

REWARD FOR NATURE CONSERVATION: TREE KANGAROOS, CARS AND SCIENTISTS

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ABSTRACT

The objective of this article is an analysis of ethnohistory of establishment of YUS conservation area in Papua New Guinea. Particular attention is devoted to the natives' attitudes and expectations toward and from YUS conservation area. The article is based on the research, which the author conducted among the Nungonn ethnic group of the Morobe province. Attitudes and expectations are analyzed and interpreted on the basic survey executed among the Nungonns and via drawings made by the pupils of a local primary school in Yawan. Author argues that the natives dream for the kind of development, which is in a stark contrast to the conservators' ideas of biodiversity protection.

Keywords: Nature Conservation, Culture, Drawing

INTRODUCTION

In this paper I analyze the dilemma created by incompatible expectations on the part of the conservators and the local community despite the fact that both, in some sense, are concerned with "conservation". In this article I explore the attitudes toward nature conservation and expectations concerning development; as gnozeological tool I use drawings made by pupils of primary school in Yawan. I hypothesize that the drawings represent ideas transmitted from parents and teachers to children. In other words, the drawings mirror both local attitudes toward conservation program and expectations concerning benefit from this one.

The article relates to the current anthropological interest in study of attitudes of locals toward programs of the nature conservation. Recently some anthropologists focused on similar problem, which I address in this article. They found out that conflicting expectations result from misunderstanding concerning what development and nature protection mean (see for example West 2006). In the framework of development anthropology anthropologists analyzed the concept of development itself and see it as "domain of thought and action" resulting from peculiar historical experience after Second World War (Escobar 1995: 10). Among others, Escobar argues that nature and biodiversity transformed into economic capital (Escobar 1995, 1998); this kind of capital is then an instrument utilizable for development of local community. Escobar wrote that development has two-face, because in the core of the concept are both recognition and negation of difference (Escobar 1997: 497). In the article I will present effort of locals of Uruwa to establish conservation area in order both to protect tree kangaroos and to develop their community via education and techno-economic progress. As I will document the New Guineans from Uruwa valley have clear idea what development is. On the one hand they recognize their lower techno-

economic and educational levels; on the other hand they want negate a gap via both participation in market economy and nature conservation program.

The article is based on data gathered during two-step fieldwork among inhabitants of three villages of Nungonn. A census revealed that there are nearly nine hundred people – Yawan (218), Toweth (386), Kotet (282). Three additional distant villages were not central for this study. Inhabitants of the selected villages are in close everyday contact, participate in church services and do collective work for school (as for example cutting the grass and repair the school buildings). I stayed among Nungonns two-times (2009 and 2011¹). An unusual aspect of this study is using of collection of drawings made by pupils of a local primary school in order to study visualization and representation of a culture. The study of culture via drawings is rather undervalued in anthropology. Visual anthropologists prefer to represent culture via films and photographs; that is why they do not generally collect drawings (see Ruby 2000). Cultural anthropologists also underestimate the importance and potential utilizing of drawings in the fieldwork. Anthropologists indeed have been collecting drawings ever since the beginning of the anthropology as an empirical science (see for example Haddon 1904). Famous anthropologist Margaret Mead also collected drawings during the fieldwork on Manus (Mead 1930). Scholars have mainly used drawings as a projective technique in order to analyze intellectual maturity or personality traits of members of the non-Western cultures (see Schuster 1978). That is why the researchers often use the standardized test technique (for example Dubois 1944; Honigman & Carrera 1957; Martlew & Connolly 1996). Few anthropologists utilized drawings to study culture itself, or cultural context of the drawings (see for example Cox 1993, 2005; Lindström 2000). In this article I will briefly introduce the Nungonn ethnic group and then I will describe the history of YUS² conservation area (YUS CA). Finally, I will outline a future vision of nature, nature conservation and of the village as the pupils of the primary school represented in the drawings. This will reveal attitudes and expectations toward and from YUS CA.

First of all I have to clarify some of terms, which I use in the following paragraphs. I operate with the terms ethnic group, community, village and clan on the four distinct levels. Ethnic group includes inhabitants of ten villages in upper Uruwa. The residents of these villages speak the same Nungonn dialect and share the same culture. The most important is that the people of these villages identify themselves as Nungonns; that is why I define them as ethnic group. Self-representation and self-identification as Nungonns is product of historical sociocultural processes which have been taking place in Uruwa since Second World War at least. Thomas Eriksen argues that standardization of language and schooling are among others important impulses for creation of ethnic identity (Eriksen 2010). This is exactly the state of affairs in the area of Kotet, Toweth and Yawan. Primary school is located in Yawan since 2004. The term community refers to the dwellers of these villages, which are in the daily contact, know each other and understand themselves as “community”. The community consists of eleven clans, four in Yawan, tree in Toweth and four in Kotet. According to the anthropological theory a clan is group of people united by descent from a common ancestor (see Holy 1996, Fox 1971). Each clan in the area consists of one or more lineage. Each of them owns some lands in the area. As I will document, these conditions enabled creation of YUS CA.

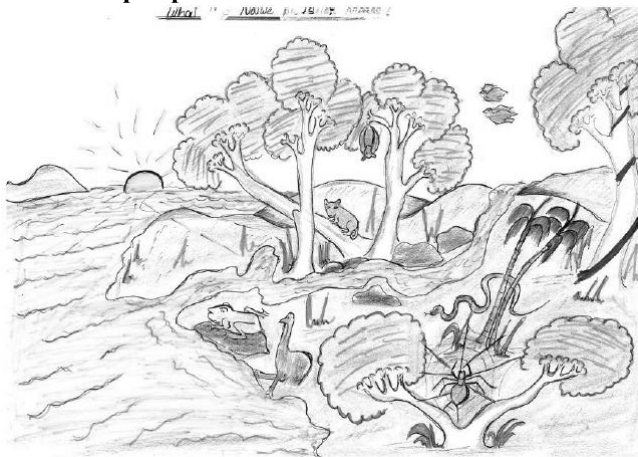
¹ In 2011 I stayed in Yawan with my PhD student Julie Hubenakova. During the research we teamed up and we combined a standardized anthropological toolkit, including participant observation and formal interviews, some of which utilized the genealogical method. Besides this we collected sets of drawings.

² The YUS stands for initials of the Yopno, Uruwa and Soma rivers.

NUNGONN ETHNIC GROUP

The Nungonn ethnic group is located in the upper Uruwa valley in the Finisterre Range of the Morobe province. This ethnic group belongs to Yau language family (Lewis 2009). People of different villages of this part of Uruwa valley speak Nungonn dialect of the Yau language, which means that they all understand each other. This area is a relatively remote part of Papua New Guinea. The selected community of the Nungonn people inhabit the region of 1,400 m above sea level. These community has not been previously studied by any anthropologist. Lutheran missionary Ursula Wegmann did a survey in the selected village of the Uruwa Valley in the eighties (Wegmann 1990). She conducted a survey in Boksavin village, which is a few days walk from the selected villages. The purpose of her study was related to the missionary activities of the Lutheran Church. Beside this anthropologically oriented survey, Wegmann also published some linguistic studies of Yau language (1982, 1993a, 1993b, 1993c 1994a, 1994b). In a collaboration with Doug Lauver, Wegmann published the essentials of Yau grammar (Lauver & Wegmann 1990). Lauver previously prepared a Yau dictionary (Lauver 1990). Only a few particular studies are available, published by the author as outputs of the previous fieldworks (Soukup 2011a, 2011b; Bláha, Soukup, Balcerová 2011).

Fig. 1: Nature in a native's perspective



From anthropological viewpoint it is possible to say that selected villages represent a typical example of the way of life in this area of Papua New Guinea. These people are gardeners, mainly planting yams (*nak*), taro (*moit*), and bananas (*dowot*). In order to achieve an economic progress a few local men developed a coffee business. The main source of proteins are pigs, chickens and also fish. From time to time, they also keep cassowaries. There is an exception concerning pigs. Adventists of Nungonn obey the biblical rules prohibiting the consumption of pork. A secondary source of proteins is a hunting game, which is restrained due to establishment of the YUS CA as I document later.

It may be possible to partially reconstruct the history of the contact between the local people and the Europeans. People of the Uruwa Valley have been in contact with the Europeans since the 1920s, when missionaries started their activities in this particular region. Probably the first European, reverend Karl Saucker contacted people in the Finisterre. In 1927 he developed a mission station in the remote region of Ulap, later he

traveled from this point into the Uruwa Valley (at that time Orowa valley) where he contacted the local people (Wassmann 1991; Mückler 2009). Since then, the people of Uruwa have been in touch with Europeans. During the Second World War, the Nungonn came in contact with the Japanese and the Australian army corps. After the war the missionaries took up their pre-war mission activities. As we see later, the local religious situation had become complicated; missionary activities disrupted communities. As a consequence of these activities a religious schism arose, and had a negative impact on the social climate in the communities.

Concerning the development and operating the YUS CA, the local people frequently meet scientists from Europe, Australia and the United States. Many locals work as assistants to them. That is why many inhabitants of Yawan, Toweth and Kotet are familiar with scientific view of things and the ideas of nature conservation. When it comes to the ever-growing amount of contacts with both the Europeans and the other people of different parts of Papua New Guinea, the local people mastered pidgin English (*Tok pisin*) and standard English. But their own vernacular is not dying, because teachers of the primary school pay attention to the language protection. All the dwellers use the Nungonn dialect on daily basis.

ANTHROPOLOGICAL STUDIES OF THE NATURE CONSERVATION IN PNG

Recently the anthropologists initiated the study of programs of the nature protection; they often study local attitudes of the natives regards the idea of nature conservantion as well as the (un)success of these programs due to the incompatibility of the viewpoints among participants of the project. My article is a part of this anthropological interest in environmental studies of the New Guinean communities. I will briefly mention a few of the recent anthropological works related to this particular topic.

Stuart Kirsch undertook a fieldwork among Yonggom. Afterwards he published his results in the book *Reverse Anthropology*, in which he analyzed New Guineans' position towards the mining activities of the Ok Tedi Mining (Kirsch 2006). A British anthropologist Colin Filer targeted the research of a political, social and protectionist context of the logging and mining in the Melanesia (see for example Filer 1997). Another British anthropologist Paul Sillitoe also analyzed the possibilities of nature conservation in the context of way of life of the Wola community from the Southern Highlands. He underlined the importance of socio-political exchange. Agencies should not only respect socio-political exchange, but they should base their project on the principles of it (Sillitoe 2001).

Only two projects of nature conservation have been running in Papua New Guinea.³ One of them is in progress in the Crater Mountain. An American cultural anthropologist Paige West focused on the research interactions and understandings between the members of the Gimi ethnic group in the Crater Mountain and nature conservators. In the book *Conservation Is Our Government Now*, she analyzed the tension between the participating peoples. She argues that the animosity originates in the incompatible expectations, which both sides have. Residents of Crater Mountain dream of development of their community. They want compensations for the work and successful conservation; they await money, medical care and new technologies. Conservationists are convinced that locals have the opportunity for the development of their community; natives could achieve progress of the

³ Actually the project "April-Salome Forest Management Area" is in progress in East Sepik.

community via hard work on the project. Unfortunately, the conservations were not satisfied by the outputs of the native effort. It is possible to call the result of the cooperation between natives and conservationists a “disappointment”. According to the West this state of affairs originates from the mutual misunderstandings what both conservationists and natives meant by a “conservation” and a “development” (West 2006).

The second major project of the biodiversity protection is running in the YUS CA of Morobe province. My research interest resembles the one of the West. Besides the study of selected community themselves, I am interested in the native understanding of ideas and the purpose of nature conservation. The YUS CA is a home to thousands people who have, for the hundreds of years, inhabited the region and have been dependent on available natural resources. Subsistence strategies of the Nungonn ethnic group can be marked as sustainable cultural adaptations, which allow a long-term survival in the area. Set of cultural changes in the native way of life is taking place, due to the foundation of the YUS CA. The rules of the YUS CA restrict gardening, hunting and collecting materials in the protected area. In exchange for the restrictions, the government and interested institutions promised development of participating communities. They promised to improve medical care and to support education. As in the case of the Crater Mountain project, the conservators and natives have a different idea of what a development should be. Later I will document attitudes and evaluations of the project by the natives. First it is necessary to describe the origin and up-to-date state of the YUS CA.

HISTORY OF THE ESTABLISHMENT OF THE YUS CA

The land inhabited by the members of the selected Nungonn community belong to the YUS CA. This is the first protected area under the Conservation Areas Act from 1978. The Conservation Area is bisected by the Yopno, Uruwa and Soma rivers. Papua New Guinea National Government declared the YUS CA a very first protected area of the independent state on the 9th January 2009. On the 22nd of April the big *singsing* celebration took place in Teptep village; villagers participated on the celebration as well as the officials and staff of Tree Kangaroo Conservation Program (Annual Report 2009). 37 villages including more than 100 clans participate in the project. The YUS CA covers over 75,000 hectares of the Huon Peninsula; this area extends from the sea level up to 4,000 meters and embraces many different types of ecosystems (Anonymous 2007).

Currently the YUS CA runs the Tree Kangaroo Conservation Program (TKCP), which is focuses on the research and the protection of species *Dendrolagus matschieri* (Montgomery and Bishop 2006; Martin 2005; Annual Report 2009, 2010). It is possible to trace the beginnings of the TKCP back to the year 1996, when the cooperation between Woodland Park Zoo in Seattle and local landowners of Huon Peninsula started. The YUS CA covers the land, which is a home to thousands of people of nearly forty communities. The local people depend on gardening, hunting and bush materials. In order to both protect the biodiversity and make living in the area possible, the territory is divided into three zones. The village zone is a space of livelihood; here the people can build houses, create gardens, collect materials or hunt. The buffer zone divides the village zone and the conservation zone. The villagers can hunt, collect firewood and cut down the tress in order to obtain building materials. It is assumed that the animals migrate from the conservation zone that is why in the buffer zone lives sufficiency of game (Anonymous 2007).

The YUS CA was created in 2009 after a decade of considerable efforts of the local people, scientists and officials. The creation of the YUS CA did not start smoothly. Local

people recall the problems concerning negotiations with representatives of villages inhabiting the area. A cultural diversity of the Huon Peninsula shaped the main barrier during the efforts to establish the YUS. The leaders and landowners of 37 different communities had to find a common position concerning the establishment of the conservation area. The representative of the Toweth explained the difficulties he faced during effort for establishment of the YUS CA. At one point, the people of one village attacked him by spears and arrows. Since the middle of the nineties the representative from the Toweth tried to contact all the villages in YUS area in order to convince people about the advantages resulting from the YUS establishment. He remembers that in the meantime he negotiated with both local authorities and representatives of Woodland Park Zoo in Seattle. He invited workers of the Zoo to come to the Uruwa valley, but it took a long time until people landed on the airstrip in Yawan.

RELIGION, YUS CA AND TREE KANGAROO

The natives affirm that the idea of the YUS CA establishment came from the efforts of the locals; i.e. they assert that they are actually the generators of the idea. Establishment of the YUS CA depended on the very existence of the wild tree kangaroo, which is a highly endangered species. The fate of this species on the Huon peninsula was deeply affected by religion. The whole region of the peninsula was penetrated by the Lutheran Church, but there is an exception in the villages of Yawan, Kotet and Toweth, where two denominations coexist as a consequence of the historical development. The Lutherans and Adventists currently live together in those villages. The presence of two Christian denominations in one community was a source of a miscommunication, conflict and violence within villages in the last decades. The following story of a religious conflict is a reconstruction recreated by the Nungonn natives. A brief outline of the history of the conflict is as follows: The Lutheran mission came into the Yawan area in 1945 and missionaries soon established a Lutheran missionary station and actively operated there for almost six years. After a violent conflict between the missionaries and the natives, the missionaries left the region in 1951. In 1964 the Adventist missionaries arrived and took over the area. As many people converted to Adventism, the conflicts escalated. The Lutheran missionaries returned in 1971 and reclaimed the area. Subsequent clashes between church denominations had a disturbing impact on the community. The Lutheran mission left the area again in 1979. In the following years, the Lutherans lived without any church support (services, baptism etc.) in the area. The presence of the conflict is expressed in the organization of a public space of Kotet. The village is placed on the hill. Kotet is divided into Upper-Adventist-Kotet and Bottom-Lutheran-Kotet; this division is symbolically articulated by the chapels. Finally, in 2009 the representatives of the Lutheran church returned and tried to re-establish an active Lutheran church in Kotet. This effort for reconciliation took place during my fieldwork among the Nungonn people in August 2009 within three day feast of an appeasement.

Since the beginning of the 20th century, the Lutheran missionaries penetrated the Huon peninsula. Many villagers converted to Christianity of the Lutheran denomination; it is possible to say that the Lutherans dominate the Huon peninsula. But there are also minor enclaves of Adventists; this denomination has a strong position in Kotet, Toweth and Yawan. Unlike the Lutherans, the Adventists obey most of the rules of the Old Testament. Among others, they respect the food taboos from Leviticus. In this biblical text it is prohibited to consume a pig, a hare, a camel, among others. In the fauna of Papua New Guinea only a few species correspond with the biblical rules. Therefore the Adventists

extended this Old Testament restriction onto the tree kangaroos, cassowaries and flying foxes, which they tabooed (Jebens 2005: 115; see also Martin 2005). The natives of the studied communities explained to me that as a consequence of this taboo, the highly endangered tree kangaroos survived in the Finisterre range. In their point of view the YUS CA could have been established, because they (meaning the Adventists) protected the tree kangaroos. Moreover, the main figure of the Toweth village has as councilor and landowner with enough power to enforce the idea of a foundation of a conservation area. The message from the native Uruwa perspective is as follows: (1) We (Adventists) obey food taboos, and as a result the tree kangaroos survived in the tropical forests of the Huon peninsula. (2) We made considerable efforts in order to establish the YUS CA: we negotiated with the leaders and landowners from the communities living in the region of Yopno, Uruwa, and Soma. In the other words, without our effort, the YUS CA would have never happened and would have never existed, so we expect the promises to be fulfilled.

THE DREAMS ARE COMING TRUE

The life of the Nungonn people is in the present considerably affected by Europeans. The Nungonns are convinced that, like other ethnic groups in Papua New Guinea, they lost their “ancestral culture”. Of course, from an anthropological viewpoint this is problematic statement. Anthropologists deconstructed term culture and they insist that something like “ancestral culture” does not exist (see Abu-Lughod 1991, Fox & King 2002). Cultures constantly change; therefore there can’t be something like “ancestral culture”. But New Guineans from Uruwa valley do not care the anthropological theories and debates. *They* are convinced that they lost their ancestral culture (see Soukup 2011a). The Nungonns are Christians partly incorporated in a monetary capitalist economy (Soukup 2011a; Wegmann 1990). Many of them plant coffee, sell the goods and assist the scientists, who come in the YUS CA to study biodiversity. The establishment of the conservation area brings not only job opportunities, but also brings them closer to the outside world. There is an airstrip in the Yawan village, which makes it possible to stay in contact with the local cities of Papua New Guinea (Lae and Madang). Also, in Yawan there are primary school, a radio connection and a station equipped with basic medical care. In spite of the increased standard of living in the villages, the inhabitants expected more progressive development. As they repeatedly assured me, they anticipated a stronger support from the participating institutions. “Where are the benefits and the incomes from the successfully running YUS CA?” Moreover, they feel that the concerned institutions waste money. For example, they do not understand why the representatives of Woodland Park Zoo have a bureau in Lae, which is too expensive. Why they do not live in Yawan, where they would be closer to both the course of events and local people. The question is what do development and nature conservation mean from the point of view of the natives? To understand these issues, it is crucial to view the matters from the native perspective. In other words, to try to identify what kind of development they imagined during negotiations concerning establishment of the YUS CA?

As I noted in the introduction of this article, I collected drawings made by pupils of the primary school. Dataset includes drawings on the following topics: a self-image, a family, a village, a culture, a nature, a tree, a dream, a fairy-tale, whatever you want, nature conservation, and my area in a future. Drawings can reveal the background of the natives’ expectations from the YUS CA project generally and from the TKCP particularly. For this purposes, I selected the drawings on the following topics: nature, my area in a future, a

drawing topic of choice (see examples fig. 1, 2, 3). Collection of drawings includes a description of the particular images from the participants of the research in 2011. The group of students consisted of four girls and eight boys, and young men between 13 and 20 years of age. This gender disproportionality results from the field conditions. The group was created on the basis of willingness to participate. The age group arose from the fact that the primary school was opened quite lately (2004).

Fig. 2: Future of the village in a native's perspective



The participants of the research accented in their description of the drawings that people or machines did not make nature. Some of them wrote that god created nature, which provides “*many things to people*”, as one participant wrote. Significant is that no drawing includes a human being. In other words, in their view the humans are not a part of nature. Five of the twelve drawings are without animals, the authors painted just trees, flowers and water bodies. More often they depicted trees, flowers, birds, cassowary⁴, water-bodies and sky (see table #1). Only in one case there is a drawing without a water-bodies and one without a tree. What is also interesting, the authors depicted water-bodies, which they’ve never seen. There is a water-fall and the Uruwa river in the Yawan area, but they cannot see the ocean or a natural pool that they chose to draw.

⁴ Cassowary is a flightless bird. I do not include cassowary in the class of birds. Cassowary is a very important for the natives of New Guinea. Many natives do not understand cassowary as a species of bird (see for example Bulmer 1967).

Table 1: Kinds of objects depicted on the drawings (topic: what is nature)

Object	Girls	Boys
Tree	4	6
Flower	2	4
Flying fox	1	0
Snake	1	1
Bird	3	4
Cassowary	2	2
Fish	0	2
Pig	1	0
Tree kangaroo	2	1
Water (river, pool, water-fall, ocean)	4	6
Sky (sun, clouds)	2	6

The authors stated in their descriptions of the pictures that people cannot disturb and hunt animals or cut down many trees. On the other hand, they also wrote about nature as a source of timber and food. One of the participants wrote: “*The nature is like my mother. It provides many things to me and helps me build my house.*”⁵ Mentioned “let-it-be” attitude is possible to be explained as a result of environmental education, which the local teachers provide. The classrooms are decorated by drawings on the topic of the nature protection; the pupils are surrounded by conservation issue. Julie Hubeňáková collected various drawings on the topic of “what does nature protection mean?” The authors mark logging and building roads for vehicles transporting logs as a wrong behavior towards the nature. In other words, the pupils marked deforestation of Papua New Guinea as the main wrong behavior towards the nature. It is interesting that these villages are located in a poorly accessible area and the rain forest of Finnisterre Range will probably never be endangered by logging. In spite of this, the teacher instructs the pupils that logging brings many troubles in future. In this context it is necessary to take into consideration the fact that

⁵ All quotations from the descriptions are reproduced as they were said and written; i.e. without corrections of syntax, grammar or spelling.

Papua New Guinea is one of the world major exporters of tropical wood. As a consequence of the extensive logging the tropical forest decreases very fast.

Natives' expectations for the future will be analysed through drawings on the topic "my area in a future". All authors pointed out changes of the landscape and urbanism. Villages consist of permanent houses, which are equipped with water conduit and power line (see table #2). There are no trees in the villages, because the roads replaced trees and grass. Only one participant did not draw the above mentioned objects; he shaped a big stadium with a running track. It is possible to sum up that the landscape of the future is the opposite to the conservation attitudes accentuated in the topic "what is the nature" and "what the nature protection means".

Table 2: Kinds of objects depicted on the drawings (topic: my area in a future)

Object	Girls	Boys
Car	4	5
Water-tank or water conduit	4	3
Permanent house	4	6
Road	4	6
Electricity		2

It is not possible to read from the drawings whether the pupils evaluate expected changes positively or negatively. A relevant description given by the authors could help us understand what these drawings really mean. One participant gave a following description of the drawing (see fig. 3): *"This is my drawing; you can see my area in today. On my picture of my village is not good. My area is near tree and beside of me big mountain covert with many rain forest. We have no service. My village is made up of two small group of houses. So I imagine my area at another side of the drawing. That's my dream to develop or imagine my area in 50 years later or in the future. And my village people will have basic service like water supplies and power line, they need a highway from Lae to my village. And lastly they need permanent houses or buildings."*

In the other descriptions we can read: In the future *"we will live for different levels of life. ... That time we will use foods from the store to eat"*; There will be roads and cars, *"they will make our area become colorful also they will help us to sell things and get money from the fruits, pigs, peanuts and etc."*; *"People in the village will develop their knowledge by becoming business men and women to bring new things in my area"*;

Fig. 3: Be a nurse



From all the descriptions it is evident that pupils expect a development of their community in a particular way. As “the development” they imagine roads, cars, permanent houses, electricity and water conduit. The villages are located in a poorly accessible area. The natives of this region are just partly integrated to a monetary economy. A dream for a development of the mentioned type is difficult to achieve, especially if they don’t have any income. Without an easy access to the city monetary economy they have limited chances to get income; concerning heavy terrain logging and mining will be never initiated, so the natives cannot expect that they make money from exploitation. They can sell crops and coffee, but due to the irregular aerial connection with the markets in the cities they only have a limited chance to succeed in the market economy. So their main capital is actually biodiversity. A participation of the community in a program of nature conservation is the only way to achieve the dream development. The government and concerned institutions support financially and technically tens of communities in the YUS CA. In spite of this, the members of the communities expect a more rapid progress; they are convinced that the local authorities and the interested institutions intentionally freeze desirable development in order to maintain the status quo. Maybe, as in the case of the Crater Mountain, the intentions and ideas of the conservators and the natives are mutually incompatible.

CONCLUSION

The Nungonn ethnic group has been in touch with the Europeans for almost one hundred years, especially with missionaries. In the last two decades, they’ve been in a close contact with scientists and conservators. The communities of New Guinea were egalitarian, but in the recent decades changes are happening. A gap between villages and cities arose; the social classes are forming (see Gewertz & Errington 1996). The natives of New Guinea have faced the dominance of the Europeans ever since the first contact (the technology and goods). They reacted to this by so called cargo cults, which have been arising since the end of the 19th century. Villagers feel an increasing gap between cities and rural areas. This we can read from the description of the drawings on the topic “my area in a future”, they wrote: “Today, we have no development in our area...”; “My area is far away from the Lae

city. *I'm in a rural area*". They feel the social and the technological distance between their area and the local cities. They can bridge this situation by limited means. The pictures on the theme "whatever you want" were the part of the research. The boys want to be scientists, doctors or pilots; the girls want be nurses. Why these careers? Because pilots, doctors, nurses and scientists make a lot of money and help other people. The pupils are educated enough for the environmental responsibility, but they dream of development. The pupils think reasonably that, as they see it, you need money to achieve development; that is why it is good to be a pilot, a doctor, a nurse or a scientist. In the future, their area will be developed, as they wish; "*At that time we will survive on money, no one will help us*". I'm not sure, if this ambiguous sentence means a helpless future or self-sufficiency.

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