* Demographic Issue

* Cloth & Dress

* Taboo

* Tourism Activity

* Indigenous Languages Preservation

* Environmental Risk

RESEARCH INSTITUTE
CENDERAWASIH UNIVERSITY
JAYAPURA, IRIAN JAYA
INDONESIA
IRIAN
BULLETIN OF IRIAN JAYA
DEVELOPMENT
Vol. XXII, No. 1, April 1999

Editorial:
- Greetings from Irian Jaya ........................................ 2
- UNCEN and Irian Jaya Research and Development, by Ir. Frans A. Wospakrik, M.Sc, Rector of the Cenderawasih University ........................................ 3

Articles:
- Demographic Transition and Demographic Policy in Irian Jaya, by M.C. Rumbiak ................................. 7
- Cloth, Dress and Ethnic Identity in Irian Jaya, by Michael C. Howard ................................. 14
- Taboo as Sociolinguistic Shadow Among Biak Speakers, by Willy Mandowen ................................. 32
- The Response of Dani Society to Tourism in Wamena, by Onesimus Warwer ................................. 41
- Irian Jaya Libraries and the Preservation of Indigenous Languages, by A.C. Sungkana Hadi ...... 48

Information:
- Evaluation of Environmental Risk in the Project Area of PT Freeport Indonesia, by Wisnu Susepto .... 54
- Current Research Projects ........................................ 57
- Proposed Research Projects ................................. 60

Published by:
The Research Institute
Of the Cenderawasih University
Irian Jaya, Indonesia

The Bulletin is published with the assistance of sponsorship by
PT. Freeport Indonesia

IRIAN, vol. XXII, no. 1, April 1999
Greetings from Irian Jaya:

Dear Readers,

It is our pleasure to see you again and say hello, after our long time of vacancy due to the absent of the Bulletin. The Bulletin, indeed, stopped for about six years due to the termination of the Cenderawasih University and the Summer Institute of Linguistics Cooperative Program (UNCEN-SIL Cooperative Program) in 1993, by whom the Bulletin was previously published.

As you know, IRIAN: Bulletin of Irian Jaya development was published under the Joint Cooperation between the Cenderawasih University (UNCEN) and the Fund United Nations Development for West Irian (FUNDWI) from 1971 to 1974, and with the Asia Foundation from 1974 to 1975. When UNCEN established an institutional cooperation the SIL in 1975, the Bulletin was continuously published by the UNCEN-SIL Cooperation Program from 1975 to 1993.

UNCEN Management is aware of the important role of a bulletin to communicate the scientific performance of the university. Republishing the Bulletin, therefore, is regarded as a strategic step to improve the university recognition among scientific society worldwide. It is fortunate, that the Freeport Indonesia Company is willing to support the republication of the Bulletin.

We hope that the Bulletin will continuously visit you to bring some new findings, opinion, or thoughts as well as information on Irian Jaya research and development, mainly those that are conducted by UNCEN Researchers and Academic Staff.

Best Wishes from Irian Jaya,

Editors

The Editors welcome manuscripts of a theoretical or practical nature that directly or indirectly bear on Irian Jaya. Manuscripts should be double-spaced and submitted in English, or in Indonesian with an abstract in English. Manuscripts should be submitted in electronic form on 3.5’ IBM-compatible floppy disks, which should be accompanied by one hard copy (print out). The print out should indicate the formatting codes used (word processor, style sheets, and special characters).

The views expressed in any material produced in the Bulletin are those of the authors and do not necessarily represent the views of the Research Institute of the Cenderawasih University.
Apart from performing the nation's mission to educate people of the Republic of Indonesia, higher education institutions in this country have to mainly develop science, technology, and arts, as well as to develop ways for implementing them in order to improve the welfare of the society. Under this mission, higher education institutions in this country no longer being positioned as ivory towers which are separated from the society, rather being and functioned as sources for empowering the nearby/surrounding societies through systematic interactions deliberately developed for it. The interactions include studies as well as action researches directed to enhance and to accelerate the development of all aspects of the people life. Results of the studies and the researches then should be communicated and dedicated to the society, through both publications and community service programs.

Cenderawasih University (Uncen hereafter), the only state university in Irian Jaya, apart from performing the mission as a national higher education institution, it also supports the mission of the Irian Jaya provincial government. The specific mission of Uncen in Irian Jaya is to increase the literacy and the welfare of the people of Irian Jaya, to improve their life by using existing economic and potential natural resources by safe environmental approach, and to make breakthroughs to outreach groups of local tribes living in remote and isolated areas. It is realized, that to successfully performing the mission, science, technology, and arts play very important roles. Uncen's academic staff, with their academic and professional capacity should play the mayor role in pushing forward the progress of the province, mainly to educate people of this province to enable them to cope with the modern way of life.

On the other hand, it is important to mention the rich culture of the Irian Jaya people, particularly those of the indigenous groups, which has not been understood properly by others, including decision and policy makers in this region. This often becomes the main obstacle in understanding the needs of the people, which result in the formulation and implementation of many irrelevant development programs, that is, programs which are not needed and are not expected by the people. To overcome such obstacle, many planners and policy makers are becoming aware that a socio-cultural approach should be included in the designing, planning and implementation of development programs in this province. However, such approach has not been properly applied due to the lack of understanding of the Irian Jaya culture among the bureaucrats in this province as well as in the central government of this country. It is a real challenge for Uncen's academic staff,

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1Rector of the Cenderawasih University, Jayapura, Irian Jaya, Indonesia.

IRIAN, vol. XXII, no. 1, April 1999
therefore, to comprehensively understand the culture by conducting anthropological researches. It is therefore on the shoulder of Uncen to be the first, if not the only one, and the most important institution to become the main source of information for any outsider to learn and understand the culture of the Irian Jaya people.

As stated in its Strategic Development Planning for the period of 1996-2005, Uncen's vision for the year 2005 is among others to become the leading agent in the efforts to educate the people, to develop and implement science, technology, and arts, in the development process of this province that will benefit the people of Irian Jaya thereby enabling them to catch up with their backwardness. To achieve this vision, improvement efforts both in the quality and diversity of educational programs, as well as the ongoing research programs and projects need to be conducted continuously. The rich natural resources, bio diversity, culture, and the vast land of the province will never cease to be the source of research, and will always inspire and offer great and unended opportunities and challenges for researchers and the academic staff at Uncen as well as researchers from all over the world to explore and dig more deeply existing scientific secrets which are still hidden in this land.

In connection with the need to develop the socio-cultural approach in development planning and its implementation, Uncen through its Department of Anthropology, is obliged to keep on doing research on socio-cultural issues in Irian Jaya. The variety of local indigenous languages, at least those that have been identified and studied, so far, strongly indicate the diversity of the culture in this area. It seems that there should also be a specific approach to each of the culture of the people speaking the languages so that their aspirations and expectations can be translated properly into development variables which will be relevant to and properly meet their adjustment capability to the progress of the development process nationally and globally.

To support the improvement of the quality and quantity as well as the diversity in research programs, Uncen has established a number of research centers, both in Jayapura and Manokwari campus. These centers are: (1) Population Research Center, (2) Environment Research Center, (3) Women Research Center, (4) Sago and Tuber Crops Research Center, (5) Irian Jaya Culture and Society Research Center, and (6) Biodiversity Research Center. Besides these centers, Uncen, in cooperation with the Provincial Government of Irian Jaya, has established the Irian Jaya Studies Center. Through these centers, it is expected that the academics of Uncen from time to time could improve their research skill and professionalism according to their discipline of studies, and at the same time dedicate their work both as individuals and in groups to support national development programs in this region.

It is well understood, that researches are conducted not merely for scientific reasons only, but should also be directed toward the benefits of the society. The research results, therefore, should be communicated to the society to enable the society members to utilize the findings. From the scientific society point of view, the communication of the research report will enable other researchers to use such research results as references to verify their research findings. In order to communicate research results, it is therefore necessary to publish them through an appropriate media or publication. Through
such publication, the results of the studies are made known, and at the same time opinions or ideas can also be put forward which will inspire others to conduct deeper studies. It then develops conducive research atmosphere in this province such that in the years ahead, improvement and progress in Irian Jaya will be as fast as those of the other provinces.

Being aware of the importance of realizing the idea of the need to make available a vehicle to publish research results and ideas related to development of Irian Jaya, Uncen's management have struggled strongly during the past few months to republish the bulletin *IRIAN: Bulletin of Irian Jaya Development* which has been absent since 1993. The Research Institute of Uncen is assigned to take care of the publication. It is important to mention here, that due to the support of the management of PT Freeport Indonesia Company through its financial support that has made the republication process of this bulletin takes place. Uncen management, using this opportunity, therefore, wishes to express its appreciation and thank to PT Freeport Indonesia Company for the support to such scientific efforts. The publication of this bulletin will be continued, and will be regarded as an integral part of the routine task of the university/Research Institute in the future.

In its 2005 vision, Uncen is determined to become the prominent element in research programs and development in Irian Jaya in order to make much better use of all potentials and resources in this province, to create a brighter, more prosperous, and more creative society in improving their standard of living. We also hope that this bulletin will also achieve the position as a prominent scientific publication in the future which enable scientists and professionals to communicate their works in science, technology, and arts particularly works of scholars that strongly related to issues and problems in this rich land of Irian Jaya.

Uncen, therefore, welcomes any scientific contribution nationally and internationally through this bulletin for future development of Irian Jaya and its people.
RESEARCH INSTITUTE AND RESEARCH CENTERS
AT UNCEN

Since 1997, the status of the Research Center of the Cenderawasih University had been improved to be an institute, named Research Institute of the Cenderawasih University. The Institute is coordinating seven research centers / studies centers, include:

1. Population Research Center, UNCEN Jayapura Campus, Jl. Sentani, Abepura, Jayapura 99351,
   Phone 0967-582962, E-mail: pkuc@jayapura.wasantara.net.id

2. Living Environment Research Center, UNCEN Manokwari Campus, Jl. Gunung Salju, Amban, Manokwari 98314, Phone 0986-211067, Facs. 0986-211455

3. Tuber Crops and Sago Research Center, UNCEN Manokwari Campus,
   Phone 0986-214992,
   Facs. 0986-211455, 211702

4. Women Research Center, UNCEN Jayapura Campus, Phone 0967-582962, 581322

5. Irian Jaya Culture and Society Research Center, UNCEN Jayapura Campus,
   Phone 0967-581322

6. Bio-diversity Research Center, UNCEN Manokwari Campus, Phone 0986-211455

7. Irian Jaya Studies Center, (in cooperation with Provincial Government of Irian Jaya)
   UNCEN Jayapura Campus, Phone 0967-581322

Presently, the University is working to develop two other research centers:
Traditional Food Research Center, and Tourism Research Center.
Demographic Transition and Demographic Policy
in Irian Jaya

by Drs. Michael C. Rumbiak, MA

Demographic transitions, which are periods of major demographic change, have occurred at many intervals in human history. Demographic transitions often accompany transformations in other aspects of human life. This paper explores some of the different phases of demographic transition currently being experienced in rural and urban Irian Jaya, and considers the implications for demographic policy in the province.

Throughout much of the pre-agricultural era human population growth was very low, and occasionally even negative. This latter tendency towards depopulation was usually caused by a range of disasters, including epidemics and climatic changes or cataclysms. The various revolutions in human history, such as the invention of tools, the development of sedentary agricultural systems, and the more recent industrial revolution, have all coincided with dramatic accelerations in the population growth rate, some of which have seen populations double over periods of as short as thirty years.

These dramatic demographic transitions are postulated for the tool making and agricultural revolutions. Constant growth in overall population numbers has resulted in increases in population density and the generation of various demographic and environmental problems. Under these conditions, figures for fertility and mortality as well as migration often increase. Haggett (1979) quotes Notestein's claim that demographic transition takes place following the transformation of systems of agricultural production. In support for his argument, Notestein pointed to the importance of agriculture in the history of demographic transition in England, France, and other western European countries.

From this point of view, demographic transition is a dependent variable which is potentially determined by a series of independent variables, including development initiatives. The agricultural revolution, for example, allowed people to meet requirements for food and nutrition (animal protein, vegetable protein, calorie, etc.), and thus enabled them to enjoy better and longer lives. On the other hand, demographic transition also exerts a considerable influence on a range of other aspects of human life, raising fresh problems which policy makers and planners need to address.

1 Another version of this article has been published in Demographic News.
2 Senior staff at Demography Study Centre and now Dean at Faculty of Economics, Cenderawasih University.
Demographic Transition

Demographic transition, defined narrowly, is limited to mortality and fertility transitions, which are known collectively as vital transitions. Together, mortality and fertility are the basic components in changes to population totals across space and time. In a broader definition, demographic transition is expanded to include population movement. Population transition, on the other hand, is even broader than demographic transition as it includes both demographic and non-demographic transitions, such as transitions of education, health, family, and so on. In this paper, I use a narrow definition of demographic transition, limited to the vital transitions of mortality and fertility.

Based on the theory of demographic transition, population dynamics within a given location commonly experience four distinct phases. The first phase is one in which birth and mortality figures are both high and similar in scale. Natural increase of the population is very slow, and the population total tends to fluctuate around a fairly steady point. In phase one, life expectancy at birth is low (because infant mortality rate is high), usually averaging below 50.

In the second phase, a mortality transition takes place, marking the beginning of a demographic transition. Mortality figures decrease but the birth rates remain high; in other words, there is no fertility transition to match the mortality transition. The mortality transition usually reflects advances in medical treatment, food production, and other related fields. The consequences of a fast natural growth of the population include: a figure for natural population growth in excess of 2%, which means, in effect, that the population doubles in less than a generation, or less than 30 years. Another consequence of mortality transition is that more of the children born to an individual family survive, so that family size increases. This second phase of demographic transition is often characterised by demographic problems, particularly when the rate of population growth begins to outstrip growth in agricultural production.

The third phase, fertility transition, occurs when population fertility declines. The overall population total continues to increase, though not as quickly as in phase two. The third phase of demographic transition is characterised by optimal population growth, where agricultural production is sufficient to match the rate of increase in the population.

Malthus originally proposed that population growth follows a geometric progression while the growth of agricultural production follows an arithmetical progression. This notion arose because the population of England at that time was experiencing continual increase, though the technology of food production could not keep pace.

In the fourth phase of demographic transition, mortality continually decreases, followed by a corresponding decline in fertility, resulting in an almost zero rate of population growth. This condition is caused by different kinds of controls on mortality and fertility, usually through human agency, and often specifically through government intervention.

In summary, the narrow theory of demographic transition described here proposes a sequence of changes in population over time:
1) An initial stationary rate of population growth
2) Low natural population growth
3) Dramatic increase in the natural growth rate of the population
4) The population total reaches its optimal limit
5) The rate of natural population growth starts to decline
6) The rate of natural population growth returns to a low, stationary level.

**Mortality Transition**

Mortality transition precedes fertility transition and results from revolutions in the fields of population health and subsistence production. Mortality transition introduces a life expectancy transition, which is a shift from shorter to longer life expectancy, and an increase in life expectancy for a greater number of live births. Mortality transition thus influences the figures for population morbidity. The influence on population growth of what were previously marginally life-threatening diseases or conditions is dramatically reduced. Mortality revolutions occur fairly quickly and tend to follow very soon after health and production revolutions.

**Fertility Transition**

Mortality transition often leads directly to fertility transition. As the population increases following a mortality transition, and anxieties over sustaining population growth decrease, people begin to take steps to reduce fertility. Increases in family size can result in individual families taking the initiative to slow the rate of family growth. Cultural values, which previously placed a heavy emphasis on high fertility to balance high mortality, begin to shift, and birth spacing and other forms of fertility control emerge. Mortality revolutions also result in more centralised or government-controlled forms of demographic or development programs, including birth planning.

A consequence of the mortality and fertility transition sequence, at least in western countries, has been the development of smaller, nuclear families. Another consequence has been a transition in the age structure of populations, with a relative decrease in the proportion of infants and children, and a relative increase in the proportion of older people.

**Demographic Transition in Irian Jaya**

When we consider the current demographic situation in Irian Jaya, we see evidence for two distinct phases of demographic transition:

**Demographic Transition Phase One: the rural areas**

The first phase is that of an essentially stationary population growth rate. Most rural areas in Irian Jaya, and particularly the more remote interior areas, experience equally high rates of fertility and mortality. The natural growth rate in this stationary phase shows zero population growth, and even occasionally depopulation, as in the recent drought and famine in some parts of Irian Jaya during 1997 and 1998. This stationary population growth is caused by the preponderance in remote areas of diseases and other natural disasters. Zero population growth reflects the poor health conditions, low levels of agricultural technology, and
limited access to education of many areas of Irian Jaya.

The main demographic problem in rural areas in Irian Jaya is high mortality rates, and in particular the figures for infant deaths (≥ 100%). The resulting fertility rate (≥3%), combined with the zero (or "highly stationary") rate of natural population growth, presents a strong challenge to these populations.

These small rural populations with a poor quality of life present a major development challenge, quite apart from the other socio-economic aspects which create pressure on the population in Irian Jaya, particularly in the remote inland rural areas and coastal rural area.

Demographic Transition
Phase Two: the urban areas

Phase two of the demographic transition can be witnessed in the urban population of the regency capitals in Irian Jaya. Lower mortality rates, especially the baby death rate, occur in conjunction with fertility rates that are still high. While family planning programs continuously address this problem, results have not matched expectations. There has been an explosion in the infant population, the school-age population and the job-seeking population during phase two. The imbalance between lower mortality but still high fertility is exacerbated by positive net migration into these regency capitals. The dramatic growth of Irian Jaya’s urban population has created increasingly complex demographic problems in such areas as education, job opportunities, and housing.

As a simple illustration of the problems posed by the explosive increase in Irian Jaya’s urban population. Despite continuing efforts to provide more schools at every level — elementary, junior high, senior high and advanced — there is an alarming tendency evident in Irian Jaya towards the development of “parallel classes”. In the absence of sufficient numbers of new schools, and often without any additions to staff numbers, parallel classes have been created (e.g., classes IIA to IID in class II) to accommodate the increasing numbers of school children. Often the same teacher teaches all four parallel classes. Under these conditions education standards inevitably fall, and basic education in skills such as reading and writing is endangered.

A further consequence of declining educational standards is the decline in the causal-analytic ability of school-leavers. This significantly impacts on the capacities of the population of Irian Jaya as a human resource for the development of the province. Employment opportunities and salaries are directly affected, and large portions of society are condemned to poverty.

Another phenomenon is the explosion in the urban working age population; as a consequence the number of people seeking jobs increases significantly every year. Only a small fraction of the overall population are able to continue their studies to senior high school, and to the various institutions of advanced education; as a proportion of the population, this figure is also decreasing. In every department, job opportunities appear to be decreasing, and the unemployment total thus inevitably increases each year.
Efforts have been made by the government to tackle the rising problem of employment, but the results thus far have been limited, due largely to the lack of resources made available. A further problem is that the failure to educate and develop a creative, enterprising work force means that opportunities are seldom exploited.

Demographic Policy

Demographic policy seeks either directly or indirectly to control the growth rate of the population. However it must be adapted to suit actual conditions for a given population, in light of the area it occupies and its specific needs.

Demographic Policy for Rural Areas: Phase One Demographic Transition

The demographic condition of those rural areas experiencing phase one of the demographic transition, as outlined above, is as follows:

a. Population numbers tend to be highly stationary (with equally high mortality and fertility rates)

b. Small numbers of surviving children in each family (and thus relatively small family sizes)

c. Low life expectancy (below fifty years of age)


These small rural populations, with their low standards of living, are effectively unable to participate in or contribute to the process of provincial development. In cases exhibiting these demographic conditions, demographic policy must consider promoting an increase in the population, in conjunction with improvements in education and health service.

National demographic policy seeks to determine the ideal number of children per family. According to the national demographic program, each family should aim to have two children, and in the rural areas in Irian Jaya, each family should have five children. In addition, in order to speed up the rate of population increase, each administrative village (desa) is instructed to meet certain population targets. This goal is considered vitally important if the small numbers of these populations are not to become an obstacle to their development, preventing them from supplying both labour and a sufficient market to attract services and job opportunities.

Resources for the various integrated development programs, including health development, education, and agriculture, must all be increased in order to promote population growth and achieve this demographic policy target.

Demographic Policy for Urban Areas: Phase Two Demographic Transition

The demographic condition of those urban areas experiencing phase two of the demographic transition, as outlined above, is as follows:

a) A high natural growth rate (above 2%) results in population doubling in less than 30 years.

b) High proportions of living born babies in each family and, consequently, many more children per family and large family sizes.
c) Transformation of the age structure of the population, with between 40% and 45% aged 0-14; a population structure conventionally defined as "expansive".

d) A high dependency figure (above 70%) indicating the proportion of the population that is non-productive and dependent on others for their livelihood. A high proportion of dependents creates a socio-economic burden on the working component of the population and impedes socio-economic development.

Various demographic and non-demographic problems flow from this sort of demographic condition:

a) Education problems include those of new student enrolments, school capacity, the production and distribution of new teachers, and parallel classes.

b) Problems relating to employment and the work force include unemployment, decreasing job opportunities and increasing numbers of job-seekers.

Demographic policies for these urban areas must attempt to address the problem of an increasing number of population and seek to establish an optimal rate of population growth. Quantity controls aimed at decreasing the fertility rate and the numbers of children per family need to be developed. In addition, quality control measures should be put in place that give the community a degree of control over the process of reducing fertility, by educating people about the benefits to living children of smaller family sizes.

In terms of the theory of demographic transition, 80% of the population of Irian Jaya population – those who live in rural areas – are in phase one, with low socio-economic conditions. The remaining 20% of the province’s population who live in urban areas are in demographic transition phase two with better socio-economic conditions.

Another finding is that natural population growth in the rural areas is low (or "highly stationary"), while in urban areas the natural growth rate is high (above 2%) and can be expected to double within less than thirty years. Provincial demographic planning thus needs to take into account the differences in the problems currently posed by phase one and phase two, or rural and urban populations in Irian Jaya.

Rural populations need additional education and health subsidies to improve basic living standards, together with education about quality controls and the means of determining and achieving optimum family size. Urban areas will also need substantial attention to ensure that schools provide a sufficiently high standard of education, and that job opportunities are available for those students when they leave school.

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Cloth, Dress and Ethnic Identity
in Irian Jaya

Michael C. Howard

After decades of neglect, studies of dress have come back into vogue among academics in recent years. While past (largely pre-World War II) studies were largely concerned with technical aspects of the textiles used, current studies are more interested in the cultural context of dress. Most of the recent literature on dress, however, has been decidedly inward looking, relating dress to such things as hierarchy and gender within particular societies. To the extent that a broader context is addressed, this has tended to entail a look at perceived negative aspects of globalization on local fashions.

While contemporary writings on dress frequently associate certain styles of dress with some ethnic group, as noted by Eicher (1995, p. 1), there has been a marked neglect of analysis of this relationship between dress and ethnic identity among academics. Virtually the only general post-war work on ethnicity to discuss the role of dress as an ethnic marker is Manning Nash's, *The Cauldron of Ethnicity in the Modern World* (1989). Nash categorizes dress as one of the "surface pointers" which "make recognition at a distance, or a fleeting instance, possible, and as such are in themselves often barriers to more intimate contact (1989, p. 11). He then remarks that these surface pointers are significant only when linked to "core features of group differences" (1989, p. 12). The latter, he states, include: kinship ("presumed biological and descent unity"), commensality ("the propriety of eating together"), and common cult ("a value system beyond time and empirical circumstance") (1989, pp. 10-11). This is not much, but it is a starting point from which to explore the interrelationship between dress and ethnic identity in both general and particular contexts.

The particular context of the present article is the Indonesian province of Irian Jaya. The discussion that follows begins with a brief survey of writing on dress and ethnic identity in Southeast Asia, with a focus on Indonesia. This is followed by an overview

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1This article is a revised version of a paper presented at the 1996 annual meeting of the American Anthropological Association, San Francisco, California. Research for the article was conducted while working as a short-term adviser for the CIDA-funded Eastern Indonesia University Development Project (EIUDP) from 1991 to the present. I would like to thank Nafti Sanggenofa of Cenderawasih University and John Moore of EIUDP for their assistance with my research in Irian Jaya and Robyn Roper for her comments on the original paper.
of Irianese societies and dress prior to the advent of sustained external influence during the latter part of the nineteenth and into the mid-twentieth centuries. Next is an examination of acculturative influences during the period of Dutch rule and under Indonesian rule until the past few years. Finally, there will be a look at developments over the past few years in regard to acculturative pressures and the contemporary use of items of dress associated with Irianese identity.

**Dress and Ethnic Identity in Southeast Asia**

One particularly striking feature of the purportedly more theoretical writing on dress in recent years is the virtual absence of Southeast Asian material from the discussion. This is despite the fact that few other regions of the world have been the subject of so much descriptive writing on dress as Southeast Asia (see Howard 1994). And that throughout Southeast Asia patterns of dress have long played an important role as markers of ethnic identity.¹

Turning to Southeast Asian academic studies, it is striking how little attention is paid to dress in the post-World War II literature on ethnicity in the region. Leach, in his classic 1954 study of Kachin state in northern Myanmar, which for many is the starting point of modern studies of ethnicity in the region, mentions dress only briefly. He remarks that “apart from speech, the most obvious cultural variable in different parts of the Kachin Hills is dress” (1954, p. 55), but it is apparent that the topic holds little interest for him. He views dress as essentially a random symbolic expression of underlying structural differences (1954, p. 16) reflecting ethnicity as well as status. Despite the lack of elaboration in Leach’s study, he does point to a couple of themes that remain important to the study of dress and ethnic identity: the need to take into account regional variations in dress within an ethnic group and, in particular, the differences in patterns of dress between highlanders and lowlanders (1954, pp. 20, 55).

Dress does not play much of a role in subsequent ethnographic writing on Southeast Asia in the 1960s and 1970s, which focuses on social aspects of ethnic relations. This is exemplified in Kunstadter’s 1967 two-volume survey, Southeast Asian Tribes, Minorities, and Nations. While some of the themes discussed in the book in relation to ethnic identity, such as the maintenance of cultural boundaries and the process of assimilation, potentially could have included attention to dress, the topic is almost completely ignored.

Since the 1980s there has been a marked growth in academic writing on textiles in Southeast Asia, especially in Indonesia. Among the initial works, particularly important in relation to the study of dress and ethnicity is Niessen’s study of Toba Batak textiles (1985). Niessen's analysis draws on J.J.B. de Josselin de Jong’s

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¹The re-introduction of dress into anthropological writing is commonly associated with the publication of Cloth and the Human Experience (edited by Weiner and Schneider) in 1989. The focus of the book is on gender and status, although chapters by Bernard Cohn on clothing in colonial India and Louise Allison Cort on traditional Okinawan textiles to discuss aspects of ethnic identity. Southeast Asia is ignored for the most part in the book. Eicher’s Dress and Ethnicity (1995), which offers a number of case studies focusing on dress in a variety of settings contains only one essay relating to Southeast Asia: a chapter by Annette Lynch on Hmong in the United States.
"Field of Ethnological Study" notion that focuses on the study of "certain areas of the earth’s surface with a population whose culture appears to be sufficiently homogeneous and unique to form a separate object of ethnological study, and which at the same time reveals sufficient local shades of differences to make internal comparative research worthwhile" (1977, pp. 167-168). He suggests that the Indonesian archipelago is such a field, with many differences, but a structural core. While Josselin de Jong focused attention on kinship in defining these core elements, Niessen sought to use the idea in relation to textiles, arguing that the "concept is useful primarily for its implication that intercultural comparisons made within such a field of study will not be random, and will be likely to reveal variations in common themes" (1985, p. 3). In terms of common themes specifically relating to textiles, Niessen turns to the work of Jager Gerlings and his comparative study (1952) of the textiles of the Dayak of Borneo, Toraja of Sulawesi, and the people of the islands of Sangir and Talaud in which he draws attention specifically to the symbolic role of textiles as female goods in these different settings.

Niessen’s initial study focused on one group of Batak. In subsequent studies (see Niessen 1993) she has sought to place Batak textiles in the larger regional and global context and in so doing has touched upon the relationship of dress to differences among Batak and between Batak and non-Batak. Thus, in a discussion relating to anti-Dutch and anti-Malay feelings of the Karo Batak around the time of the Karo rebellion in 1872 she notes: "Karo clothing cooperated with those feelings as a badge, and an expression, of their difference from their neighbors. The simple and sober indigo blue cloths of the Karo reflected the egalitarian nature of their social structure" (1993, p. 64) and that "the clothing of the Karo did not cooperate with the principles of authority and hierarchy endorsed by the Malay and colonial establishment" (1993, pp. 64-65). The use of indigo dye allowed the Karo to transform even cloth purchased from others into something that identified it as distinctly Karo. Later, when "the Karo switched their political direction, they switched both their clothing styles and colours" (1993, p. 69). Their cloth became more European and Malay in color and style (e.g., red and gold replaced indigo).

Other recent academic studies of textiles in Indonesia have tended to focus on the traditional symbolic role of textiles within particular societies or related groups of societies rather than questions of cross-cultural ethnic identity (see Barnes 1989, McKinnon 1991, Geirmaert 1992). Thus, despite considerable growth in the amount of academic writing on textiles in Indonesia, as elsewhere in Southeast Asia, attention to the relationship between ethnic identity and dress remains underdeveloped.

The present article focuses on the eastern-most part of the Indonesian archipelago. Irian Jaya is marginal to the Indonesian Field of Ethnological Study, while at the same time it is at the western extreme of what can be considered the Melanesian Field of Ethnological Study. In some respects, both in the past and today, Irian Jaya is a transitional zone between the two fields.
Traditional Irianese Societies and Textiles

Irian Jaya's population today is approximately 1.6 million. The population is concentrated around the northern towns of Jayapura, Biak, and Manokwari and in the highlands around Wamena. Elsewhere, population densities tend to be very low. Indigenous people constitute over eighty percent of this population (the rest being comprised of migrants from other parts of Indonesia). Most of the indigenous peoples of Irian Jaya are Papuans who have inhabited the island of New Guinea for tens of thousands of years. In addition, there is a smaller group of Austronesian speakers along the coast and on the offshore islands of north and west Irian Jaya, who first arrived in this area around 4,000 years ago.

The roughly one million indigenous inhabitants of Irian Jaya are relatively diverse linguistically as well as in other aspects of their cultures. The Summer Institute of Linguistics (Grimes 1992, pp. 565-585) lists 248 indigenous languages for Irian Jaya. Only twenty-four of these languages are spoken by more than 10,000 people, while many of the other 224 languages are spoken by fewer than 1,000 people. The most widely spoken languages are the Dani and Yali languages of the Biliem Valley and vicinity, Ekari (or Me) of the western central highlands, Moni to the northeast of the Ekari, the Asmat languages of the southern coastal region, and the Biak (the main Austronesian language) and Sentani languages of the north coast.

In terms of economic adaptation, the indigenous population of Irian Jaya can be divided roughly into three traditional primary "regional agroecological variations and associated land resource tenure regimes" (Lavalin and Hasfarm Dian 1987). First are swampy coastal and riverine areas where people rely on sago palms and fishing. The Asmat, Marind-Anim, and Mimika of southern Irian Jaya provide examples of this adaptation. Second are the highlands with gardening of sweet potatoes and pig raising. The Dani, Yali, Ekari, and Moni provide examples of this adaptational strategy. Third are the foothills, small valleys, and non-swampy coastal areas where people employ strategies involving a mixture of gardening, sago extraction, fishing, hunting, and pig raising. The Moi and Kemutuk of the Sentani subdistrict provide examples of this adaptation.

Mansoben and Walker (1990) and Godschalk (1992) discuss general types of leadership patterns in Irian Jaya. Essentially there are three types. The first is one in which leadership is assigned to elders. These are the senior members of unilineal descent groups. This type of leadership is found where such descent groups are especially important, such as among the Ekari. The second type is associated with bigmen. Such leadership is obtained by the accumulation of wealth and influence through gift giving and trade. The Dani provide an example of this type of leadership. There is evidence that the bigman system has become more prominent in recent years as a result of individuals taking advantage of new opportunities resulting from greater exposure to the outside world. The third type is chieftainship. There are two main varieties of chief. The first is the ondeafi or kepala suku of the northern coastal region to the east. Their position is associated with a chiefly clan and, in general, such chiefs held power over only one or two villages. This type of leadership may be associated with the influence of Austronesian
migrants to the north coast. The second type of chief is the raja. This type of chief is found in western Irian Jaya around the Raja Ampat islands, Fak Fak, and Kaimana. Such leadership was adopted from the sultanate system of Tidore, Ternate, and Jailolo in the sixteenth century.

Social and economic relations among and sometimes even within ethnolinguistic groups tended to be limited in the past. The rugged and often inhospitable environment played a role in keeping people apart. There were social factors as well. Members of other groups generally were considered to be potentially dangerous or potential victims of aggression. Communities, even small ones, were economically self-sufficient for the most part. Trade was mainly limited to a few prestige goods and did not involve long distance travel. These societies were not completely isolated from external contact, but such contact was infrequent and usually indirect and innovations resulting from external influences were rare.

The traditional clothing of Irian Jaya can be divided roughly into five categories (Direktorat Sejarah dan Nilah Tradisional 1986): barkcloth, shell-ornamented cloth, tassel and fringe fiber clothing, coconut fiber cloth, and gourd penis coverings. Oversimplifying somewhat, it is possible to divide traditional patterns of dress in Irian Jaya into two main zones occupying distinct regions associated with two of these types of clothing: the interior koteka zone and the north and west coastal barkcloth zone.

Koteka is an Ekari word referring to a phalocrypt or penis covering made from a gourd. While other groups have their own names for such a penis covering (such as holim in Dani), the term koteka has come to be widely used throughout Irian Jaya. The koteka zone encompasses virtually all of the highlands area of Irian Jaya (excluding the Bird’s Head) and some of the adjacent foothill regions. Koteka, of course, refers only to one item of male dress. Women in this zone also tend to have one item of distinguishing dress in common: a string bag (commonly referred to as a noken, or su in Dani) that they hang down their backs and that serves as an item of adornment as well as being used to carry food, children, pigs, and the like.

Dani dress is by far the best documented within the koteka zone. Dani men wear only the penis covering and a few items of adornment (including a waliimo, a bib or tie, and a hat-like wig) and women wear a skirt and a string bag. Boys and girls start wearing clothing at about age four. Upon marriage a young woman changes the loose hanging grass skirt that is standard costume for unmarried women for a braidied cord skirt made of up to thirty meters of plant fiber cord that hangs very low on the hips and is sewn on before the marriage ceremony (see Sargent 1972, pp. 221-232, on dressing for a wedding). Heider (1979, p. 56; and see Heider 1969) considers Dani clothing to be “mainly ornamental,” serving primarily to protect a person’s modesty, as well as having a supernatural function as protection from ghosts that might otherwise try to enter a person’s body through the base of the neck or anus. The latter is one function of the string bag that women hang down their backs. In addition to modesty, of course, clothing also serves to make fashion statements. Heider (1979, p. 56) notes that differences in status among men are generally known to those around them and are not reflected in dress. Rather, differences in dress are more a matter of personal preference. This is reflected in
penis coverings. Men will usually have a wide variety of shapes and sizes of these as well as plain and decorated ones.2

The basic items of adornment of the Dani (penis sheath, string bag, grass skirt, and braided cord skirt) are to be found throughout much of the koteka zone. Within this zone there are in some instances differences in styles and additional items that distinguish the members of one ethnolinguistic group from another. Wealthy Moni men, for example, wear a “cushion on the loin made of plaited string and covered in grass husks” (Van Nuen 1973, pp. 15-16) that is not found among many other groups in the koteka zone.3 Yali men can sometimes be distinguished from their Dani neighbors by a series of rattan rings that they wrap around the middle of their bodies (with a long penis sheath sticking out from underneath).

One feature of the clothing associated with the koteka zone is the absence of motifs adorning the costumes. The koteka themselves generally are plain with only a small piece of twine wrapped around them mainly for support rather than for decoration. The noken often have geometric patterns made by dyeing the twine different colors or by employing strands of colored twine made from orchids, but these patterns do not form particular motifs.4

The basic men’s costume in the barkcloth zone is some kind of loincloth along with various decorative items and the women’s costume consists of either a barkcloth or grass skirt. The coastal barkcloth zone might better be referred to as the non-koteka zone since there is, in fact, considerable variation in dress in the zone. It could also be referred to as a zone of Austronesian influence. In a recent survey of barkcloth in Irian Jaya (Howard 1996, p. 114), I comment that the distribution of barkcloth in Irian Jaya appears to reflect the influence of Austronesian speakers, although some barkcloth may also have been developed independently. Barkcloth was worn by people along the coast of Irian Jaya from the Papua New Guinea border in the northeast and around the western end of the province to the area occupied by the Mimika on the southern coast.5

Not only are there many differences in the barkcloth found within the zone, but there are numerous other variations in dress as well (a sense of the variety of dress can be gained from the photos in Howard 1996). Such differences sometimes serve to distinguish one ethnolinguistic group from another, but often they are more regional in character, reflecting patterns of trade or cultural links among neighboring groups.

2MacKenzie (1991, p. 193) remarks about the Telefol, that “men grow their own penis gourds using stones to train the gourds to the desired shape. Much like western clothes the forms of these gourds can be seen to reflect personality.”

3Van Nuen’s account of Moni male costume (1973, pp. 15-16) makes several references to differences in dress that reflect relative status or wealth such as the loin cushions and a wig adorned with rodent bones.

4MacKenzie (1991, pp. 34-35, 137, 139) provides a survey of the distribution of string bag types among the Mountain Ok people of Papua New Guinea. Unfortunately, such a survey that would allow analysis of the relationship between string bag styles of ethnolinguistic identity in Irian Jaya has yet to be conducted.

5Kooljman (1963, pp. 119, 121-122) devotes only a few pages to Irian Jaya in his survey of Indonesian barkcloth.
One particularly distinctive form of dress is made of cloth woven from palm leaf fiber known as terfo (see Howard and Sanggenafa, n.d.). This woven cloth is associated solely with the Austronesian speaking peoples living near the northern coastal town of Sarmi who appear to have brought the knowledge of how to make such cloth with them when they settled along the coast a few thousand years ago, and represents perhaps the earliest type of weaving found among the Austronesian speaking peoples of Southeast Asia. The wearing of this cloth ceased in the early twentieth century (although recently it has been revived). Such cloth was worn in addition to barkcloth and was generally part of a costume worn for dances and ceremonial occasions. Men, for example, tended to wear a loincloth made of barkcloth with a girdle of the woven cloth, while women wore skirts made of pieces of woven cloth hanging from the back and front.

Within the barkcloth zone it is possible only to speculate on how particular patterns of dress spread between Austronesian and non-Austronesian peoples. Such diffusion is likely associated with trade along the coast and the exchange of items of adornment for trade and social purposes. Often particular items of clothing would be made in only one or two communities and then traded to other communities. In his description of women’s barkcloth dresses around the Jayapura-Sentani area, Van der Sande (1907) refers to trade in barkcloth as well as to local differences in the type of barkcloth and the style of dresses fashioned from it. The beaded skirts (sireu, see Greub 1992, pp. 50-51) found on Yapen island and neighboring areas of Cenderawasih Bay, which serve as important items of bridewealth, appear to be made in only one or two communities (Ambai) which specialize in this craft.

Early accounts by Europeans also indicate that clothing fashions sometimes changed in terms of design and the use of motifs. Such changes indicate a more dynamic situation than found in the interior koteka zone that possibly reflects the different character of these coastal societies with their greater exposure to one another and to the outside world over the past few centuries.

The koteka and barkcloth zones are not rigidly bounded. Transitional zones are to be found in the regions located between the interior highlands and the coast. The upper reaches of the Mamberamo River, in particular, forms such a transitional zone in which costumes sometimes incorporate elements from both zones.

As noted earlier, Irian Jaya can be viewed as belonging to both the Indonesian and Melanesian fields of ethnological study. In regards to traditional dress as described above, there are parallels with dress patterns in neighboring Papua New Guinea. In the case of lowland New Guinea, dress patterns are associated with very early material culture traditions of the Austronesian peoples and thus can be linked to the Indonesian field of study, while the dress patterns of upland peoples are linked to a much earlier tradition of dress that is no longer evident in the rest of the Indonesian archipelago.

In her study of “flexible looped string bags” (or bilum in the terminology used in Papua New Guinea) of the Telefol living on the Papua New Guinea side of the border region adjacent to Indonesia, MacKenzie refers to the “bilum dependent”
cultures of the montane and hill regions of Papua New Guinea (1991, p. 2). These she distinguishes from the largely Austronesian speaking peoples of the lowland and coastal regions and island archipelagos, where palm leaf baskets are used (1991, p. 3). Thus, she makes a distinction in material culture between the speakers of Austronesian and non-Austronesian languages. Her distinction is essentially the same as mine between the koteka and barkcloth zones, but with an emphasis on different items of material culture. Also, I would caution that it is important to note that material culture of the Austronesian speaking peoples is also commonly associated with neighboring lowland dwelling non-Austronesian speaking peoples. Such zones also reflect differences found throughout Southeast Asia in terms of distinctions between the dress of highland and lowland peoples, with the dress of lowland peoples commonly reflecting to a greater degree more recent external influences.

Modern External Influences

Relevant modern external influences date back at least to the sixteenth century and possibly a few hundred years earlier and are associated initially with trade that took place under the auspices of sultanates in northern Maluku such as Ternate and Tidore. A variety of types of cloth and clothing were brought by traders to the coastal areas of the Bird's Head peninsula and adjacent islands as well as to the islands of Cenderawasih Bay. The exchange of cloth often had political implications as well as economic ones. Agents of the sultan of Tidore, for example, presented locally influential men with special clothing to indicate their loyalty to the sultan. Political and economic links with Tidore helped to promote the raja system of chieftainship and the rajas were able to consolidate their power in part through control over external trade relations.

The rajas and other coastal leaders engaged in trade with interior peoples and in this manner cloth made its way throughout the Bird's Head peninsula, where it formed a key element in a system of exchange and prestige. Such cloth is referred to as kain timur.6 Kain timur was not used for clothing, but as a form of wealth that was accumulated by those striving to achieve prestige and was a vital part of marriage exchanges and fines imposed under traditional law. In this way, such cloth was integrated into a cultural context associated with the Melanesian field of study (in particular, systems of political leadership, economic exchange, and marriage), although it originated with the Indonesian field. As people of the Bird's Head region have come into greater contact with other Irianese, the kain timur complex has served as an important marker of their identity to distinguish them from other Irianese.

The trade cloth from the north Maluku sultanates was used as clothing to only a limited extent in part because of its scarcity. As external trade along the north coast increased in the nineteenth and early twentieth centuries with the advent of a growing Dutch presence in eastern Indonesia, people along the coast and on the offshore islands began using imported cloth more widely for clothing. People on the island of Biak, long a center of interaction with outsiders, were among the earliest ones to

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start wearing loincloths and skirts made of such cloth. Dutch missionaries, who established their first outpost in Irian Jaya in 1855, also served as promoters of the use of imported commercial cloth for clothing. Writing about the inhabitants of the northeastern coastal areas in the 1880s, de Clerq and Schmelzh (1893) describe pubic coverings made of barkcloth, strings of various plant fibers, as well as imported commercial cotton cloth. The increased Dutch presence in the Jayapura-Sentani area after the arrival of a large military expedition in 1909 resulted in more widespread use of commercial cotton cloth for clothing in this area and the decline of clothing made of more traditional materials.

The Dutch presence in Irian Jaya prior to the Second World War was limited to a handful of settlements, Christian missionaries, and scattered colonial administrators. Towns such as Serui, Manokwari, and Hollandia were small and largely inhabited by Europeans and other migrants. Missionaries commonly insisted that people wear Western clothing when attending church services. Around secular European centers imported cloth and European-influenced clothing also came into more common use among local indigenes. The Dutch, however, converted, educated or employed relatively few Irianese and throughout Irian Jaya most people continued to wear more traditional dress.

External influences on dress increased considerably after the Second World War as the Dutch colonial government stepped up efforts to develop the region and as Christian missionaries became more active. While previously, Dutch Protestant missionaries in particular had viewed promoting the wearing of Western style clothing as an integral part of their conversion efforts, the new American Protestant missionaries, who began work especially in the highlands around Wamena in 1956, focused on other issues and left the question of clothing alone.

Clothing reemerged as an issue under the new Indonesian administration, which launched Operasi Koteka in the Biliem Valley and Wissel Lakes region in August 1971. The two main ethnolinguistic groups who were the targets of the campaign were the Ekari and Dani. Although named after the penis sheath, Operasi Koteka was a broad development effort initiated by the commander of the army in Irian Jaya concerned with everything from animal husbandry to building latrines. Nevertheless, getting the Dani and Ekari to switch from their traditional dress, especially the koteka, to Western style clothing was an important aspect of the initiative.

Operasi Koteka met with a few modest successes in some areas, but overall it fell far short of its goals, and, in fact, met considerable local resistance, especially in its attempt to change the clothing styles of local people. Heider (1979, p. 57) remarked about koteka wearing among the Dani that “there are no good reasons to give it up” and noted that few Dani men expressed any interest in wearing pants at the time. In the Paniai region, resistance to efforts to eliminate traditional clothing also met strong resistance and the rejection of modern clothing became a part of more general, and at times more violent, resistance against the government. Prior to the Me-(or Ekari) rebellion of 1969 in Enarotali and the surrounding area, in 1968 many Me began abandoning their villages and gardens and moving into the forest in preparation to fight against the
Indonesian government. At the same time, "the Me took off their clothes- which were seen as a symbol of ogai (non-Irianese foreigners)- and men wore penis gourds and women tree bark skirts" (Giay 1995, p. 232).

Kasiepo (1987, p. 92) notes the failure of these efforts to get the highland peoples to replace kotekas with trousers and comments that missionaries and other critics of the campaign argued in particular that the switch to pants represented a threat to health without other changes which promoted the use of laundry soaps and created market conditions to make such soap available. Thus, while the government, like earlier missionaries, viewed the eradication of traditional dress as a primary goal, the achievement of which would symbolize its overall success, critics argued that the clothing issue was incidental or even irrelevant to more fundamental concerns relating to health and economic development. In fact, some argued that government efforts to get people to change their clothing habits made success in other areas even more difficult. The unintended outcome of Operasi Koteka was to elevate the koteka to a symbol of resistance to heavy-handed government initiatives and promote it as a symbol of local identity.

While Operasi Koteka was failing to get highland men to wear pants, throughout much of Irian Jaya during the 1970s and 1980s, gradual economic development, more widespread schooling, and greater outside exposure was leading to dramatic changes in dress. By the end of the 1980s, T-shirts and shorts for men and skirts and blouses, dresses, and underwear of commercial cloth for women were being widely adopted, even in many relatively remote areas. During the 1990s this process has intensified considerably, even in the Operasi Koteka heartland. While in 1990 it was still relatively common in and around Wamena to see Dani men and women wearing traditional dress, by the mid-1990s the only men wearing kotekas were the elderly and a few younger ones seeking to earn money by posing for tourist photos and virtually all women were wearing non-traditional dress.

Recent Developments

Under Suharto's New Order government, nation-building entailed seeking national unity in a variety of overlapping and in some ways contradictory manifestations including the promotion of a globalized modernity, a Javanese-based national culture, and the standardization of local cultures under the guise of the slogan "unity in diversity." All three of these sub-themes have been evident at various times in relation to government policies towards dress in Irian Jaya. As was discussed above, the theme of modernity emerged shortly after Irian Jaya was incorporated into the Indonesian state through Operasi Koteka. One manifestation of Javanese-based nation-building was the practice of having civil servants don Javanese-style batik clothing on certain occasions as a demonstration of their Indonesian-ness. The "unity in diversity" theme emerged only recently through the government's promotion of local batik styles and the search for standardized forms of neo-traditional provincial dress. Such initiatives have been pursued within the context of rapid socio-economic change that is affecting dress styles as well.

Although commercial cloth and Western style clothing is now in common use throughout Irian Jaya, there are some
developments taking place promoting the continued presence of cloth and clothing that is distinctly identifiable as Irianese. Interestingly, unlike many other parts of the world, the tourist market has played only a minor role so far in promoting traditional and neo-traditional cloth and clothing in Irian Jaya—reflecting the relatively small number of tourists who visit the province. Three cases will be briefly examined below: the emergence of new kain timur in the Bird’s Head, the barkcloth revival in the Jayapura district, and batik Irian.

Both government officials and Christian missionaries have sought to stop the use of kain timur in the Bird’s Head, largely on the grounds that the relatively large amounts of money used to purchase the cloth could be put to better use in promoting community development.7 This is a common argument used elsewhere against extravagant marriage and funeral ceremonies. Such arguments and initiatives have made little headway in the Bird’s Head and kain timur continues to be widely used. For young men, however, the value of the cloth poses a problem since meeting the terms of his marriage settlement in regard to the cash needed to purchase required kain timur can be quite onerous.

Such young men thought that they had found a way around this economic dilemma during the late 1980s, when migrants from Flores began settling at transmigration sites in the Prafi area. The Flores women were weavers and before long many of these women were producing new versions of the old kain timur cloth. The prices they received for the cloth were considerably higher than those they could obtain for their own traditional cloth, but to the local young men awaiting marriage these new pieces of cloth were a relative bargain. Before long there was a virtual boom in the production of new kain timur. As with other booms, it was not long before there was an oversupply and prices dropped markedly. In addition, the old men who possessed most of the older kain timur responded to this threat by changing the rules concerning the kain timur needed for marriage. They now began to specify not simply the categories of cloth (which could easily be copied from old pieces), but also insisted that the payments include older pieces. The boom went bust, but new kain timur continues to be produced and has become an integral part of the kain timur system. In addition, such cloth is now sometimes used for decorative purposes.

The use and production of barkcloth around the Jayapura-Sentani area had pretty well died out by the time of the Second World War.8 Even in more isolated neighboring areas, its production and use in recent decades has been rare. Prior to the war, barkcloth was used for two purposes: for clothing and for paintings (commonly known as maro paintings). There has been a revival in both of these uses over the past few years.

Maro paintings emerged as an art form during the early part of the century in a few localities in the Jayapura-Sentani area, primarily the coastal village of Nafri and the island of Asei in Lake Sentani. While some maro may have been associated with local religious traditions and associated practices, for the most part maro painting was a

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7The discussion of new kain timur is based on Howard (1995); also see Poli, Manalip, and Wenehen (1997).

8The account of the barkcloth and maro painting revival is drawn largely from Howard (1996) and Howard (1998).
commercial innovation for a European market that employed traditional barkcloth making skills and local motifs previously associated with carving, pottery, and other forms of painting. The maro paintings and their motifs were certainly linked to particular ethnolinguistic groups and even clans or other sub-groups within these, but they did not function, except perhaps indirectly, as markers of ethnic identity.

Staff of the anthropology museum at Cenderawasih University promoted a revival of maro painting starting in 1992 with an exhibition at the museum featuring the work of the most prominent older maro painter, Seru Ongge, and by including another painter, John Ongge (one of Seru’s sons), in an exhibition of Sentani art in Jakarta. Since then, Nico Tanto (a museum staff member), has emerged as a promoter of maro painting by commissioning works, helping painters to obtain barkcloth, and trying to sell their work through a variety of outlets. The tourist shops in Hamadi also sell inferior maro paintings. As a result of these developments, there are now a number of local maro painters, especially on Asei island which now boasts over two dozen men who identify themselves as maro painters. As in the past, the maro painters of Asei and elsewhere use motifs associated with their ethnolinguistic group and tend to view their work as artistic expressions of their particular culture. Members of other ethnolinguistic groups who have sought to develop maro painting generally have considered it proper to employ motifs from their own culture, rather than copying the motifs of others. Within the commercial market, however, such ethnic identification is not always so explicit and the pieces are often treated as generic souvenirs from the Jayapura-Sentani area.

The revival of barkcloth for use as dance costumes in the Jayapura district began in 1992 with a traditional dance competition sponsored by the kabupaten of Jayapura. This competition has now become an annual event that includes a large number of coastal and inland communities. As many as a few dozen dancers may perform from a single village and considerable effort goes into making traditional or at least traditional looking clothing in many communities. This includes making costumes of barkcloth as well as other fibers. In the past barkcloth dress usually was not decorated, although there is some evidence of decorations being added when the costumes were employed for special occasions. Virtually all of the newer barkcloth costumes sport motifs made from natural pigments, commercial paints, and even pens. These motifs are sometimes viewed by the makers as being associated with their cultures and along with the total look of the costume are considered to be public markers that the wearer is from a particular community or ethnolinguistic group.

9The Gereja Kristen Injil de Irian Jaya (Evangelical Christian Church of Irian Jaya) runs the Pusat Pengembangan dan Penbinan Wanita (Center for Women’s Development) or “P3W” which sells a variety of handicrafts from Ambai, Sentani, around Jayapura, and other locales. P3W has also played a minor role in promoting barkcloth painting. It has sold cards with barkcloth on front featuring stenciled Irian designs since the early 1990s and in 1996 began selling larger maro paintings.

10Rutherford (1996, p. 592) discusses recent yospan competitions on Biak in which dancers are from Biak-Numfor. Inspiration for these costumes often comes from elsewhere in Irian Jaya rather than solely reflecting the local culture.
Most of the costumes worn are used only for the competition and then they are put away until needed for another dance if they are still serviceable. This revival of traditional costumes exists alongside of the continued spread of Western style clothing rather than serving as an alternative. There is, of course, a tradition in the region for special dance costumes that differ from everyday clothing. The dance teams are presented by community leaders at the performances and the costumes therefore serve to identify members of a community and to differentiate them from others. In contrast, the everyday dress worn throughout the region, which consists of Western style clothing or shirts and skirts made from commercial batik patterns from Java, is devoid of any form of local identification. The situation is similar to that of many of those who perform folk dances in Western countries. In Irian Jaya, however, with its recent history of highly charged views about loyalties to the state, the promotion of local costumes and dances has added significance, representing what may be viewed as a more liberal attitude on the part of the authorities to expressions of local culture.

Similar issues have emerged in regard to batik clothing in Irian Jaya. Batik clothing has assumed an interesting role in recent years through efforts to promote national and regional identities within Indonesia. Essentially a Javanese style of clothing, batik shirts and dresses are widely viewed in Indonesia as symbols of national identity. As part of nation-building efforts, batik dresses and shirts are worn by government officials on certain days and on special occasions throughout the country. While women in many parts of Irian Jaya have for many years readily worn cheap sarongs made with batik prints for everyday wear, few men wear batik shirts, and government efforts to promote the special wearing of batik until recently have not proven overly popular.

Among Irianese Christians, ideas of special or formal dress more often follow European and North American notions as a result of missionary influence- white shirts and dark trousers for men.

Initial efforts in the 1980s and 1990s to promote a local batik industry in the Jayapura area and Wamena were not very successful. Little cloth was sold and most of what was bought was purchased by tourists or resident expatriates. The most important initiative in this regard was Proyek Batik, established in Waena (near Jayapura) in 1983 by Yayasan Kerjasama Untuk Pembangunan Irian Jaya (The Irian Jaya Joint Development Foundation), a joint activity between the United Nations Development Programme and the Government of Indonesia. Proyek Batik produces stenciled as well as tulis batik and makes such items as men's shirts, women's skirts, dresses, blouses, and table cloths.

For the first ten years or so of its existence, Proyek Batik did not do very well. Then in 1995 the provincial government

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11Pieces of batik cloth are also to be found in Irian Jaya's Bird's Head, where they are used as kain timur. As kain timur, such batik assumes a very localized meaning that does not identify it broadly with the nation as a whole. Even its Javanese origin in this context has little or no meaning to local people, who generally are not concerned with the actual place of origin of kain timur.

12The first time that I wore a batik shirt at a formal function in Irian Jaya, one of my Irianese colleagues commented that I was dressed like a Javanese.
issued a statement urging government employees in Irian Jaya to wear batik Irian at least on special occasions. This represented a marked change in strategy. While batik was still being promoted as a national symbol, rather than insisting on the use of batik with Javanese motifs, recognition was given to Irianese motifs which were now to be incorporated into this nation-building campaign—unity in diversity instead of Javanese culture for all. The strategy has worked insofar as batik Irian has now become extremely popular with Irianese civil servants. In fact, batik Irian shirts and dresses are increasingly worn not just for special occasions but for everyday office wear and away from work as well. Whether such popularity mirrors growing support for the Indonesian government, however, is less apparent and difficult to assess.

The motifs chosen for batik Irian are inspired by the three best known carving traditions in Irian Jaya: those of the Asmat, the people of Lake Sentani, and the people of the north coast around Tanah Merah Bay. Such motifs are sometimes mixed. The actual design work is done by artists from Sentani. One of the men primarily responsible for creating these designs argues that his use of motifs from other parts of Irian Jaya is justified because, so he believes, the people of Sentani were the original people of Irian Jaya and, thus, ultimately Sentani art is the basis for all other Irianese art.13 This is not a belief that is widely shared by non-Sentani peoples, but it has helped to allow Sentani batik-makers to transcend local ethno-linguistic boundaries in their creations and to produce clothing that is more generically Irianese.

Selection of clothing among batik Irian consumers appears to be primarily a matter of personal taste and not of loyalty to the motifs of a particular group or region. Observation of batik Irian worn on numerous occasions indicates this to be the case both with those from ethno-linguistic groups whose motifs are found on batik Irian as well as those from groups with no motifs represented. Thus, someone from Tanah Merah Bay is as likely to wear clothing sporting Asmat motifs as motifs from Tanah Merah Bay, even though the option is available to wear clothing with motifs identified specifically with their own group. To a degree, therefore, one can see the emergence of a pan-Irian style of batik, at least among the province’s emerging local middle class, that draws on a variety of more localized traditions.

The government of Indonesia has encouraged the emergence of batik Irian and barkcloth dance costumes in Kabupaten Jayapura in a way that has allowed both to assume characteristics associated with local ideas and desires. Government concern with order or regimentation in the case of the barkcloth is seen primarily in efforts to keep the dance competitors and their audience from becoming too exuberant. But the styles

13 The links between the Sentani and Asmat peoples are explored briefly by Voorhoeve (1969), who argues that “some sort of historical connection is strongly suggested” (1969, p. 466) on the basis of the dualistic structure of their society, the recitation of wailing-weeping sacred songs, public recitations of the heroic deeds of great men at their deaths, some apparently common myths, their highly developed art of woodcarving featuring certain seemingly common elements, and linguistic association within the Central and South New Guinea Phylum of languages. Such a heritage, of course, does not imply that the Sentani speakers were the first ancestors of the Asmat, only that they share a common past.
of the costumes are pretty much left up to local communities. Likewise, the motifs found on batik Irian cloth have been relatively free of government interference. Government desire to ensure an orderly manifestation of local cultural expression—under the unity in diversity theme—has expressed itself more noticeably in a recent effort to promote a set of standardized neo-traditional costumes for Irian Jaya. Such standardized costumes have been created and officially recognized elsewhere in Indonesia and now it appears that it is the turn of Irian Jaya.

The standardized neo-traditional costumes are used mainly to illustrate supposedly local dress at official functions and in an assortment of publications. They tend not to be things that people actually wear and their association with actual traditional costumes varies from relatively faithful contemporary renditions of former types of dress to completely fanciful. For the purpose of creating such a costume for Irian Jaya, a team of seven individuals was selected by the government and it presented its report to a seminar in February 1997 (Dinas Kebudayaan 1997). A province like Irian Jaya presents a particular problem for those wishing to create such costumes since there really is not much by way of traditional costume that is suitable for contemporary representation. Accordingly, the three male and three female costumes put forward for consideration by the committee bear only a minimal link to actual traditional costumes and rely more on seeking to capture the spirit of traditional dress symbolically through the use of motifs, materials, or styling that evoke an association with traditional costumes. Thus, the costumes include motifs from Sentani, Biak-Numfor, Waropen, Asmat, the Bird’s Head, and so forth. While the costumes are made largely out of commercial cloth, there are accessories associated with traditional dress, such as a man’s headdress made of bird’s feathers and a woman’s headdress made of a stuffed Cenderawasih bird. While batik Irian represents the emergence of pan-Irianese dress with minimal official direction, the effort to create these official provincial costumes is more artificial in nature and of less relevance to considerations of actual manifestations of relationships between dress and ethnic identity.

Conclusion

The societies of Irian Jaya evolved in relative isolation when compared with many other parts of the world. Different patterns of traditional dress developed in certain regions that facilitated identification of the wearer at least in broad terms. By and large, however, dress served only a limited role in demarcating members of different communities or ethnolinguistic groups. This in part probably reflects the limited nature of relations between communities and groups. The role of clothing in identification changed, however, as relations with the outside world became more pronounced and especially as conscious efforts were made to incorporate Irianese into the Dutch colonial state, Christian religions, and, finally, the Indonesian state. The initial rather crude efforts by the Dutch and Indonesians to assimilate the Irianese into their respective states included attention to dress that assigned considerable symbolic importance to what people wore.

In recent years, missionaries and government officials have come to place less importance on forcing people to change their
dress at a time when such changes have taken place as a result of informal cultural and economic influences. Irianese continue to have a strong sense of highly localized identity, while abandoning many of the material trappings of such an identity. This is especially true of the growing Irianese elite and middle class which has left behind the lifestyle associated with such material culture, but they retain important social and emotional links with their ethnolinguistic group. It is to this population that batik Irian has shown itself to have a particular appeal. Its functional utility is enhanced by the fact that batik Irian allows them safely to identify with the Indonesian state while at the same time expressing their Irianese identity.

One thing that is especially striking about the traditional dance competitions is the enthusiasm of the participants both back in the village when getting ready and during the competition. This can partly be explained by the fact that the event is exciting and a lot of fun. But there is more to it than this. There is a 'bread and circuses' aspect to the competition in that it certainly is a diversion from the many difficulties faced by these communities in recent years. In the face of such difficulties, dressing up in traditional costumes and going off to a big party promotes a sense of security associated with positive aspects of life in the past as well as an opportunity to enjoy oneself and forget one's troubles. Unlike the koteka in the face of Operasi Koteka, the traditional dress worn for these competitions seems to serve more as a security blanket than as a form of resistance. This positive association with aspects of the past is an important aspect of local and ethnolinguistic identity in modern Irian Jaya as people seek to adapt to a rapidly changing world around them. In this regard, traditional dance costumes are not simply modified survivals of the past, but a significant part of the processes of identity formation and adaptation within the context of contemporary situations.

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The purpose of this paper is to describe briefly the way Biak speakers address socio-cultural taboo within a lexical scale of degree of prohibition. The approach used in this description attempts to give both an insightful understanding and an adequate explanation of an underlying world view of Biak speakers as reflected by taboo terms.

INTRODUCTION

The Biak language is named after its people and the island. It is classified as an Austronesian language and is spoken by more than 40,000 people who inhabit the island of Biak and a few adjacent small islands that lie off the north coast of the Indonesian province of Irian Jaya (West New Guinea).

A small number of materials on the Biak language have been published. However, a comprehensive description of the language has not yet been undertaken. Previous work on Biak language and culture by van Hasselt (1876), Kamma (1954), Voorhoove (1975), and Fautngil (1994) makes little or no mention of the issue of taboo. Taboo terms were not amongst those documented in the Numfoor/Biak - Dutch dictionary produced by Van Hasselt. In light of this apparent omission, the cultural notions that underlie attitudes of communication among Biak speakers, as these are reflected specifically in the lexicon of taboo terms, have yet to be adequately addressed from an emic point of view.

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The socio-cultural implications of taboo terms commonly reflect basic values and belief systems of many Polynesian and Melanesian societies, including Biak. Indeed, the origin of the word 'taboo' can be traced to the Tongan term "tapu" or "tafuu", as documented by Captain Cook in reference to Polynesian customary avoidance of certain persons, places, or objects. English dictionaries define taboo as a prohibition against touching, saying, or doing something for fear of immediate harm from a supernatural force; or as a prohibition imposed by social custom or a protective measure. Expanding on this definition, Biak speakers acknowledge the additional importance of knowing when not to speak and what not to say.

Based on a survey of the literature and my personal observations and experiences as a native Biak-speaker, this paper explores taboo with particular reference to the Swandive dialect of Western Biak. Part B outlines my theoretical approach to the problem, and Part C offers a preliminary account of certain forms of taboo in Biak.

Theoretical Background And Approach

Speech is the mirror of the soul: as a man speaks, so is he.
(Fromkin 1993)

This statement by Publius Cyrus, made as early as 42 B.C, has found universal application. As a minimal element of the language grammar, the lexicon of taboo terms in Biak does indeed mirror the life and worldview of Biak people. A study of taboo in Biak thus requires an approach that can adequately identify what it is that is actually reflected in that mirror.

Leach (quoted by Al-Khatib, 1995) distinguishes between strong and less pronounced taboos (Al-Khatib, 1995). Strong taboos are those related to the way a person draws a boundary between the self and the world. He further says that the boundaries of the body are the focus of many concepts of taboo. As we approach the boundary between the individual and the outside world, the idea of taboo becomes more intense. Things that transgress that boundary, such as excreta and urine, breast milk and semen, are the focus of strong taboos. As soon as we get rid of them, for they are disgusting and distasteful, we have to define them as not-us. Al-Khatib states that ideas of taboo are useful within this categorizing process. What falls outside the scope of a word or a category becomes taboo.

If Al-Khatib’s representation of Leach’s argument is accurate, it would seem that the way he defines taboo is too narrow. For, as I try to suggest in this paper, the self and the world (seen and unseen), and the taboos that are deployed to manage this relationship, can be described in terms of a continuum. Al-Khatib (1995: 444) continues:

Leach (1964) believes that the world around us is composed of objects or things with varied names. Those objects which are unmanned do not exist and are therefore tabooed. So, taboo is all that falls outside the well defined categories, all which finds no place in the system of words and concepts.

In the quotation above, the phrase 'outside the well defined' indicates a break which the concept of continuum advocated in
this paper tries to bridge. The scope of this continuum of taboo forms, and the way in which they are labeled to mirror the world view of Biak speakers, can be understood in terms of the Biak concept of “nin” or ‘shadow’. Taboo finds daily expression in the actions, words and concepts of Biak speakers. I do not seek, therefore, to suggest rigid definitions for Biak taboo terms which might suggest absolute boundaries. Instead, my approach to taboo is an attempt to illuminate its practice in Biak speech and practice.

Furthermore, in their study of Chinese taboo, Hongxu and Guisen (Al-Khatib, 1995) conclude that there is a considerable difference over time between modern Chinese linguistic taboos and earlier taboo practices. They suggest that the ancient taboo words stemmed mainly from a sense of danger and fear of punishment. In contrast, the modern ones chiefly reflect a concern for social etiquette and propriety in behavior. Al-Khatib states that, ‘Inhibition, rather than prohibition, is the key to understanding the very intricate nature of linguistic taboos in our time.’ Can we detect any likely changes over time in Biak uses of taboo?

The kind of study that I advocate here seeks to deduce some of the likely cultural views and values of the speakers from the socio-linguistic lexical forms of taboo. This lexicon, derived from speech events, is then used to classify taboos according to a ranking of degrees of prohibition, along a scale of 1 to 10. This lexical scale is shown in Figure 1.

**Figure 1: A Lexical Scale of Socio-linguistic Taboo in Biak**

```
<-<-<-<-<-<-<-<-<-<-<-<- M A N S E R E N <------[ l o r d ]
nanggi 'sky'
fafores 'swearing'
manwen 'ghost'
faknik 'sacred thing'
<---1---2---3---4---5---N1N---6---7---8---9---10 ->
[shadow]
orwarek 'prohibition'
sasor 'carefulness'
befawase 'tenderness'
B E N A B Y E -> -> -> -> -> -> -> -> ->
[ being k i n d ]
```
Points 1 to 10, as indicated in Figure 1, are arranged along a continuous linear scale. Each point on the scale does not necessarily reflect a clear-cut distinction. Rather the points overlap with one another, in the sense that movement towards the right hand of the continuum indicates an increase in the quality of prohibition and in the strength of sanction. At the mid-point of this continuum is “Nin” which means ‘shadow’ in the Biak language. This ‘shadow’ extends across all of the points on the scale, as suggested by the upper and lower arrows. “Nin” indicates the essence of the continuum as a mirror of Biak society and its cosmological world view.

The taboo term “Manseren”, ‘the sacred man’, also covers all the points on the continuum. It is positioned at the highest point of prohibition: “nanggi”, which refers to the sky. The lowest point of prohibition is identified with “Benabye”, the quality of ‘kindness and harmony’. But, like “Manseren”, this lowest point is also an underlying value that motivates the shadow along the full length of the continuum. This is one of the reasons for my definition of taboo as a continuum of terms, rather than a series of sharp distinctions. Taboo is thus fundamentally constitutive of the values of Biak society. Taboos are grounded in a ‘hidden supernatural power of belief’ to the extent that they are not susceptible to conventional forms of scientific proof.

The following example is a useful illustration of the role of taboo in Biak. When a case of adultery occurs in a village of Western Biak society, it is not always easy to negotiate a solution to such a problem. The head of the village, the “mananwir”, usually assigns special negotiators for both the male and female parties. These negotiators assist both sides to confess their immoral practice. Often they will be asked to swear on the name of the lord of the sky, “manseren nanggi” (i.e. at the extreme end of the scale of taboo, in the area of points 9 and 10). However, since it is very dangerous for them to mention such a term, they will usually make the oath using a euphemism such as “ambober”, which lies only at point 4 on the scale of sanction or prohibition: “Yaufwi bara ambober”, meaning ‘I do not know, as reflected by “ambober”. “Ambober” is a type of tiny bamboo that points straight to the sky.

Here the actors have maintained a harmonious relationship with the supernatural power. Failure to observe such a procedure may bring about sickness to the person who, in this instance, will become as thin as the tiny bamboo. We can see that the deeper the terminologies of taboo refer to the unseen supernatural worldview, the stronger the form of sanction.

My reasons for adopting this analytical approach, in which taboo is viewed in terms of a continuum, are twofold:

1) to allow for a genuine description of the cultural values that goes beyond a superficial understanding derived solely from the study of vocabulary; and

2) to propose a linear framework for the comprehension of taboo terms in the context of Biak society and its concept of cosmos as a whole.

The inclusion of cosmology here reflects the fact that taboo in Biak society cannot be adequately explained unless the people’s worldview, their understanding of the cosmos, is addressed. In his personal communication to Mary Douglas, the author
of Purity and Danger (1984), Michael Lambeke (1982) acknowledges the limitations of his description of taboo in Malagasy society, in which he failed to consider taboo from a cosmological perspective. In fact, taboos negatively constitute not only society but also the cosmos. In line with such statements, taboos not only reflect values in Biak society but also help to constitute it, for they are an integral part of its very substance.

I do not propose to offer a detailed analysis of the taboo continuum in this preliminary paper. Instead, an initial hypothesis has been proposed for such a study, namely: "the more that X affects the unseen world [where X is a term spoken], the more likely the harm from a supernatural force." In other words, the less that X is held to affect the unseen world, the less likely will be the harm from a supernatural force. In the next part of this paper, some of the instances of taboo practice in Biak that might be employed in exploring and refining this theoretical framework are described.

Sociolinguistic Taboos
In Biak

This part sets out a series of case studies of different forms of taboo in Biak society and language. The taboo examples described in cases 1 to 5 illustrate verbal taboos that prohibit someone from saying or doing something. The remainder of the cases show how Biak speakers employ certain taboos as a form of protection from supernatural powers.

The taboo terms described in the first six case studies below can be located on the continuum scale in the range between points 5 and 9, as they reflect the Biak understanding of prohibition. In contrast, case studies 7 to 9 are classified on the scale between points 2 and 5.

Word Taboos Associated With Certain Places

In the western part of Biak, between the villages of Yenbepyoper and Maudori, there is a cave. This cave has been considered 'sacred' by Biak people. It is a home of unseen spirits called "manwen" or 'ghost'. When people pass by the cave or talk about certain topics related to the cave, they dare not mention the name of the cave "abyab napdo". The supernatural power of the cave may harm them or bring about sickness to any members of their families.

Word Taboos Associated With Fishing

In another instance, when my brothers and I go fishing on the sea of Yenburwo village, it is taboo to inform anyone when we go fishing. If we fail to observe this taboo, we will be unable to catch a single fish. Instead of saying "nggora nggosarfer" meaning 'we are going fishing', we say "nggora nggbobores" meaning 'we are going for a paddle'. Moreover, women are not allowed to help carry our fishing tools.

Another interesting event I once observed amongst the villagers of Yenburwo was the prohibition of mentioning the name of flying fish "inanai". We assumed that this type fish called "inanai" wouldn't appear on the sea surface for us to catch if we mentioned the name or involved a fisherman whose wife was pregnant.
Word Taboos Associated With Hunting

My grandfather would not permit anyone to stand before, sneeze, cough, or utter a word to him when he was ready to go hunting. When he was hunting in the woods, we would not be allowed to mention his name or to inform people what he was doing. If someone persisted in asking, my grandmother would say that he was collecting rattan, "rya pyaw kabrai". The reasons for such avoidance might be the fear that an unseen supernatural power would send snakes to block his path, hurt him, or otherwise hinder him from catching an animal.

Word Taboos Associated With Harvesting

When it was time to harvest the taro or sweet potato crops, Biak people would perform a special ritual called "Fan Nanggi" meaning 'the first and best fruits for the lord of the sky'. A couple of weeks before this ritual was to take place, all the villagers, and particularly those directly involved in the performance of the ritual, would be strongly prohibited from carrying out certain tabooed speech acts until the day of the event was over. They had to maintain a very good relationship with the unseen power, or master of the sky, otherwise the entire harvest would be a disaster.

Word Taboos Associated With Sailing

As they push their little canoes into the sea, Biak people have to observe certain weather conditions. They truly hold the fact that they must not mention or point at the heavy dark clouds that darken the sea's horizon as they prepare to go sailing: "Bardai awer mandep beker nawa" which means 'Don't acknowledge those dark clouds, for a big wind and huge waves will come to sink our canoe'.

Word Taboos Associated With Unseen Spirits

Biak people who still hold their traditional beliefs assume that, as the sun or the moon sets down, the unseen spirits of supernatural power arise from the earth and begin to hang around the villages. During this span of time, the older people of a family are required to perform some kind of taboo speech as protection to children. A baby who cries in the middle of the night will be loudly named "kasib barya rosa dar kucker i", or 'what is that lizard making noises for'.

As the sun sets, a father walking home from the farm with his child may utter certain taboo phrases. A father will often call his child, who is running home a few meters before him, a 'scabby lizard' ("kasib bar iyafra"). This expression is intended to prevent harm from befalling the child from unseen spirits.

Word Taboos Associated With Sexual Matters

As in most other Pacific societies, linguistic taboos connected with the sexual organs and sexual behavior are considered quite offensive and hurtful in Biak society. They are viewed as vulgar, obscene, shameful and immoral. Their use in a non-
permitted context, such as in a place shared by both genders, provokes severe reactions on the part of the audience.

Biak speakers attempt not to use taboo phrases associated with sexual matters in order to avoid being subject to a great deal of criticism by speech community members. As quoted by Al-Khatib (1995: 447), Freud states that:

Anyone who has violated a taboo becomes taboo himself because he possesses the dangerous quality of tempting others to follow his example; why should he be allowed to do what is forbidden to others? Thus he is truly contagious in that every example encourages imitation, and for that reason he himself must be shunned.

The reluctance to use words related to sex, and the development of taboos against their use, has led the Biak speech community to invent new words or phrases in their place. To make taboo words describing sexual matters sound less offensive and more acceptable, euphemisms are employed. For example, in the context of washing a corpse, or discussing an immoral practice among the elders in the village, the word "rofmar byeja" meaning 'his or her body coverage' is used for 'vagina' or 'penis'. Similarly, euphemisms can be used to soften the phrase 'sexual intercourse'. "rya yob i kwar" or "syuni ro sim byeja kwar", meaning 'he already met her' or 'she has entered his room', respectively.

In other situations, Biak people avoid uttering words that are associated with tabooed parts of the body. Thus "kapui" ('feces') is replaced with "mamas" ('the dirt'), while 'someone goes to the toilet' will be expressed as "isawen war beba ma war kasun", which means 'he throws away big and small water'. Since these materials and actions are seen as dirty and obscene, they are referred to using other less-offensive words. One reason that contributes to people's unwillingness to use these words has been identified by Mary Douglas (1966): 'our idea of dirt is compounded of two things, care for hygiene and respect for conventions'.

4. Word Taboos Connected With Unpleasant Matters

Unlucky events or accidents like death, disease, crime, and punishment have a connotative effect on a number of words in Biak community. As an example, the clause "imar kwar" meaning 'he/she is already dead' has to be substituted with the clause "imbran kwar" meaning 'he or she has already walked away'. Certain dangerous diseases will be called "dafduf ker" which means 'just a piece of disease'.

Word Taboos Concerning Kinship Relations

It is taboo for Biak people to mention the names of in-laws or the names of their mother's brothers. Mentioning the names of in-laws might affect the growth of children or the unity of a family. They also believe that their children may develop bad behavior as they grow up if they mention the names of their mother's brothers. They would rather use the term "rifyo" or "mambahyo" for 'brother in law' or 'father in law' respectively, and "imen" for 'mother's brother'.

IRIAN, Vol. XXII, No. 1, April 1999
Conclusions

As sociolinguistic shadow, taboo reflects some significant issues in the development of Biak people and their cultural values. The more that Biak society develops, the less likely that these fine gradations of taboo will be remembered and observed. This development suggests that the underlying norms of Biak society are becoming increasingly obscure. The social norms that were used to shape the attitudes of Biak society have gradually been replaced by new forms of social code.

Yet, if they remain unaware of the continuum of the ‘shadow’ of taboo, government or other social institutional workers may not appreciate the complex role of taboo in Biak society. In particular, they may try to impose written forms of national law on Biak society in ways that contravene local taboo. For example, the Department of Environment may try to invest considerable resources and energy in its campaign for a sustainable environment, such as the protection of local coral reefs, without appreciating that the concept of taboo has long guided the awareness of local people of the need for a balanced environment.

The concept of continuum also helps to account for the relationship between social etiquette and the danger of sanction. In Biak society, it provides a scale of ‘shadow’ such that, although inhibition and prohibition can be differentiated literally, their semantic nature in discussing taboo cannot be absolutely designated as following either the modern or ancient models proposed by Hongxu and Guisen (Al-Khatib 1995).

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The Response of Dani Society to Tourism in Wamena

by Onesimus Warwer

Due to the fact that tourism in Wamena and Kuruhi, in Jayawijaya regency, is at the beginning development, there are only limited people who make use of this economic opportunity. Over thirty-five people in the two locations were asked for what kind of tourism developed in Jayawijaya, what services are given to generate income, and what specific changes happen as the impacts of tourism to Dani society.

Tourism is a service activity that creates opportunities for social and cultural contact between local communities and tourists. Through such contact, certain changes occur in the life of the local people, who perceive tourism as a form of economic activity.

Background

Many studies have addressed the social and cultural impacts of tourism. In a case study conducted in Bali, de Kadt (de Kadt 1979: 61) has considered the social relations between Balinese and tourists from an economic perspective. Hotel owners, guide services and taxi drivers seek and receive money in return for their services. De Kadt argues that tourism has benefited the Balinese socially and economically, while at the same time generating the interest and the funding necessary for the continued maintenance of Balinese cultural traditions.

Smith (1989:57) has concluded that when an Eskimo community, after some initial resistance, finally opened up to receive tourism, it resulted in a transformation of their traditional handicrafts. However in another study, on tourism in Toraja, Smith (1989:143) noted that the traditional belief system, Aluk To Dolo, and the Toraja mortuary rituals continue to exist largely due to the interest shown by tourists and the wealth generated by their visits.

On the other hand, tourism can also have negative impacts on local communities through the breadth and nature of new forms of social interaction. Petit-Skinner (1977), who has studied the impact of tourism on Tahitian people, demonstrates the links between tourism and the expansion of the sex industry there. Drawing on the results of female researchers working at Muangthai in Thailand, Triang (1992: 165) has also shown how tourism promotes prostitution.

A study by Evans (in de Kadt (ed.) 1979) of tourism in the Puerto Vallarta community, found that tourism can be strongly influenced by local institutions and decisions. Local entrepreneurs play an important role, enjoying increased opportunities for employment. This in turn

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IRIAN, Vol. XXII, No. 1, April 1999
results in increasing differences within the community in terms of income and status, access to new ideas, and standards of living.

On the evidence of the studies mentioned above, we know that tourism can have both positive and negative impacts upon the lives of those people who choose to engage with tourism as a strategy designed to generate a new form of income. This paper focuses on the impacts of tourism on such features of traditional society as sacred objects, and on the modification of certain elements of Dani culture. The paper stresses the active role of Dani people, who have adopted the idea of tourism as a new form of economic activity or exchange. This article derives from my field research in 1997 on basic economic institutions and other institutions related to tourist activity in the Wamena area.

**Methods And Materials**

This study is located in the Wamena and Kurulu sub-districts of Jayawijaya Regency, in the Central Highlands of Irian Jaya Province. These two sub-districts are located in the Grand Valley of the Balem River. Wamena township, in the Wamena sub-district, is the capital of the regency; Kurulu sub-district lies immediately to the north-east of Wamena sub-district. These two sub-districts are easily accessible by plane from Jayapura to the airport at Wamena. From Wamena, taxis to Kurulu take about thirty minutes to cover the distance of about 16 km.

Most Dani people practice a subsistence economy, and follow a largely traditional way of life, with low levels of formal education. The Indonesian government is currently seeking to improve the standard of Dani life through the introduction of a range of different programs in such fields as education, agriculture, and animal husbandry. Local government statements indicate that tourism is seen not only as a new strategy to generate income for the administration of Jayawijaya Regency, but also as a means for the local people to derive important alternative sources of income.

The number of the tourists who visit the Wamena and Kurulu areas has been increasing over time. The following table
gives figures for tourist visitors to these areas during 1990:

<table>
<thead>
<tr>
<th>Continent</th>
<th>Number of Tourists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>94</td>
</tr>
<tr>
<td>Asia</td>
<td>180</td>
</tr>
<tr>
<td>Australia</td>
<td>115</td>
</tr>
<tr>
<td>Europe</td>
<td>1,946</td>
</tr>
<tr>
<td>United States of America</td>
<td>512</td>
</tr>
<tr>
<td>Total</td>
<td>2,847</td>
</tr>
</tbody>
</table>

Table: The Number of Tourists visited Wamena and Kurulu in 1990

The increase in the numbers of tourists visiting Jayawijaya Regency has in turn become a stimulus for the local Dani communities to invent further objects and attractions for these tourists. Additional facilities in the township of Wamena, such as restaurants, travel bureaus, and souvenir shops, also support tourist activity in the Wamena and Kurulu areas.

The fifty subjects interviewed for this study consisted of tourist guides, porters, the leaders of dance groups, the travel bureau, and the owners of the famous Dani mummies. Most of the subjects had relatively low levels of education, that is to say that they had not completed elementary school, though tourist guides had usually completed senior high school. All of these subjects belonged to families which depend largely on a traditional subsistence economy.

A guided interview list was devised in order to focus the interviews with the informants. Methods of data collection consisted mostly of the techniques of in-depth interview and participant observation. I also obtained information from a range of other informants such as village heads, the administrative head of Wamena sub-district, and church leaders.

The contents of the questions were generally about the kinds of services offered to the tourists, and how much money was obtained in return for these services. These questions were addressed to those subjects who were actively engaged in tourism businesses as one of their main strategies for generating an income. Questions dealing with social and cultural impacts were also addressed to the head of the sub-district, the clergymen and other select informants who had some perspective on the broader impacts of tourism in the Baliem Valley.

Results And Discussion

The findings of this study showed that tourist activities in the Wamena and Kurulu sub-districts have resulted in some modification of certain cultural elements, and in changes in specific aspects of Dani society. The main responses of Dani people toward tourism are identified as follows:

Cultural Tourism and Nature Tourism as the Main Responses of Dani Society to Tourist Activity.

There are two principal types of tourism practiced in the Baliem Valley: cultural tourism and nature tourism. According to some of the tourists that I interviewed, one of the main attractions of visiting the Dani is to see its unique form of culture, including activities such as traditional clothing, and ways of cooking. Dani culture has a special value, which relates to the unique nature of Dani tradition; Dani culture thus has a particular appeal for
tourists, and a corresponding value for those Dani communities that engage with tourists.

Nature tourism, which makes the most of the exceptional environmental beauty of the Baliem Valley and surrounding regions, offers another type of attraction and also generates income for Dani communities. Many tourists come to hike in and around the Grand Valley, or to take photographs of its spectacular scenery. Prominent natural features of the landscape include Lake Habbema, the Sogokmo Valley, the Salt Pools, the "Death Gate" of Anugara, Wikuda or Kuntilola Cave and Susu Hill. These and many other features of the Dani landscape provide for a strong element of "nature tourism" in the Baliem Valley.

The uniqueness of Dani culture is identified as a major attraction for many of the tourists who come to visit Wamena, and plays a major role as a source of income for the local people. This uniqueness is evident in the form of traditional Dani technology and beliefs. Their technology and beliefs can be seen in the architecture of Dani houses, and in the pattern of Dani settlements. A traditional settlement consists of five to ten houses, including men's houses (pilamo), women's houses (ebeai), meeting places (usilimo) and pig houses (wamdabu). The settlement unit is called sili.

These potential objects of tourist interest are then further developed to meet the needs of the tourists. The local people serve the tourists' needs by providing local guides to traditional villages such as Sopaima, Aikima, and Araboda. The local dance groups at these villages then perform traditional dances, cook feasts, and introduce the tourists to other attractions. In return for the services of local people, tourists pay between Rp 100,000 and Rp 250,000 for a sequence of performances.

In addition, at the Nayak Market, in the township of Wamena, western Dani from beyond the Grand Valley also sell souvenirs such as stone axes, traditional netbags, and bark bracelets.

Another element of the tourist landscape is the use of mumified ancestors by Lokomabel clan in Jiwika, Elasak clan in Aikima, and Kurisi clan in Araboda. These clans, each of whom possesses at least one mumified ancestor, use the mummies as a source of income from tourists. Konono Lokomabel told me that his clan has been able to build eight traditional inns in Sopaima through the profits from their tourism ventures, such as the commercialization of their mummy, traditional dancing and pig-feasts. In addition to this, the Lokomabel community also grows paddy rice and coffee crops, which provide them with a source of cash income in addition to their revenues from tourism.

The Reinvention of Dani Tradition in Response to Tourism in Wamena

Dani people have reinterpreted certain elements of their culture to enhance their attractiveness as new cultural commodities or tourist attractions capable of generating a new form of income. According to Hobsbawm (1983), newly invented objects, beliefs or practices are then handed down from one generation to the next as a part of traditional culture. For example, warfare is one of the elements of traditional Dani culture that is being revived and reinvented, in the form of the "war festival", to serve the tourists who increasingly visit Wamena. These cultural attractions have become commodities in a market where tourists will pay a certain amount of money
in return for services provided by the local government and Dani communities.

"Perang-perangan", or the "war festival", is the official term for this newly invented tradition revived by the Tourism Department of Jayawijaya Regency. Dani society has traditionally practised tribal warfare which was itself a form of religious institution. According to Dani beliefs, war is a type of religious duty. Nowadays tribal war is forbidden by the government and the Dani have thus participated in the invention of this new form of war, not as real warfare, but as a spectacle for tourists.

The new war festival is a political instrument which has been used to unite most of the former war confederations, such as Aso-Lokobal, Hobi-Giak, Napua and Mukako. These former confederations are now constrained to become involved in the war festival and to follow the new regulations for warfare established by the local government. The group which puts on the best display in the war festival now wins a government-sponsored prize, consisting of the national flag and five million rupiah.

Another newly invented tradition is the pig race, which is performed by Dani women together with their pigs. This is a special attraction in which women compete in a foot race, followed by their pigs, over a distance of hundred meters. Traditional feasts that involve the slaughter of pigs to welcome new guests to a village are another way of generating money from the new "tourist guests", who pay for the pigs and also for the privilege of watching the preparation of the feast.

Another invented tradition is the creation of novel tourist objects. Mummified bodies of clan leaders have become tourist objects for the Lokomabel, Elsok and Kurisi clans. Before the arrival tourists in the Wamena area, the Kurisi mummy was kept in secret in the war house, or wimalai. No-one from outside the clan which owned the mummy was allowed to enter the wimalai house and the mummy's presence in the house was a closely guarded secret. With the arrival of tourists, however, Dani families have decided to commercialize their mummies by asking for payment from visitors or tourists in return for public displays of the mummy and the right to take photographs of it.

In Kurulu, local tourist objects such as the mummies belong to certain clans. The income obtained from these objects is divided in such a way as to support daily life and also to meet other needs, such as ritual or ceremonial obligations.

Another sacred object in Dani life is ap warek or kanake. Ap warek and kanke are stones or arrows that were formerly used in tribal warfare. Together with the mummies of the ancestors, ap warek and kanke were formerly sacred things. Yet many Dani now manufacture new ap warek specifically for sale to tourists.

Front Stage and Back Stage Behavior of People in Wamena and Kurulu

The display of mummies as tourist objects involves two contrasting types of behavior, which I describe here as "front stage" and "back stage" behavior. The owners of mummies place the mummies in front of their houses when the tourists agree to pay the amount of money asked for by the owners. In this way the mummy is treated as
a profane object with economic value for the community.

Back stage behavior is the behavior that is performed by owners of the mummies outside of the context of tourism, when the mummies are again ritual rather than profane objects. The mummy of an ancestor is a sacred object that serves to dispel anxiety when the owners have experienced misfortune, such as the death of a relative, or sickness amongst their pig herds. In these circumstances they perform a certain ritual in which an offering in the form of a special sweet potato or cut of meat is offered to the mummy.

Similar behavior by members of the same clan is observed when they wear only traditional clothing as they wait for tourists to visit their traditional villages. On the other hand, when they go to the town of Wamena town, they wear store-bought clothing. This form of front and back stage behavior is commonly practised by people from villages in the Baliem Valley such as Sopaima and Aikima. As one of my informants, Y. Mabel, put it: ‘The tourists like to photograph us and will give us money if we wear traditional clothing [koteka]’ (‘Turis senang foto dan kasih uang kalau pakai baju koteka’).

Wider Social Interactions

Tourism is an economic activity that broadens the scope for social interaction. This particular form of social impact occurs when a new market arises between tourists and local people and government. The local people and government in Wamena sell their services to the many tourists who visit Wamena every month. The tourist services such as guides, hotels, cultural attractions, and tourist objects create a field for social interaction between local people, government staff and tourists.

One example is the war festival, which is now performed every year in August. During this event Dani people, local guides (both Dani and non-Dani), business people, and local government staff meet to sell their services to the tourists. An obvious result of this interaction is the increasing mastery of English by local guides. English language is initially an important means of communication in explaining Dani culture to tourists. However, wider forms of interaction also occur because the tourists often visit remote villages and interact with large numbers of local people. The increasing use of English by guides and other community members who interact with tourists is becoming an important resource for the Dani in representing themselves and their concerns to the outside world. The contacts between guides, communities and tourists create new networks of contacts not previously available to the Dani.

Some Conclusions

The modification of certain elements of Dani culture is evidence for a process of acculturation through increasing inter-cultural contact. Tourism is a new concept from outside that certain Dani individuals and communities have embraced for the opportunities and the positive effects (including increased income and wider social networks) that it represents. The result is a new tradition, made up of a mixture of old and new traditions, that will probably come to be accepted by all Dani people in the future. However some negative effects always flow from the modification of the basic elements of any culture. This is illustrated in the case study of tourist activity
in Wamena, in terms of effects such as the reinterpretation of certain cultural elements as tourist commodities. The creation of cultural elements to meet the needs of tourists has led to a sort of double life in which Dani people lead “front stage” lives before the tourists, but then engage in “back stage” behavior which more accurately represents their real lives and aspirations.

For many Dani households, tourism is now an important source of additional income that they use to meet needs, such as the acquisition of foodstuffs in stores or markets. But the development of tourism as a new economic strategy for households is also emerging as an opportunity to reinvent and thus revitalize old traditions.

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Irian Jaya Libraries
and the Preservation of Indigenous Languages

By A.C. Sungkana Hadi

As one of the agents of cultural and social change, Indonesian libraries apparently have to play an appropriate, necessary role in supporting the national mission to improve the intelligence of the nation, and to preserve indigenous cultures, including indigenous local languages. This is, however, not an easy kind of service as libraries often have to go beyond the scope of their conventional services. These 'non-conventional services' however, entail some problems that have to be confronted and overcome.

Based on the Decree of the Minister of Education and Culture, March 11, 1981, (Keputusan Menteri Pendidikan dan Kebudayaan Republik Indonesia 1981), there are seven types of libraries which together comprise the Indonesian National Library System. The system includes the National Library, including the Provincial Library (Perpustakaan Daerah – now the Provincial Unit of the National Library, or Perpustakaan Nasional Propinsi), public libraries, mobile libraries, school libraries, college/university libraries, and special libraries. These libraries should collaborate in a such way that enables them to perform their mission.

One of the most important missions for the libraries is the preservation of indigenous languages and cultures which, in turn, is intended to promote reading habits and improve the general education standard of the public. This is because there are a lot of indigenous languages in Indonesia, with the greatest number being in Irian Jaya. The languages are used for communication amongst the members of the tribes, including written communication which is recorded in traditional, original documents. Preserving indigenous languages, therefore, also involves the preservation of indigenous documents and traditional tools for scientific communication.

Libraries In Irian Jaya

As an integral part of the Indonesian National Library System, Irian Jaya libraries are committed in supporting the mission of the central as well as the provincial government. The mission of the Irian Jaya government is to combat isolation, ignorance, and poverty (Mackbon 1995: 50-68). The problem, however, is that the libraries are still suffering from several constraints, such

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1 This is a rewritten version of a paper submitted to the 10th CONSAL, Kuala Lumpur, Malaysia, 21-25 May 1996.
2 Senior librarian at the Cenderawasih University, and now Head of the Cenderawasih University Library.
as limited information resources, limited budgets, a lack of qualified human resources, and limited information technology infrastructures.

On the other hand, some efforts have been launched to enable the libraries to overcome these constraints. Currently, there is a relatively strong human resource in terms of Irian Jaya librarians, many of whom have library education backgrounds, ranging from two or three years of diploma study through to full masters degrees. With more attention to, and serious handling of, the management of these human resources, these librarians will be the greatest supporting factor enabling the libraries to improve in the performance of their functions.

Out of more than 900 libraries throughout the province, the Library of the Catholic Missionary at the APO-Jayapura OFM (Franciscan) Monastery, is probably the oldest, even though it has not been organized in a modern library management style yet. It was founded in the Dutch colonial era, and held numerous invaluable materials about Irian people and culture. We advise people to visit the library, as well as the Library of the STFT College "Fajar Timur," if they wish to gain access to comprehensive materials on Irian Jaya.

Most of other libraries were founded in the period since Irian Jaya officially became the 26th province of the Republic of Indonesia. Among these libraries, the Library of the Cenderawasih University and the Library of the Summer Institute of Linguistics in Irian Jaya are two that hold comprehensive materials on Irian Jaya indigenous languages.1

Irian Jaya’s Indigenous Languages

Irian Jaya has a population of approximately 2.1 million people, and is the least densely populated province in the country, with less than 5 people per square kilometer. Due to Irian Jaya’s rough topography, approximately 80% of the province’s population live in relatively isolated villages. The dispersed nature of settlement has led to the development of many distinct languages. The number of tribes in Irian Jaya, estimated at about 250, probably corresponds to the number of different indigenous languages found in the province.

Since the end of the 1980s, Irian Jaya has enjoyed special treatment from the Central Government. Under the "Going East" policy, Irian Jaya has increasingly received attention from the Central Government and both domestic and international private sectors. Special attention has been paid to the study of Irian Jaya’s languages in order to preserve them.

In line with this new attention, a joint project involving the Department of Education and Culture (in this case, the Cenderawasih University or UNCEN) and the Summer Institute of Linguistics (or SIL), of Dallas, Texas, was initialized on March 24, 1975. This project, which was popularly known as the UNCEN-SIL Project, was in operation until 1992. The major results of the project include hundreds of research reports working in collaboration with the Regional Office of the Department of Social Affairs of the Republic of Indonesia; its Library is still open to a limited public.

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1The Summer Institute of Linguistics is now
and reading materials on Irian Jaya languages.

According to Silzer and Clouse (1991: 23-34), of approximately 600 local languages in Indonesia, 251 are located in Irian Jaya. If we include the 770 reported languages of Papua New Guinea, then the island of New Guinea, according to Silzer and Clouse, contains more than 1000 languages. This figure constitutes one fifth of the world's languages. The island, therefore, sustains an invaluable portion of the world's cultural heritage.

Problems

On one hand, linguists and other social scientists may rightfully be proud of the existing heritage in New Guinea. On the other hand, they are confronted with the challenge of guaranteeing the perpetuation of this cultural heritage. The chief problem is that some of these languages, in Irian Jaya in particular, are nearing extinction. This is due, first of all, to the fact that some languages are spoken by only a few people. Silzer and Clouse, in their index of Irian Jaya languages, listed twelve languages which number less than fifty speakers, while the status of another nine languages is not yet known. The Dusner language, for example, is spoken by only six people, while the Tandia language had only two remaining native speakers in 1991. Eight years on from the Silzer and Clouse survey, one might well ask whether the Dusner and Tandia languages are still alive today.

In relation to the problem of language extinction, population growth trends in Irian Jaya are a source of further anxiety for linguists. Statistics for the population of Irian Jaya in 1980 and 1990 showed that the average population growth in rural areas is lower than that in urban areas. During the period 1980-1990, there was population growth of 27.13% in rural areas compared to 36.31% in urban areas (Raharjo and Setiawan 1995). This implies that the number of potential native speakers of the respective indigenous languages will not increase significantly. The rural growth rate of 27.13% also includes non-native immigrants who came from other parts of the country. Meanwhile, the high level of urbanization in Irian Jaya, growing at a rate of approximately 4% during the period 1980-1990, suggests high levels of immigration combined with rural-urban drift. The movement to urban areas of rural indigenous people, many of whom gradually move away from their traditional habits and culture, including their indigenous languages, is a further threat to the survival of these languages. Most of these indigenous urban immigrants are young people seeking better education, jobs, or a better standard of living in the cities. They may no longer comprehend their own languages or, at least, they may not live in environments that are conducive to the maintenance of their own languages.

The next problem is that most of the languages have not yet been described comprehensively. This is unfortunate, as description is a highly important tool allowing people, including literate indigenous children, to learn a specific language. The lack of description of the indigenous languages will be one of the most serious handicaps in learning and preserving indigenous languages so that they can be transmitted to the next generation.
Our fears over the potential for language loss in Irian Jaya thus appear well-founded. Few appropriate mechanisms or tools, involving either natural processes (such as transmission to younger generations) or external intervention (such as language description and education), are available to preserve many of Irian Jaya’s indigenous languages. Serious and systematic efforts to preserve these languages must be developed as a crucial and urgent program that the government and society should embark upon immediately.

**Existing Efforts**

Among the few programs conducted in the past, that of the UNCEN-SIL project to develop reading materials written in specific languages that had already been described deserves high praise. Currently there are more than sixty works, written in several languages, available at the Cenderawasih University Library. Most of the works are booklets and brochures. Some of the titles are reading materials devoted to young people of the respective ethnic groups to enable them to know and learn their own languages.

It is thus unfortunate that the program has been terminated, due to the end of the UNCEN-SIL Project. It must be our task to extend and to improve upon this program. At the very least we should aim to produce multiple copies of the existing reading materials, and to distribute them to the relevant institutions so as to allow people to access them more easily.

In the interim, teaching staff at the Language and Arts Department of the Faculty of Teacher Training and Education, Cenderawasih University, are committed to the continuing study of certain linguistic aspects of Irian Jaya languages. Most of the studies deal with the efforts to analyze more comprehensively those languages that have already been described in a preliminary way. It is expected, of course, that these pure research activities will be followed by more applied forms of research, particularly in support of language preservation programs.

In order to support and to ensure the continuity of these programs—which the development of reading materials and the research—the government should create a long-term funding program. Funds should be made available for the composition of reading materials, their publication and distribution, and for the organization and maintenance of the materials to allow the target communities to access them.

**Roles For The Libraries**

References to the organization and maintenance of reading materials immediately invoke the concept and the role of the library as an institution. It is the task of the library to develop and run a system of organizing, maintaining, and providing reading materials to allow public access. This is why the library is often referred to as an “open university”, an educational institution available to all people, allowing them to gain information, knowledge, and experience.

Some define the library as a social institution that preserves and maintains all human knowledge and memories of the past, as a museum of cultural heritage. In a library, a reader can be pulled into the past or into another country, meeting historical or cultural others in a form of dialogue, or
simply reflecting on or enjoying their lives, or admiring their magnificent works.

Younger generations in Irian Jaya will never have direct knowledge of the magnificent works of their ancestors, as there are often only a few examples of ancient physical entities that still exist in the modern world. However, they will still be able to view pictures of this magnificent heritage, to read and to learn about their past, and thus to feel a sense of ownership of their heritage through exploring of library materials. It is sadly true that we will be totally ignorant of our past if there are no libraries in our society.

On one hand, a library can be considered as a museum of cultural heritage; on the other, a library is an educational institution where people can receive indirect instruction from various magnificent teachers from throughout the world. It is through the collections held in libraries that people are able to find the materials that meet their specific study needs or questions.

It should be noted that a new awareness is emerging among librarians concerning the scope of their responsibilities. In the past, librarians used to think that they should be responsible only to serve a literate readership. However, most librarians now agree that combating illiteracy is a major role for them. Every library, according to Salter and Salter (1991: 52-53), should have a place in the national literacy effort.

I absolutely believe that the preservation of indigenous languages is one of several programs that might be pursued within the national literacy effort, especially in Irian Jaya. This is because most ethnic groups that still rely principally on indigenous languages live in relatively remote areas. These communities will become literate and preserve their own languages and cultures, only if they can first read and write in their own languages.

**Libraries and Language Preservation**

In line with the above, it seems reasonable to place the library in a position of some importance in the efforts to preserve indigenous languages. Libraries not only organize and maintain reading materials written in indigenous languages and keep them in secure locations, but also allow people, including those of younger generations, whether from within or without the different ethnic groups, to learn and to practice these languages.

If special attention and new programs are developed as part of a serious effort to preserve languages, then special forms of treatment or service of the materials might also be created. The library could, for example, conduct a special program of tutorials for the readers of a specific language. The program, of course, would be developed and carried out in cooperation with language teachers or linguists of the respective language.

**District and Rural Public Libraries in Irian Jaya**

To maximize the efficacy of the functions of the national library system, as these are set out in the Decree of the Minister of Education and Culture of the Republic of Indonesia, each district and rural library in Irian Jaya should be instructed to develop a special collection on Irian Jaya languages. The core of the collection should be reading
materials written in the indigenous languages represented amongst the users of each local library. In addition, the libraries might be designated as 'local open schools' in which local communities might learn and practice their languages.

Of course, none of these programs can succeed without adequate funding, particularly in the context of a non-profit, service library system. The government and the community need to jointly support the rural library program proposed here in order to guarantee the preservation of indigenous languages and cultures. With the improvement of the organization and the upgrading of the status of the Perpustakaan Daerah Irian Jaya – which is now the Perpustakaan Nasional Propinsi Irian Jaya – it seems possible to launch such a program. Librarians at the Perpustakaan Nasional Propinsi Irian Jaya should move to develop a comprehensive and sustainable library development plan that incorporates the basic elements of this language preservation program.

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Information:

Evaluation Of Environmental Risk
In Project Area Of PT Freeport Indonesia

By Wisnu Susetyo

This is the short explanation of the evaluation of Environment risk which is done by PT. Freeport Indonesia. To those who have questions or suggestions and comments, please contact Department of Environment, PT. Freeport Indonesia.

PT. Freeport Indonesia operates in mining business and management of copper, gold, and silver ore in Irian Jaya. Nowadays these ores are produced from open mining Grasberg and underground mining in the east of Ertsberg at production level more than 200,000 tons per day. These ores are sent to processing plant in mile 74 to use the running band and the underground tunnel. Furthermore, the ores are gently processed so that they look like flour and processed to use the floating technique to obtain gold and silver concentrate.

Tailing

The rest of natural stone cracks which does not float and become the inferior mineral called tailing. About the 97% of processed ores become tailing and expelled to bound for Aghawagon-otomona Ajkwa river system to be carried to the low plain and to be sedimented between two levees.

The area size of tailing sedimentation is now about 140 km² and in the coming days it will be modified to receive the 230 km² of the tailing deposit. A part of the tailing, particularly the smallest friction runs continually to pass through the sediment area and reaches agkwanga basin and finally come to Arafura sea. A consequence of tailing presence in Aghawagon-Atomona Ajkwa river system results in the rise of the suspended density concentrate and the level of shallowness from the mentioned rivers.

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IRIAN, Vol. XXII, No. 1, April 1999
Furthermore in the low plain exists the river shallowness and in past time causes flood and the swerve of tailing route from Ajkwa river bound for Kopi and Minarjerwi in the east. Furthermore, the gently tailing particle blocks of air supply bounds for the tree roots in the jungle that suffer from the flood that result in the death of trees in those areas. To minimize the tailing impact, based on the international consortium consultant and Indonesia government agreement, PT. Freeport Indonesia has built a pair of levees called east levee and west levee. The purpose of the levee building is to limit the running area of tailing and the sedimentation of tailing so that the tailing does not run to Kopi and Minarjerwi river or other rivers.

Environmental Observation

To know the impact of tailing quantitatively and to plan the further environment management, PT. Freeport Indonesia has carried out monitoring program intensively and extensively since 1999. One of the supporting facilities of the controlling program is the establishment of Timika Environment Laboratory that has operated since the beginning of 1994. Thousands of analysis made monthly by Timika Environment Laboratory to give accurate and up to date of observation data. Addition to that, Freeport has two ships with the size of 8 metres and 18 metres. The function of both ships is to take the water sample, sediment and biota.

Environmental monitoring program has operated and its program includes quality of mining water, river water, basin water, sea water and underground water. In connection with that, biota of river water, water basin, and sea monitoring made for the biodiversity life. Also, the quality monitoring of tailing, sediment on river bottom, river basin, sea, and metallic concentrate in plant and fish tissue. In addition, different kinds of acute and chronic toxic studies of water biota.

River water and basin water which the tailing passes through indicated by pH relatively high so that they have dissolved metal concentrate low. That water quality fulfills the raw requirement quality of category B in the government regulation No.2, 1990. There is no consistent tailing impact at diversity of the water biota, except the animals in the bottom of water basin or sea such as small worms and small crabs. Another impact of the tailing is the change happens at diversity of water biota. The species which can not stand with the shallowness and highly suspended density such as small shrimp (atydae spp) will move to the near by surrounding sea. On the other hand, the species that can stand with that condition such as cat fish (arius spp) and big shrimps (macrobrachium spp) become dominant.

There is no metallic accumulation in the fish and plant tissue at the dangerous level to human health. Only an indication of the increase of the metallic concentration in the fish hearth in the tailing and controlled areas such as Otokwa river so that there is no concluding result from the tailing impact.

The result of the toxic study concludes that there is no acute indication from the examined water animals. The impact of tailing sedimentation on mangrove is being studied by outside and inside expert. The biota condition of kopi and Minarjerwi river that has suffered from the tailing impact in short time will recover from that condition after the external levee has been built. Such rivers are now in the one comparison with
Evaluation of Environment Risk

As a part of company commitment to the regional environment impact analysis at the production level 300,000 tons per day, Freeport Indonesia wants to make the evaluation on environment impact and human health risk. This project as a part of tailing management study carried out in the year of 1998 to 2001. The purpose of evaluation on environment impact and human health risk and to make quantification on the tailing risk toward environment and human health. Six studies have been identified as human Health study and eleven studies identified as ecological study. As an example, a study will be made as follows. Evaluation of all survey data were done in last five years. Diet survey and local community health survey at the spread level of dust in local community around the tailing area, metallic absorption study of crops and transportation modelling, distribution and sedimentation of tailing. Data obtained from those studies will be used in calculating environmental risk by using the raw protocol from USEPA. As main consultant from The Environmental Risk Evaluation has been appointed, Parametrix Inc., which is located in Seattle, State of Washington, USA. As operation consultant is CSIRO from Australia, Hydroqual from New Jersey-USA, Bandung Institute of Technology, Bogor Institute of Agriculture, Gadjah Mada University, Cenderawasih University, and Institute of Indonesian Science (LIPI). To guarantee the objectivity, results of environment risk evaluation and evaluation of community health risk study are periodically reported to a group that restudy the research results. The members of that group come from academic staff, government, and non-government office.

Meeting with Interested Parties

In the connection with the evaluation of environment risk and evaluation of human health risk, Freeport Indonesia has held a meeting with the differently interested parties such as local community, local government and central government, scientists at higher education, and the research institute. The purpose of such meeting is to express the earlier information about the implementation plan of evaluation of environment risk, accumulation of sorrow, and answer the questions. Meeting with the local society is supported by non-government office and the local government. For that purpose, a video has been produced for presentation of tailing and the evaluation of environment risk in simple language and easy to be understood. After the study finishes, a further meeting will be hold to report the progress of study implementation and the achieved results.

Data Collection for Evaluation of Human Health Risk

Since last October 12-15 November 1998, there were about thirty lecturers and graduates from Cenderawasih University has entered the administrative villages (desa) in the PT.Freeport area to carry out diet survey and life habit of inhabitants. Seven of the ten villages include the areas that covered by dust of tailing, and three villages are included as village control. The seven villages studied are Banti, Kali Kopi, Kwanki Lama, Kampung Pisang, Pad IX, Pulau Karaka, Pulau Poriri. While three controlling villages are Asgroanop (high plain), Iwaka (low plain) and Atuka (cost). The observation made during
thirty five days successively at 160 inhabitants which divided into three categories of ages: children : 1-7 years old, youth : 8-17 years old, adult: above 18 years old. The number of women respondents are the same as the number of men. The respondents are randomly stratified selected. Each respondent is controlled by one surveyor during six days successively. The observation is focused on type and the quantity of food and drink, daily activities, and respondent interaction with water, land or tailing. At the sixth day the total diet sampling drawing is a fourth of the total food and drinks consumed at the day. Besides that, land and water sampling drawing is taken from each village. Those sampling then are sent to the commercial laboratory in Australia to determine the thirty chemical elements. From survey and laboratory data, the calculation of the metallically spread magnitude of each group year in each administrative village (desa).

Based on these spread data, the quantification is made from the risky population. The risky spread of tailing area can be compared with the risky controlling area. The complete report of this study will be finished at the middle year of 1999.

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**CURRENT RESEARCH PROJECTS**

Within the 1998/1999 Fiscal Year, 102 titles of research projects have been carried out by UNCEN Researchers. The following are some of the research, mainly those that deal with Irian Jaya people, culture, and resources:

1. *Fungsi keluarga menurut orang Genyem di Kecamatan Nimboran Kabupaten Jayapura* (The Function of Family according to Genyem People at the Nimboran Sub District, Jayapura), by Yosephina Griapont and Teddy K. Wanane

2. *Studi tentang ikan di Surya, desa Berap Kecamatan Nimboran Kabupaten Jayapura* (Study of fishes in Surya, Berap village, Nimboran Sub District, Jayapura), by Syamuel Renyaan

3. *Penuturan cerita rakyat Waropen Irian Jaya : Kajian etnografi komunikasi* (Waropen Folktales storytelling : study of communication ethnography), by Dharmodjo


5. *Pengaruh ekologi dan perilaku manusia terhadap epidemiologi penyakit pada masyarakat Lembah Baliem Kabupaten Jayawijaya* (Ecological and human behavior impacts on disease epidemiology at the Baliem Valley community, District of Jayawijaya), by Akhmad, Urip Wahyudin, and Aisyah Ali

6. *Lihatkan hukum dalam penyelesaian sengketa pada orang Nafri Kecamatan Abepura : Sengketa perkawinan* (Law

IRIAN, Vol. XXII, No. 1, April 1999
alternative in solving marriage dispute among Nafri people in Abepona Sub District), by Kadir Katjong and Frans Reumi

7. Peranan pranata adat dalam upaya penyelesaian sengketa tanah pada masyarakat Genyem Kota Kecamatan Nimboran (The Role of Customary institution in Solving Land conflict among Urban Genyem community in Nimboran Sub District), by Frans Reumi, and Kadir Katjong

8. Sistem kekerabatan dalam upaya penyelesaian sengketa atas tanah ulayat suku Moi di Sorong Irian Jaya (Kinship System in Solving Land Dispute among Moi Tribe in Sorong, Irian Jaya), by Kadir Katjong and Frans Reumi

9. Eksplorasi, identifikasi dan koleksi serta pembudidayaan jenis anggrek Irian menunjang konservasi plasma mutiaah di Indonesia (Exploration, identification and collection of Irian Orchid and its culture to support the Conservation of Germplasm in Indonesia), by Soetjipto

10. Ubijalar dan manusia Ekagi: Ethnobotanical Research (Sweet potato and Ekagi people), by D. Pekei, Mecky Sagrim, and Yohanes Kamakula


13. Konservasi Plasma Mutiaah ubijular asal Irian Jaya dalam Kultur In Vitro (Germplasm Storage into In Vitro Culture of Sweet Potato Origin Irian Jaya), by Barahamia

14. Inventarisasi potensi jenis Dipterocarpaceae pada areal hutan tropika Siwi Kabupaten Manokwari (Inventory of the Potentials of Dipterocarpaceae in Tropical Forest Siwi Area in Manokwari District), by Rusdi Angrianto and C.Y. Hans Arwam

15. Aspek taxonomi dan ekologi jenis-jenis rotan pada hutan Merdey Kabupaten Manokwari (Taxonomical and Ecological Aspects of Ratan Varieties in Merdey Forest, District of Manokwari), by C.Y. Hans Arwam

16. Pasca kegiatan Kelompok IDT dan perubahan sosial ekonomi masyarakat Kecamatan Ransiki Kabupaten Manokwari (Post IDT Group Activities and socio-economic changes of Ransiki Sub-district Society, District of Manokwari), by Herman Kareth

17. Pengaruh pola mata pencaharian terhadap kemiskinan masyarakat pria dan wanita dalam pembangunan di Kabupaten Jayawijaya: Studi tentang pemberdayaan gender di Kecamatan Bokondini (The Impact of livelihood pattern to the Equal Partnership of Man and Woman in Development Program at the Jayawijaya District: Study of Gender Empowerment in Bokondini Sub-district), by Ave Levaan and Agus Wenehen

18. Kajian kesenjangan kesempatan bekerja bagi kaum migran dan penduduk asli di
19. Transformasi tari tenggang dalam kebudayaan orang Dani di Kabupaten Daerah Tingkat II, Jayapura (Transformation of “Tenggang” Dance of Dani Culture in Jayapura District), by Enos Rumansara, Yosephina Gripon, and Marlina Flassy

20. Reproduksi subsistem dan dampaknya terhadap peningkatan ekonomi rumah tangga petani etnik Dani di PIR Arso I (Sub-system reproduction and Its Impact to the Improvement of Dani Farmer’s Home Economic in Arso PIR I Plantation), by Andreas Sedik, Urip Wahyudin, and Yenina Akmal

21. Sistem kekerabatan dan peranan laki-laki dalam fertilitas: Kasus keluarga orang Meybrat Kepala Burung (Kinship System and the Role of Man in Fertility: Case Study of Meybrat Families in Bird Head Area), by Teddy Wanane, Agust Yarona, and Marlina Flassy

22. Respon masyarakat Dani terhadap kegiatan pariwisata di Kecamatan Wamena, Kurulu dan Assologaima Kabupaten Jayawijaya (Response of Dani Society toward Tourism Activities in Wamena, Kurulu, and Assologaima Sub-districts, in Jayawijaya Regency), by Onesimus Warwer

23. Inventarisasi tumbuh-tumbuhan obat tradisional masyarakat Espano di Taman Nasional Lorens Irian Jaya (Inventory of Traditionally Medicinal Plants among Espano Community in Lorens National Park, Irian Jaya), by B.T. Rumahorbo and Puguh Sugianto

24. Identification of Avifauna Diversity in Forest Edgest of Cyclop (Dafonsoro), by

Margaretha Z. pangau, Agus Renyoet, and Daawia

25. Penguasaan dan Pemanfaatan sumber daya laut oleh masyarakat adat di Irian Jaya: Studi di desa Entieyebu (Tablamsu) Kecamatan Depapre Kabupaten Jayapura (Control and exploitation of Marine Resources by Customary Community in Irian Jaya: Case Study of Entieyebu Village, at Depapre Sub-district, District of Jayapura), by Magdalena Silitonga and Martinus Omba


27. Pendugaan populasi rusa (Cervus Timorensis) di Pulau Rumberpon (Estimation of Deer [Cervus Timorensis] Population in Rumberpon Island), by A. Gatot Murwanto and Rudi A. Maturbongs

28. Studi pola konsumsi pangan dan status gizi suku Arfak di Manokwari, Irian Jaya (Study in Food Consumption Patern and Nutritional Status of Arfak Society at manokwari, Irian Jaya), by Muhammad Junaidi, Mulyadi, and Ellyono Gunawan

29. Potensi telur penyu belimbing (Dermochelys Coriacea) di Kawasan Cagar Alam Pantaio Jamursba-Medi Kabupaten Sorong (Potentials of “Belimbing” Turtle Eggs (Dermochelys Coriacea) in the Area of Pantai Jamursba-Medi Conservation Forest, District of Sorong), by Yesaya Ramandey, Yacob Manusawai, and Naffi Lessil
30. **Inventarisasi potensi matoa (Pometia spp) pada hutan tropis Amban Pantai Kabupaten Manokwari** (Inventory of the Potentials of Matoa (Pometia spp) at the “Amban Pantai” Tropical Forest, in Manokwari), by D.N. Kesaulija and Hans Arvam

31. **Pengkajian sosial ekonomi translok penduduk asli di lokasi pemukiman Koya Tengah Jayapura** (Socio-economic study of Indigenous Local Migrants in Koya Tengah Resettlement, Jayapura), by Agus Wenehen

32. **Diet Survei (Pola makan, kebiasaan makan) penduduk sekitar areal pertambangan PT Freeport di Timika** (Diet Survey: Eating Pattern and Habit of Population around the Mining Area of Freeport Company in Timika), by Agus Sumule and others

33. **Akware Pairi Kamorota : Kamoro Phrasebook**, by T.T. Purba and others

34. **Studi tentang hukum adat suku Amungme dan Kamoro** (Study of the Customary Law of Amungme and Kamoro Tribes), by Frans Reumi and others

35. **Pengkajian sosial budaya dan lingkungan suku terasing di desa Tangma dan Pasema kaimana Kabupaten Fakfak** (Socio-cultural and Environmental Studies of Isolated Tribes in Tangma and Pasema villages, at Kaimana Sub-district, Fakfak), by Karl Abdi Frank and others

36. **Dampak pembangunan jalan kabupaten terhadap masyarakat terisolasi di Irian Jaya** (The Impacts of Regencial Road Building to Isolated Societies in Irian Jaya), by Enos Rumansara and others

37. **Evaluasi keberhasilan pelaksanaan program IDT di Irian Jaya** (The Evaluation of the IDT Program Accomplishment in Irian Jaya), by Onesimus Warwer and others

38. **Pengelolaan Kawasan Timika Pasca Tambang PT Freeport Indonesia Company [PT FIC]** (Management of Timika Area Post Mining of Freeport Indonesia Company), by Muhammad Musaad and others

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**PROPOSED RESEARCH PROJECTS FOR THE FISCAL YEAR OF 1999/2000**

Following are some of the research project titles, mainly those that deal with Irian Jaya people, culture, and resources, proposed to be carried out at the fiscal year of 1999/2000:

1. **Produksi dan karakterisasi sirup glukosa dari ubi-ubian dan sagu Irian Jaya** (Production and Characterization of Glucose Syrup of Irian Jaya Tuber and Sago), by Zita L. Sarungallo.

2. **Uji organoleptik dan sifat fisiko-kimia sembilan kultivar talas** (Colocasia Esculenta [L] Schott) hasil seleksi plasma nutfah talas (Olgarotopic Test and Physical and Chemical Characteristics of Nine Taro Cultivate [Colocasia Esculenta L. Schott] of the Result of Taro Germplasm Selection), by P. Istalaksana

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IRIAN, Vol. XXII, No. 1, April 1999
3. Analisis musim penangkapan ikan dan faktor-faktor teknis operasi penangkapan ikan dengan menggunakan 'huhate' di perairan sekitar Sorong dan Fakfak (Analysis of the fishing season and technical factors of fishing operation using ‘huhate’ in the Sorong and Fak-fak waters area), by Ridwan Sala.

4. Filter air dari biji kelor (Moringa Oleifera Lamk) dalam upaya penurunan jumlah mikroorganisma air danau Sentani (Moringa Oleifera Lamk for decreasing the number of micro-organism in Sentani Lake), by Tri Gunaedi.

5. Pengaruh pembangunan pertanian terhadap peranan wanita Dani di kecamatan Wamena (Impacts of Agricultural development to the Dani women roles in Wamena Sub District), by Johana Yembise and Onesimus Warwer.

6. Partisipasi perempuan etnis Irian Jaya dalam kegiatan ekonomi informal perkotaan di Kotamadya Jayapura (Participation of Irian Jaya ethnic women in informal economic activities in Jayapura District), by Elsyah Marlisa and Bonifasia Elita B.


8. Peranan wanita dalam rumah tangga dan pencarian nafkah di desa Warung Bayem Kecamatan Genyem Kabupaten Jayapura (Women roles in household and making a living at the Warung Bayem village, Genyem Sub District, District of Jayapura), by Sri Wilujeng and Verena Agustini.


10. Faktor-faktor sosial budaya yang mempengaruhi meningkatnya penyakit menular seksual (PMS) di daerah Lembah Balem Kabupaten Jayawijaya (Socio-cultural Factors affecting the Increase of Sexually Transmitted Diseases in Balem Valley Areas, District of Jayawijaya), by Yosefina Griapen.


12. Prospek pengembangan objek wisata alam di wilayah pembangunan III Kabupaten Manokwari (Prospects of natural tourism area development in the third development area of the District of Manokwari), by Arung Lamba, T. Putra Urip, Ismael J.

13. Disparitas kaum migran dan penduduk asli dalam kesempatan berusaha di berbagai sektor informal di Kabupaten Tingkat II dan Kotamadya Jayapura (Disparity of migrants and indigenous people in endeavor opportunities in several informal sectors in Jayapura and Jayapura City Districts), by P.N. Patinggi, T. Putra Urip, Sabar Sibolan.

61