

# JOINING THE GLOBAL MARKET: ARE SWISS POCKET KNIVES OR MALARIA TABLETS THE REASON FOR AMAZONIAN INDIGENOUS PEOPLE INTEGRATION?

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## I. Introduction

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Amazonian indigenous peoples are presently facing the transformation of their traditional subsistence systems by the globalisation of markets. Although there are opposing views in relation to the consequences of market integration, it is often accepted that they negatively affect native communities, by altering their livelihood patterns, social organisation and culture (Godoy *et al.*, 2001). As a consequence, it is reasonable to conclude that the safest way to proceed, if we were to protect indigenous societies, is to avoid their market enrolment. Similarly, it should follow that projects aimed at the generation of alternative income sources are misled. Nonetheless, in practical terms, arresting market involvement can only be achieved through focussing on the underlying causes of indigenous groups market adoption.

The driving forces of market participation are not yet clear, mainly because something as complex as the incorporation of indigenous peoples into market economies requires that several disciplines and approaches are considered together (Godoy, 2001). However, for the sake of systematisation, we could say that there are three overall leading reasons fostering trade engagement: (i) pressure from the outside society, (ii) necessity and (iii) desire for imported goods.

Pressure is the most often stressed explanation for indigenous peoples' integration into markets (Colchester, 1997; Sponsel, 1995). It is said to exist whenever indigenous groups are forced to trade commodities they control, or if they do so to guarantee their land rights. For instance, in the Philippines, a country rich in minerals, a big bulk of its indigenous areas have been granted to foreign companies' exploitation. In West Papua, Indonesia, the Amungme group has seen their sacred lands invaded by the Grasberg mine owned by transnational corporations (SURVIVAL, 1998). In the Brazilian Amazon, pressure for logging is widespread in indigenous areas, especially due to the fact that mahogany is mostly found in native territories (Watson, 1996). Mining has also been a major problem to Brazilian indigenous groups and other Amazonian countries (CS, 2001; ISA, 2000; Mendez *et al.*, 1998; Rabben, 1998; SURVIVAL, 1998). Correspondences worldwide occur because indigenous areas combine the presence of important resources with poor recognition of land rights. In addition, poor countries usually foster mineral and natural resources exploitation within indigenous territories as a consequence of their expressive external debts (SURVIVAL, 1998).

However, other studies emphasise the role of necessity in market adoption. With a decreasing ability to make a living from the territory assigned to them, indigenous groups are forced to enter commercialisation. For instance, the Asurini Indians of the Brazilian state of Pará, who suffer scarcity of their most important protein source, fish, have been forced to abandon subsistence activities and adopt cash cropping in order to maintain their nutritional balance (Treece, 1990). Similarly, the Bororo from central Brazil are increasingly adopting commercial activities because of the environmental disruption within their territories (Gross *et al.*, 1979). On the other hand, some authors have considered necessity as arising not from environmental disruption, but from the need to buy western medicines to counteract the impacts of introduced diseases to which indigenous populations have low immunity. Baksh

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(1995), for instance, has argued that the need to purchase medicines is among the reasons for market integration in Peruvian Machiguenga communities.

Pressure and necessity as the reasons underlying the adoption of commercial activities might imply that, at least theoretically, markets could be restrained. However, the existence of a third variable, i.e., a sheer desire on the part of indigenous groups, means that integration might be an unavoidable situation, even when optimal conditions prevail.

The existence of an indigenous peoples' desire to actively adopt market activities has only infrequently been hypothesised or tested. When this notion appears, it is usually resigned to the periphery of ethnographic research (Hugh-Jones, 1993). Colchester (1989) and Henrich (1997), however, argue that too much emphasis on external factors has neglected the degree to which indigenous groups are purposefully and enthusiastically expanding their commercial participation even when they have secured access to significant land and environmental resources. According to Henrich (1997), external pressure and necessity among the Machiguenga play a less important role in integration than the willingness of the indigenous group to acquire superfluous goods such as a Swiss-army knife.

As shown, there is no consensus on the reasons underlying indigenous peoples' market integration. This study thus presents a review and historical information of the reasons underlying indigenous peoples market integration, focusing the Kayapó of A'Ukre, and examine why market integration occurs. It is hypothesised here that: "*market integration in Amazonian indigenous areas reflects external pressures' imperatives and necessity, but also desire and aspiration from the part of indigenous people*".

The importance of the evaluation rests on the fact that if the hypothesis is proved true - or if market integration seems indeed to be at least partially caused by local desire - then integration is, in effect, inevitable. Hence, the understanding of market consequences assumes a particular importance.

## **II. Methods**

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The techniques employed in this study consisted of: (i) literature review on the Kayapó; (ii) a formal household survey; (iii) informal interviews and (iii) systematic observations of aircraft traffic. A formal survey was employed to assess the characteristics of all the households (extended families) in the village of A'Ukre (n=23), such as: (i) demographic variables, (ii) incomes; (iii) assets; (iv) description and frequency of food purchased and (v) private health services attendance. The survey also included data on daily consumption of food for a sample of 20 children. Data on food consumption were collected by interviewing the mothers of children aged between two and four, since this implied children that had been weaned but were still completely dependent on the mother to be fed. Informal or unstructured interviews with no pre-set questions were undertaken throughout the period of fieldwork with different classes of informants, such as villagers, local teachers and health workers, as well as two loggers who visited the area. These informal interviews provided information mainly on: (i) health and educational assistance and its problems; (ii) previous and present contact with missionaries; (iii) people's views of imported goods and assets, (iv) historical background of people and (v) historical processes in the village. Systematic observation of small aircraft traffic was adopted here to assess the frequency with which goods were transported into the village. According to their origin, aircrafts landing at A'Ukre were coded as: (i) government; (ii) researchers; (iii) missionaries and (iv) private affairs of A'Ukre individuals. Air traffic was sampled because this is the main form of access to the village.

### III. Study Area

A'Ukre (7° 46'14"S; 51° 57'43"W) is a Kayapó Indian village located at the bank of *Riozinho do Anfrísio* river, a second-order tributary of the upper Xingu river. Vegetation is mostly *terra firme* Amazonian forest mixed with palm trees, with the occurrence of liana forest and *cerrado* (Zimmerman *et al.*, 2001). The study site is highly representative of the dry belt archway of transitional forest mosaics of southern Amazônia, the natural habitat for mahogany stands. Created 20 years ago, the village is located within the “Kayapó Indigenous Area”, Brazilian state of Pará which encloses six others Indian villages (total area of 3.3 mill ha and a population of 1946 people) (Figure 1).

**FIGURE 1. Location of study site**



Source: ISA (2000)

The village can easily be reached by rented planes that depart from the nearest town Redenção, 220 km away. In recent years, A'Ukre population has engaged in four market activities: (i) marketing cold-pressed oil from Brazil-nuts (*Bertholettia excelsa*) with the English cosmetic company “The Body Shop”; (ii) logging mahogany trees (*Swietenia macrophylla*); (iii) trading handicrafts in an irregular basis and (iv) a research project that provides labour for the villagers.

### IV. Amazonian Indigenous Peoples and Kayapo Market Integration

Markets are by no means a new feature in the Amazonian region. Trade was a regular activity for many indigenous groups, even before the European conquest of the Americas. Before the Europeans, indigenous groups were part of an extensive inter-regional trading system for items such as utilitarian lithics, lapidary work, decorated clothing, tools, pottery, plant and animal materials (Roosevelt, 1989). In Brazil, at the time of the Amazon conquest, indigenous groups living around the mouthbays of Amazon River tributaries, known as the *Várzea* people, dominated trade with more sparsely settled and politically weaker groups. These floodplains (*várzeas*) hosted villages even in excess of 10,000 people at the time of European arrival.

*Várzeas* communities were sedentary and practiced agriculture with short-cycle crops, especially maize. A highly storable crop, maize permitted exchange with other groups (Moran, 1989). Different groups were hierarchically ordered along the tributaries into *terra firme* and were commanded by those groups in the mouthbay (Roosevelt, 1989). The antiquity and far reaching nature of trade gives support to the idea that it could have been an integral part of indigenous societies in the Amazon region. Trade could have served several purposes. First, it could have provided a mode of support for those people living in less favourable regions. Second, trade articulation of different economies could have allowed greater population densities than possible by isolated groups dependent exclusively on their own ecological zones (Bunker, 1985). However, barter could not only be explained by the differential availability of resources, for instance, the existence of clay to produce pots or of suitable wood to build canoes. Even in those cases where resources were widespread, there are examples of some tribes that had the monopoly of manufacturing some products over

other groups, such as canoes. This fact indicates that there were probably also other cultural mechanisms at work for the existence of trading (Thomas, 1972).

As can be seen, trade was intrinsically associated with the pre-historic Amazonian Indian population. However, even if trade relations existed before contact times, those traditional activities are based on exchange, usually by customary rates, and not on a monetised market economy. The transition between traditional trade and monetised market economy is a process with different steps, which become blurred at many points, but that usually begins with a gift giving process.

In Brazil, the first encounter between Europeans and Indigenous peoples took place in 1500. At that moment, the exchange of an European hat for a feathered headdress marked for the Indians the beginning of a new relation (SURVIVAL, 2000). This emblematic moment exemplifies the first step on the process of indigenous peoples' market integration, which is similarly repeated throughout different countries of the Amazon basin. This process usually follows equivalent lines, beginning with the move by Indian trackers or missionaries into the territory of an uncontacted tribe. To establish a friendly contact and secure the pacification process, manufactured goods, such as knives and cooking pots, are placed as gifts to be taken by the Indians. For a certain period, variable among groups, the supply of gifts is kept. Soon, these gifts create a dependency relationship, or what has been called as the process by which "luxuries become necessities" (Gell, 1986; Hugh-Jones, 1993).

Necessities created by gift-giving were frequently responsible for guaranteeing the permanent residence of indigenous groups in the Amazon. However, once friendly contact was established, the flow of presents usually ceased. As time passed, the once considered luxury items turned slowly into being necessities (Murphy & Steward, 1956). And as demand increased, means of obtaining the income necessary to purchase goods were implemented. Particularly, the progressive acquisition of technologies that continuously required supplies, such as replacement parts, gasoline or oil, helped to boost and perpetuate the need for income generation (Henrich, 1997). Shotguns, for instance, are very prone to create a dependency relation because these tools are capable of increasing hunting efficiency and hence are very attractive to indigenous groups (Hames, 1979). However, they imply a subordinate relation on the monetary system to acquire shells, therefore introducing the necessity to produce the modes of exchange (Gros, 1977).

The process of gift-giving lasted different periods of time for various Amazon groups and it is still under way in many localities. But the process of gift giving was slowly turned from traditional barter into a more strictly market economy, although at first it was still based on goods transactions. Indians would, for example, give animal skins, forest products and artefacts as "gifts", and would receive glass beads, blankets and machetes also as "gifts". This process would even be perceived as the usual transaction manner with the Brazilian society (Lea, 1986).

After the initial moment of gift-giving, the process of Amazonian indigenous peoples incorporation into market activities mainly followed that of forest goods cycles (Godoy, 2001). To be able to keep the influx of industrialised goods to which they became used, Amazonians joined these cycles. The first of them was the "rubber boom". At the end of the 19<sup>th</sup> and early 20<sup>th</sup> Century, rubber became an important product for the new emerging world industry. Originating from Brazil, the rubber tree (*Hevea brasiliensis*) is present on *terra firme* forests - unflooded or *interfluvium* forests - and therefore the place where remaining tribal populations were left after the decimation of the *varzea's* groups. Demand for rubber resulted in the movement of Brazilians to the *terra firme*. As a result, Amerindians died from diseases brought by outsiders, but also joined the rubber trade (Eden, 1990). Enrolment of native Amazonians in market activity began by buying and selling manioc flour, as well as

hunting meat and fish to feed the rubber extractors (*seringueiros*) (Gros, 1977). Gradually, many groups became involved in the rubber production itself, experiencing the same processes of Brazilian extractors, i.e., debt-peonage or a patron-client relationship. The co-option of indigenous groups' was caused by desire but was also a matter of pressure. Traders compelled indigenous people because of the labour-intensive nature of rubber collection - trees grow widely dispersed - associated to the low population densities in the area (Bunker, 1985).

Although rubber was the most important activity in this period, contemporaneously the end of the 19<sup>th</sup> century also experienced a growing market for animal pelts and feathers. As with rubber, several indigenous groups engaged in the activity, particularly because their ability to hunt was highly praised. In the 1920s, the export market for animal pelts further expanded. Also in the 1920s, areas with high concentrations of Brazil-nut stands became involved in marketing this product (Schmink & Wood, 1992). Again, indigenous groups were the occupants of many of these Brazil-nut areas, since these trees are characteristic of non-flooded areas.

With the onset of the Second World War, rubber extraction experienced a second boom after two decades of stagnation. During the 1950s, extractive activities became to be particularly encouraged by the government, through its indigenous protection department, SPI (*Serviço de Proteção ao Índio*). The policy at that time was that indigenous peoples should trade resources not only for themselves, but also as a mean of raising money for the maintenance of the Indian service bureaucracy. This mechanism became known as *renda indígena*, or indigenous income (Fisher, 1994).

Extractive activities were the foundation of the Amazon economy and thus constituted the major market engagement of indigenous groups throughout early history and up to the 1960s. However, after the 1964 military coup in Brazil, development strategies for the Amazon region changed. Extractive activities were expected to be replaced by more profitable enterprises, mainly based on private investment and governmental provision of infrastructure. The plan also entailed the goal of the Amazon region "integration" with the rest of the country's economy.

The extractivist-based landscape of the Amazonian economy began to be altered, particularly during the early 1970s. At that time, the economy in Brazil was expanding and the military were firmly in control. The National Integration Plan (PIN, *Plano de Integração Nacional*), which consisted of a series of projects and incentives, represented the cornerstone of this period. Announced in 1970 by president Medici, the plan aimed to integrate economically the Amazon with the rest of the country. First, the plan resulted on the *Transamazônica* highway being built, alongside which agriculture was encouraged (Fisher, 1994; Schmink & Wood, 1992). Second, a number of incentives for agricultural production were set, prompting private investors to acquire lands in the Amazon and to clear forests for cattle raising or cash cropping (Godoy, 2001). Third, the plan also included a number of mining enterprises within or in the neighbourhoods of indigenous territories (Fisher, 1994).

Indigenous peoples in the Amazon were significantly impacted on by the transformations brought about by this governmental plan, particularly because at that time most indigenous territories in the Amazon were not yet demarcated. As a consequence, they began to suffer encroachment on their lands by private investors, but also by governmental projects. Road building brought about increasing contact and pressure over their resources. Also, mining operations impinged on native groups and mainly the development of several gold mining sites within their territories, which were stimulated by high international gold prices (Fisher, 1994). Alongside this panorama, the Indian department FUNAI (*Fundação Nacional do*

*Indio*), created in 1967 to substitute SPI, was involved in fostering market activities in indigenous areas (Gross, 1979).

#### *IV.1. Kayapó Market Integration*

The Kayapó story mirrors that of other groups in Amazonia. Its integration into the market economy was a product of ongoing activities in neighbouring areas. The historical account of their market integration therefore follows a similar pattern and equivalent cycles as experienced in the region as a whole.

As was the case with other indigenous groups, the Kayapó are also not newcomers to trade. In pre-historical times, they used to exchange plant types and varieties with other indigenous groups, such as the Tapirapé, Karajá, Mundurucu, Assurini and Xavante (Posey, 1985). Similarly, they are not new to the incorporation of goods from other societies. For instance, from the Juruna, the Kayapó learnt how to build canoes (Léa, 1986). However, the Kayapó contact with Europeans came much later than the Americas' conquest. At first, this contact existed only through the intermediation of other indigenous groups, from whom they not only acquired European goods, but also introduced diseases. Direct, but still intermittent contact, probably occurred at the beginning of the 17<sup>th</sup> century. At that time, English, Dutch and French preceded the Portuguese in establishing posts up the Xingu River for trade with the Indians, among which were probably some Kayapó groups (Galvão, 1979).

For two centuries, the Kayapó maintained an intermittent and mostly violent contact with the Brazilian society, sustaining a raiding behaviour over Brazilian settlements (Turner, 1991;1995b). At the end of the 19<sup>th</sup> century though, the situation began to change. The discovery of rubber-trees along the Xingu resulted in the invasion of Kayapó homelands by rubber tappers. Also in this period, Dominican priests established a Mission to serve the first group of Kayapó. Named Santa Anna, the settlement was to assist the Kayapó who lived along the Araguaia River, the original homeland of this group before they were forced northwards by the expansion of Brazilian occupation (Posey, 1989). Gradaus-Kayapós were moved to the mission that overlooked the Araguaia River, in the same place which is now the site of the city of Conceição do Araguaia. However, this first group that turned to permanent contact became extinct, with the last survivor dying in 1960 (Schmink & Wood, 1992).

In 1908, contemporaneously to the Gradaus group settling, the first ground route from the Brazilian village of *Conceição do Araguaia* to the Xingu was opened. Hostilities against another Kayapó group, the Gorotire, began later the same year. These clashes between the Brazilian society and the Kayapó would be maintained for much longer, with the groups alternatively robbing collectors or making arrangements with entrepreneurs (Fisher, 1994).

With rubber decline in the 1920s and 1930s, activities diversified along the Xingu River. Gatherers came to collect Brazil-nuts along the "free" stands of the Fresco River, which were housing Kayapó groups. As a consequence, contacts between the Kayapó and Brazilians increased in the 1930s and 1940s and some bands engaged in commercial activities (Schmink & Wood, 1992). In 1939, for instance, the German ethnographer Kurt Nimuendaju reported that some Gorotire-Kayapó were involved in nut gathering to trade with local entrepreneurs. Also at that time, middlemen profited from trading with women of another Kayapó group, the Kubenkräkegn, even if official contact would occur for this group only 12 years later (Fisher, 1994).

Although some commercial activities already existed, raiding still persisted. The increased contacts between extractivists with the Kayapó resulted in attempts at pacification. The government was particularly keen on Kayapó pacification because of their disruptive power over extractive activities. Raiding had made the group famous even before their official contact. Before the 1940s, they were already in the media, due to their constant attacks on Brazilians in order to obtain shotguns, ammunition, machetes, steel axes and dogs (Vidal,

1977). This notoriety prompted the official impetus for pacification aimed at making Kayapó territories accessible especially for Brazil-nut collection. The organisation of the contact with some Kayapó bands was left to a governmental body responsible for extractive activities, the Superintendency of the Economic Valorisation Plan for Amazonia (*Superintendência do Plano de Valorização Econômica da Amazônia - SPVEA*) (Fisher, 1994). The first of the still surviving groups that entered in permanent touch, Gorotire, was officially settled by 1937. At that time, a band of Gorotire approached a small community in the confluence of the rivers Fresco and Riozinho do Anfriso, already possessing clothes, weapons, glass beads, axes and cooking pots. Initially approached by a priest, the Gorotire agreed on founding an Indian Protection Service post (Schmink & Wood, 1992). The Kayapó were apparently not interested in their legal status when they accepted being settled, but on a more consistent access to European goods. They realised that raiding impoverished extractive workers yielded an inadequate and uncertain supply of desired goods. A flow of manufactured goods and medical services followed the friendly associations with the government, a practice that served first to attract the Kayapó and then to bind them to government posts (Bamberger, 1979). Extractive operations were installed soon after pacification took place, based on the state agency control. The system employed by the SPI for commercialisation was not too different from the *aviamento* system present in the region, which was based on the advancement of goods (Fisher, 1994). Payments were usually made in firearms, shells, tools and clothes.

With the Second World War the new rubber boom also affected the Kayapó. At this time, Indians were further encouraged by the governmental body to produce rubber, as well as collect Brazil-nuts. In the 1950s, problems arising from market adoption were already perceived in some groups. For instance, the recently contacted Kayapós from Kubenkrakegn spent so much of their time collecting rubber and Brazil-nut, that the Indian Protection Service was obliged to distribute them food. By the end of the 1950s, several other Kayapó groups were settled and, soon after, the villages of Kokraimoro, Baú, Mekragnoti and Kararaô also engaged in rubber production (Fisher, 1994).

Between the 1960s and 1970s, an air service was established to most Kayapó villages. At that time, the newly created governmental body, FUNAI, was competing for the Indians' attention with local merchants, traders and poachers. Therefore, the air link was another attempt to bypass the direct transactions between Indians and local entrepreneurs, materialising FUNAI's desire to be the sole trade partner of the Indians. In this period, the Bacajá Xikrin-Kayapó also entered into contact and began to produce Brazil-nuts and wildcats skins, trading with FUNAI's help (Fisher, 1994). In the same decade, the Kayapó of Kubenkrakegn were encouraged to produce rubber and Brazil-nuts, in exchange of a large influx of trade goods (Turner, 1966).

The 1970s plans for Amazon development also affected the conditions of the region occupied by the Kayapó. Their traditional territory became suffocated by several development projects initiated in the region by the government. Kayapó Indians even became directly involved in some infrastructure building, such as the *Transamazônica* highway. Their role was either to contact indigenous groups not yet pacified or to provide hunted game for the workers involved in the road construction (Fisher, 1994).

In the late 1970s the Kayapó area was also affected by Brazil's gold mining boom. Two sections of the Kayapó territory were invaded by gold miners. Small *garimpos* sprang up in the Northeastern part of the reserve near the Rio Branco, several days walk from Chief Pombo's Kikretum village. Other deposits were later discovered even closer to this village resulting in a much larger invasion to the reserve's eastern border, next to the main Kayapó village of Gorotire (Schmink & Wood, 1992).

Cumaru, a rich gold producing area near Redenção, on the borders of the Gorotire reserve, was discovered in 1979. It consisted of a series of gold mining areas spread around the countryside. Moving from outside the indigenous territory not yet demarcated, miners soon started to invade Kayapó lands. For a while, the Gorotire Kayapó either expelled the gold miners, or conceded them temporary permissions for extraction, in exchange for a percentage of the gold produced. However, in March 1981 federal authorities reacted by taking charge of the Cumaru site and putting it into military control, and became paying the Gorotires only the amount legally due to owners of gold-bearing lands. According to the law, if mineral deposits were found at a certain property, the owner had the right to ten percent of the mining tax or the equivalent of one percent of the production (Schmink & Wood, 1992).

The Kayapó of Gorotire grew increasingly discontent over time with the low return they were receiving, compared to the high environmental impact related to gold mining. In 1985, they decided to capture the gold mining areas and expel the *garimpeiros* from their territory. Several protests from miners and social conflict in Redenção followed. This event was then capitalised by the Kayapó to force a deal with the government: in return for reopening the mines for a two-year period, they called for the government to demarcate their territory (Turner, 1991; 1995b). They were successful in their attempts and proceeded by permitting the mines to be reopened for the agreed period. After the two-years period, however, the Kayapó were not eager to stop gold mining as they had become accustomed to the goods their mining income provided.

In another Kayapó settlement, Kikretum, the village's territory had been invaded by miners since 1972. The Indians knew this but could not locate the site. After four years of attempts, Chief's Captain Pombo managed to take control of the mining area located about a week's trek from the village (CEDI, 1985). On this occasion, 35 warriors ambushed and expelled about 300 miners (*garimpeiros*). However, not so long after, the miners returned to the place (Schmink & Wood, 1992).

Although the miners' expulsion was at first aimed at closing the *garimpo* areas, the local chief Pombo soon started to have second thoughts and he then decided to negotiate a series of deals with gold miners (CEDI, 1985; Schmink & Wood, 1992). He was very successful for a while and became famous throughout the region. With the deal, aeroplanes started to fly into Kikretum village daily, loaded with meat, white bread, clothing and other goods purchased in the nearby town. Superfluous food was also frequently seen loading full planes, such as soft drinks and candies. At the same time, income from gold mining was also being used for necessary purposes, such as paying health bills in town's private hospitals.

As a consequence, the Indians grew rapidly accustomed to the consumer goods their new income provided, and the levels of expenditures correspondingly increased. Pombo became the owner of several properties outside Kikretum, including, for instance, a big mansion with a swimming pool in the town of Conceição do Araguaia. Also, the income provided increased the mobility of the Kikretum people, who were frequently seen spending their time in town (Schmink & Wood, 1992).

Gold mining seemed a good deal at first for the Kayapó. Money and goods were becoming common in the villages. The village leaders in particular were benefiting from a luxurious life in town. People's health improved with more regular assistance and teachers became a regular presence in the villages. Better houses were built for people in the villages; generators provided light. At the same time, however, Gorotire and Kikretum suffered from the negative impacts of mining, malaria increased, as did sexually transmitted diseases. People rarely pursued traditional activities and relied more on purchased food. By the beginning of the 1990s, birth defects started to appear in Gorotire and studies showed that the Kayapó and the environment were significantly affected by exposure to contaminants from mining operations

(Rabben, 1998). In Gorotire and Kikretum, the Indians had to take showers since they could not bath in the highly polluted waters of the local river (CEDI, 1985). The debts of the chief and the Indians soon accumulated in nearby towns', for example with supermarkets, hotels, hospitals and even a barbecue restaurant (Schmink & Wood, 1992). The luxury properties of the village leaders in town were also lost.

Soon after, disagreements among villagers increased. From the beginning, Indians were bitterly divided over how best to deal with the presence of gold miners on their lands. Some, as Pombo, favoured dealing with them, while others did not want to have anything to do with them (Schmink & Wood, 1992). But when the problems increased, the approach to mining became even more dubious. Some Gorotire villagers did not agree with what seemed a low return for too high damage. In this case, mainly the very young and senior men were disaffected. In opposition, support was coming usually from the middle-aged men, who were the ones benefiting most from the activity. Particularly, mining support came from those men who were related to leaders and therefore benefited most (Turner, 1999).

A decrease in the global price of gold at the beginning of the 1990s led to the abandonment of the *garimpos* throughout the country. Concurrently, several gold sites within the Kayapó territory were already over-exploited. Further exploitation at that time would require significant investment in mechanised gold production and this would, according to the new Brazilian Constitution, depend on the approval of the National Congress, as well as the indigenous community consent (Santilli, 2000).

But gold mining was not the only activity being carried out during the 1970s and 1980s; logging also began to be pursued in the Kayapó territory. The logging pressure over Kayapó territories started when, during the 1960s, the opening of a local road in Pará (PA-150) gave way to the richest Brazilian stands of mahogany and sawmills moved to the area (Schmink & Wood, 1992). At that time, loggers made their first appearance in the Kayapó communities, and eventually managed to negotiate concessions for mahogany extraction from the leaders. Concessions were first granted by chief Pombo of Kikretum in about 1979 and secondly in 1981 at Gorotire (Turner, 1995b). As for payment, the Kayapó received small fees at first and later on also infrastructure building, such as modern houses for the leaders and improved houses for the villagers. However, logging income was mostly deposited in communal accounts that were explicitly, or tacitly, controlled by the chiefs or the few literate Indians able to keep the accounts (Turner, 1993). The income of the leaders at those times was very high, though it was still very low for the real mahogany value.

By the early 1980s, leaders were using the income from mahogany logging and also gold mining to maintain lavish personal life styles in Brazilian cities. This "lavish" style included cars, houses, drinking binges and Brazilian mistresses (Turner, 1995b). Logging contracts also became a source of inter-village tension. In 1982, for instance, FUNAI approved contracts with several sawmills to exploit timber on Kayapó lands. Some villages, A'Ukre for instance, were against it and loggers were killed in the occasion (Schmink & Wood, 1992). FUNAI kept signing logging contracts for the Kayapó area until about 1985, pressed by the Indians threatening to do it without the government consent.

The landscape began to change with the new Brazilian constitution of 1988. The new legislation, associated with existing environmental laws, made the legality of logging in indigenous areas a dubious matter (Pankararu, 2000). However, the most usual interpretation has been that logging is permitted when it is practiced in a sustainable manner, not depleting the resources for the next generations and based on an approved management plan. However, management plans were proposed and approved only in one recent case (ISA, 2000). Hence logging operations kept being realised in an illegal and disguised form, even when temporary mahogany bans were imposed. Illegality made no much difference for mahogany

commercialisation within the Kayapó areas. The government has in infrequent occasions captured the wood coming from indigenous territories, usually with violent repercussions on the part of the Kayapó. As a consequence, mahogany reserves in the Kayapó territory are becoming rapidly depleted (Zimmerman *et al.*, 2001).

Frequently associated with a conservationist role – and keen to maintain this image - the Kayapó kept excusing themselves for pursuing logging and gold mining activities. The excuse constantly given was the necessity to pay for health and education, both of which were provided by loggers when mahogany extraction was at its peak. Even though the quality of the assistance provided was very low, for instance, by bringing large supplies of medicines to impress the Indians, some of which were useless or had expired. However, notwithstanding the reality of the deficit on governmental supply of health and education, the income necessary for paying for these services was far lower than the levels received from gold mining and logging (Turner, 1995b). In addition, these services were never treated as a priority and were left to a secondary position even in those times when the influx of money was very high. In contrast, income from these contracts was especially spent on more personal goods. Common villagers, or those not associated to chiefs, were for the most part left with the burden of living the traditional life in the advent of environmental degradation, not being able, for instance, to fish in the now very polluted river.

Presently, the willingness to engage in marketing and to sign concessions to natural resources exploitation is not consistent among different Kayapó villages and sub-groups. Mainly, there is a striking difference between the Kayapó groups in the Pará and Mato Grosso states (the last, Kayapó Metuktire). Those in the North have granted concessions to loggers and miners, whereas in the South they have not. According to Turner (1995a), the difference appears to be caused by a stronger support received by the villages located in the South, from both the government and the Rainforest Foundation, organisation founded by the singer Sting.

More recently, the Kayapó have been participating in various types of development activities, including the marketing of forest products (Stiles, 1994). As an example, they were the first Indians in Amazonia to participate in the new wave of “green capitalism” enterprises (Turner, 1999). A’Ukre installed a project for producing Brazil-nut oil for trading with the English cosmetic company, The Body Shop. Another less internationally publicised initiative relates to managed logging extraction on Xikrin do Cateté village (ISA; 2000). Contemporaneously, there are leaders of villages who seem to show intentions of pursuing cattle ranching. To exemplify that, a local entrepreneur, who has dealt with the Kayapó, had been recently consulted by one of the Kayapó leaders of Gorotire, interested in beginning a cattle farm for his own profit within the indigenous territory.

#### *IV.2. The Role of Different Actors in Increasing Integration*

Governments can have an active role on increasing indigenous peoples market relations, especially when they foster development projects next or within their territories. In addition, governments provide the legitimacy for other actors, such as missionaries, since they tolerate or facilitate their presence and actions.

In the Brazilian Amazon, the government has been the main actor influencing native peoples’ integration into market economies. This is especially true because Indians in Brazil have historically been considered as incapable human beings, equivalent to children, and therefore in need of protection policies from the government (Posey, 1989). Different policies have determined the intensity, as well as the quality of Indians’ incorporation by regional or global economies. The course of action has changed throughout Brazilian history but, for most of the time, guidelines were aimed at indigenous peoples’ assimilation into the mainstream society and, therefore, also to market economies.

The actions carried out by governments are echoes of their positions in relation to indigenous people. In Brazil, almost every Constitution has conventionally included the principle of tribal peoples' rights to the occupation of traditional territories. In spite of this, the Civil Code and the Statute of the Indian of 1973 (*Estatuto do Índio*) assumed the desirability of Indians' incorporation into national society. According to the Statute view, native groups should not be "marginalized", but transformed into "producing" Indians for the national development sake (Treece, 1990).

Nevertheless, there was a movement between humanitarian and integrationists aspects throughout Brazilian history. The first creation of a specific body for indigenous peoples purposes derived mainly from international and, to a lesser degree, internal complaints. The revolt arose from the massive killings of indigenous groups in Brazil that were occurring in the late 19<sup>th</sup> century. By that time, there was a current view among Brazilian congressmen that Indians should be exterminated for purposes of national development (Davis, 1977). However, the increasing number of violent acts that followed this principle raised concerns around the world, leading to the creation, at the beginning of the 20<sup>th</sup> century, of a national system for indigenous people's protection.

First headed by a military servant, Marshal Rondon, the SPI was driven in its early days by the motto "to die, if necessary, but kill never". The institution assumed for a long period a protective approach against acts of persecution and oppression to Indians. Alongside, it pursued Indian pacification to what they applied the already described gift-giving technique. Although not violent, SPI served better the Brazilian society than the Indians and helped to wipe out many indigenous groups (Davis, 1977; Ribeiro, 1996).

By the end of the 1940, time of the first contact for many Amazonian indigenous groups, SPI was already approaching the Indians as a productive unit. The service and the Ministry of Agriculture agreed in this period to use Indian labour to strengthen the extractive industries in the region. The surplus money achieved was deposited by the Protection Service in the Brazilian National Bank, to be applied on activities and services on behalf of the respective tribes (Fisher, 1994).

From 1950 to 1954, the indigenous policy entered again an humanitarian period. Being headed by one of the most dedicated Indianists, the period focused on trying to guarantee indigenous rights and to pursue efforts to create special areas for them (Davis, 1977). But again in the late fifties the SPI policy was reshaped with the creation of the *renda indígena* that embedded the mentality of converting Indian posts into economic enterprises. Indians were forced to sell the products of their labour to Indian agents. Moreover, indigenous lands and resources were leased to outsiders for mineral, timber, and grazing rights. Income surplus was also used for paying the salaries of Indian agents and alleviating the costs of Indian affairs. This policy was aimed at transforming native subsistence economies and set the groundwork for their integration into the wider market economy and class structure of Brazil (Davis, 1977). "Pacification" and economic "development" continued to be interrelated, with many attempts to pacify indigenous groups through the SPVEA, aimed at promoting greater economic returns on the region (Fisher, 1994).

In the late 1960s, another retreat movement to humanitarian considerations occurred. Several scandals involving Indian tribe massacres, for instance the massacre of the *Cintas Largas*, as well as a commissioned "Figueiredo report" of the SPI situation, revealed many problems in the Indian department (Davis, 1977). The world outside Brazil became increasingly aware of the Indian situation in Brazil with news broadcasted internationally. SPI was embroiled in corruption and economic considerations prevailed in the indigenous policy. As a consequence, SPI was disbanded and a new agency, FUNAI, was created in 1967.

Two opposing models of Indian policies coexisted in the early days of FUNAI. The first developed by the Villas Boas brothers, aimed to provide indigenous groups with a buffered environment from the government, placing indigenous groups in reserves or Parks. The intention was that the groups should gradually and slowly be prepared to integrate into the mainstream society. The second model was the reintroduced *renda indígena*, which, as stated previously, aimed to transform indigenous villages into productive economic units. This second model was developmentalist, based on rapid indigenous peoples' integration as producers of marketable commodities (Davis, 1977; Fisher, 1994).

International perceptions of the negative impacts of Amazonian development changed overnight with the beginning of the *Transamazônica* Highway construction site in 1970. From then, the economical development of the “sleeping giant”, a nickname given to Brazil, began to fill both newspapers abroad and in the dictatorship-controlled media in Brazil. The “Brazilian economic miracle” - or the time when the country's growth rate surpassed 11% a year - came into being in this decade. Associated with it, the Brazilian ideology of “nation building”, which made little room for the ethnically distinct tribes that were identified by their own forms of political organisation. As a consequence, redirections were made in both FUNAI's administration and philosophy, with important outcomes for Indians' market integration. The institution position was that indigenous peoples should be oriented towards a well-defined planning process, making their participation in the national progress as producers of goods. A series of governmental investments and public enterprises, among them the *Transamazônica* Highway, affected in many ways several indigenous groups, many of whom had not been contacted before. Governmental policies directly and indirectly resulted in the integration of indigenous groups. Roads and dam building in the Amazon, for example, were factors that increased marketing, either due to the destruction of the Indians' natural resource base or by contact expansion. Land conflicts, already present in the overpopulated and unequally distributed lands of the Southern part of the country, were being solved by opening frontier areas in the North, next to indigenous peoples' territories. New pacification expeditions were also organised after a FUNAI announcement in 1973 (Davis, 1977; Schmink & Wood, 1992).

In 1983, the discovery of several mining sites within the natives' territories led to a governmental decree permitting that state companies – and private firms in the case of strategic minerals – carried out mining operations in those areas under FUNAI's supervision. This measure was challenged by many groups of the society and also by the FUNAI's president, who opposed mining within indigenous territories. But non-democratic structures in place at the time ensured that the only repercussion was the dismissal of the rebel president (Schmink & Wood, 1992).

As we have seen, from the beginning of colonial times up to the end of the 1980s, the policy was based on the integrationist scope. Indigenous cultures were considered a temporary situation and their assimilation a goal to be achieved. Frequently, integration was also evoked as a necessary measure to allow for the country's economic “development”. Lands and resources within indigenous areas could not be left out of the new “progressive” country. Officially, this position began to change only in 1988 with the new Brazilian Constitution. Indigenous peoples and some NGOs mobilisation were successful in bringing in a different face to the new legislation. At least in theory, the stated government policy was transformed into guaranteeing indigenous peoples' rights to their cultural diversity, a relative independence and the abandonment of the integrationist principle (Treece, 1990). Since then, however, governmental policies towards indigenous groups, and specifically towards market integration, have been ambiguous and unclear. Part of this ambiguity comes from the fact that numerous presidents have taken charge of the Indian's foundation over the years – a total of

27 presidents in 33 years. In 1999, for instance, the president affirmed that it was important to legalize logging and mining within indigenous areas, as the effects of not doing it were worse. According to him, activities were uncontrolled and were still being pursued illegally with dire consequences (ISA, 2000). Other presidents were more inclined to avoid either any commercial activity within indigenous areas, or to induce sustainable forest products marketing.

FUNAI's interventions and impacts in indigenous areas have been very weak during the last two decades, particularly from the start of the 1990s with the Indian department becoming under-funded. Several of its attributed tasks, such as the case of education and health, were slowly handed over to other governmental departments. Market activities have thus been pursued directly by the own initiative of indigenous groups or with the help of NGOs. Projects run by NGOs have increased and are usually aimed at providing economic alternatives to indigenous peoples and, at the same time, assure environmental conservation. Without state control, the government has even been blamed for the boycotting of some NGOs' initiatives (Santilli, 2000).

Presently, a series of actions included in a new governmental plan are considered to be dangerous for Amazonian indigenous areas in the future. Named *Avança Brasil*, the program aims to double the road network in the region, build hydroelectric dams, ports, railways and waterways. The purpose is to stimulate the agro-industrial sector in the region, as well as increase the profits of soybean plantations in the centre of the country. As a consequence, about eight percent of the Indigenous areas will be directly affected by this plan, and an unknown percentage indirectly (Nepstad *et al.*, 2000).

As for the Kayapó, the role of the government in promoting market integration is similar to the general panorama of other indigenous groups. They were first attracted and contacted by receiving gifts, some of which they had already become accustomed before. From this practice, they developed the idea that the Brazilian government was the big father who would eternally supply them with gifts. But not long after the official contact, some Kayapó groups such as Gorotire were impacted by those policies prevalent at the end of the 1940s. Among these, was the use of Indian labour to strengthen the extractive industries in the region (Fisher, 1994).

Extractive activities were the main governmental focus until the developmentist changes of the 1970s. In this period, the impact of governmental practices on the Kayapó incorporation was overwhelmingly important. All the problems experienced in the villages of Gorotire and Kikretum at the end of the 1970s and early 1980s were, if not induced, not controlled by the government. In some cases, FUNAI was against what was occurring in the Kayapó area, and would rather arrest, for instance, mining operations. However, the Indian foundation was part of a Ministry (*Ministério do Interior*) also responsible for controlling other productive activities. Therefore, it was very likely that all FUNAI's opposition would be suffocated by the higher levels of administration within the Ministry. As a consequence of that, several "rebel" directors were dismissed at that time. It is also worth noting that there were at least two different policies within FUNAI itself, one opposing mining and the other supporting it. The supporting team was in many instances formed by corrupted employees, mainly at the local level, who were benefiting in some way by the deals made between the Kayapó and miners (CEDI, 1985).

There is also another important example to show how the government has positively influenced Kayapó incorporation into market activities in the 1970s and 1980s. When the Kayapó decided they did not want gold mining anymore in their lands, notwithstanding the fact that this was an ambiguous decision, the government still tried to convince them to keep

the activity. The Kayapó then decided to take advantage of the situation, signing a deal that finally resulted in the demarcation of their lands (CEDI, 1985).

Presently, similar to the general FUNAI's trend, the governmental interventions are very weak in all aspects of the Kayapó society. Under-funded, embroiled in corruption at least at the local level and with many activities out of their responsibility, FUNAI is rarely involved in organising trade in indigenous areas. Although handicraft shops maintained by the foundation still exist, for the Kayapó at least, they have little impact, since there is no organisation of this handicraft trade. Hence, the Indians are able to sell their products only when they are travelling and visiting FUNAI's shops in towns such as Brasília, São Paulo and Rio de Janeiro. Also, within FUNAI there is still a department of agricultural development, which, for instance, in 1999 was responsible for encouraging A'Ukre Indians to plant rice. However, the underlying purpose was then mainly for self-sustaining their necessities. FUNAI's impact on marketing is therefore practically absent and in the FUNAI's absence, the Indians have been illegally trading mahogany. Since most Kayapó villages are presently administered by Indian leaders, it makes it even easier for them to enrol in logging without the consent or intermediation of the government department.

The foundation presently has an important impact on the incorporation of the Kayapó within the cash economy. FUNAI is responsible for creating the labour market for Kayapó males. After a great deal of pressure, mainly Kayapó leaders were granted high level administrative positions at the local level, as well as the village administration and other minor jobs. These positions are very much disputed, since they imply little or almost no work effort, provide a regular income, as well as access to several other benefits. With the decrease in logging rates and with no gold mining, they represent the most praised income sources for the Kayapó. Besides these jobs provided by FUNAI, the government is also responsible for the insertion of the Kayapó into the cash economy by providing rural pensions to elderly Kayapó. Finally, the recent developmental plan of the federal government – *Avança Brasil* – is expected to affect the Kayapó. *Nepstad et al.* (2000) sustain that at least three Kayapó communities, i.e., Bacajá, Baú and Mekragnoti will be directly affected by the planned infrastructures.

Missionaries are the second actors most usually associated to indigenous peoples' integration. Religious groups have had a remarkable influence on the transformation of traditional indigenous livelihoods being, for instance, one of the main promoters of sedentisation (Henrich, 1997). If their role has been less important than that of the government, it is by no means negligible. Moreover, in many instances and historical periods, missionaries were even associated with the government. In the mid-nineteenth century, for instance, state authorities encouraged missionaries to assist in pacifying the Indians. Similarly, in the late 1950s, several Indian posts were entrusted to religious missionaries by the government (Davis, 1977). Two decades later, religious groups as "The Summer Linguistic Institute" and other Protestant organisations still had an important presence in Amazonian indigenous territories, both in Brazil and in other countries such as Peru. They were involved in approaching uncontacted groups and also in promoting cash cropping in some indigenous areas (Gros, 1977; Henrich, 1997).

Presently, the governmental policies have changed. Missionaries are no longer entrusted indigenous territories and are even avoided at contacting zones. Even though, different religious groups still make their presence in several Amazonian indigenous territories. This statement is true both in the case of those groups contacted long ago, where their presence is tolerated by the government and also occasionally in areas where their access is forbidden. The outcomes related to market assimilation that result from the contact with these religious groups are variable. Some religious groups are avoiding activities that could foster Indians'

transformation into capitalist producers, whereas others are pursuing a complete opposite scheme. As an example of this last case, the Xavante of Mato Grosso, Brazil, have been recently living with the presence of a religious group that collect money among the Indians as offers to the church (ISA, 2000).

In the case of the Kayapó contact, missionaries also played an important role. As presented before, missionaries made the first attempt at permanent contact in the 19<sup>th</sup> century with a group of Gradaus Kayapós, which became extinct after that (Posey, 1989). Missionaries were also important for the first approach of the Gorotire Kayapó in 1936, before the foundation of a SPI post (Fisher, 1994). From the beginning, missionaries appeared to represent to the Kayapó a form of access to goods, transportation and medicines. In support of this idea, Posey (1989b) has provided the example of the relationship between the Kayapó of Gorotire village and missionaries. Although religious groups were expelled from Gorotire many times - when the Indians were in no need of them for pursuing goods - they were also invited back when the access to goods was restricted.

Finally, researchers are the last group worth mentioning for the integration of indigenous groups into the market economy. Their impact seems to be much less important than the previous two categories, but studies related to their importance are lacking. Nevertheless, visiting researchers such as ethnologists, can promote a desire for goods through the same gift-giving process described earlier. Frequently, researchers are induced to hand over gifts for achieving the right to stay in a village as observers. Moreover, they do so for the personal links they establish with the people they are studying. With this act, they can similarly induce the breaking of autonomy of indigenous villages and increase the desire for goods from the encompassing society. However, they can also produce an opposite effect, by helping indigenous peoples to understand the options they have at hand, as well as their consequences and thus probably induce market avoidance (Souza, 2000). As for the Kayapó, researchers have been studying them since contact times, as was the case of Nimuendaju (Fisher, 1994) and presently they are still frequent visitors in Kayapó villages.

## **V. The Case of A'Ukre**

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### *V.1. Historical Account of A'Ukre Market Integration*

A'Ukre village was formed in 1978 from the Kubenkrākegn group. After a dissension within the group, a band left to form the new village and was joined later by people from other villages, mainly Gorotire. A'Ukre people therefore share the historical events that have happened in the villages they came from. As children, some of the older villagers experienced the pacification attempts whilst living in other Kayapó groups. They became accustomed to the practice of receiving gifts and they have later joined the extractive periods of rubber, Brazil-nuts and animal pelts. Many A'Ukre residents have lived through the peak and luxurious times of mahogany extraction in other villages. Also several among them actively participated in the gold mining period of Gorotire. Amongst the villagers, for instance, there are leaders who were responsible for signing some mining and logging agreements in Gorotire. In addition, there are others who have spent time in the gold mining sites, serving as guards or working on the gold extraction itself. This historical process implies that A'Ukre villagers were exposed to many goods and products that abounded at peak times of mining and mahogany extraction, even before the actual foundation of A'Ukre. The village is therefore formed by people with previous extensive contact with some commercial activities.

After A'Ukre creation, logging itself occurred within the village territory. Some accounts (in 1982) describe the local villagers opposing logging activities within the village territory. At that time, FUNAI had signed a contract with loggers to exploit mahogany in the Kayapó

indigenous area as a whole. A'Ukre's refusal to accept this deal resulted in two loggers being killed by them (Schmink & Wood, 1992). However, this position changed later. Certainly, the village has been pursuing illegal mahogany logging since 1989 on a yearly basis (Zimmerman *et al.*, 2000), with the only exception of two years (1995 and 1999). According to a villager, the exploitation rates reached the amount of 5,000m<sup>3</sup> of wood in some years. However, mahogany did not bring to A'Ukre the same wealth levels observed in Gorotire and Kikretum. For the most part, and for several years, the leaders would be the almost sole beneficiaries from the transactions. For the villagers, it was left only a sporadic influx of imported food, in addition to other benefits, such as the acquisition of an electrical generator.

This pattern changed in 1998. Some disagreements between leaders over administrative problems, but also in relation to the benefits of logging, produced another village split and the formation of the Moikarako village. Besides these divergences, there was also discontentment amongst common villagers who were unhappy with the small benefits they were seeing from logging. The newly appointed chief was therefore expected to transform this pattern, making deals that would benefit the villagers as a whole. According to one of them, the new chief tried to carry on as usual, dealing for his own benefit and that of his family. He was soon pressed again by the villagers and the mahogany income from that year was used for the construction of wood houses, with cement floors and surrogated roofs for all the families. The amount of mahogany extracted that year – or at least the amount that was paid by the loggers - was relatively low for the village standards (about 1,500m<sup>3</sup>). In 1999, according to Zimmerman *et al.* (2001), there was apparently no mahogany logging in A'Ukre. Finally, in the period of fieldwork (2000), mahogany extraction was small, according to both villagers and local logging employees visiting A'Ukre in March, even if loggers from two different companies were exploiting the village territory simultaneously. As payment, the Indians of A'Ukre received a few flights loaded with goods such as meat, chicken, soft drinks, batteries, coffee, sugar and photo films. Moreover, one of the loggers paid the cost of transporting a boat that the villagers had received from the governor. The boat was also loaded with food and diesel (about 2000 litres). Finally, the loggers also paid for some flights to take people to town, or allow the chief to attend political meetings.

The description presented above cannot be considered to reflect the full reality. It only accounts for those benefits known and evaluated by the common A'Ukre villagers. The perception of villagers is based on incomplete information because logging in these terms is illegal and village leaders try to cover its existence. It is likely that an equal or even larger amount of benefits than those described here goes straight in to some of the leaders' accounts. Accordingly, the whereabouts of this money are unknown. Even though, if the practice of benefiting more the leaders is widespread among the Kayapó, it is important to emphasise that the benefits they receive are only a very small proportion of the commercial value of mahogany.

Gold mining was never pursued within A'Ukre territory. Local chiefs always affirm that they would never allow gold mining to be undertaken within their territory because they knew about the dangers to the environment and their people's health. For instance, while in São Paulo in early 1999, giving a presentation in an urban school, the main A'Ukre chief was asked by one of the students if it would allow gold mining inside its controlled territory. He promptly denied, as he had done on many other public occasions before. However, only few months later, in early October of the same year, four prospectors visited A'Ukre, invited by the leaders and at the knowledge of all the villagers. They were there to prospect gold in the village's territory. When asked about this issue, some villagers, men and women included, part of which had experienced the problems with gold mining in Gorotire, were happy with the fact that the "good times" could soon return. According to some villagers, miners were

searching for gold only at those locations that could not directly impact the local river, which the villagers depend for subsistence. On the other hand, this option did not consider the evaluation of the possible impacts to other Kayapó groups, an impracticable initiative by the part of the Indians themselves. Finally however, gold was not found in an amount worth exploiting and the initiative was, at least for now, abandoned.

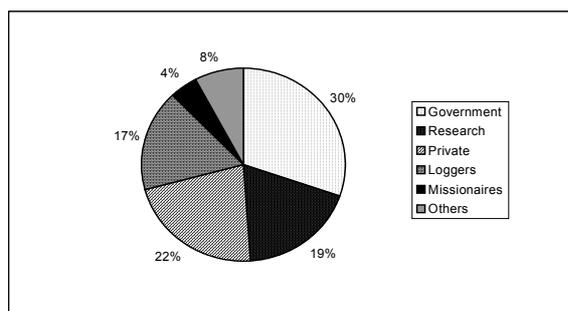
Besides these now almost “traditional” commercial activities for Kayapó standards, mining and logging, A’Ukre in a sense pioneered the integration of a new dimension to their market activity. Village leaders were responsible for inviting both the Body Shop company and a researcher to start activities within the A’Ukre territory. Ecological research, although not strictly a direct market activity, constitutes for the Kayapó further integration and exchange with a market economy, partly through trade and partly through supplying paid labour to researchers.

### *V.2. The Role of Different Actors In A’Ukre Market Integration*

As outlined in the section above, A’Ukre villagers lived through the same historical context experienced by the former groups they come from. Therefore, older villagers were affected at some point by the policies of inducing forest products marketing, by the more “modern” development ideas of the 1970s and, finally, by the current absence of governmental interference. Presently, the government is not responsible for forest products trade within A’Ukre. Brazil-nut commercialisation with the Body Shop company is organised by the Indians themselves and the company. The government only provides some help on an irregular basis when, for instance, it allows the use of aircraft hired for other purposes to be loaded with the oil produced. Mahogany logging is undertaken despite government regulation rather than with its assistance. No other commercial activity is organised by the government in the village, a good example to the situation in indigenous villages as a whole. Governmental presence is therefore only observed in A’Ukre in relation to education and health assistance as discussed in following sections and as a provider of labour as highlighted before.

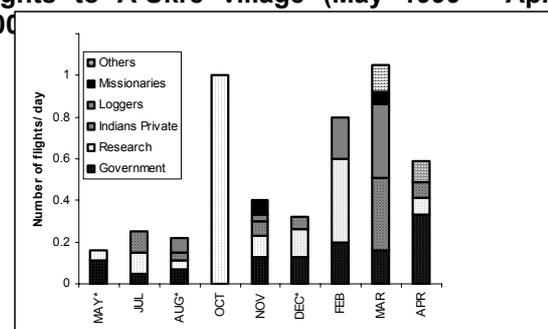
In addition, an important governmental impact in A’Ukre, with implications to market integration, is in providing the means of access to the outside world. This position is important, since the village is not connected by permanent roads or by a navigable river. Government hired airplanes are, for instance, used on an irregular basis by the Indians to travel to Redenção to purchase industrialised food or, less frequently, for transporting handicrafts to sell in FUNAI’s shops. The government is the single largest provider of flights to A’Ukre, approximately one-third of the total (Figure 2). These aircrafts serve the area on an irregular basis with the number of flights per month varying between less than one, to about a flight every three days (Figures 3).

**FIGURE 2. Origin of flights landing in A’Ukre (May 1999 - April 2000)**



Source: Fieldwork data, plane arrivals observations.

**FIGURE 3. Monthly variation on daily rate of flights to A’Ukre village (May 1999 - April 2000)**



\*Note: Data not available for June and January.

A'Ukre people have had contact with missionaries before the village's formation in 1978 and also subsequently to it. Similarly to what was described for another Kayapó village, Gorotire, missionaries were expelled and re-invited to A'Ukre in several occasions. The ruins of a missionaries' house are still observable in the village but, presently, there is no missionary presence in A'Ukre. However, some links with religious groups are still maintained by individuals converted by the missionaries. Occasionally, these male Indians are invited to attend some activities and courses in town, as was once the case during the period of study in November 1999. Moreover, missionaries' presence in nearby villages, such as Moikarako and Gorotire, means that aircraft hired by these missionaries arrive sporadically in A'Ukre. These occasions are though very rare, accounting for only four percent of the total number of landing flights of the village (Figure 2). The access to town seems to be the only current impact of missionaries in A'Ukre market incorporation. And therefore, due to the insignificant number of flights, the influence is practically absent.

Researchers have usually a small impact on market integration as compared to other groups. However, villages housing research stations, as is the case with A'Ukre, are a particular case. Three are the main roles on market integration exerted by the research activity. First and foremost, the activity is responsible for market incorporation of the local inhabitants by the process of paying salaries to research assistants. Second, the presence of researchers put the villagers in contact with new objects that the Kayapó become to desire. For instance, it is quite usual that A'Ukre villagers make use of camping tents, which are widespread in the village, a habit incorporated from the researchers. Finally, the research activity provides the village with another source of access to town, being responsible for a fifth (19%) of the local air traffic (Figure 2).

## *V.2. The present force behind A'Ukre market integration*

### Food Acquisition

Kayapó people rely on a mixture of swidden-agriculture, hunting, fishing, gathering fruits, nuts and honey for food. Presently, A'Ukre and other Kayapó villages have included in this list some industrialised products. This is perceived by analysing some examples of daily food diets of A'Ukre children from different income level households (Table 1).

Households vary in their income levels. And, as a result of this, they vary in the regularity they purchase industrialized food. Mainly, households can be classified, according to their purchasing practices, into three different groups: (i) those buying food from town at least once a month; (ii) those buying food at least once every two or three months; and (iii) those buying food only very infrequently, which can mean only once or twice a year. Within each of these frequency categories, households differ in their list of products acquired (Figure 4). Some products are acquired by all the households, i.e., by those that frequently purchase food and those that do it on an infrequent basis. Five products are consistently purchased by all A'Ukre households i.e., rice, beans, sugar, coffee and cream crackers. Oil and powdered juice are acquired by more than 80% of the households, whatever their frequency of food acquisition. Slightly less popular are salt and spaghetti, obtained by only less than 80% of the households in all frequencies. Due to their high rates of acquisition, these products might be considered as being basic food staples for the A'Ukre context. Therefore, from this point of view, they could be considered as necessary. This statement is also supported by similar food habits being shared by other Kayapó villages (Souza, 2000). Nevertheless, by necessity it is meant here acquired necessities, since especially in the case of powdered juice, there is no possible nutritional explanation that could imply a real need.

Besides these products, there are others purchased by only few households. Poorer households, which equal those that acquire food from town more infrequently, also

**TABLE 1. Food consumption of children**

Poor		Medium		Rich	
<i>Child A</i> US\$84/per cap. <sup>1</sup>	<i>Child B</i> US\$84/per cap.	<i>Child C</i> US\$193/per cap.	<i>Child D</i> US\$194/per cap.	<i>Child E</i> US\$734/per cap.	<i>Child F</i> US\$1288/per cap.
Beans <sup>2</sup>	Beans	Beans	Banana	Beans	Beans
Chicken	Chicken	Coffee	Brazil-nut	Bread	Chicken
Cream crackers	Coffee	Fruit juice	Fish	Chicken	Coffee
Spaghetti	Fruit juice	Rice	Yam	Coffee	Cream crackers
Rice	Spaghetti	Banana	Manioc flour	Cream crackers	Fruit juice
Yam <sup>3</sup>	Eggs	Brazil-nut	Marrow	Fruit juice	Powdered Milk
Corn <sup>4</sup>	Rice	Coconut <sup>11</sup>	Papaya	Rice	Spaghetti
Sweet manioc <sup>5</sup>	Banana <sup>7</sup>	Corn	Sugar cane	Banana	Eggs
Sweet potato <sup>6</sup>	Brazil-nut <sup>8</sup>	Djuakupu	Sweet potato	Corn	Rice
	Djuaiaka <sup>9</sup>	Fish		Manioc flour	Banana
	Djuakupu <sup>9</sup>	Hunting meat		Marrow	Brazil-nut
	Fish	Yam		Sweet potato	Coconut
	Hunting meat	Manioc flour			Corn
	Yam	Marrow			Krem or Uxi <sup>14</sup>
	Manioc flour <sup>5</sup>	Papaya <sup>12</sup>			Djuakupu
	Marrow <sup>10</sup>	Pequi piqui <sup>13</sup>			Fish
	Sweet manioc	Sweet potato			Hunting meat
	Sweet potato				Yam
					Manioc flour
					Marrow
					Papaya
					Sweet manioc
					Sweet potato

*Colour legend:*

	= locally grown
	= purchased items
	= most usually purchased; but occasionally grown locally

Source: Survey data, household interviews.

- Notes:
1. Per capita income;
  2. *Phaseolus vulgaris*;
  3. *Dioscorea bulbifera*
  4. *Zea mays*
  5. *Mahihot esculent*
  6. *Ipomoea batatas*
  7. *Musa ssp.*
  8. *Betholettia excelsa*

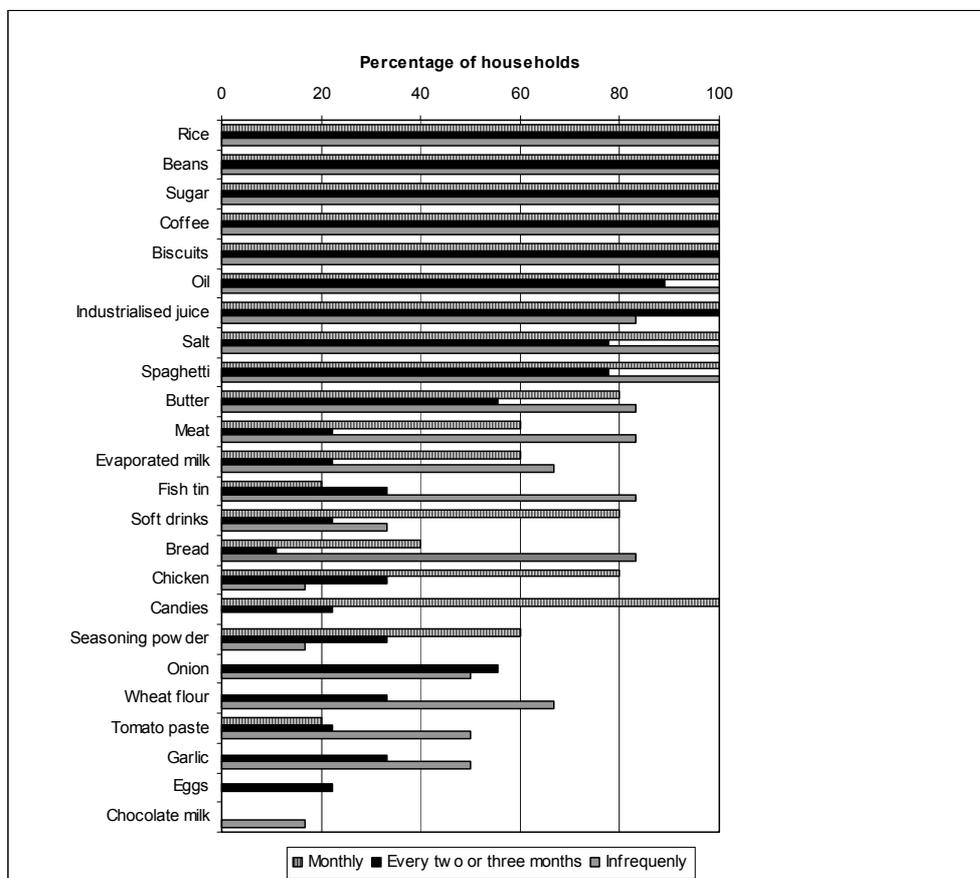
9. Refers to traditional dishes, including different types of manioc flour and either fish or meat.
10. *Cucurbita ssp.*
11. *Cocos nucifera*
12. *Carica papaya*
13. *Caryocar brasiliensis*
14. *Endopleura uchi*

occasionally buy some of these luxury items, as is the case of canned chocolate milk and soft drinks. This implies that even poor households acquire unnecessary items occasionally, if they were exposed to them earlier.

The presence of luxurious items in the A'Ukre shopping basket means that at least partially the acquisition of industrialised food is driven by desire. However, for the main products there is the possibility that purchasing is driven by necessity. There are two main indicatives that this is not the case of A'Ukre. Firstly, malnutrition is apparently not prevalent in the village. Anthropometric data were gathered for part of the A'Ukre population but are not presented here. The collection of data had to be abandoned because of resistance by the part of the Kayapó, who associated measuring people to death, and feared this procedure was

sorcery. This association comes from FUNAI's practice of sending coffins to the Indian villages, for which usually they ask the village administrator to measure people. However incomplete, after evaluating about a third of the population, there were no indications of malnutrition, even amongst the people most at risk, i.e., children from about three to five years old. This is true even for those poor households acquiring food only once or twice a year and, therefore, where the impact of imported food on the nutritional balance is very weak. Secondly, the seasonality of food acquisition does not relate to the period of the year that the Kayapó experience the most important food constraints. This period equates with the end of the dry season, i.e. from August to October. In opposition, the peak on food acquisition occurs in February – March, when the cash availability increases. Moreover, if we consider air traffic, and among it mainly private hired planes, as indicators of food influx, the period they experience food shortages again do not correspond to plane traffic (Figure 3).

**FIGURE 4. The A'Ukre shopping basket for food**



Source: Survey Data, household interviews.

Note: Legend refers to the periodicity that households purchase food. Within each frequency category, certain products are acquired by different percentages of households.

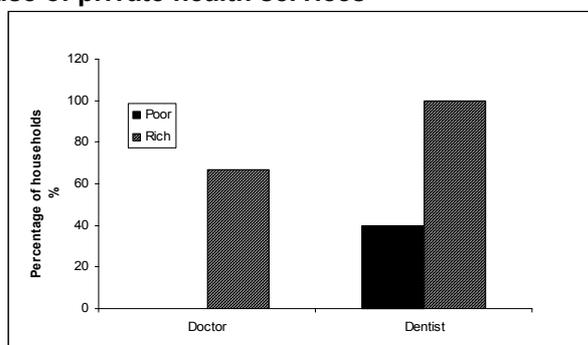
However, the problem could be caused not by the amount of food available, but by its quality. Protein scarcity is considered by some authors as a limiting factor for Amazonian indigenous populations (Gross, 1975; but see Beckerman, 1994) and thus could be the reason for food purchase. However, most of the food items acquired have low protein contents. Moreover, other studies specific to A'Ukre have shown that the animal protein intake from hunting for the village is well above the rates recommended (Nascimento, 1997). Moreover, hunting protein is scarcer during the dry season and therefore not corresponding to the peak period of food purchase.

## Health

Health of Indigenous people in Brazil was previously the responsibility of the Indian department, FUNAI, but was definitively entitled in August 1999 to the Health Ministry, through its National Health Foundation (*Fundação Nacional de Saúde*, FNS), which is organised in special departments (*Distritos Sanitários Especiais Indígenas*) (Pellegrini, 2000). Before 1999, villages were left for about three to four years with no, or very irregular, health assistance. The reason was again the lack of funds, but also administrative and corruption problems within local FUNAI. This problematic period is, however, not unusual in the health care practice of Brazilian indigenous areas and serves only as an illustrative example.

Due to the poor nature of governmental health services, private medical and dental assistance are in many cases paid by the Kayapó. As should be expected, rich and poor A'Ukre households differ in this matter (Figure 5).

**FIGURE 5. Percentage of households making use of private health services**



Note: Poor and rich defined as bottom and top quartile of A'Ukre household income distribution.

As seen, richer households increase their possibilities to deal with health problems in emergency situations. Similarly to education, this fact could account for the Kayapó desire for cash earning. However health has its impact, the fortuitous nature of these necessity occasions makes it a less important driver on market adoption than education, which is now presented.

## Education

Education was previously the responsibility of the Indian department, FUNAI. From 1991 though, it became the duty of the Ministry of Education that acts at the local level through a special indigenous department (Grupioni, 2000). With lack of funds, the local office usually has no resources even to fly teachers into the villages. Because of this, they have to count on favours from other governmental departments, A'Ukre researchers or, in many instances, flights financed by the Indians themselves with money raised with mahogany transactions. In 2000, for instance, some of the village teachers entered with flights paid in this manner. Besides lack of funds for flights, students' material is lacking and the infrastructure is in very poor state. The A'Ukre wooden school, for instance, does not allow that classes are given when it is raining. But A'Ukre is still privileged if compared to other Kayapó villages. Usually, the village is entitled to two teachers, according to the number of students. In 2000, however, there were four teachers in the area, although this did not mean an improvement in educational conditions. Rather, the innovation was due to complete inadequacy of teaching conditions in other villages and the redirection of teachers to A'Ukre. With bad, but still

Among the poor A'Ukre households, i.e., those at the bottom quartile of the income distribution, none has paid for a private doctor for a household member in previous emergency situations. For the richer households, however, this percentage is more than two-thirds (67%) of the households. In the case of private dental care, 40% of the poorer households have made use of it, in contrast to richer households which all have already used this service. Besides doctors and dentists, all households, both poor and rich, have occasionally acquired medicines.

feasible conditions, A'Ukre improved its situation for that year whereas the other villages were left with no teaching.

The irregularity, disorganisation and, consequently, poor quality of education in Kayapó villages has meant that families send their sons to study in town. Richer households always attempt to send at least one of the boys to study in town, with very few exceptions. In the period of fieldwork, three out of 51 A'Ukre boys - or less than six percent - were studying in Redenção. A higher number - ten out of 51 or about one-fifth - had also previously spent some time at urban schools.

The opportunity to educate members of the family is important and held in high esteem by the Kayapó. They either invest their own money or, less often, try to use their political influence to receive help from FUNAI. In this last case, some leaders were able to appropriate resources from FUNAI, which were directed to benefit outstanding indigenous students from all the communities. The rationale for seeking education relates to the fact that it increases the chances of income earning and also of assuming some leadership roles. In A'Ukre context, literate Indians are those, for instance, assuming administrative positions in the local government, hired as research assistants and responsible for dealing with loggers. In some cases, people do indeed seem to be moved to cash earning activities mainly to improve educational standards of household members. For instance, in 2000 one A'Ukre household was trying to maximise profits for Brazil-nut oil production to be able to send one of the boys to town. A Kayapó who had previously been a village administrator earning a regular salary from FUNAI was the household head. He was thus formerly able to sustain his two sons studying in private schools in town, and was therefore trying to maintain at least the older son studying in town.

## **VI. Summarised evidence of pressure, necessity and desire**

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### *VI.1. Pressure*

Pressure exercised by the mainstream society is the first reason accounted for indigenous peoples' market integration. The historical process of Amazonian Indians, and successively of the Kayapó and A'Ukre village, has shown that pressure is amongst the causes of market incorporation. Evidence of pressure is varied, beginning with simple acts such as the necessity of indigenous groups to conform to the outside society and therefore to be clothed (Hugh-Jones, 1992). However, pressure is most importantly observed in the commercialisation of strategic resources controlled by indigenous groups (Colchester, 1997b). The evidence presented in this study shows that for the Kayapó and A'Ukre, desire for resources controlled within the groups' territory was the first and foremost form of pressure for their market adoption. Throughout different historical periods, the Kayapó-controlled areas contained strategic resources, such as rubber, Brazil-nuts, feathers, animal skins and gold. The very pacification process of the Kayapó was therefore forced by this necessity to prompt the extractive industry (Fisher, 1994; Schmink & Wood, 1992). At present, the major compelling force is experienced over the control of wood and mainly mahogany resources, which are quickly becoming exhausted (Zimmerman *et al.*, 2001). However, even mahogany depletion is not likely to dampen market inducement, since there are other wood varieties present in the Kayapó territory that are increasingly disputed. Moreover, the Kayapó territory is rich in minerals, other natural resources and also hydroelectric power, all of which can maintain the driving force for years to come.

It is also important to make a remark about the forms in which pressure can be put forth, which basically can be direct or indirect. Direct forcing to market adoption in indigenous territories is in many instances objected to. As presented, the objection to gold mining was at first the position of the Kayapó, and later on the A'Ukre Kayapó also objected mahogany

logging within their territory. Similarly, the same situation is observed in other Amazonian countries' contexts (CS, 1998). The opposition is, however, in many instances transformed later. As seen for the Kayapó of Kikretum, after expelling the miners, the villagers changed their minds and decided to put gold exploitation to work for them. The same occurred with the relationship of A'Ukre and logging.

As for the actors involved in fostering integration, we have seen that the governments have a decisive role in market adoption, as it was the case of the Kayapó and A'Ukre. Firstly, the government – but also missionaries – were important for sedentisation through settlement creation. Contrasting with this, the sustainability of the traditional form of subsistence in the Amazon depends - at least for the populations in the *interfluvium* - on territorial movements. Slash-and-burn agriculture, for instance, is dependent for productivity maintenance on the alternation of plots themselves and therefore to occasional village movements (Conklin, 1954). Sedentisation, associated with the delimitation of small territories, can lead to natural resources exhaustion and then to the necessity of integration into market activities. The Kayapó territory is large and A'Ukre, for instance, has already changed location once. Hence environmental exhaustion is not yet important. However, increased infrastructure development in the village could stop village movements in the future and therefore increase the reliance in market products.

Besides sedentisation, the Brazilian government exerted pressure over indigenous peoples' market integration through several policies. As presented before and exemplified with the Kayapó case, there were many moments when integrationist approaches were at the base of Brazilian government policies. In addition, even when policies were more humanitarian-based, there were conflictive interests within the government itself that at the very end fostered commercialisation. Similar evidence is encountered worldwide, such as in Sarawak, Malaysia, with governments repeatedly using the argument that indigenous territories have not been put to work for the benefit of the country's prosperity (Colchester, 1993). Similar contexts were also underlying the logic of several projects impinged over indigenous groups throughout several Amazonian countries (Treece, 1990). At present the Brazilian governmental policies are apparently not integrationists, although they seem rather ambiguous. If specific indigenous policies do not provide a stated integrationist approach anymore, there are signs that this can be only a new wrapping for an old practice. For instance, the new project for the Amazon area, *Avança Brasil*, is likely to affect indigenous areas, as highlighted previously (Nepstad *et al.*, 2000).

Nevertheless, in many cases - if not most - the strategies of pressure adopted are more indirect. In many instances gifts or token money is provided to co-opt indigenous groups to commercialise their resources. The Kayapó case has shown how the pacification process is bounded to this indirect process, as it has been the form of actuation of extractivists, loggers and miners throughout the Amazon history. Patterns are also similar in other regions of the world, such as for instance in the Ecuadorian forests, where to reduce the risks of oil production exploiters usually walk in the villages with supplies (Mendez *et al.*, 1998). In other cases, pressure is exerted by co-opting indigenous groups with the payment of percentages of the production profits. This was the case when the government and mining companies paid a percentage of the gold profits to the Kayapó. Again, this pattern is similar to other contexts such as when a percentage of the profits began to be paid to halt indigenous protests related to the Grasberg mine in Indonesia (SURVIVAL, 1998a). Finally, as seen, researchers also do not usually escape from this cycle, even when they attempt to do so. They find themselves trapped by the common order and are likely to distribute goods and money to be able to proceed with their research. By doing that, they are also indirectly pressuring indigenous groups into market integration.

Pressure was hence a driving force behind the Kayapó and A'Ukre market integration and this situation do not appear to be an exception either for the Amazon, nor for the global situation of indigenous groups.

### *VI.2. Necessity*

The second reason underlying indigenous peoples' market integration is the necessity that can arise from: (i) environmental disruption within indigenous territories that curtail subsistence practices; (ii) the necessities of basic services, such as health and education; (iii) newly created necessities for industrialised goods; and (iv) the necessity to guarantee land rights.

However, to begin with, it is important to understand what defines a necessity. In its simpler terms, necessity can be considered as the property of those goods from which the very biological survival of a group is dependent. But if we expand this notion to include the cultural survival, the picture gets more complicated. Shirts, guns, sunglasses, watches, and other goods have not the same significance or value for the Indians as they do for ourselves. This change in "regime of values" (Hugh-Jones, 1993) makes it almost impossible to identify what constitutes a necessity in another culture apart from our own, since necessity is culturally determined. Moreover, the limits between what constitutes a desire and what is a need are blurred. In some instances, goods become a necessity after being adopted for a while, since technological losses are usually traumatic from the psychological point of view (Baksh, 1995). Bearing that in mind, the following presentation would be based on a cut-off line between necessity and desire that is not very clear and thus can be put under fire.

The first form of necessity implies the indigenous peoples' capacity to make a living from the territory assigned to them. By contrast, the fact that Indians are presently much less mobile than before, can lead in the long run to a depletion of the local resources. Hence it can cause market adoption to either acquire food or get technological inputs such as fertilisers or cars to access distant localities. The role of necessity as a driver for market adoption is apparent in many indigenous groups. In Brazil, the need exists in small and demarcated reserves that do not allow for subsistence maintenance. Especially groups in the Southern and Northeastern part of the country, but also some groups in the Amazon, experience this problem. In the case of the Kayapó of A'Ukre, however, we have seen that there is not a basic survival necessity underlying market integration. They acquire food, but not because of nutritional deficiencies and not when food scarcity is present. The Kayapó are privileged in the sense that they have large areas assigned to them. However, A'Ukre is not a very old village and this could account for the lack of environmental problems. Nonetheless, there is also an example of a necessity condition in the context of the Kayapó of Gorotire. Over there, fish protein became scarce in the 1980s due to environmental pollution caused by gold mining, making the group more dependent on purchased food. In other regions of the world, the same trend is repeated. In Papua New Guinea, for instance, the Yonggom people relied on fish, prawns and turtles for their maintenance that became rare due to the pollution caused by the Ok Tedi Mine. With a compromised diet, the natives ended up being completely dependent on commercial activities (Kirsch, 1997). In western Siberia too, pollution from the oil and gas industries has killed fish and game that were at the base of the local people livelihoods, inducing them to revert to market activities (SURVIVAL, 1998m).

Necessities can also arise from deficiencies or from food scarcity present only in certain periods of the year. For the Kayapó, we have seen that this was not the case, since their peak periods of food purchase do not correspond to food scarcity. In contrast, this is indeed the case for some other groups, such as for instance the Sirionó who are enrolled in marketing Caimans' pelts. The income raised with the activity is especially invested in acquiring staple

food items that helps them through periods of agricultural scarcity in the local dry season (Stearman & Redford, 1992).

Subsistence needs are not the sole necessary drivers compelling market integration. Other basic needs are also significant, such as health care and education. In the Amazon, health necessity arose mainly from the introduction of European diseases, but also from the disruption of traditional practices. Education, in turn, became necessary for dealing with the mainstream society. As seen for the A'Ukre example, the deficiencies in the governmental provision of assistance induce the villagers to seek private alternatives that imply cash availability. Faced with government abandonment of essential services, Kayapó and other indigenous groups have been driven to rely on the forms of trade available, even if they are environmentally unfriendly. However, if some leaders argue that they have no choice to enter the market trade, it is also true that these basic necessities are not usually met by the income received (Turner, 1999). It has also to be remarked that health and education necessities are prevalent in the market incorporation underlying causes in many different indigenous localities. For instance, among the Machiguenga of the Peruvian Amazon, the procurement of income alternatives to educate children is widespread (Henrich, 1997).

The third form of necessity worth exploring is that arising from new created necessities. As explained earlier, the process of gifts-giving and, in the final instance the sheer exposure to goods, leads to a process of creating new necessities for indigenous group (Hugh-Jones, 1993; Gell, 1986). Amongst the created necessities, some industrialised goods occupy a special place, because they facilitate or decrease the time spent on subsistence activities. The role of guns and axes are particularly easy to explain. Shifting agriculture, for instance, is about four times faster with an axe or a machete than with a stone chopper (Colchester, 1989). Hunting efficiency is also increased with new technologies (Hames, 1979; Yost *et al.*, 1985). For the Kayapó, the increased efficiency has meant a complete replacement of traditional subsistence technologies. Guns, for instance, are prevalent on hunting in the A'Ukre and Kayapó contexts, with other traditional techniques being practically abandoned (Nascimento, 1997). Moreover, some industrialised goods have already been incorporated in the Kayapó myths or their social life (Léa, 1986). Guns, for instance, are in many cases used as equals to traditional clubs during festivals. This incorporation of industrialised goods is present in almost all indigenous societies. Without machetes, aluminium cooking pots and steel axes, indigenous peoples would work much harder. Therefore, their present quality of life is inextricably dependent upon the ability to generate cash to be able to acquire these necessary goods (Baksh, 1995).

The final form of necessity is related to the engagement on market activities to guarantee land or other types of rights. This necessity arises from a strategy that is usually adopted when the aim is to exploit aboriginal lands, i.e., to state that they are unproductive and/or unoccupied (Posey, 1989a). Especially in the proximity of frontier areas, as is the case of Kayapó lands, the argument is viewed as a strong one for forcing the “use” in the capitalist sense of producing goods for exchange. In many cases, indigenous groups first oppose commercial activities within their territories, but are faced with the fact that they are not able to arrest them. In several cases, they use this pressure to guarantee the effective control of their lands. As seen earlier, the Kayapó were indeed forced to permit gold mining in their lands in exchange for the demarcation of their lands (Fisher, 1994). Zimmerman *et al.* (2001) also points to the fact that income from mahogany logging has not being solely used on superfluous destinies by the Kayapó. It has also being applied in the organisation of protests that have guaranteed many rights to the Kayapó and Brazilian indigenous groups as a whole. Again, similar trends are observed elsewhere in the world. In Alaska, the Inupiat have also

used the interest to explore oil resources within their traditional territory to force the government to guarantee their land rights (Kruse, 1982).

Necessity is hence one of the driving forces behind A'Ukre and Kayapó market integration. For A'Ukre, food scarcity is not yet a problem, but there are examples of this problem in other Kayapó villages and yet other indigenous peoples. In contrast, deficiencies in health and educational services have been inducing the Kayapó to pay for alternatives, a usual fact in similar contexts. In addition, newly created necessities, as well as guaranteeing the land rights, have been at the base of the Kayapó market involvement, as it is also the case with other groups.

### *VI.3. Desire*

Besides a pushing force for commercial activities' adoption, or the pressure from the mainstream society, there is finally also a pulling force that equates with the indigenous desire to be market integrated. There is much evidence that show that desire exists in the Kayapó market incorporation, as well as in the case of many other indigenous groups. Indications come mainly from the food and goods that are purchased, alongside the group approach to market integration and the different actors within it.

As was discussed earlier, food acquisition is realised even in the absence of necessity. Moreover, as the data indicated, even poor families acquire luxury items such as candies and powdered juice on some occasions. Similar evidence has been provided by other studies. Vickers (1982), for instance, has argued that candies, alcohol and several different forms of non-necessary carbohydrates make part of the regular purchased food items by several Amazonian groups. Not only food, but also the acquisition of goods provides another example of desire as a driving factor. Non-essential items are present from the beginning of market incorporation among the goods purchased by indigenous groups (Hugh-Jones, 1993). Similarly, the Kayapó had incorporated glass beads to their culture before their official contact and are presently acquiring goods such as CD recorders.

A second set of evidence supporting the desire approach relates to the way that indigenous groups move towards market integration. The raiding behaviour of the Kayapó is a first good example. Underneath the act of plundering Brazilian villages, there was the desire to obtain the new goods and not yet a necessity. Secondly, desire is perceived when we observe the transformation of a protest over market activities within their lands, to a different form of protest that aims not to arrest the activities, but to be incorporated into its beneficiaries. In the Kayapó case, mining and later on logging were arrested, but used again soon after, in a different form that guaranteed their share on the revenues. In other localities, the same history is repeated. Blockades and protests over many sorts of commercial exploitation are first intended to stop commercial activities, but are later on transformed (Mendez *et al.*, 1998). As summarised by an indigenous statement, "*we are not saying that not a single tree should be cut down, we only demand that logging should be managed in such a way that it genuinely benefits the local peoples*" (Harrison Ngau, quoted in Colchester, 1993:162). Similar statements are also provided by indigenous organisations such as, for instance, the Coordinating Body for the Indigenous Peoples Organisation of the Amazon Basin – COICA (COICA, 1989).

A third set of evidence supporting the desire hypothesis comes from the relationship that indigenous groups establish with different actors, who are usually underneath market integration in indigenous territories. Desire for goods influences the manner by which they welcome strangers into their villages (Colchester, 1989). Missionaries probably provide the clearest example. As suggested by the Kayapó case, missionaries were invited and expelled from A'Ukre many times. More than being seeing as a religious group, the Kayapó and other indigenous groups apparently consider missionaries as a source of goods and commercial

activities (Hugh-Jones, 1993). As stated by Colchester (1989), missions survive because they trade material benefits for the Indians souls. A second group of actors, researchers, provide a similar role in many cases. Exchange of goods for hospitality and information also forms part of the anthropological and researchers enterprise. In A'Ukre, missionaries were expelled, but a regular source of researchers was already provided. Finally, it is worth noting that loggers and miners are not entering some indigenous territories, as for instance the Kayapó, without consent but are rather invited by leaders.

The indication that desire is an underlying cause of indigenous peoples' market integration lead us to a final question or to why exactly desire exists. First, desire comes from the sheer exposition or contact to food products and goods. The Kayapó and particularly the people from A'Ukre provide again a good example. They have been historically exposed to many riches and therefore they are presently compelled to find resources they control that could be dispose of to be able to return to what they perceive as the glorious times of mahogany logging and gold mining. Exposition is rather important because it implies that even when commercialisation is arrested, there might be no return to an economy completely based on subsistence activities. Some indigenous groups are said to return to old patterns of production when levels of market integration are diminished (Galvão, 1979; Santos *et al.*, 1998). However, most of them will try a new commercialisation path.

Secondly, desire is also said to arise from the symbolic circumstances of good acquisition. Possessing foreigners' goods might imply the prestige of being in the contact and being able to deal with them. Desire for goods can also come up from the necessity of symbolic innovation or for pure socialisation (Hugh-Jones, 1993).

Finally, it has to be remarked that desire to be market integrated is by no means the rule amongst indigenous peoples. Groups experience an extraordinary difference when submitted to new economic conditions. Some societies take on consumerism, while others are highly conservative in this respect (Gell, 1986). Yet there are also differences within the groups themselves. Diversity can be exemplified by the contradictory actions in relation to gold mining expressed by the Kayapó that were in part due to internal conflicts (Treece, 1990). Furthermore, it is worth noting that a lack of desire might also change with time. For the Kayapó it has happened in relation to both gold mining and logging. Other examples also exist for other localities. For instance, nomadic people in some cases show at first a low interest for goods that they cannot carry with them. However, they might begin to desire these new technologies and goods over time (Hart, 1978).

Desire is hence also a force behind market integration of the Kayapó and, if not all, many indigenous groups. It can be perceived from the type of food and goods acquired and also by the form they approach market integration and its different actors.

## **VII. Conclusions**

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This study was based on the hypothesis that market integration in Amazonian indigenous areas reflects external pressures' imperatives and necessity, but also desire and aspiration from the part of indigenous people. Evidence from the Kayapó case and A'Ukre study site has shown that pressure, necessity and desire are the overall forces driving market integration. Pressure is important, because the Kayapó control strategic commodities in the Amazon, which have been depleted in the outside areas, and also because they are under the effect of governmental policies and the world market economy. Necessity is in turn decisive, because in many cases they are under the effect of environmental disruption and also because they have incorporated the need for new technologies and foodstuffs. And lastly, desire, because in some cases they are not only driven by utilitarian acquisition, and also because they purposefully try new modes of exchange.

From this, we conclude that, since there is also a desire component, we cannot completely avoid market integration in indigenous areas. Therefore, it is important to understand its impacts in social organization, natural resource use and also if alternatives modes of marketing are able to diminish deleterious impacts.

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