



This is to certify that the

dissertation entitled

CULTURAL POLITICS OF DISEASE CONTROL:
STATE-COMMUNITY RELATIONS IN THE STRUGGLES
AGAINST MALARIA IN THE PHILIPPINES

presented by

Eufracio Cubacub Abaya

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Anthropology

Amy V. Millard
Herbert F. Whitte
Major professor

Date 28 Oct. 1994



**PLACE IN RETURN BOX to remove this checkout from your record.
TO AVOID FINES return on or before date due.**

DATE DUE	DATE DUE	DATE DUE
2 5 1971	_____	_____
JUN 11 1971	_____	_____
2 36	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

MSU is An Affirmative Action/Equal Opportunity Institution

c:\civ\date due.pm3-p.1

**CULTURAL POLITICS OF DISEASE CONTROL:
STATE-COMMUNITY RELATIONS IN THE STRUGGLES
AGAINST MALARIA IN THE PHILIPPINES**

By

Eufracio Cubacub Abaya

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Anthropology

1994

ABSTRACT

CULTURAL POLITICS OF DISEASE CONTROL: STATE-COMMUNITY RELATIONS IN THE STRUGGLES AGAINST MALARIA IN THE PHILIPPINES

By

Eufracio Cubacub Abaya

This dissertation addresses the dynamics of domination, conformity, and resistance in the struggles against malaria involving the state health functionaries and an Ilokano community in northeastern Luzon, Philippines, in the early 1990s. It analyzes these dynamics in terms of the concept of cultural politics, defined as the encounters of power-laden cultural schemas taking place in contestations over definitions of and responses to social reality at a given time.

Using historical records, this study describes the key features of the schema of malaria control espoused by the state. The analysis shows that the schema upholds a well-entrenched epidemiological orientation, adheres to a top-down health policy formulation and implementation, champions the rhetoric of "malaria blocks economic development," and depends heavily on financial and technical assistance from international health and development agencies.

Using surveys, interviews, and participant observation, this inquiry analyzes the Ilokanos' cultural understandings of the body, health, sickness, and healing. In practice, these understandings indicate the rootedness of the physical presentations of

sickness such as malaria in the social and moral spheres of daily experience.

Moreover, these understandings have resulted in the reconfiguration at the local level of the definitions of malaria, including the global antimalarial strategies such as spraying of houses with insecticides, treatment of bed nets with pesticides, environmental engineering, case finding and treatment, and community participation.

Grounded in asymmetrical power relations, the encounters between the state health functionaries and the Ilokanos reflect the contradictions between the state schema of malaria control and the Ilokano ethnomedical knowledge and practices. These contradictions contribute to the persistence of local apathy, ambivalence, and resistance towards the official antimalarial strategies.

This study of the cultural politics of the state-community relations in the arena of disease control aims to contribute to the current discourse on the inseparability of culture, power, and history.

**Copyright by
EUFRACIO C. ABAYA
1994**

**To my late Tatang and Inang,
for their enduring commitment
to the education of their children**

ACKNOWLEDGEMENTS

The United Nations Development Program/World Bank/World Health Organization Special Programme for Research and Training in Tropical Diseases provided financial support for both my graduate studies at Michigan State University (MSU) and field research in the Philippines. The Department of Anthropology, University of the Philippines, allowed me to take a leave of absence from teaching and concentrate on my graduate studies. The Department of Anthropology, MSU, also provided financial assistance for my graduate work. The Institute of International Health, MSU, allowed me to use their office facilities. I am most grateful for their generosity.

To my guidance committee--Drs. Ann V. Millard (co-chair), Herbert Whittier (co-chair), Harry Raulet, and Judy Pugh--thanks for being unstinting with your time and patient in your mentoring.

I acknowledge Dr. Jeff Riedinger, Department of Political Science, MSU, for serving as the dean's representative during my dissertation defense. I benefitted immensely from his thoughtful comments.

I owe special gratitude to the people of Masipi and to many friends and acquaintances in various offices of the Philippine Department of Health for making field work an enriching and unforgettable experience. I am also grateful to Dr. Realidad S. Rolda, former chair of the Department of Anthropology, University of

the Philippines, for her sustained support while I was conducting field work in the Philippines.

I extend my special thanks to Michael C. Ennis-McMillan and Martin Manalansan IV for helping me shape and sharpen my arguments.

To Dr. Donna Chollett, Walter Russyk, Suparna Braskaran, Krishnakali Majumdar, and David Canales-Portalatin, I am grateful for their comments on earlier versions of this dissertation. Vandana Goswami and Min Chuan Yang joined me in confronting the challenges of dissertation writing.

My efforts would not have come into fruition, however, without the unfailing support of my two field assistants (Jessie and Marlyn), my relatives (sister Gee and her husband, Alex; sister Faina; brother Lex; nephew Ernie; niece Gina; nephew Jonathan; grandniece Detdet; sister Fely and her husband, Ron; nephew Dan; brother Doti and his wife, Robin; niece Jo; and nephew Andre), my friends in the Philippines (Dr. Emma Porio, Che Cheng-Dominguez, Boy Dominguez, Ernie Acosta, Linda Bulong, Orly Turingan, Tess Guanzon, Mary-Ann Octaviano, Pearl Patacsil, and Dr. Edmond Dantes), and my friends in the U.S. (Drs. Pat and Herb Whittier, Drs. Isidore Flores and Ann V. Millard, David Canales-Portalatin and Michael C. Ennis-McMillan, Sonia Padilla and Ron Dietz, Charito Bermejo and David Adrikovich, Martin Manalansan IV, Dr. Donna Chollett, Dr. Renato Linsangan, Dr. Cheribeth Tan, Sue Saguiguit, JoAnn Palma, Glenda Soriano, Dr. Rudie Altamirano and Let Carpio-Altamirano, Rene Cerdena, Zandro Martinez, Manny Viray, Lilian Gadrinab, and Rey Ebor). To all of them, I owe a lifelong debt.

PREFACE

My engagement with the anthropology of disease control began in 1985 when, as a member of the faculty of the Department of Anthropology at the University of the Philippines, I was invited to participate in a WHO-sponsored research project on malaria in my country. Focusing on the knowledge, attitudes, and practice (KAP) of communities with respect to malaria and its control in Cabagan, Isabela, the research examined the extent to which people's KAP cohered with that of the state's antimalarial program. The research was predicated on the assumption that the results would constitute a vital input to health policy formulation and implementation. In particular, the results of the research were considered to be useful in designing health education strategies to "modify" people's "erroneous" KAP and, consequently, generate wider community acceptance of state-instituted antimalarial strategies borne of the knowledge claims of biomedicine and the biomedical sciences, as well as of the economic and political goals of national and international health and development programs.

This dissertation radically departs from that previous investigation. It represents my effort to avoid a stance that privileges biomedical knowledge and practice over other culturally specific forms of knowledge and practice, a stance that elides the issue of power that inheres in the interactions between the so-called "health providers" and "target beneficiaries," and, finally, a stance that ignores the

embeddedness of social dynamics in historical processes. In addressing these compelling issues, I drew inspiration from interpretive and critical perspectives in social anthropology as applied in the arena of health and suffering. I have, for instance, followed the lead to "denaturalize" biomedicine by designating it as a social and cultural domain. This orientation made me more sensitive to the ways in which the culture of biomedicine interacted with the local cultural forms; and, by extension, to practices of domination, conformity, and resistance engendered by these interactions. I turned my attention to the ways in which the structure and orientation of the antimalarial program condition and, in turn, are themselves reproduced through, the encounters of the antimalarial program actors with the Ilokans in malaria-endemic settlements in Cabagan, Isabela. Analytically, I viewed these activities as manifestations of cultural politics--that is, the dynamics of meaning and power in socially situated negotiations and renegotiations over definitions of reality. Having framed the workings of the antimalarial program in terms of the notion of cultural politics, the dissertation can be considered as falling under the rubric of studies that regard health and suffering as key loci for the investigation of the interplay of culture, power, and history.

The process of writing this dissertation, I must admit, was punctuated by difficulties arising from the intellectual and personal experience of an author as a positioned observer. For instance, I had to confront the raging issue of objectivity versus subjectivity in social scientific writing by meshing survey data and historical accounts with transcripts of interviews and discourses obtained in actual encounters among the health workers and the villagers.

The virtue of reflexivity in my study of the struggles against malaria lies in the fact that it led me to reexamine the extent to which ethical and moral orientations have influenced the course of this project, given the social milieu of my field work and academic pursuits. My being a member of academe, the empathy I have with people in subordinated groups, the financial support for my doctoral studies from the World Health Organization (a key participant in the arena of international health and development) and my being an Ilokano, all contributed to the dilemma of being deeply engaged with the politics of writing.

TABLE OF CONTENTS

List of Tables	xiii
List of Figures	xiv
Chapter One: INTRODUCTION	1
The Problem and Theoretical Concerns	1
Cultural Politics and Social Theory	4
Notes on Malaria Studies in the Philippines	7
Chapter Two: METHODS AND RESEARCH SETTING	12
Data Gathering Strategies	12
Historical Research	12
Ethnographic Research	13
Representations of Masipi	26
Supralocal Representations	26
Infralocal Representations	31
Chapter Three: THE PHILIPPINE ANTIMALARIAL PROGRAM THROUGH TIME	38
The American Colonial Administration (1898-1935):	
"Beginnings of the Battle Against Malaria"	39
The Commonwealth Period (1935-1945):	
"The Campaign Deteriorates"	48
The Post-Colonial Period (1946-1990s):	
"Shifts from Control to Eradication to Control"	50
Concluding Remarks	69
Chapter Four: <u>MALARYA</u> IN OUR MIDST	71
Ilokano Ethnomedical Knowledge and Practices	72
The Fate of Ligaya	73
Experiencing <u>Malarya</u>	79
Concluding Remarks	95

Chapter Five: ENCOUNTERS OF CULTURAL SCHEMAS.....	96
Antimalarial Program-Community Dynamics.....	97
Disseminating Official Knowledge:	
Voices from Above.....	98
Local Participation Needed.....	106
Malaria Control and Economic Progress.....	107
Contracting Malaria and Everyday Routines.....	109
Surveillance and Submission.....	110
Dispelling "Local Misconceptions".....	111
Mosquitoes as Culprit.....	112
Which Mosquito?.....	113
Plasmodia-Mosquito Connection.....	114
Deciphering and Treating Malaria.....	114
Malaria Is Fatal and More: Scare Tactics.....	116
Reconstituting the Bed Nets.....	117
Official Malaria Control Measures.....	119
Instilling a Sense of Community Responsibility.....	121
Personal and Collective Obligation.....	122
Contesting Resistance to House Spraying.....	123
Undermining the <u>Reserba</u> Mentality.....	125
K-Othrine is Safe.....	127
Presuming People's Acceptance.....	128
Concluding Remarks.....	131
Responses to the Malaria Control Program:	
Voices from Below.....	133
House Spraying.....	133
Case Finding.....	139
Drug Distribution.....	141
Community Participation.....	142
Concluding Remarks.....	149
Chapter Six: CONCLUSIONS.....	151
Truth Claims and Malaria: The Limits of Cultural	
Domination and Resistance.....	151
Appendix.....	159
Bibliography.....	161

LIST OF TABLES

Table 1. Offices, hospitals, and clinics visited.....	15
Table 2. Sample population.....	22
Table 3. Age of respondents.....	23
Table 4. Birthplace of respondents.....	23
Table 5. Educational attainment of respondents.....	24
Table 6. Principal occupation of respondents.....	25
Table 7. Health-related legislation promulgated during the early U.S. Occupation.....	43
Table 8. Malaria control and related activities during the rehabilitation period (1946-1950).....	55
Table 9. Bilateral and multilateral foreign aid agencies and private foundations.....	57
Table 10. Reasons that <u>malarya</u> is dreaded.....	81
Table 11. Reasons that <u>malarya</u> is not dreaded.....	81
Table 12. Cases of <u>malarya</u> reported in each household in the last year.....	82
Table 13. Causes of specific cases of <u>malarya</u> in the household.....	84
Table 14. Reasons that villagers are vulnerable to <u>malarya</u>	85
Table 15. Reasons that nobody in the household has had <u>malarya</u>	87
Table 16. How <u>malarya</u> is transmitted.....	88
Table 17. Measures to prevent <u>malarya</u>	89
Table 18. Characteristics of <u>tyempo iti malarya</u>	90
Table 19. Therapies for <u>malarya</u>	91
Table 20. Biomedical drugs.....	92
Table 21. Plant medicines.....	93
Table 22. Purposes of spraying.....	134
Table 23. Duration of the efficacy of the pesticide.....	135
Table 24. Reasons that households submit to house spraying.....	136
Table 25. Reasons that households refuse house spraying.....	136
Table 26. Reasons that the pesticide is washed off.....	137
Table 27. Reasons for collecting blood smears.....	140
Table 28. Whether the residents can control <u>malarya</u>	143
Table 29. Reasons why villagers cannot control <u>malarya</u>	144
Table 30. Activities that residents can do to control <u>malarya</u>	145
Table 31. Whether health personnel and residents should become partners.....	146
Table 32. Activities of residents and health workers to control <u>malarya</u>	147
Table 33. Reasons that partnership is not feasible.....	148

LIST OF FIGURES

Figure 1. Municipality of Cabagan in Isabela Province, Philippines.....	14
Figure 2. Research Sites: Magallones, Comprá, and Sagpat.....	16
Figure 3. Magallones.....	17
Figure 4. Comprá.....	18
Figure 5. Sagpat.....	19
Figure 6. Outdoor Economic Activities, Malaria Transmission, and Mosquito Density.....	20
Figure 7. Forest Concessions in the Cagayan Valley.....	28
Figure 8. Distribution of Malaria in the Philippines.....	32
Figure 9. Organizational Structure of the Philippine Public Health Rehabilitation Program.....	52
Figure 10. Organizational Structure of the Philippine Malaria Eradication Program.....	63
Figure 11. Organizational Structure of the Malaria Control Program.....	68

Chapter One

INTRODUCTION

The Problem and Theoretical Concerns

In the Philippines today, malaria persists despite several decades of state-led, nationwide antimalarial efforts. The state attributes this failure partly to its difficulty in ensuring local participation in antimalarial activities. Through shifting approaches and strategies, the state continues to contend with people's responses ranging from ambivalence to outright refusal to involve themselves in antimalarial activities. This study examines this problem in terms of the concept of cultural politics. By cultural politics¹ I mean the encounters of power-laden cultural schemas² in contestations over the definition and management of life circumstances. These contestations, by extension, engender practices of domination, conformity, and resistance.

This study characterizes the historically grounded precepts that underlie the

¹Ortner (1989a:200) provides a complementary definition, that is, "the struggles over the official symbolic representations of reality that shall prevail in a given social order at a given time."

²In espousing the notion of power-laden cultural schemas, I am following the position of Comaroff and Comaroff (1992:28) in regard to the prevailing criticism leveled against cultural analyses that fail to "add" power into the equation. This criticism contends that power "determines why some signs are dominant, others not; why some practices seem to be consensual, others disputed—even when they are backed by the technology of terror" (1992:28). While subscribing to this general point, both authors argue that "power is not above, nor outside of, culture and history, but it is directly implicated in their constitution and determination. It cannot, therefore, be 'added' to them" (Ibid:28). They argue that power and culture are inseparable in that "power is an intrinsic quality of the social and the cultural; in short, their determining capacity" (Ibid:28).

divergent ways malaria is understood and dealt with by the state health functionaries and by the Ilokano-speaking farmers and wage laborers residing in a malaria-endemic area in northeastern Luzon. I examine how these precepts, situated and actualized within characteristic power relations, configure the social encounters between the Ilokanos and the state-paid health workers. My purpose is to show how the obstacles encountered by the state health apparatus in advancing its antimalarial activities in a given social setting are embedded in superordinate-subordinate relations between the government health functionaries and the Ilokanos.

In casting the problems of the Philippine antimalarial program in terms of cultural politics, my analysis asserts that cultural forms and their expressions are socially contested or negotiated. This study, therefore, focuses on the processes of contestation over the official antimalarial program run by the state, under the auspices of international health and development agencies. Specifically, it examines the contested character of meaningful cultural forms such as the body, malaria, sickness, therapy, and disease control. This analytic stance, however, does not deny the shared nature of cultural forms. Yet, in recognizing culture as shared, it asks, following Dirks et al. (1994), "By whom?" and "In what ways?" and "Under what conditions?"

As a concept, cultural politics is useful for directing attention to superordinate-subordinate relations in a given social setting. In this study, I focus on the encounters between the Ilokanos and various state institutions and agencies, particularly the health care bureaucracy. I posit the following questions: In what ways and under what conditions has the state been addressing the problem of malaria among the Ilokanos? In what ways and under what conditions have the Ilokanos been responding

to that state initiative?

These questions speak to the workings of ideology³ and social control in the cultural politics of the antimalarial campaign. In broad terms, ideology comprises the doctrines and precepts espoused by a particular social group in terms of which the social world is interpreted. Social control refers to the ways of enforcing public conformity with socially prescribed modes of action (cf. Waitzkin 1991:7). In this study, I view the antimalarial program partly as a medium expressing an ideology of the state's health bureaucracy. To achieve public conformity, the state creates and maintains structures and mechanisms for social control, notably, its organized health system that advances antimalarial strategies, which entail surveillance and control of "target" communities. This process is shaped by a system of power relations that interact with and sometimes subjugate precepts and practices of the community. In practice and through time, the state's official modes of defining and dealing with malaria have to contend with the ethnomedical knowledge and practice of the target communities. One aim of this study is to examine the interplay between the state's

³My conception of ideology is informed by that of Williams's which regards ideology as "an articulated system of meanings, values, and beliefs of a kind that can be abstracted as [the] 'worldview' any social grouping subscribes to..." (1977:109). Moreover, I subscribe to Comaroff and Comaroff's (1992:29) assertion that

[t]he regnant ideology of any period or place will be that of the dominant group, although the degree of its preeminence may vary a good deal; so also, will the extent to which it is empowered by the instrumental force of the state. *But other, subordinate populations have ideologies.* And, insofar as they try to assert themselves, to gain some control over the terms in which the world is ordered, they too will actively call upon them—even if only to clash their symbols. [italics added]

ideology and the ideology of the Ilokanos.⁴

Cultural Politics and Social Theory

Until recently, issues of "resistance to modern health care," now redefined as "resistance to scientific medical bureaucracies" have been primarily explained in terms of "lack of fit" between biomedicine and "folk" medicine (see Foster and Anderson 1978; Paul 1955). This approach to medical encounters, which is apparently informed by modernization theory, has been criticized for not only suspending epistemological scrutiny of biomedicine but also for its inattention to local and global power relations that produce and shape sickness (Morsy 1990).

Arguing against analyses that regard biomedicine as a natural system, Kleinman (1978) views biomedicine as a cultural system in and of itself. He explains the problems arising from clinical encounters as resulting from the limitations of the physical reductionism inherent in biomedicine in dealing with the experiential underpinnings of other culturally constructed ethnomedicines. Kleinman's concept of "explanatory model"⁵ has proved to be a useful analytic device to examine clinical

⁴This view relates to a point made by Comaroff and Comaroff (1992:29), stating that the ideologies of subordinated groups are kindled by contradictions, "contradictions that a prevailing culture no longer hides." This stance resonates with that of Williams (1977:109), who argued that

[a] lived hegemony is always a process. It is not, except analytically, a system or a structure. It is a realized complex of experiences, relationships, and activities, with specific and changing pressures and limits. In practice, that is, hegemony can never be singular.... It has continually to be renewed, recreated, defended, and modified. It is also continually resisted, limited, altered, challenged by pressures not at all its own. We have then to add to the concept of hegemony the concepts of counter-hegemony and alternative hegemony, which are real and persistent elements of practice.

⁵He defines the notion of explanatory model as a set of beliefs which "contains any or all of five issues: etiology, onset of symptoms, pathophysiology, course of sickness ... and

encounters. It calls attention to the divergent definitions of reality that come into play in clinical encounters.

The "explanatory model" approach, however, has been questioned for focusing on the individual as the object and locus of significant events, a feature of biomedicine that Kleinman and his followers criticize (e.g., Good 1977, 1986; Good and Del-Vecchio Good 1982). Young (1982) argues against the use of explanatory models of illness as the primary source of explanation for the surface meaning of an individual's statements. In his view, individuals appropriate different kinds of socially determined and dialectically related knowledge. Additionally, he argues that ignorance of these socially embedded processes of knowledge construction contributes to the reproduction of conventional medical knowledge (Young 1978, 1980). Taking issue with the micro-level circumscription associated with the explanatory model approach, Frankenberg (1980) and Singer (1989) argue for the need to locate clinical events and encounters in the wider field of asymmetrical power relations.

Drawing on dependency and world systems theories, critical medical anthropology analyzes social processes that bear upon the social distribution of sickness and access to health care in the context of asymmetrical relations, the role of the state, the commodification of health care, and the ideological nature of medical knowledge (e.g., Baer 1982; Singer 1986). Morgan (1987), however, argues that the application of dependency theory in the analysis of the political economy of health resulted in a capitalist-centered view of the world. This view is reflected in the attribution of the configurations of health and health care mainly to the determinative

treatment." [Kleinman 1978:87-88]

force of capitalism. Not only is the persistence of indigenous forms of healing in the midst of capitalism rarely explained but also the local initiative and the active role of subordinated social actors are ignored.

Others (e.g., Comaroff 1982; Scheper-Hughes and Lock 1986, 1987; Taussig 1980; Young 1978, 1980) begin with the supposition that social life is fundamentally a negotiation of meanings. They reject the hegemony of positivist science by regarding Western scientific endeavors as arising from a historical and cultural milieu. Scheper-Hughes and Lock (1987:48) observe that this theoretical and methodological persuasion has shifted the focus of inquiry in medical anthropology from "alternative medical systems" to "the ways in which knowledge relating to the body, health, and illness is culturally constructed, negotiated, and renegotiated." The same authors suggest that a task for medical anthropology is

to describe the variety of metaphorical conceptions (conscious and unconscious) about the body and associated narratives and then to show the social, political, and individual uses to which *conceptions are applied in practice*. [Scheper-Hughes and Lock 1987:49; italics added]

In the same vein, Lindenbaum and Lock (1993:x) assert that the subject matter of medical anthropology is

neither simply medicine as an institutional body of scientific knowledge nor the human body as an unproblematic product of nature, but rather ... the creation, representation, legitimization, and application of knowledge about the body in both health and illness.

What is evident in these recent concerns in medical anthropology is the field's active involvement in theorizing about the interrelationships among culture, power, human agency, and history. These are, of course, not isolated developments for they

resonate with theoretical musings about "practice." Acknowledging the immense contributions of Bourdieu (1977), de Certeau (1984), Sahlins (1976), Giddens (1979), and Williams (1977), Ortner (1989b:199) characterizes practice theories as

[t]heories of the production and transformation of the cultural order through a variety of forms of action and interaction.... *In a practice analysis one examines the particular forms of human activity and human relationships prevalent in a society at a given moment, and attempts to see in them the sources of cultural reproduction and cultural change.* [italics added]

In effect, theories of practice emphasize the inseparability of structure and human agency, thus rejecting formulations that privilege structure over human agency or human agency over structure. As Ortner (1989b:196) notes, Bourdieu's notion of habitus refers to "a lived-in and in-lived structure"; Foucault's idea of discourse designates "a symbolic order that is controlling yet manipulable"; and Williams's concept of hegemony suggests "a lived system of meaning and values--constitutive and constituting."

This dissertation, thus, aims to contribute to the current discourse on the interconnectedness of culture, power, and history. It explores the ways in which power-laden cultural schemas and historical processes shape the struggles against malaria in the Philippines.

Notes on Malaria Studies in the Philippines

It should be noted, at the outset, that studies of malaria in the Philippines emphasize an epidemiological approach that leaves the sociocultural underpinnings of malaria relatively unexplored [see for example the bibliographies by Russell (1934), Walker (1953), and Rosal (1974)].

Studies on the structure, organization, and management of the antimalarial program in the Philippines come from the field of public administration and, to date, two studies have been conducted. Doria (1964) examined the process of technical assistance surrounding malaria eradication in the Philippines. This study documented the relationship between the Philippine government and donor agencies evident in activities such as planning, organizing, staffing, directing, coordinating, recording, and budgeting. The study also described the donor-client relationship inherent in the program.

Alfiler et al. (1990) examined the organization and management of disease control programs in the Philippines. Their discussion of malaria control focused on the shifts in administrative and management strategies in the antimalarial program. This study prescribed ways to overcome the organizational and administrative obstacles facing the program in the light of the tenets of public administration. It also provided useful information for the analysis of the role played by international donors in the decision-making process concerning the program. Unlike Doria's study, this investigation alluded to the dominant role played by international health agencies in charting the course of the malaria control program in the Philippines.

The studies by Lariosa (1986) and Abaya (1987) are case studies focusing on the social and cultural aspects of malaria and its control. Lariosa's inquiry focused on knowledge, attitudes, and practice (KAP) concerning malaria and its control in Cabagan, Isabela. The study measured local knowledge about the epidemiology of malaria and concluded that local notions of malaria etiology, signs and symptoms, and treatment, in large measure, did not cohere with biomedical knowledge. The

investigation also measured the attitudes of the study population towards the health care delivery system and concluded that the study population held unfavorable attitudes, particularly in regard to the delivery of health services in the area.

Conducted in the same locale, my inquiry focused on the ecological factors and ethnomedical knowledge and practices that account for the persistence of malaria. I characterized the people's "medical behavior" as pragmatic, as they used both "traditional" and "modern" healing practices to ameliorate malaria.

Both studies were partly grounded on the modernity versus tradition paradigm. In my earlier work, however, I have alluded to the idea that global political and economic forces (e.g., international health agencies and pharmaceutical industries) influence the form and content of the local responses to malaria. In this present study, I am pursuing this point as it relates to the shifts in the orientation of the malaria program in the Philippines through time.

The social and cultural dimensions of malaria and its control in the Philippines remain relatively unexplored. Research has been narrowly focused on either the communities affected by malaria or the state malaria control apparatus. The cultural politics surrounding the interactions between the state's antimalarial program and the malaria-stricken communities has been left virtually unexamined. This study, thus, addresses these relationships.

Chapter Two provides a description of the research strategies used to conduct this research. It also includes a discussion of the various representations of Masipi (the study site) as a social and physical setting.

Chapter Three addresses the key features of the antimalarial program as they

unfolded through time. Attention is given to the history of malaria control in the Philippines. The discussion highlights the roots of the antimalarial campaign in U.S. colonial expansion, its grounding in biomedical knowledge and technology, the primacy it gives to top-down health planning and implementation, and its embeddedness in the economic and cultural dependency of the Philippines on foreign aid, notably from the United States.

In Chapter Four, I examine the ways in which malaria assumes its configuration in the local discourse about the body-in-health and the body-in-suffering. I focus attention on the local precepts and practices concerning health, sickness, and healing. My purpose is to describe the ways in which malaria is configured in the experiential world of the Ilokanos.

Chapter Five focuses attention on the structure and dynamics of the cultural politics of the antimalarial activities in Masipi. It demonstrates how certain features of the antimalarial campaign, such as its emphasis on medico-technological strategies for disease control and its top-down approach to health planning, invariably condition the cultural politics of the antimalarial interventions in the study area. The analysis also points to the processes of domination, conformity, and resistance created through the interactions among the state health functionaries, the state-supervised barangay⁶ officials, and the local residents. These interactions reflect the power relations that shape the nature of negotiations among participants over the official definitions and strategies concerning malaria control writ large. These encounters illuminate the

⁶The term barangay is a designation for the smallest politico-geographic unit of the Philippine state.

ways in which the state, employing various strategies of persuasion, contends with community-based cultural constructions of malaria including the views of the local residents towards the antimalarial program.

The final chapter underscores the historical and ethnographic grounding of the cultural politics of the struggles against malaria in the Philippines. It pays heed to the recent call in the field of medical anthropology for the linking of local to global processes, especially in regard to the politics of international health. It points out the processes responsible for the predicaments faced by the state and the Ilokanos in addressing the problem of malaria. In espousing a notion of power as productive and transformative, the discussion brings to light the limits of government authority in the face of locally situated cultural forms of apathy, ambivalence, and resistance.

Chapter Two

METHODS AND RESEARCH SETTING

The first part of this chapter takes up the data gathering methods employed in this inquiry. The second part discusses the various representations of Masipi, the setting of the ethnographic investigation.

Data Gathering Strategies

Historical Research

I focused my historical research on the origin and development of the antimalarial program in the Philippines. Specifically, I paid attention to the goals that had guided the efforts to control malaria in the archipelago, efforts that began in the early 1920s under the U.S. colonial regime. Primary sources included reports and other writings by U.S. nationals who were directly involved in the colonial government, publications from the Philippine Bureau of Science, and documents such as memoranda, executive orders, and newsletters from the Philippine Department of Health and the Malaria Eradication Service (now the Malaria Control Service), and reports of the periodic external evaluations of the malaria program of the Philippines. Secondary sources included studies of the malaria program in the Philippines and works that characterized the nature of Philippine-U.S. relationships from the colonial and postcolonial era. Library work was conducted in the both the Philippines and the

United States. In the Philippines, I used the library resources of WHO Western Pacific Region Office in Manila, the Philippine Department of Health in Manila, the University of the Philippines Library System in Quezon City, and the Thomas Jefferson Library in Makati. In the United States, I used the library resources of Michigan State University in East Lansing, Michigan, and the University of Michigan in Ann Arbor, Michigan.

Ethnographic Research

I conducted fieldwork in Manila, in the provinces of Cagayan and Isabela in northeastern Luzon, and in the municipality of Cabagan, Isabela (see Figure 1) from November 1991 to April 1993. I collected data from health service professionals (e.g., medical doctors, nurses, midwives, microscopists, sanitary engineers, malaria workers, and pharmacists), who represented the state health care system, and the Ilokanos in Masipi, including Kleinman's "popular sector"--lay people--and the "folk sector"--local healers (Kleinman 1978:86).

I carried out some of the research through interviews and observations in health offices, hospitals, and clinics (see Table 1). When permitted, I tape recorded the interviews and later transcribed them. Otherwise, I took notes in the process of interviewing and after leaving the setting.

I spent considerable time with the Ilokanos of Masipi in Cabagan, Isabela. Masipi, the name of the settlement, means "in between" and characterizes the location on stretches of land between hills. Masipi's total land area is 4,733 hectares, and the elevation ranges from 40 to 140 meters above sea level. Several small tributaries and intermittent creeks lead to the Masipi Creek, a tributary of the Pinacanauan River.

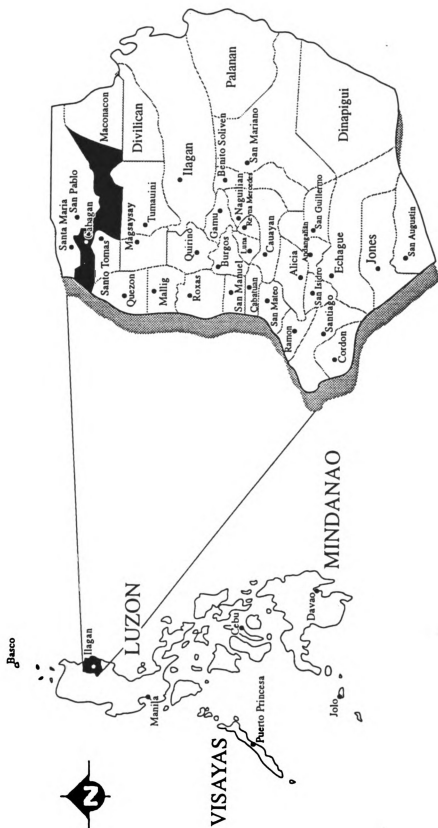


Figure 1. Municipality of Cagan in Isabela Province, Philippines
Source: Abaya (1987)

Table 1. Offices, hospitals, and clinics visited

-
1. Central Office of the Department of Health in Sta. Cruz, Manila
 2. Regional Health Office (Region II) in Tuguegarao, Cagayan
 3. Provincial Health Office in Ilagan, Isabela
 4. Municipal Health Office in Cabagan, Isabela
 5. Milagros District Hospital in Cabagan, Isabela
 6. Rural Health Unit in Cabagan, Isabela
-

Two barangays comprise Masipi, with a total population of some 3,000 individuals. Masipi West includes the settlements of Comprá and Magallones while Masipi East includes the settlement of Sagpat. These settlements are separated by expanses of grasslands and agricultural lands, which are planted in rice, corn, tobacco, sugarcane, and legumes (see Figure 2).

Figures 3, 4, and 5 reflect the physical features of the three settlements. Certain climatic and environmental features of the area, as well as aspects of the daily life in the village, tend to promote a condition conducive to the occurrence and transmission of malaria. There are abundant water sources (rivers, streams, and man-made irrigation canals), which are surrounded by thick foliage and undergrowth, making them suitable breeding places for mosquitoes. Most houses are made of bamboo and cogon (coarse grass) thatch and are elevated 3 to 5 feet above the ground on posts. This leaves no hindrance to mosquito-human contact. Moreover, as Figure 6 shows, outdoor economic activities take place when malaria transmission rates and mosquito density are high, at the onset and end of the rainy season.

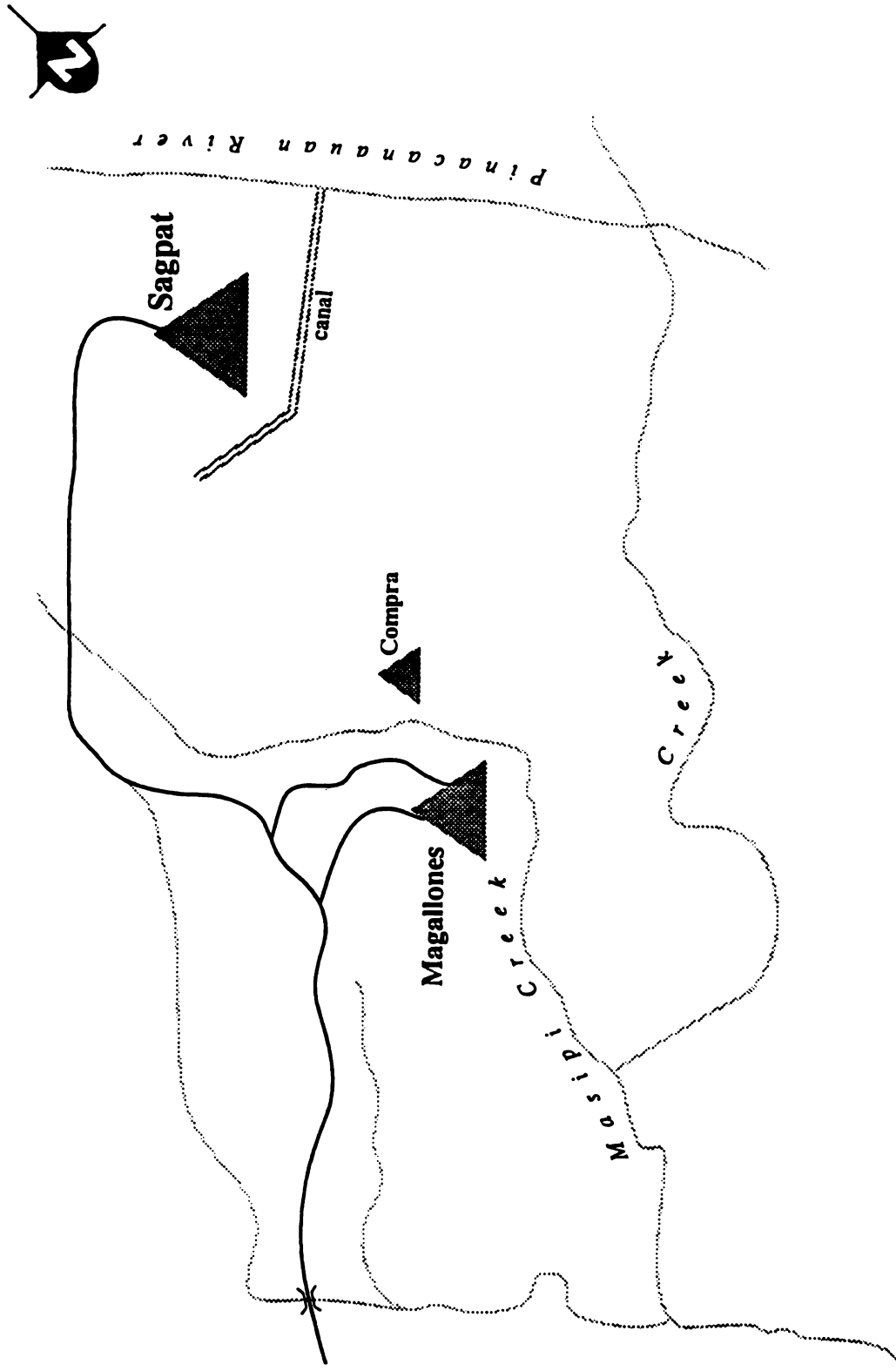


Figure 2. Research Sites: Magallones, Comprá, and Sagpat
Source: Abaya (1987)

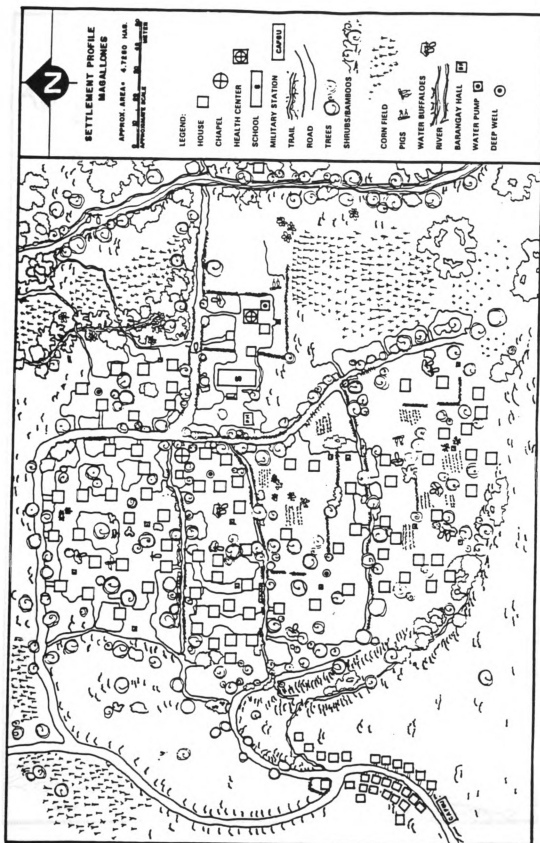


Figure 3. Magallones

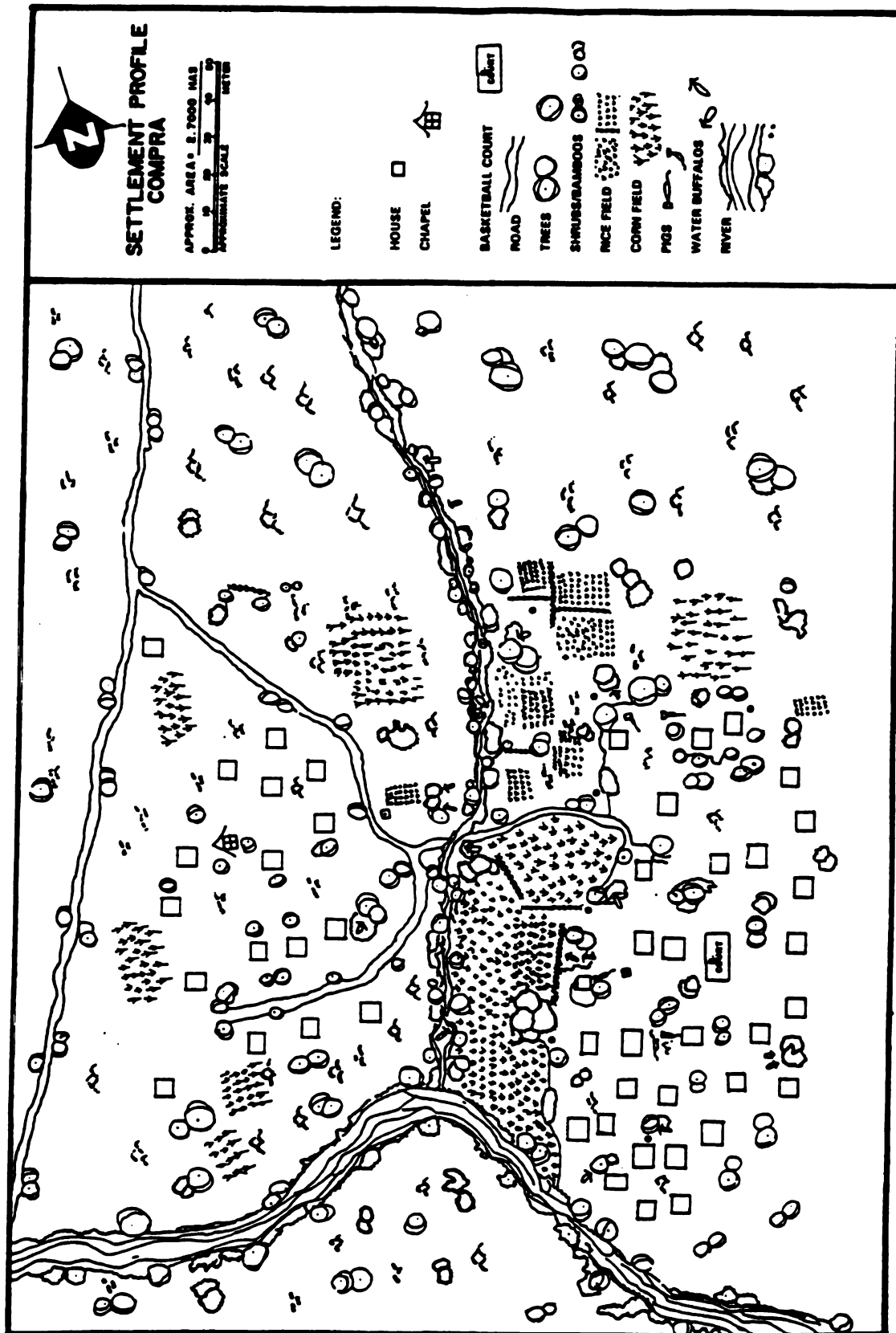


Figure 4. Compra

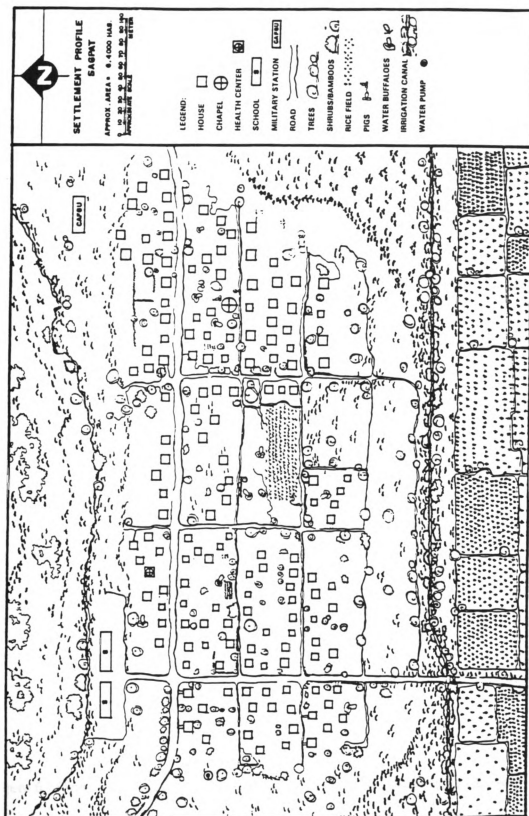


Figure 5. Sagpat

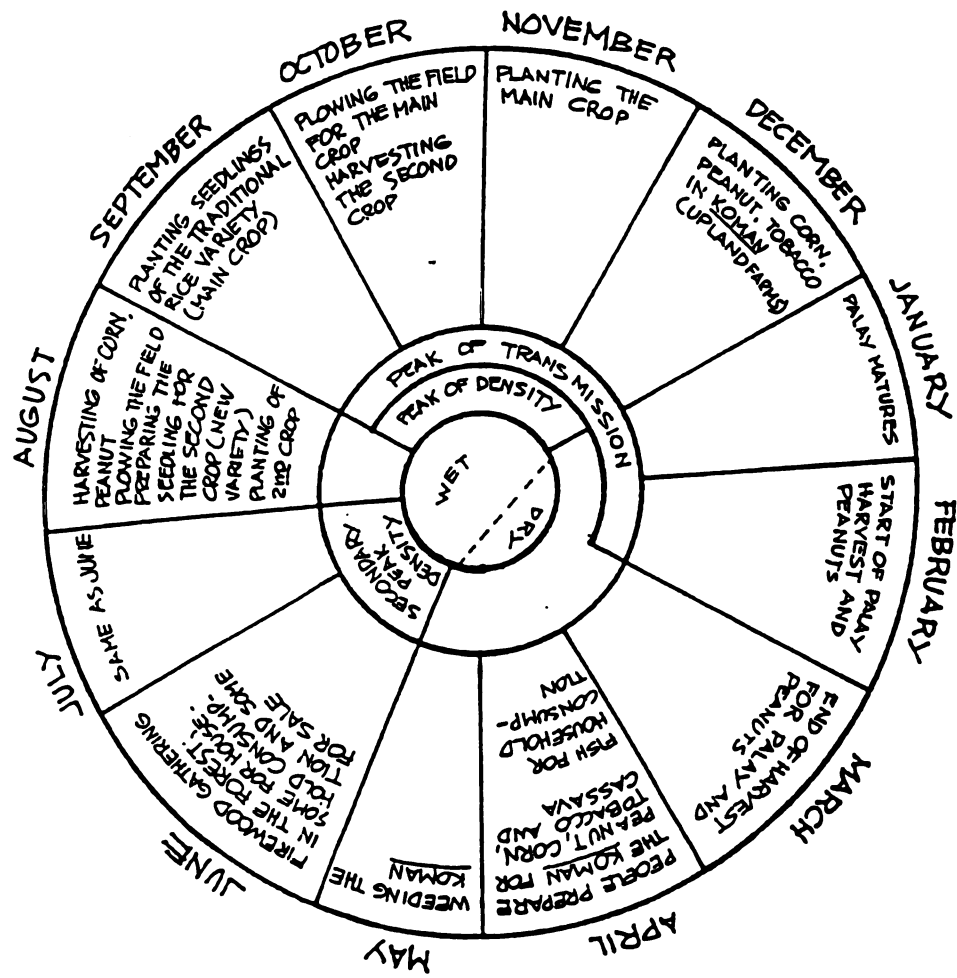


Figure 6. Outdoor Economic Activities, Malaria Transmission, and Mosquito Density

I collected data through participant observation and extended interviews in various settings such as the sari-sari stores (variety stores), where the old and the young engage in tongtongan ("to converse"); the plasa, where local events such as the annual pista (a religious celebration in honor of a Christian saint), game tournaments, and drying of palay (unhusked rice) and corn take place; strategic locations along the river, where most women wash household items and many villagers bathe; the local chapel, where occasional Roman Catholic masses are held; the barangay hall, where community assemblies called by the barangay officials are held; the barangay health station, where encounters between the state-paid midwife and local residents take place; and in houses of key informants. I also visited households with members experiencing symptoms of malaria and other afflictions. At times, I was able to observe healing sessions performed by local healers (mangagas). Finally, I paid close attention to local discourse concerning the state's health care services, including its personnel, and to the encounters between health workers and residents in various settings.

I also collected data through a survey on people's views of and experiences with malaria and the antimalarial program using an interview schedule in Ilokano, the language of the area. The sample included 30% of 332 heads of household, distributed across three settlements as shown in Table 2. Interviews took at least an hour and a half.⁷

⁷I was assisted by two part-time research assistants, with whom I had worked closely during my previous fieldwork in the same setting. Both had finished high school.

Table 2. Sample population

	N	n
Compra	48	16
Magallones	113	34
Sagpat	166	50
Total	332	100

N = heads of household

n = sample size

The sample was drawn through a modified random sampling technique. The selection process started with maps of the settlements showing all the houses, which I numbered. Pieces of paper were numbered consecutively and randomly selected by drawing them from a bottle, one at a time and including all pieces of paper for each drawing (random selection with replacement). At each house that was selected, a household head was interviewed, either a man or woman depending on who chose to participate.

There were 52 women and 48 men who participated in the survey. Their ages ranged from 15 to 60 years old (see Table 3). Most respondents were born in Cabagan, Isabela, and older participants were born in Bacarra, Ilocos Norte, from which the early migrants of Masipi originated (see Table 4). Most respondents were literate and had at least elementary education (see Table 5).

Table 3. Age of respondents

Years	no.
15-19	2
20-29	20
30-39	33
40-49	17
50-59	16
60 +	12
Total	100

Table 4. Birthplace of respondents

Location	no.
Masipi	50
A <u>barangay</u> of Cabagan	18
A municipality of the province of Isabela	20
A municipality in the province of Ilocos Norte	12
Total	100

Table 5. Educational attainment of respondents

	no.
No formal education	6
Some elementary education	49
Completed elementary education	20
Some high school education	12
Completed high school	10
Some college	3
Total	100

Table 6 shows the occupations of the respondents. The category "housekeeper" indicates a role that is generally ascribed to married women. Women with this designation also participate in farm work, including planting, harvesting, processing, and marketing.

It should be noted that I have changed the names and any descriptions of people in the study to protect their identity.

Table 6. Principal occupation of respondents

	no.
<u>Agtagimbalay</u> (Housekeeper)	52
<u>Agtaltalon</u> (Farmer):	
Owner-cultivator ⁸ of ricefield (rf)	2
Owner-cultivator of upland farm (uf)	2
Owner-cultivator of rf and uf	3
Owner-cultivator of rf and	
Tenant ⁹ for rf	2
Owner-cultivator of rf and Tenant	
for uf	3
Owner-cultivator of rf and Tenant for	
rf and uf	2
Tenant for rf	11
Tenant for uf	4
Tenant for rf and uf	9
Tenant for rf and wage worker ¹⁰	1
<u>Makitantandan</u> (Wage worker):	
Farm work	5
Logging	2
<u>CAFGU</u> (Military men) ¹¹	2
Total	100

⁸These are small landowners. Average landholding is 0.5 ha.

⁹Tersyahan (share tenancy) is practiced; that is, after all farm inputs such as fertilizers and seedlings have been deducted from the total cost of the harvest, the tenant gets 70% while the landlord gets 30%.

¹⁰Wage worker refers to a hired agricultural laborer working in tasks such as ploughing, planting, and harvesting.

¹¹A government-supported paramilitary group called Civilian Armed Forces Geographical Unit, actively involved in the counterinsurgency program of the state.

Representations of Masipi

In this section, I take up the representations of Masipi as gleaned from my conversations with residents in the poblacion (the center of the municipality of Cabagan) as well as with those in Masipi. From the former, I generated characterizations, labelled here as supralocal representations, and the latter, descriptions glossed as infralocal representations. By delving into these characterizations of Masipi, I hope to create a local context, a sphere of ideological forms, as it were, upon which definitions of Masipi as "Other" are predicated. That local context, it will be shown, reflects the links of Masipi with broader sociopolitical processes.

Supralocal Representations

Masipi as a barangay has a relationship to the concept of the barrio, the basic social and territorial entity during the Spanish and U.S. colonial eras. The barangay was a precolonial settlement and social organization consisting of 500-2000 people, relatively self-sufficient and kinship-based. Thus, the barangay is a term signifying a reformulation of a Filipino ideology of barangay/barrio during the Marcos era. This move was consistent with the state's populist discourse. As Aquino (1982) has noted, the barangay is an instrument for state control.

One key image of Masipi in the minds of outsiders is that it is a nagadayu nga barangay ("a very remote or inaccessible barangay"). It is one of the eastern barangays in the foothill areas of the Sierra Madre mountain range. This image is not without basis. Masipi is 17 kilometers from the poblacion or centro, the seat of the municipal government. The dirt roads to Masipi are virtually impassable especially

during the monsoon months (July to December). Two trucks ply, however irregularly, from Masipi to either the municipalities of Cabagan or Tumauni. These trucks are called wipon, a name probably derived from the fact that these vehicles were used as "weapons carriers" during the Second World War. The presence of these vehicles implies remoteness given their suitability in rugged terrains. In fact, they are ubiquitous in many so-called "remote barangays" in the Philippines. This image of remoteness is also reinforced by the fact that Masipi is one of the points of entry to huge forest concessions operating in the Sierra Madre mountain range (see Figure 7; note the Cabagan area in upper left). Logging signifies remoteness simply because the activity requires penetrating the interiors and exploiting the wilderness. An equally powerful marker for remoteness is the fact that Masipi does not have electricity; that is, nagadayo unay, narigat nga ikkan iti kuryente ("it is so distant that it is difficult to install electric cables").

Another pervasive image of Masipi is that of a pugad para kadagiti kumunista or "sanctuary for the communists." The Sierra Madre mountain range is an icon for the Communist Party of the Philippines, an underground social movement in the country. Frequently, it figures as a revolutionary symbol in underground protest songs and other art forms. Located in the foothill areas of the Sierra Madre mountains, the people in Masipi are branded as either members or supporters of the CPP, especially the New People's Army (NPA), its military arm. This image is so pervasive that I was asked frequently by friends and acquaintances in the poblacion whether I had been approached by a member of the NPA, euphemized as "Nice People Around." Also, in a joking manner I had been branded as an NPA by some

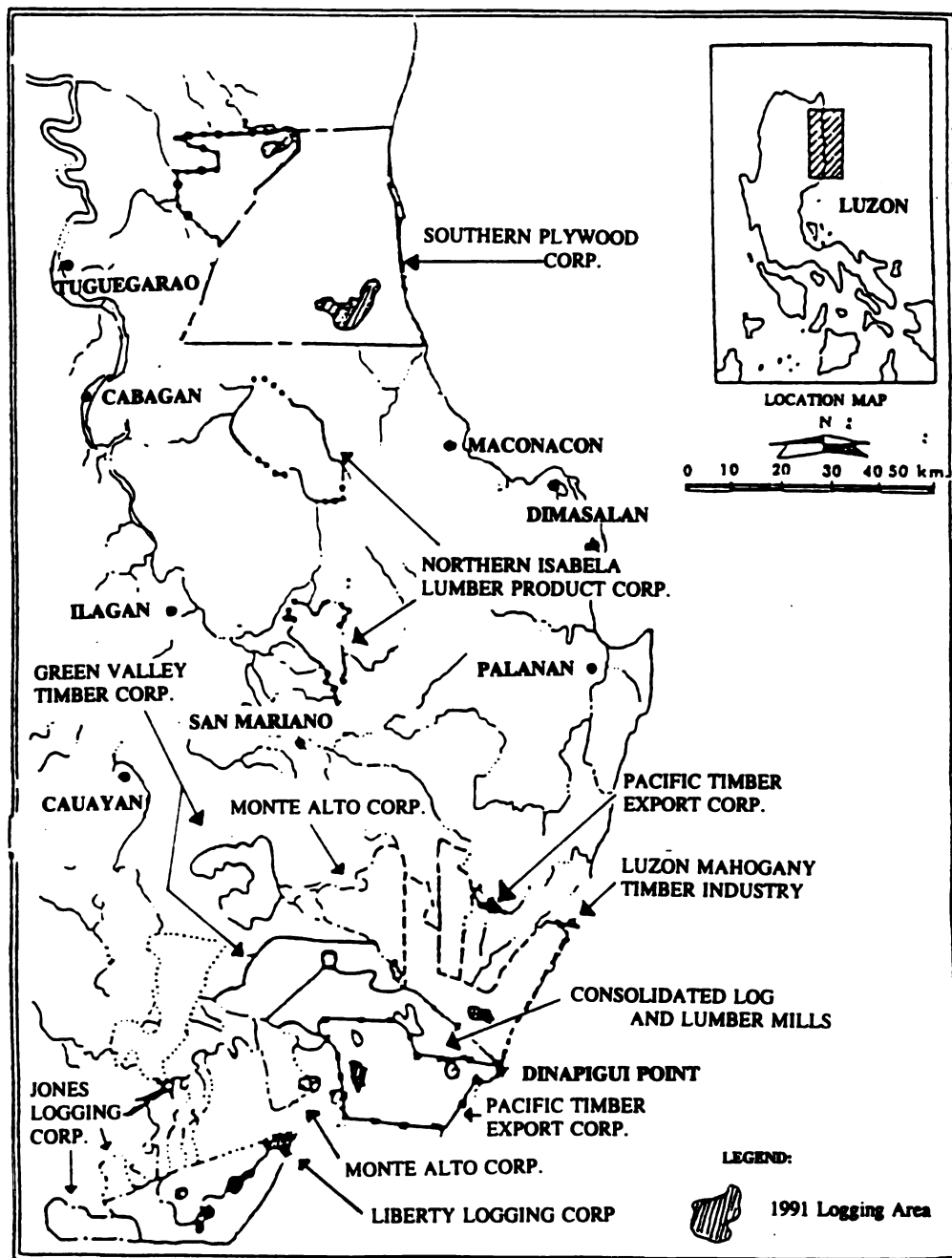


Figure 7. Forest Concessions in the Cagayan Valley

Source: Department of Environment and Natural Resources (1991)

residents in the poblacion, having conducted prolonged field work in the area.

Stories abound about the armed clashes between the members of the NPA and the government military forces that happened very frequently during the late 1970s to the early 1980s in Isabela and other areas of the Cagayan Valley. Masipi is viewed as one of those "battlegrounds." That image still predominates despite the state's claim that the CPP has been suffering from organizational and operational reverses due to internal ideological and leadership squabbles. Two military detachments, one in the western part and the other in the eastern part, have become permanent landmarks in Masipi. These detachments are instruments for strict military surveillance in the whole Province of Isabela and other areas identified by the local and national mass media as zones containing rebels. Today, their continued presence is linked with the counterinsurgency measures of the state, a role that has been recently reinforced by the state's policy of a total logging ban.¹²

Meanwhile, state control is also expressed in barangay ordinances requiring that villagers carry a flashlight in the village at night. The ordinances discourage clandestine activity and violators are arrested and penalized. Like most militarized communities in the Philippines, Masipi has a paramilitary unit organized primarily to enhance counterinsurgency. This unit is called CAFGU (Civilian Armed Forces Geographical Unit) and its members are recruited from the local populace, under the supervision of the Philippine National Police.

Another key image is that of an impoverished barangay (marigrigat nga

¹²This policy was triggered by the Ormoc tragedy (a flash flood that claimed thousands of lives in Ormoc City, Samar). Deforestation is a major problem in the Philippines.

barangay). This attribute is linked to the image of inaccessibility discussed earlier. Outsiders view its remoteness as an obvious constraint faced by the people in obtaining basic supplies and commodities. Government services include a land reform program, agricultural extension, and social forestry, which is part of a larger program on watershed management. These programs are supported by government funds, acquired through loans from the World Bank. A few weeks before I terminated my fieldwork in Masipi, gravel was being put on the roads. These developments have generated strong opinions from the people in the poblacion. Outsiders feel that Masipi is being favored by the state while equally impoverished barangays surrounding the poblacion are being neglected. Some link these efforts to counterinsurgency schemes, and they insinuate that most employees recruited from the villages were former members of the underground movement and that their involvement indicates "their return to the rule of law" and their allegiance to the state. It may be that the attention to local health services also implies a concern about people's welfare and thus serves to consolidate political support for the government.

In the minds of health officials, Masipi and the rest of the barangays located in the eastern part of Cabagan are "suitable training grounds" for government workers, particularly those who are assigned the task of doing extension-type services. Working in these remote areas is seen as a test of one's resourcefulness because of the lack of transportation and potable water; one's patience because the people of Masipi are said to be "superstitious" and "mostly illiterate"; and, lastly, one's courage because of the counterinsurgency operations in the area.

Masipi and the rest of the eastern barangays have acquired the image of

nagadu iti agmalmalarya idyay, "that area is malaria-infested." This is not without basis. From the standpoint of epidemiology (see Figure 8), this area of Cabagan is in an ecological zone suitable for the normal run of malaria (Abaya 1987; Lariosa 1986). Masipi is classified under the category "hard-core" malarious barangay in Cabagan and has been one of the targets of antimalarial operations. In short, Masipi is almost always implicated in discussions concerning the loci of malaria in Isabela in general and Cabagan in particular.

Infralocal Representations

One gains access to the realm of infralocal representations from local narrative history. That narrative history is inscribed in stories of lallakay (elderly men) and babbaket (elderly women). These stories reinforce Fonacier's (1953) essay about the migration of Ilokanos from their Ilocos homeland because of extreme land pressure. Fonacier refers to this migration as the "great Ilokano movement." He writes:

... legion of hardy pioneers ... left their ancestral abodes and staked their fortunes elsewhere. The story is told by the land that these pioneers had placed under cultivation--land that is mute but eloquent testimony of the labors and sacrifices of these pioneers.... The story is a saga of a people who were pioneers, a people who finding themselves hemmed in within the narrow confines of their ancestral homes expanded, colonized, and settled in other areas more suited to their spirit [pp. 89-90]

The Ilokanos went to the Cagayan Valley and settled in regions now known as the provinces of Cagayan, Isabela and Nueva Vizcaya. This is to be expected because that region is adjacent to the Ilokos coastal plain and through the passes of the Cordillera or by sailing vessels doubling Cape Bejeador, settlers could easily reach the Cagayan Valley region where a big expanse of rich and fertile land awaited the thrifty and industrious Ilokanos. They also went south to Pangasinan, particularly eastern Pangasinan which is adjacent to the province of La Union. Then they moved into Tarlac, Zambales and Nueva Ecija, and

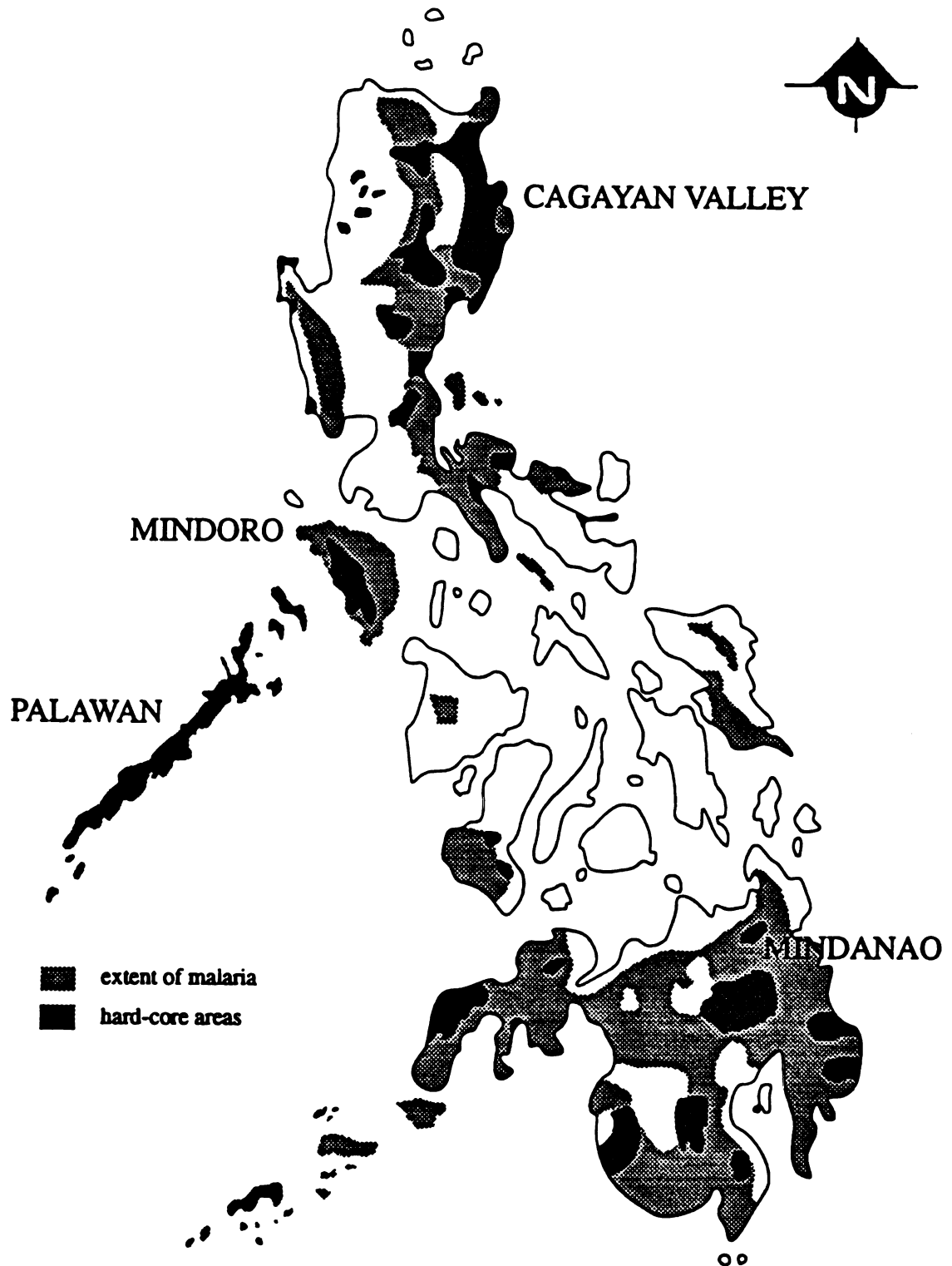


Figure 8. Distribution of Malaria in the Philippines
Source: Cabrera and Arambulo (1977)

occupied the vast stretches of land in those regions [pp. 92-93]¹³

The memories of Lakay Pedro, a resident of Masipi, now in his late 80s, complement Fonacier's remarks about the Ilokanization of the Cagayan Valley and parts of the central plains of Luzon. Lakay Pedro was six years old when they (his parents and four brothers and one sister) moved to Isabelita from Bacarra, Ilocos Norte, because land for cultivation was scarce. Their life was "full of hardships" because they were "poor." Two of his uncles and their families had earlier settled and cultivated the lands in Masipi. He recalled: "The path then was a small trail with elevated lands on both sides (sipit) so perhaps this is why this whole vast place is called Masipi." His uncles were periodically visited by Lakay Frogoso and Lakay Rambac because his uncles were also working for these two landowners, who lived in the poblacion. He said that the eastern part of Masipi is called Sagpat ("tableland") and it is an older community, settled by the Rambacs, Acobs, Acsons, and Subias. These families all originated from Bacarra and had been able to acquire their own farm lands. They built an irrigation canal and organized themselves into a corporate group or sangjera.¹⁴ The western part is called Magallanes since it was the pamilya iti

¹³In the same vein, Keesing (1962:181) writes that

[f]rom 1850 to 1857, Ilocanos were given free passages, advances of money, and other inducements to settle as tobacco growers [by the Spanish authorities], augmenting the local population.... The first American census showed 50,401 Ilocanos.... By 1948, Ilokanization of the Cagayan provinces had progressed to a point where 435,519 persons counted Iloko as their mother tongue, or approximately two-thirds of their total population of 638,301.

¹⁴Lewis (1971) provides a description of the structure and function of the sanjeras or corporate irrigation societies in the provinces of Ilocos Norte and Isabelita.

Magallones ("Magallones family") that opened the area. And sitio Compra ("to buy") is part of Magallones. Its name was derived from the fact that the residents, who were formerly residing in Sagpat and Magallones, bought their residential lots from a particular landlord.

Lakay Pedro spoke of the close social ties among the people of Masipi. He recalled that "during the olden days" they practiced ammoyo:

That's working together as a group. When there was a house to be built, we did it as a group. We were not paid, we just did it through ammoyo. We had to clear lands for farming and we also did it through ammoyo. We took turns clearing the lands of each member.

With a bit of sarcasm, Lakay Pedro lamented the gradual erosion of the institution of ammoyo:

I don't know, perhaps the young generation is too intelligent and hardheaded. Before, when a leader says this or that, the members follow. Now, this is no longer true. People today can be likened to scattered termites. Money moves everything these days. That's the trait of today.

According to oral history, Masipi as a territorial unit is composed of Sagpat, Magallones, and Compra. It was only in the early 1980s that Masipi was divided into two barangay, namely, Masipi East and Masipi West, which is now officially composed of three sitio, namely, Magallones, Compra and Guingab.¹⁵ The residents of Magallones and Compra, however, have affinal, consanguineal, and fictive kinship ties as well as a shared history that lead them to regard Guingab's residents as different (sabali isuda--"they are different"). This social distance is reinforced by the fact that Guingab residents are Ibanag speakers and also by their physical distance

¹⁵I learned from some barangay officials that Guingab was merged with Magallones and Compra to meet the population size required to establish a barangay.

(Guingab is about 1.5 kilometers from Magallones and Comprá).

From the mid-1960s until the early 1970s, Sagpat experienced tremendous instability created by the abuses committed by private armies of local landlords and politicians called tulisanes. The tulisanes were extremely dreaded by the local populace. They abused women, pilfered property such as agricultural produce and farm animals, and extorted cash from the local inhabitants. At the same time, the Communist Party of the Philippines was increasingly gaining support from many communities in the countryside. It should be underscored here that, according to many villagers, the NPA took the side of the local peasants and protected them from the abuses of the tulisanes. Armed clashes were said to be recurrent. Masipi became one of the NPA "outposts" in Cagayan Valley and at the same time a target for military operations by the government forces. There was great pressure from the state for the residents of Sagpat to move to Magallones and Comprá, which were about two and a half kilometers away, apparently because the residents were being caught in the middle. The situation started to stabilize by the late 1970s, with the presence of the two military outposts in the area. Parenthetically, the martial law regime in the Philippines under Marcos spanned 10 years (1972-1982). Meanwhile, the people of Masipi regard this period of their history, which they call panaun ti NPA (time of the NPA), as a time of fear, instability, and adventure.

Notwithstanding the changes in the residential patterns in Masipi brought about by this experience, the idiom of kinship relations or agkakabagyan dominates the organization of social life in Masipi. The notion of barangay has become a shared idiom among the residents of Masipi. They identify and associate themselves with the

barangay as a both a territorial and social unit, signifying local collective interests, on the one hand, and a political-administrative unit that articulates the interests of the state, on the other. In concrete terms, the residents of Masipi invoke their being tagabarangay Masipi ("from barangay Masipi") to assert their identity as members of the same sociopolitical unit. This stance is particularly evident when people participate in social events such as the town's annual foundation day celebration, during which their sense of "community" is asserted in relation to the other barangays in Cabagan. Residents of Masipi also hold their own annual pista (a community-wide celebration in honor of their patron saint, San Isidro, a Roman Catholic saint). The pista is a powerful marker of their existence as a sociopolitical entity. During social events such as this, the links of Masipi with the agencies of the state take on concrete expression. For instance, it has become customary for high-ranking government officials, military men, and members of the local municipal elite to be invited to the occasion and, consequently, reinforce publicly not only the prevailing patron-client ties but also the social differentiation in Masipi. The few nabaknang ("wealthy") are afforded the chance to have their status validated, especially in the eyes of the kalkalaingan ("people of moderate means," that is, able to maintain adequate subsistence) and the napanglaw ("poor" or "marginal"), by giving lavish feasts, attended by the elite of Cabagan. There is, therefore, a tacit recognition of the three aforementioned social positions as the local status model, which broadly correspond to land-owners (akinkukwa iti daga), tenants (makidaga) and laborers (makitandan), respectively.

The pista, like election campaigns, is an occasion in which the images of

Masipi become part of a political idiom couched in terms of the patronage politics that characterize Philippine politics today (cf. Kerkvliet 1990). It is during these occasions that such supralocal images as "remoteness and inaccessibility due to bad roads," "absence of electricity," "poor health conditions," "lack of potable water," and "impoverished" are shared by the residents themselves. These images are invoked by the state-paid barangay officials and other influential members of the community to generate attention and support from the municipal government as their link to the state bureaucracy. The appropriation, of course, is a two-way process for the same idioms are employed to couch certain promises and commitments in regard to the well-being of the people of Masipi, especially during elections and other political campaigns.

From the preceding discussion, one can deduce that the creation of Masipi as a barangay reflects the ongoing relationship between the people of Masipi and the state through its governmental agencies. As will be shown in Chapters Four and Five, that relationship is made concrete through the process of implementation of state programs in Masipi. That process finds its specific expression in the cultural politics surrounding the interactions between the state's health care system and the social and cultural spheres of everyday life among the Ilokanos of Masipi.

Chapter Three

THE PHILIPPINE ANTIMALARIAL PROGRAM THROUGH TIME

Along with other so-called tropical diseases,¹⁶ such as cholera, leprosy, and tuberculosis, malaria became the target of public health campaigns in the Philippines during the early part of this century under the U.S. colonial administration. This chapter examines the history of antimalarial efforts in the Philippines. My purpose here is to consider the key features of the antimalarial program and to provide an understanding of how history has shaped the structure and dynamics of the program. These interconnected features include the national-international health and development agenda, top-down health planning and implementation, and a well-entrenched epidemiological orientation of disease control interventions that fails to consider the relevance of local knowledge and practice in disease control efforts.

I focus on the orientation of the malaria control program. The analysis suggests that military, economic, and political goals are linked to the development of the antimalarial program in the Philippines.

I contend that the antimalarial schema is part and parcel of a health care

¹⁶Contrary to common understanding, cholera, plague, leprosy, smallpox, typhoid, tuberculosis and many intestinal parasites are not necessarily bound up with tropical conditions in the geographic and climatic sense. These diseases have all thrived in western Europe and the United States. The term tropical diseases can thus be viewed as a misnomer (cf. Doyal 1979:100).

system that rests upon the authoritative knowledge and practice of biomedicine and epidemiology. This orientation justifies professional dominance in the planning and implementation of antimalarial activities. Local precepts and practices frequently run counter to the tenets of Western science, thus the colonial and current medical discourse tend to relegate them to the realm of superstitions and irrationality. Antimalarial campaigns, thus, have tended to assume that it is possible to reorient people's ideas and behavior towards biomedical knowledge and practice.

In addition, this chapter shows that the antimalarial program relies heavily upon external financial and technical assistance. This situation is perpetuated through the patron-client relationship of the Philippines with the United States through the United States Agency for International Development and other international agencies such as the Rockefeller Foundation, World Health Organization, and World Bank.

The following exposition deals with three broad temporal contexts, namely, the American Colonial Administration (1898-1935), the Transition to Independence or the Commonwealth (1936-1946), and the Post-Colonial Period (1946-1993).

The American Colonial Administration (1898-1935):
"Beginnings of the Battle Against Malaria"

The immense attention given by the U.S. colonial government to so-called "tropical diseases," such as malaria, leprosy, and cholera can be said to be rooted in European colonization of Asia and Africa. Campaigns against tropical diseases were initiated in England in the late 19th century and led to the founding of schools of tropical medicine in Liverpool and London. This development in tropical health and medicine was to provide further impetus for confronting public health problems

hampering the process of colonization. Elliot¹⁷ (1917:184) expressed this cogently:

The American occupation of the Philippines, Cuba and Porto Rico [sic] came at a time when the study of the diseases peculiar to the tropics was engaging the serious attention of governments as well as the medical profession. Recent discoveries had suggested the possibility that cholera, plague, yellow fever and malaria might *not only be controlled, but almost, if not entirely, prevented and the tropics made safe places of residence for white men*. The possibility of saving the thousands of lives which were being destroyed by these dread diseases appealed strongly to the humanitarian instincts of the world. [italics added]

Thus, not only was tropical disease control tied to the motive of making the tropics safe for white men's habitation. It also served as an idiom for justifying U.S. "benevolent assimilation" of the Philippines ("The possibility of saving the thousands of lives which were being destroyed by these dread diseases appealed strongly to the humanitarian instincts of the world").

Using their own standards for health and sanitation, the American colonial administrators laid the blame for the poor health conditions on the Spanish colonial regime. For instance, Worcester¹⁸ (1914) described the health conditions in the Philippines as "shocking in the extreme":

I had the abundant opportunity to observe health conditions in the Philippines during the Spanish regime.... There were no provisions for the sanitary disposal of human waste even in Manila. If one had occasion to be out on foot at night, it was wise to keep in the middle to the street and still wiser to carry raised umbrella. [p. 329]

¹⁷Charles Burke Elliot was a member of the United States Philippine Commission, Secretary of Commerce and Police in the Government of the Philippines, Associate Justice of the Supreme Court of the Philippines, and Associate Justice of the Supreme Court of Minnesota.

¹⁸Dean Worcester was the Secretary of the Interior of the Philippine Islands from 1901-1913 and was a member of the U.S. Philippine Commission from 1900-1913.

Conditions in the provinces were proportionately worse. As a rule there was no evidence of any effort to put provincial towns into decent sanitary conditions. [p. 329]

Elliot (1917:186) further discredited the Spaniards and the Filipinos by deploring their "unsanitary practices" as well as their adherence to "superstitions." Specifically taking up the case of malaria, he wrote:

The Filipinos realized nothing of the importance of sanitation and the Spanish officials paid little attention to such matters.... Superstition had much to do with the way in which both Spaniards and Filipinos lived. The belief that the night air contained some poisonous miasma productive of malarial fever prevailed generally and the natives closed both doors and windows to exclude the *asuang*, the devil spirits which flew abroad only at night.

Accusations of ignorance of the Filipinos about "proper hygiene" and "modern medicine" punctuated the colonial discourse. The absence of laws to address "sanitation," defined in terms of the colonialist's standards, was also invoked. The claims of Elliot (1917:186) exemplify this "tradition versus modernity" mode of thinking:

That efficient ally of the sanitarian, cold weather, was unknown. Bacteria and parasites flourished throughout the year. The alternating heat and moisture bred mosquitoes and other insects innumerable. Where science, skill and well directed energy so badly needed were all unknown....

Cholera, the plague, malaria, beri-beri and other diseases killed vast numbers and *the people in their ignorance and blindness* continued the very things which were most certain to bring death. They drank water from the streams in which they and their work animals bathed and from shallow open wells into which streets and cemeteries drained. Artesian wells were unknown.... [italics added]

There were no food laws, no animal inspection, no proper slaughter houses, and the numerous markets were filthy beyond description. Fruit and provisions were commonly sold from the ground and, covered with dust and dirt, were eaten without being washed or cooked....

It was not uncommon for a half a dozen persons to sleep in a room measuring six by eight feet, with all the doors and windows securely closed *against the imaginary night-flying spirits, in blissful disregard of the millions of very real microbes in their midst.* [italics added]

While taking a stance of "blaming the victim," the U.S. colonial administrators also took a "compassionate" tack. This political posturing is clearly expressed by Worcester (1914:329-330):

Everywhere I saw people dying of curable ailments. Malaria was prevalent in many regions in which it was impossible to secure good quinine. The stuff on sale consisted largely of cornstarch, or plaster of Paris. Fortunately, we had brought with us from the United States a great quantity of quinine and we made friends with the Filipinos in many a town by giving this drug gratis to their sick.

In a sense, the malaria problem provided the opportunity for the Americans to win the hearts of the Filipinos ("... we made friends with the Filipinos in many a town").

As early as August 17, 1899, Dr. Hoyt, major and chief Surgeon of U.S. Volunteers, suggested the establishment of a central and general department of health in the Philippine colony. Two years later, a Bureau of Health was created. Under the Taft Commission, Dean Worcester, in his capacity as Secretary of Interior, attached the Bureau of Health to the Department of Interior. For wider nationwide public health campaigns Provincial Health Boards were also created (Tiglao 1975:7).

Legislation was drafted by the Insular Board of Health and approved by the Philippine Commission (see Table 7). It could be said, thus, that public health initiatives became a centerpiece of the U.S. colonial administration in building an image of a benevolent colonial state. At the same time, these initiatives marked the top-down approach to health planning.

Table 7. Health-related legislation promulgated during the early U.S. occupation

Legislation	Purpose
1. Act No. 187	An act transferring the employees of the Board of Health of the City of Manila to the Insular Board of Health.
2. Act No. 307	An act providing for the establishment of the provincial board of health and fixing their powers and duties.
3. Act No. 308	An act providing for the establishment of the municipal boards of health.
4. Act No. 309	An act providing the compulsory vaccination of inhabitants of the Philippines.
5. Act No. 310	An act regulating the practice of medicine and surgery in the Philippines.
6. Act No. 490	An act appropriating \$50,000 for the establishment of a leper colony in Culion.
7. Act No. 593	An act regulating the practice of dentistry.
8. Act No. 595	An act regulating the practice of pharmacy.
9. Act No. 1711	An act providing for the control and suppression of leprosy in the Philippine Islands.
10. Act No. 1760	An act providing for the internment or burning of the bodies of animals which died from rinderpest and prohibiting the sale or use of any part thereof.

Source: Tiglao (1975:9)

Russell¹⁹ (1934) noted that in 1911, the Bureau of Health surveyed San Jose, Mindoro, known as the "white man's grave," because of its extreme malarious condition. The Bureau focused on this area because malaria had inhibited development of its fertile soil by Europeans and Americans. Control measures included drainage, clearing vegetation, screening doors and windows, dumping oil on stagnant water, and quinine prophylaxis.

Indeed, the colonial administrators were forthright in disclosing the link between public health and their commercial and economic agenda. Worcester contended that the "deplorable sanitary and health condition" represented a "major obstacle in the development of the great resources of this remarkable country" (Worcester 1914:67). Heiser²⁰ concurred and remarked that "as long as the Oriental was allowed to remain disease ridden, he was a constant threat to the Occidental who clung to the idea that he could keep himself healthy in a small disease-ringed circle." He also stressed the idea that "colonial labor ... had a direct monetary value" (1936:37). Not surprisingly, some scholars of Philippine history (e.g., Agoncillo and Alfonso 1967; Constantino 1967) are in agreement that the U.S. regarded the Philippines not only as an economic asset but also as a strategic asset in gaining entrance to the China market.

¹⁹Paul Russell was formerly chief of the program of Malaria Investigations, Bureau of Science, Manila, which was partly supported by the International Health Division of the Rockefeller Foundation. He was actively involved in studies on the epidemiology of malaria in the Philippines in the early thirties.

²⁰Dr. Victor Heiser served as Chief Quarantine Officer for the Philippine Islands; as Chief of the Bureau of Health under the office of Dean Worcester, the Secretary of Interior; and as the chief officer of the International Health Board for the Far East of the Rockefeller Foundation.

Antimalarial activities were, until 1926 when the Malaria Control Section was created in the Bureau of Health, confined to U.S. military camps. Stagnant pools were drained and covered with oil, and underbrush was cleared. Preventive measures such as the use of mosquito nets also became mandatory. Men in the Lucena barracks, for example, were court-martialed for not using their mosquito nets properly (Page 1906, cited in Russell 1934:13).

At the same time, the U.S. Army was engaged in scientific research on malaria, in line with the development of control strategies. For instance, Walker and Barber (1914), both members of the U.S. military corps of scientists, called attention to the mounting evidence that the malarial mosquito in the Philippines breeds in streams, negating the classical view of "stagnant water" as the breeding place for the anopheline mosquito vectors. Thus, the military was not only engaged in research but also actively involved in the initiation of environmental interventions to control malaria.

The antimalarial schema is one that can be characterized as mosquito-centric. This feature of the schema is expressed in the discourse among the colonial administrators. The following conversation between Heiser and Military Governor Leonard Wood culled from Heiser (1936:451-452) is a telling example:

In spite of all our attempts at control, the problem was by no means near a solution. The campaign was given new impetus when I returned to the Islands in 1921. One evening after dinner Governor General Wood and I were sitting, as was our custom, on the veranda of Malacanang.

"I've a very pleasant surprise for you," the General said, "I've secured a million dollars for you to spend on malaria. According to the health reports, thirty thousand people are dying annually from it, and it's time

we wiped it out."

"General," I replied, "I wouldn't know how to spend as much as that productively. From what I've learned about mosquitoes, the mere expenditure of money won't help toward the solution."

"Why not? That's the way we did it in Panama."

"But they never had to sanitize more than a few square miles in the Canal Zone while we have thousands."

"Of course you can get rid of it if you'll drain the swamps. That will cut malaria down right away."

"But, General, we're running into all sorts of contradictions in the study of malaria. Isn't it possible that swamps may not be responsible for malaria here?"

"They have everywhere else. Why not here?"

"Nobody's proved it, and it's not a scientific way of finding out."

"Well, that's the way I want it done!" was General Woods's categorical response.

I considered that the General, himself a medical man, should not have taken such an attitude. "In that case, General, I'd better stop," I said. "I can't proceed that way. It won't be difficult for you to find someone to work on the problem as you may direct, and your method may be right. I hope it is."

The subject was dropped on this uncompromising note. But the next morning, after a good night's sleep, the General, as was his wont, repented his gruffness and was extremely apologetic. "What do I know about malaria? Forget everything I said, and tell me your ideas."

"In the first place, I'd like to know whether all the deaths ascribed to malaria are really due to that cause. And, if they are, I'd like to find out why all the measures we've taken in the malarial districts have so far been practically ineffective. I suggest asking the International Health Board for help in getting a good malariologist here to make a survey."

Wood agreed to this program without a moment's hesitation and as soon as possible Walter D. Tiedeman was brought to the Islands.

He selected four towns, each representing a geographical type--one hill town, one lowland, one bordering a lake, and one lake village influenced by running water from nearby hillsides.

True to his orientation as a medical doctor, Heiser pushed for further scientific studies to be conducted to understand the malaria problem in the Philippines. He insisted on the need to invite the International Health Board of the Rockefeller Foundation to look into the problem.

In 1921, by an invitation extended by Military Governor Leonard Wood, the Rockefeller Foundation, through its International Health Division, became actively involved in malaria studies in the Philippines. By 1924, several epidemiological surveys were completed by the Rockefeller Foundation, in cooperation with U.S. military medical and engineering corps. Subsequently, the Rockefeller Foundation and the Bureau of Health carried out control demonstrations in the country.

The Rockefeller Foundation concluded that although malaria was widespread throughout the archipelago, it was less deadly than previously thought. The Foundation recommended that it could be effectively controlled through Paris Green, a larvicide. Hospitalization costs were ten times greater than actual measures to prevent cases of malaria. Concurring with the Bureau of Health, the Foundation regarded free quinine distribution through the municipal treasurers merely palliative and emphasized the importance of controlling the breeding places of mosquitoes (Russell 1933).

It is important to stress, however, that the health-related activities of the Rockefeller Foundation should not be viewed solely as advancing scientific research and humanitarian concerns. In this regard, Brown (1976) observes that a close link

exists between U.S. colonialism and the Foundation's activities in Asia and Latin America. He writes:

The Rockefeller programs did not concern themselves with workers' physical productivity alone. They were also intended to reduce cultural resistance of "backward" and "uncivilized peoples" to the domination of their lives and society by industrial capitalism. Whether in the jungles of Latin America or the isolated islands of the Philippines, the Rockefeller Foundation discovered what the missionaries before them understood: that medicine was almost an irresistible force in the colonization of non-industrialized countries. [Brown 1976:900]

In other words, the humanitarian-cum-scientific motive of the Rockefeller Foundation in engaging in public health campaigns in the country served important functions in the image-building and influence-promoting efforts of the U.S. in the Philippines and worldwide.

At this point, it could be suggested that the concern over the malaria problem took root in the U.S. colonial public health initiatives, which were predicated on the fact that malaria, among other diseases, hindered U.S. commercial, economic, and military goals. These motives provided the impetus for state-led, centrally organized antimalarial efforts. In addition, "victim-blaming" became a prominent aspect of the colonial discourse on public health conditions in the country simply because, from the point of view of the colonial administrators, the Filipinos' sense of health and well-being did not conform with Western standards of medicine and public health.

The Commonwealth Period (1935-1945):
"The Campaign Deteriorates"

As a transition from a colonial to an independent state, a Philippine Commonwealth Government was established for the Philippines. During this transition period little funding was provided for the malaria program. As World War

II loomed, priority was given to the military in the government budget at the expense of social services such as public health.

The war years were an extremely difficult time for the state to deal with public health concerns. The chaotic military regime of the Japanese created an atmosphere of instability in the country. Evacuation from and return to malarious regions and the movement of U.S. military forces led to a marked increase in malaria. It became prevalent not only in known malarious areas but also in places that had previously been nonmalarious (Tiglao 1975). Movement of population exacerbated health problems especially in terms of malaria control. As a result, the advances gained in the antimalarial campaigns prior to World War II deteriorated.

Around 1940, however, DDT (Dichloro-diphenyl-trichloroethane) was discovered. DDT was first synthesized by Ziedler in Germany in 1934, but the insecticidal properties were discovered by Paul Muller of J.R. Geigy A.G., Switzerland, in 1936-37. This compound was first applied in 1943 by the British Ministry of Supply. Further development and mass production ensued in the U.S. and U.K. DDT affects insects as a contact and stomach poison and has a residual killing effect when sprayed on surfaces upon which insects walk or rest, as first noted with house flies by Weismann in Switzerland in 1942, and with mosquitoes by personnel of the Orlando Laboratory in the U.S. Bureau of Entomology in 1943 (Russell 1952:137). This technology for disease control was to become an integral part of the Philippine antimalarial schema after the war.

The Post-Colonial Period (1946-1990s):
"Shifts from Control to Eradication to Control"

The post-World War II Philippines was in extreme political, social and economic crisis brought about by the war. The aftermath of the Second World War saw the emergence of the United States as a politically and economically powerful nation. Peripheral economies came to rely upon the U.S. for support and aid to rehabilitate those countries devastated by the war.

The rehabilitation of the Philippines became the order of the day. The United States government, under U.S. Public Health Law No. 370 of the 79th Congress, generally cited as the Philippine Rehabilitation Act of 1946²¹ provided an outlay of \$6

²¹Cited here are provisions embodied in the Act (quoted in Tiglao 1975:98-99):

Section 505, Title III of the Philippine Rehabilitation Act of 1946 delineated the authority given to the United States Public Health Service in the rehabilitation of the Philippine public health system. It reads as follows:

Section 305 (a) The Public Health Service of the Federal Security Agency is authorized to cooperate with the government of the Philippines (Republic of the Philippines), and with other appropriate agencies or organizations, in the rehabilitation and development of public health services and facilities throughout the Philippines.

Section 305 (b) To accomplish such purposes the Public Health Service shall at the earliest practicable time, survey the health situation in the Philippines, and is authorized to replace, expand, or install such health services and facilities in the Philippines as deemed essential to the preservation of health, and may assist in the rehabilitation and development of a Philippine quarantine service for prevention of introduction of disease from abroad or from one island to another. The Public Health Service may set up demonstrations and establish training centers in the Philippines; may establish and maintain in the Philippines a school or schools for the purpose of providing practical instruction in public health; and may, at any time prior to January 1, 1948, provide one year of training in appropriate schools or colleges in the United States to not more than one hundred Filipinos, to be designated by the President of the Philippines subject to the provisions of Section 311, (c) in public health methods and administration. It may replace equipment and supply reasonably necessary additional equipment, utilizing for this purpose, so far as possible, surplus property, and may recommend to the commission

million. In return, rights were given to U.S. citizens to exploit the country's natural resources. Also involved in the rehabilitation process were the Philippine Civil Affairs Agency of the Army of Liberation, the U.S. Mutual Security Agency,²² the United Nations International Children's Emergency Funds, and the World Health Organization (WHO). WHO has been assisting member states with malaria control ever since its founding in 1948.

As Figure 9 shows, malaria control was reinstated as a key goal in the U.S.-directed Philippine Public Health Rehabilitation Program. Again, a complex bureaucracy was involved, notably the close supervision of the U.S. Public Health Service over the public health programs in the country.

The Philippine Public Health Rehabilitation Program also included the control of communicable diseases such as tuberculosis, venereal diseases, leprosy; general sanitation; maternal-child health, nutrition; health education; public health training centers; the rehabilitation of laboratories essential to public health; and the rehabilitation of the Philippine Quarantine Service.

the repair or construction under the provisions of Section 304, at any time prior to July 1, 1950, of buildings deemed essential to the rehabilitation of public health and quarantine functions.

²²This U.S. government agency was formerly called Economic Cooperation Agency (ECA). Then it became Foreign Operations Administration, then International Cooperation Administration (ICA), and presently, the U.S. Agency for International Development (USAID).

Philippine Public Health Rehabilitation Program

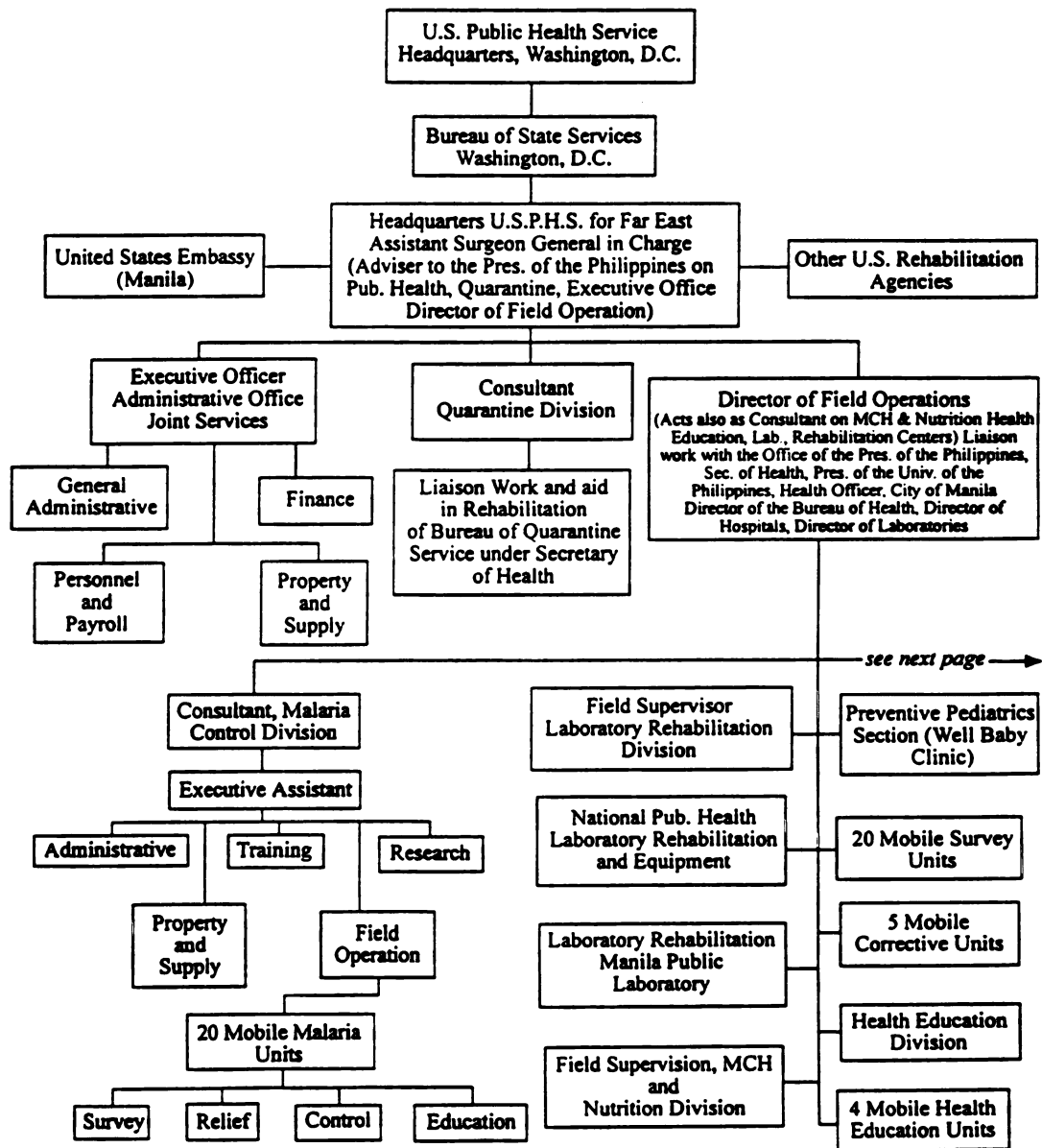


Figure 9. Organizational Structure of the Philippine Public Health Rehabilitation Program
Source: Tiglao (1975)

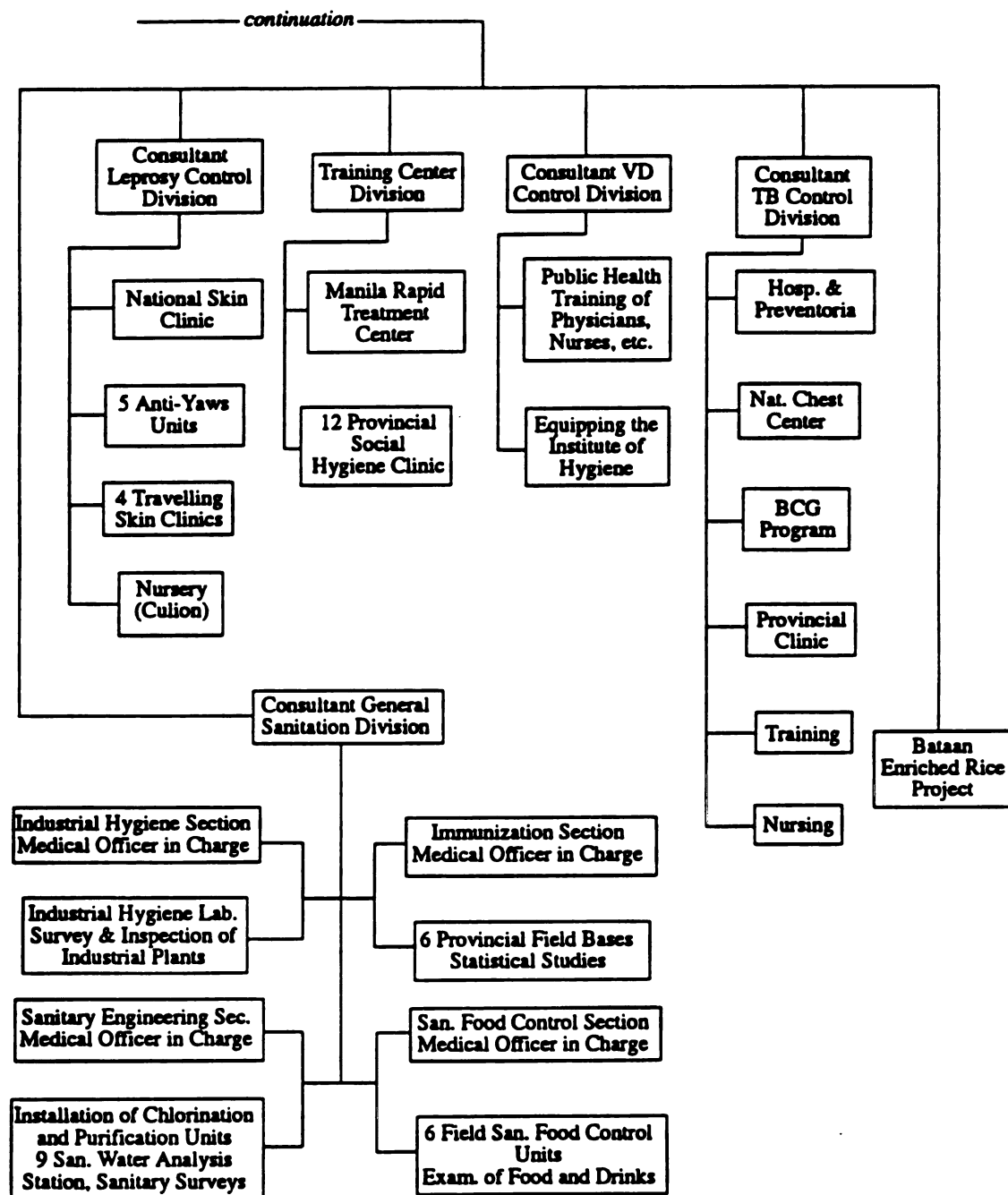


Figure 9. (continued)

Various activities conducted with respect to malaria control are shown in Table

8. Every effort was made to impress on the public the nature of malaria, its dangers, methods for its prevention and control, and its overall effect on national economic recovery. These activities were accomplished through lectures to and conferences with medical societies, hospital personnel and private practitioners; malaria educational campaigns in schools, dispensaries, public meetings, theaters, town fiestas, and in house-to-house surveys; participation in fairs, expositions, and other local festivals; distribution of posters and printed malaria information to schools, civic organizations and the general public; and the use of moving pictures and press releases (Tiglao 1975:102).

The 1950s saw, as a result of the survey carried out by the U.S. Economic Survey Mission, better known as the Bell Trade Mission, greater involvement of the U.S. in Philippine affairs (Bell 1950). The mission underscored such problems as low productivity, increased insurgency, and a generally demoralized populace. Export quotas, as stipulated in the Bell Trade Act, could not be met. The left-wing Hukbalahap Movement, otherwise known as Hukbong Mapagpalayang Bayan, had gathered enough strength to threaten the stability of the administration. The people lacked faith in the corruption-ridden government of President Quirino. These were the conclusions found in the Bell Mission Report and they became the basis for U.S. aid under the Quirino-Foster Agreement.

The Bell Mission Report became the White Paper that guided American interventions in the Philippines. These interventions covered a broad range of economic reforms that would have significant influence over the Philippine

Table 8. Malaria control and related activities during the rehabilitation period (1946-1950)

A. Control Activities	20 malaria control units collected information on malaria endemicity, topography, meteorology, demography, and socioeconomic status of malarious areas; provided free treatment of malaria patients in dispensaries and those that are encountered in the house-to-house visits; conducted control activities such as clearing brush from stream banks, larviciding, river straightening, filling and subsoil drainage, and spraying of DDT through hand and power sprayers and airplanes
B. Training	Training of malariologists, entomologists, malaria engineers, and technicians
C. Research	On the effectiveness of larvicides, antimalarials, vector control methods, and other pertinent aspects of malariology. Among the projects undertaken were a. DDT-treated sawdust as a larvicide b. DDT residual spraying of houses c. antimalarial drugs against strains of human malaria e.g., chloroquine and chloroguanide d. malaria plasmodia in anophelines other than <i>A. minimus flavirostris</i> e. the use of DDT-thermal aerosol
D. Health Campaigns	Mass education through public meetings and film presentations
E. Special Projects	Malaria control projects in Negros, a key sugar producing area in the Visayan Islands and in Quezon City, site of many governmental institutions; educational demonstrations in selected schools; technical supervision of mosquito control at the International Airport

government's domestic affairs. The internal problem of Huk insurgency became the government's goal addressed by Quirino's Secretary of Defense, Ramon Magsaysay, with the assistance of the U.S.-supported JUSMAG (Joint U.S.-Philippine Military Advisory Group).

Along with the containment of insurgency was intensified agricultural development. Two studies funded by the International Cooperation Administration (ICA) and the Philippine Council for United States Aid, namely, the Rivera-MacMillan Report (1952), entitled "The Rural Philippines," and the Hardie Report (1952), entitled "Philippine Land Tenure Reform," revealed that agricultural development was the main thrust of the U.S. policy in the Philippines. This thrust was also entirely consistent with the global economic interests of the United States.

In the health field, the Bell Trade Act contended that unless public health service was restored to a high degree of efficiency, the development of rural areas would be handicapped. As to the malaria situation, the Department of Health and ICA noted that in 1953

[o]ne-tenth of the [nation's] population was ill with malaria, and of the 2,000,000 annual cases, some 10,000 resulted in death. Malaria was most prevalent in rural areas and imposed a heavy burden upon the 3/4 of the population engaged in agricultural work. The annual economic losses from malaria ... were variously estimated to be 120 to 500 million pesos annually. [cited in Doria 1964:18]

As part of world diplomacy, international aid began to pour into the country. This period was aptly called the "advent of bilateral and multilateral assistance" or, in the words of Dr. R. Padua, then Undersecretary of Health, "the golden era of public health" in the Philippines (Tiglao 1975:125). The various agencies involved in

public-health related programs in the country in 1953 are listed in Table 9.

Table 9. Bilateral and multilateral foreign aid agencies and private foundations

U.S. government agency:

Economic Cooperation Administration (now USAID)

U.S.-based foundations:

Rockefeller Foundation

Fulbright Foundation

Ford Foundation

Smith Mundth Plan

Cooperative for American Relief Everywhere

Multilateral agencies:

World Health Organization

United Nations International Children's Fund

Other United Nations agencies (e.g., United Nations Educational, Scientific, and Cultural Organization; Food and Agriculture Organization of the United Nations; International Labor Organization)

In 1953, the malaria control section was elevated into a division, under the Bureau of Disease Control. By 1955, a nationwide malaria control program called The Six-Year Philippine-American Malaria Control Program was launched. The objective was to reduce malaria to a level where it no longer constituted an "important public health problem" and "to develop a long range program of more permanent measures whereby the Philippine Government, with its own resources, can keep malaria under control and eventually eradicate it" (Ejercito et al., quoted in Doria 1964:136). The indirect objectives of the program noted by Doria (1964:138-139) were consistent with the agenda set forth in the Bell Trade Mission mentioned earlier:

1. Enable the opening of additional arable land for economic development thus reducing the imbalance between population growth and productive resources.
2. Improve the environment for more production of goods and services and for the investment of capital.
3. Provide a tangible and direct government service to the remote population groups, thus promoting political solidarity.
4. Promote social justice by freeing the people from the ravages of malaria.

As is apparent in the above-mentioned objectives, the schema of malaria control continues to be predicated upon the motive of commercial and economic development. At the same time, this motive is complemented by such goals as "political solidarity" and "social justice."

This move toward a nationwide malaria control campaign was predicated on the results of the Malaria Control Pilot Project in Oriental Mindoro conducted in 1953

by the Department of Health with financial and technical assistance from ICA and WHO. The stated purpose of this project was to assist the Philippine government in ascertaining whether applying a residual spray of DDT to houses was an "effective and economical method of controlling malaria" (Doria 1964:975).

An administratively centralized Division of Malaria under the direction of Dr. Antonio Ejercito provided coordination for 30 field units. The Philippine government provided the technical staff, field personnel, and operational and maintenance expenses. The U.S. government, through the ICA, contributed technical consultants, transportation, insecticides, sprayers, laboratory equipment, and other supplies.

A revised plan called the Malaria Eradication Program for the Philippines was initiated in March 1956. The objectives were revised from control to eradication by advocating total insecticidal coverage with DDT of all houses in malarious areas for a period of four consecutive years. Eradication refers to the interruption of transmission and the elimination of the parasite reservoir by intensive, meticulously conducted operations that are limited in time. On the other hand, the term "control" means measures that will reduce transmission to low levels and must be maintained indefinitely (McGregor 1985:423).

The Philippine campaign represented the first nationwide testing ground for malaria eradication in the Western Pacific Region (USAID 1961). The concept of global eradication of malaria was adopted at the Eighth World Health Assembly (WHO 1973). According to Yekutieli (1981), this move was taken in recognition of signs of anopheline mosquitoes developing physiological resistance to DDT, rendering the idea of indefinite residual spraying with DDT impracticable, and the difficulty of

sustaining the program because of the limited resources of governments.

In his opening address as conference chairman for the Second Asian Malaria Conference held under the auspices of WHO in 1974 in Baguio City, Philippines, Dr. Ejercito, the conference chair, declared:

We are already well aware that we are gathered here not as representatives of the governments and countries from which we came, but as *representatives of knowledge and experience in malariology*. We are gathered here *as experts* to discuss technical matters pertaining to malaria and its control; to exchange problems which we encountered in the field; how they have been solved, and are being solved... and to reveal the results of *our scientific studies and their practical applications in the field of malaria control*. Placed on a vantage point, vis-a-vis to you, my friends, I cannot help but visualize that we shall be building in our midst a *"lighthouse" that will illuminate the modus operandi of malaria control in those regions, that will charter the rational and right course of action to free our peoples from the ravages of the dreadful malaria* in this part of the globe. Ours, therefore, is a great responsibility to review what is old, and to point out what is new in malariology, so that our accomplishments will reflect *coordinated and standardized procedures* to combat malaria on intra and inter-regional levels. *This reminds me of our "battle-cry" in our organization: "Fight Malaria With Knowledge."* [italics added; cited in Doria 1964:111-112]

Ejercito's remarks reflect the heavy reliance of the antimalarial campaign on technical knowledge and strategies of biomedicine and public health. His exhortations also illuminate the military metaphors used in the campaign.

By the end of 1956, an impressive reduction in malaria had been achieved. However, the program began to face the problem of expansion from the originally defined malarious areas. For instance, in the province of Isabela, USAID (1961) noted that there was an increase of 68% in the number of cases of malaria (from 264,000 in 1948 to 444,000 in 1960). This was a result of the government's policy of resettlement from overpopulated nonmalarious regions (along the coast and plains)

to less economically developed regions at the edges of the great valleys, which were also malarious. Parenthetically, my informants in Masipi made reference to this government program when talking about the period in which people from the provinces of Ilocos Norte and Ilocos Sur migrated to the Cagayan Valley.

Notwithstanding the added funds given by WHO to strengthen the surveillance scheme,²³ an assessment conducted by Dr. P. Yekutieli of WHO in 1959, concluded that transmission had resumed on a "considerable scale and in fairly scattered distribution throughout the discontinuation areas" (Yekutieli 1959, cited in USAID 1961:12).

The program began to address the mounting obstacles to achieving the goal of eradication. The program had to contend with the development of mosquito resistance to a residual insecticide (Dieldrin) in 1959, movement of population, withdrawal of financial support from the U.S.-funded Mutual Security Agency to many areas, absence of sufficient funds to finance total spray coverage, and the decentralization of the Division of Malaria of the Philippine Bureau of Disease Control that resulted in administrative confusion (USAID 1961). Malaria resurgence ensued.

By virtue of Republic Act No. 4832 of 1966, the Malaria Eradication Service (MES) was established under the Department of Health. This act provided for a centralized management or "vertical control" of the program. As reflected in Figure

²³WHO financed the hiring of surveillance personnel to carry out visits in all localities within the consolidation area every three weeks, that is, "areas where spraying operations have been discontinued and consequently vectors may become sufficiently numerous and long-lived to reestablish transmission" (McGregor 1985:428).

10, several specialized units such as entomology and microscopy constituted the antimalarial program. Residual spraying of houses with DDT assumed greater prominence in the "war against malaria."

External assistance from USAID was extended to June 1973. USAID assistance included provision of 10 malaria specialists and imported commodities, and WHO provided four advisors, including a training officer. In addition, 20 U.S. Peace Corps volunteers were assigned to the program (Tiglao 1975).

In 1970, the Philippine government, with the support of WHO and USAID, set up a strategy review team composed of a representative from the Department of Health as chair, a WHO consultant and someone from the U.S. Department of Health, Education and Welfare. They concluded that, given the technical, administrative, and operational problems confronting the Malaria Eradication Service, a nationwide, time-limited eradication program was not feasible. According to USAID (1961:110), the team's recommendations, which were adopted by the Malaria Eradication Service, included the following:

1. Where malaria transmission has almost been interrupted and the endemicity is very low, malaria work may now be systematically integrated into the general health service. Rural Health Units, acting as passive case detection posts, should be vigilant of any resurgence of the disease. Provincial Health Officers, City Health Officers and Regional Health Directors shall be responsible for any breakdown in the program at this stage. The provincial health officer should have mobile teams of sprayers and canvassers and a sufficient reserve supply of DDT and spraying equipment to conduct, without delay, focal spraying and epidemiological investigations where a flare up occurs.
2. In other low incidence areas, the gains achieved should be maintained by an adequate surveillance mechanism involving active and passive case detection.

Philippine Malaria Eradication Service

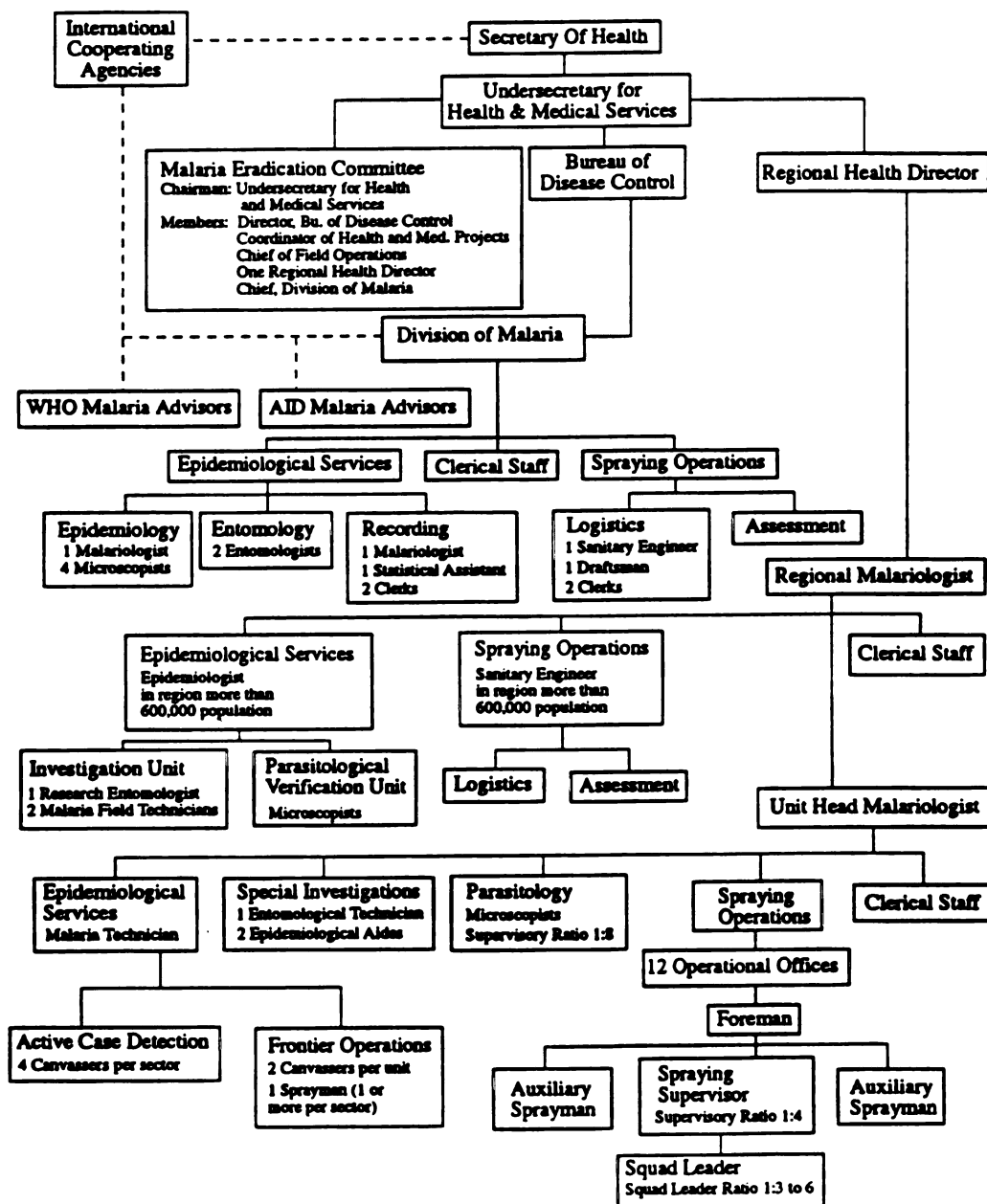


Figure 10. Organizational Structure of the Philippine Malaria Eradication Program
Source: Department of Health, Philippines (1963)

3. There are areas referred to in MES reports as "hard-core areas" where eradication measures appear not to be making sufficient impact on the epidemiological situation. In some of these areas, malaria eradication is at present impracticable. *However, because the disease impairs the health of the people, appropriate control measures have to be undertaken both for reasons of health itself and for providing the healthy manpower for the economic development of the areas.* [italics added]

Also in the same year, the government (under martial law) of President Marcos issued Presidential Decree No. 70 to overcome serious setbacks in malaria eradication campaigns on account of the refusal of homeowners to cooperate in the campaign. Below are excerpts that point to, among other things, the rhetoric of people's welfare, economic progress, and the exercise of police power by the state (see Appendix):

Section 1. To insure a successful campaign for the eradication of malaria in the Philippines in order to promote general health and welfare of the people as a whole and to alleviate specifically the injurious effects of malaria on agricultural productivity, rural development, industrial endeavor and community development, anti-malaria workers of the Malaria Eradication Service of the Department of Health are hereby authorized:

a. To enter private premises, dwellings and yards without being guilty of trespass thereof, in order to spray the houses or to canvass for malaria cases, take blood films, give treatment and other anti-malaria activities necessary to eradicate malaria;

Section 3. Anti-malaria workers shall see to it that the insecticide residue on sprayed surfaces, being essential to the success of the anti-malaria program, shall not be willfully removed but must be allowed to stay on the wall until the termination of the spraying campaign.

Section 4. Any person who refuses or obstructs an anti-malaria worker from the performance of the duties provided in this Decree or refuses, without just cause, to allow said worker free entry to his premises during a malaria control campaign shall be fined not less than three hundred pesos nor more than five hundred pesos, or by imprisonment

for not less than one month but not more than three months, or both, depending upon the discretion of the court.

This decree clearly represents the state's strong move to deal with local resistance to DDT spraying. It requires intrusion into people's homes ("To enter private premises, dwellings and yards without being guilty of trespass").

Since 1973, support from USAID has been withdrawn while that from WHO has been reduced to laboratory supplies. As a result, the program had to contend once again with such problems as lack of manpower to implement the program. To understand this withdrawal of USAID financial support for antimalarial campaigns, the observations of Voulgaropoulos (n.d.:9) are instructive:

By the late 1960s rapid population growth had replaced malaria as the major health-related obstacle to development. Robert McNamara of the World Bank exhorted developing countries to limit their populations or face the prospect of continued underdevelopment and perhaps no loans. The US Agency for International Development (USAID) began supporting family planning programs in 1965 with a budget of about US \$2.1 million. Since that time USAID and some foundations have allocated millions to universities and institutes to study the problem, develop techniques and spread the gospel. In 1968 the US Congress substantially increased funds available to USAID for family planning and population programs. By 1976 USAID expenditures through the Office of Population had reached US\$154 million yearly--60% for use in programs in Asia and the Pacific.

Put differently, the shifting funding priorities of international aid agencies condition the viability of programs such as the antimalarial program.

In 1970, the malaria program strategy was changed from eradication to control. This move was in consonance with the shift of the global antimalarial strategy espoused by WHO. In 1969, WHO conducted a reexamination of the global malaria strategy and arrived at the following conclusions, which later became the

basis for the revised strategy of malaria control (Yuketiel 1981:470):

1. The planning and budgeting of malaria eradication programmes were not included in or coordinated with the overall national economic development planning. Consequently many eradication programmes had been handicapped by lack of sustained government support.
2. Many countries had embarked on eradication programmes without realizing the extent of commitment involved.
3. Technical factors including exophilic habits (outside biting and sheltering) of vectors, insecticide resistance, and factors of human ecology (e.g., seasonal migration, habit of sleeping outdoors) though affecting about 1% of the areas with eradication programmes, had an adverse operational and psychological impact quite out of proportion to their size.
4. Serious operational deficiencies were almost invariably encountered. ... The present methods of eradication, although simpler than those available before... are still laborious and often too expensive for the limited resources of developing countries; unless the present methodology is further simplified, *global* eradication, though theoretically possible, will continue to be beyond reach for many years to come. [italics in the original]

The continued influence of WHO directives over the nature of the organization and operations of the Philippine Department of Health was expressed in the integration of the Malaria Eradication Service into the general health services as stipulated in Executive Order No. 851 dated December 2, 1982. This change pursued the so-called Primary Health Care (PHC) approach endorsed by WHO in 1978. Thus, the Malaria Eradication Service was again decentralized. Dr. Azurin, then Minister of Health, however, provided the following justification:

In essence, the integration streamlined the operations of the MOH [Ministry of Health] by establishing a unified and continuous line of authority and responsibility from the central level to the district levels. The artificial line that separated public health from medical (hospital) practice was removed, resulting in a more comprehensive delivery network at the local level. [Azurin 1988:43]

The Department of Health went through another reorganization in 1986 under the Aquino government. To solve the administrative problems faced by the antimalarial program, a semivertical organizational structure for the antimalarial program was formalized by Executive Order No. 119. Also, the program was renamed the Malaria Control Service and became a staff bureau under the Office for Public Health Services (see Figure 11). My point here is that, notwithstanding the changes in the approach to the management of the malaria program (i.e., vertical, integrated, and semivertical approaches), the program's top-down decision-making process remains in place.

In 1990, a renewed optimism occurred in regard to the control of malaria in the Philippines. This was due to the inclusion of malaria control as a key component of the Philippine Health Development Program, with a loan provided by the World Bank. The goal is to attain an annual parasite index of 1/1000 population by the year 2000. This goal is reminiscent of the optimism of the 1950s when the program was heavily supported by USAID. External aid, thus, plays a prominent role in the waxing and waning of optimism surrounding the antimalarial activities in the country.

On July 1992, Dr. Juan Flavies, the Secretary for the Department of Health, issued Memorandum Circular No. 1 series 1992, phasing out DDT spraying as a control measure. Ironically, the same memorandum provided for the substitution of other insecticides for DDT, namely Solfac, K-Othrine, Icon and Permethrine. The document claims that these insecticides do not have adverse effects on the environment and health. This point, however, was challenged by a recent external review, which noted that the insecticides now being used in place of DDT are not

Philippine Malaria Control Program

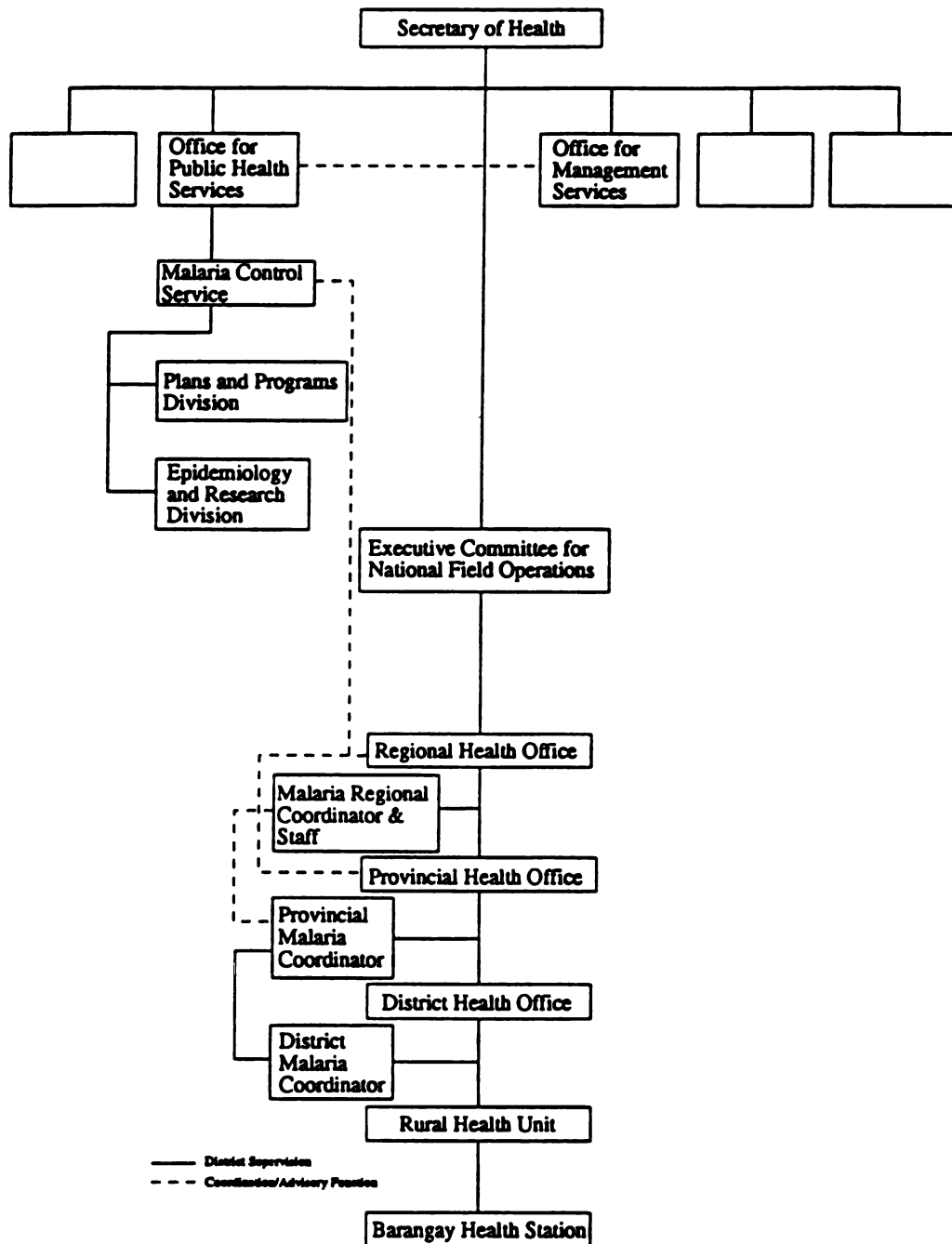


Figure 11. Organizational Structure of the Malaria Control Program
Source: Malaria Control Service (1987)

only more expensive but also more toxic than DDT (Palmer et al., 1993). Despite these contradictions, the antimalarial schema remains anchored in the primacy given to mosquito control through house spraying with insecticides.

Concluding Remarks

The antimalarial schema in the Philippines has had several salient features from the turn of the century to the present. First, the antimalarial schema, from its inception to the present, has rested on biomedicine and epidemiology, both of which shaped the development of antimalarial strategies that largely revolved around the mosquito-plasmodia aspect of the disease. These strategies include mosquito vector control, using chemicals and insecticides, and chemoprophylaxis, using antimalarial drugs. This orientation remains well-entrenched, despite shifts in the antimalarial program's philosophy (i.e., from control to eradication, then back to control).

Secondly, the antimalarial schema, from its inception to the present, is structured for a health care bureaucracy that promotes hierarchical social relations expressed in a centralized decision-making process. Whatever operational strategy the health bureaucracy has adopted (i.e., vertical, integrated, or semivertical), the schema has remained oriented towards top-down policy making and implementation. By extension, the schema promotes professional dominance in the definition and management of health problems such as malaria.

Thirdly, it could be suggested that the antimalarial schema, since its emergence, has depended heavily on external financial and technical assistance. Its resources and capabilities always remain subject to the shifting priorities of international donors. External support, thus, promotes not only the above-mentioned

features of the antimalarial schema but also the patron-client relationships that the Philippine state has forged with the U.S. and international health and development agencies.

Finally, for its continued justification, the antimalarial schema employs the idioms of nation-building, economic progress, political solidarity, and social justice. These idioms are reinforced by the use of Western approaches to health, medicine, and development. How these key attributes of the antimalarial schema clash with the ways in which the Ilokanos struggle against malaria will be elucidated in Chapter Five.

Chapter Four

MALARYA IN OUR MIDST

This chapter deals with the ways in which the Ilokanos of Masipi construe and deal with malarya, viewed within the context of their ethnomedical knowledge and practices. I find it appropriate to use the term malarya, the local term, to direct attention to the ways in which the Ilokanos experience and discern malaria. The concept of malarya is continually reshaped by local cultural experience in social interactions in homes, hospitals and clinics, pharmacies, and other settings.

The first part of the chapter discusses the local understandings and management of the body in relation to health and sickness. I present a case study of a woman who died of cerebral malaria to illustrate the point that the local ethnomedical system is grounded in a cultural logic that maintains the interconnections among the physical, social, and moral spheres of human experience. As will be demonstrated in the second part of this chapter, this cultural logic guides the local constructions of the etiology, prevention, and treatment of malarya.

Ilokano Ethnomedical Knowledge and Practices

Two related terms, saket (sickness) and salun-at (health), frequently arise in my conversations with the villagers about the state of their pammagi (bodily condition). I note, however, that in most of my talk with them it is the notion of saket that assumes greater prominence, especially when they are asked to characterize their own pammagi. This, according to them, is because they are alerted mostly to the condition of their pammagi when it is invaded by a saket. I take this as suggesting that salun-at is intrinsic to the pammagi; that is, the pammagi per se presupposes a healthy state or absence of saket. So, in the local view, to ask questions about the pammagi amounts to calling attention to the experience of saket and how it figures in one's pammagi.

The oft-mentioned markers (langa) of saket include a pale skin, reddish or yellowish eyes, vomiting, fever, loose bowel movements, restlessness, lack of appetite, moaning, crying, quarrelsomeness, sleeplessness, chills, headaches, spitting blood, and an inability to carry out one's daily routines and meet one's obligations. These bodily states and personal conduct as signs of sickness are talked about in relation to the notion of naturalesa, which refers to the body's "in-born" vitality and capacity to withstand any stressful situation. Also, people talk about naturalesa along with the person's kinatao (syn., ugali) or conduct. Here, the idea of managing one's thoughts (panunot) and feelings (rikna) comes into play. One's kinatao emerges from the manner in which a person relates to members of his immediate family (sangabalayan), kin (kabagyan), and neighbors (karruba). Kinatao is also talked about in terms of a person's relationship with deceased relatives, especially those with

whom a person has spent considerable time. For instance, when referring to a particular individual, people often use the idioms of nagalas iti kinataona ("bad conduct") and nasayaat iti kinataona ("good conduct").

The local discourse on saket stresses the interaction between naturalesa and kinatao. For instance, saket is frequently construed in terms of the idea of nakapsot wenno napigsa nga naturelasa ("weak or strong naturalesa"), especially when talking about a chronic sickness. At the same time, a person's naturalesa can either be enhanced or undermined by one's kinatao--"Makapapigsa iti naturalesa iti nasayaat nga kinatao" ("Good conduct strengthens one's natural vitality").

The Fate of Ligaya

At this point, I present a case of how the local ethnomedical system shapes the management of malarya. The case illustrates, through the actions of family members and neighbors, the embeddedness of malarya in the social world of the Ilokanos. The case is about iti gasat ni Ligaya ("the fate of Ligaya"). A resident of Magallones and a woman in her early 20s, Ligaya died at the district hospital of cerebral malaria. The ubiquity of malarya, in that every household has at least one case of the illness, and the necessity that people feel to take action resonate with diagnostic and therapeutic strategies employed to address Ligaya's affliction.

For a number of days, Ligaya had complained about a severe headache, a back that felt as though it was being seared, and intermittent chills and fever. She thought that it was a simple case of agmalmalarya (syn., agpayegpeg), which literally means "shivering." To deal with this symptom, she took some analgesics and antimalarial pills that she bought from a nearby sari-sari store. The medications did not relieve

her sickness.

One day she passed out suddenly, and she was rushed to the district hospital. There she demanded to be brought to the payward²⁴ and although her father-in-law was hesitant, he was obliged to carry out her wishes, out of embarrassment. After two days, she was brought home because her in-laws claimed that the hospital staff were unfriendly and unaccommodating. Her father-in-law claimed that she had shown no improvement, which led them to think that she needed a local healer.

Some neighbors advised Ligaya's husband and her in-laws to continue allopathic medical treatment while seeking the help of local healers. The father-in-law, however, insisted that he did not have enough money for hospitalization, no matter how they prodded him.

The family then sought the help of Delya, a local healer from a nearby barangay. She examined Ligaya's body and found that the line from her navel down to her pubis was dark and crooked. To Delya that was a sign indicating Ligaya's inherent vulnerability to misfortune. This vulnerability could also affect her close relatives.

Delya led a name-changing ritual, sawiri, to change Ligaya's name and hence to change her gasat ("fate"). The sawiri was performed in a nearby river. Delya washed Ligaya's hair with soap while an elderly man, who was to become Ligaya's "godfather," was striking a piece of bamboo with a bolo (a large heavy single edge knife) rhythmically. The name "Alicia," Ligaya's new name, was uttered in unison

²⁴The payward is a section in the hospital for patients who can afford to pay for private or semi-private rooms and hospital services. The charity ward is for indigent patients. Thus, these two sections in the hospital are markers of social status.

by the participants, who included her husband, her parents and parents-in-law, and neighbors. Ligaya, however, was not cooperative. She swore at everybody and said that the ritual was the work of the devil. Among the participants, however, her new name was expected to give her a new life, freeing both her and her relatives from bad luck.

Delya also performed a divination ritual called talado. She dropped nine rice grains into a plate with water, chanted, and then said that the arrangement of the grains indicated that Ligaya encountered some "unseen beings" (saan nga makitkita) when she washed clothes by the river. Delya said that Ligaya accidentally hurt a spirit in the river, which retaliated by causing her persistent sickness. A wari, an offering consisting of three pieces of tobacco, three candles, a box of matches, some betel nuts and betel leaves, lime, and a bottle of gin, was placed at the foot of a tree near the river, to appease the spirit that had caused Ligaya's affliction. Delya also asserted that Ligaya's regular washing in the river exposed her body to hot (pudot) and cold (lamiis) elements, which weakened her naturalesa.

Ligaya became very quarrelsome, lost her appetite, hardly slept, and grew hysterical. To many, Ligaya was exhibiting signs of panagmauyong (loss of sanity), a result of nalugunan (spirit possession). Not only was Ligaya's speech unintelligible but also her conduct was uncontrollable and violent. Her neighbors were getting more and more concerned. Discussions about her difficulties (parikut), such as her strained relationship with her father-in-law, began to surface. Ligaya was greatly upset by the loss of their cow. It was rumored that her father-in-law sold the cow to pay for a long-standing debt to a local landlord (hasyindero). Then, Ligaya's pig was

hacked to death because it went astray. These frustrations, her neighbors believed, were aggravated by the shocking sound of truck tires that burst on their way back to the village from the hospital.

The government-paid midwife, against considerable resistance, took a blood smear from Ligaya and submitted it to the Rural Health Unit in the town proper. It tested negative for malaria. However, the midwife expressed her concern over Ligaya's erratic behavior to the physician at the municipal health office. Perhaps thinking that this was an opportune time to campaign for his nephew, who was running for a municipal office, the physician agreed to see Ligaya personally. After seeing Ligaya, the physician visited some local leaders to ask their support for his nephew. According to the midwife, Ligaya was injected with an "antipsychotic" drug, which not only calmed her but also helped her eat and sleep. Ligaya's husband, however, did not pursue further treatment of this kind and said that his wife was already too weak to bear more injections.

Manolito, another local healer, was summoned by Ligaya's father-in-law. Manolito advised Ligaya's husband and parents-in-law to pray for their dead because they were making their presence felt through the sickness of Ligaya. He said that the dead were asking for their share in the fruits of the labor of their living relatives. They had to perform a pananglagip ("remembering"), involving prayer for nine days (a novena). Manolito said that Jesus and the Virgin Mary were displeased because Ligaya destroyed their images when she converted from Roman Catholicism to the Baptist Church. The family was advised to replace the images so Ligaya would get well. The family did, but Ligaya's health continued to deteriorate.

Concerned neighbors and some barangay officials prodded Ligaya's family to take her back to the hospital. The father-in-law, however, was adamant in saying that they had no money to spend. He believed that the local healers could deal effectively with Ligaya's affliction. He summoned Delya once again. Delya asked for a bible. Perhaps expressing his cynicism, Ligaya's husband threw the bible toward the healer. Then Delya asked for a white chicken, which the family was unable to provide. She then asked for a glass of lukewarm water in which she dipped her metal pin, signifying her membership in the Cruzado, a religious sect that draws on Roman Catholicism. The pin was believed to have healing power. She asked Ligaya to drink the water, which was supposed to have been blessed through her prayers and her act of dipping the pin. Ligaya, however, didn't want to drink the water, refused to face Delya, and called her names such as demonyo (devil).

All these treatments took place within a period of 14 days. On the 15th day, the ambulance from the Rural Health Unit (RHU) came to pick up Ligaya. The message about Ligaya's condition had been relayed through the radio facilities in the military detachment in Magallones to the Rural Health Unit in Cabagan. My research assistant and I rushed to Ligaya's residence. There I saw her lying motionless in the old lounging chair in the middle of the house. Her body was racked by intermittent convulsions while her bony hands, also seized by spasms, were stiffly stretched alongside her rigid body. Her sunken eyes stared blankly at the empty ceiling. The heavy heaving of her emaciated chest was accompanied by a hissing sound as she painfully expelled air from her lungs. She was brought to the ambulance in a stretcher around noon. Around 2 a.m. the next morning, Ligaya's uncle announced

her death and summoned the husband of my research assistant to help transport Ligaya's body from the district hospital. I learned that they had to carry Ligaya's body in a hammock because no commercial vehicle would accommodate such an emergency. To do so would mean inviting misfortune on the vehicle owner. Twenty male Magallones and Compra residents, most of them Ligaya's relatives, took turns carrying the corpse for 15 kilometers. Ligaya's body arrived in the village at the break of dawn. Her father-in-law reported the doctor's diagnosis: Ligaya had died of cerebral malaria, complicated by pneumonia.

A striking feature of the three-day wake was the public display of grief in the dung-aw (dirge). The dung-aw was invariably expressed in terms of the idiom of kakaasi iti gasat mo ("your unfortunate fate"). With deep emotion, relatives and friends spoke to Ligaya's corpse. They praised her for being jolly, industrious, and forgiving, but they also blamed her for not taking good care of her body, for allowing her saket to overpower her naturalesa, and for leaving her three young children behind.

In the cemetery, a minister of the Cruzado sect prayed over the corpse before it was buried. The people then went back to Ligaya's house for the final burial rite, the buggo ("to wash"). All those who had gone to the cemetery had to have their faces and necks washed by three widows to prevent perpetual bodily disturbance such as dizziness and aches.

Ligaya's kararwa (soul) was believed to hover around the places familiar to her before she died and could not go to heaven until the ninth day of her death, when her soul would realize that it no longer had a body to return to. A number of

relatives and neighbors joined the bereaved family in prayers on nine consecutive nights. This process also entailed the offering of sapong, which consisted of locally prepared food and pastries, a Roman Catholic bible, and candlesticks laid on the spot where Ligaya's corpse had lain. To facilitate the communion of Ligaya with other dead relatives, a group of women invoked their names and asked all of them to partake of the food.

Ligaya's story shows how the Ilokans draw on their ethnomedical system to address an affliction such as malarya. As with any affliction, the Ilokans interpreted Ligaya's suffering as originating from personal conduct and bodily attributes. It also shows how the "quest for therapy" and management of suffering involved the mobilization of social networks (cf. Janzen 1978).

Experiencing Malarya

This section further explores malarya in relation to the local ethnomedical system. It is based on my survey work and extended interviews with community members. I have identified cultural themes emerging from these interviews and from the responses to the open-ended questions in the survey. These themes illuminate the villagers' cultural understandings of malarya.

Malarya is a borrowed word that has acquired characteristic meanings in consonance with the local cultural understandings of health, sickness, and healing. One key marker of malarya is the experience of chills or shivering (agpayegpeg). Malarya and agpayegpeg are often viewed as equivalent. For instance, a person experiencing the sickness would talk about his or her state as Agmalmalaryaak ("I am suffering from malarya") or Agpaypayegpegak ("I am suffering from chills"). When

asked if there are different types of malarya, 32 % (n=100) suggested two types, which distinguish not only how the body behaves or what the body feels when afflicted with malarya but also severity and threat to life.

The first type is malarya natural (syn., malarya regular; malarya latta, meaning, "simply malarya"). It is marked by incessant shivering, recurrent fever, and headache. Informants have this to say:

"You shiver uncontrollably, feel cold, then suddenly your temperature rises."

"It is just regular malarya, you just shiver uncontrollably, with fever and a headache as if your head will split."

Informants call the other type of malarya as malarya maligna (probably derived from "malignant malaria," which healthworkers use to characterize cerebral malaria). This type is marked by little or no shivering, one of the key bodily markers of malarya natural. Informants put it this way:

"It begins with 'hair standing on ends' (chills), followed by fever, then headache."

"It is malarya with no chills, just fever and headache."

"You don't sweat, and you have yellowish eyes."

"It is not like malarya regular, it is trapped inside your body."

"It is the more dangerous kind, it can lead to mental derangement, even death."

"It is deceptive (traydor) because, if ignored, it goes to your brain (mapan ta utekmo), leading to mental derangement (namauyong), or even death."

Most respondents consider malarya, especially malarya maligna, a dreaded sickness (85 %, n=100). Table 10 indicates the various reasons people give for dreading malarya, foremost of which is that it can be fatal (72.9%). Some respondents, on the other hand, report that they do not dread malarya (15 %, n=100). Table 11 presents the respondents' reasons for not dreading malarya, the most striking of which is that it is a sickness that happens "naturally" and that it can be "cured."

Table 10. Reasons that malarya is dreaded

	no.	%
It's fatal	62	72.9
It's fatal and leads to mental derangement	19	22.3
It's fatal especially when you're short of money to buy medicines or to pay for hospitalization	5	5.8
It affects your work especially when everybody gets sick	3	3.5

n=85 respondents; percentages total more than 100 because of multiple responses per respondent.

Table 11. Reasons that malarya is not dreaded

	no.	%
We attend to the sick person immediately	10	66.6
It comes naturally as a sickness	3	20.0
It's curable	3	20.0
I'm the only one who gets it in the family	1	6.6

n=15 respondents; percentages total to more than 100 because of multiple responses per respondent.

Table 12 indicates the distribution of malarya across the sample households and shows that the majority of the sample households (89%, n=100) have had at least one case of malarya in the last year.

Table 12. Cases of malarya reported in each household in the last year

	no.	%																					
Households with a least 1 case of <u>malarya</u> in the last year	89	89																					
<table> <tr> <th>No. of cases</th><th>No. of households (n=89)</th><th>%</th></tr> <tr> <td>1</td><td>34</td><td>38</td></tr> <tr> <td>2</td><td>35</td><td>39</td></tr> <tr> <td>3</td><td>15</td><td>18</td></tr> <tr> <td>4</td><td>3</td><td>3</td></tr> <tr> <td>5</td><td>1</td><td>1</td></tr> <tr> <td>9</td><td>1</td><td>1</td></tr> </table>			No. of cases	No. of households (n=89)	%	1	34	38	2	35	39	3	15	18	4	3	3	5	1	1	9	1	1
No. of cases	No. of households (n=89)	%																					
1	34	38																					
2	35	39																					
3	15	18																					
4	3	3																					
5	1	1																					
9	1	1																					
Households with no cases	11	11																					
Total	100	100																					

The Ilokanos attribute the causes of malarya to several factors. Malarya is due to the undermining of a person's naturalesa through overwork, lack of sleep, frequent bathing in the river, or exposure to cold weather. Also, these practices upset the balance of pudot (heat) and lamiis (cold) in the bagi (body) which can lead to malarya. Drinking water from a spring or open well also causes malarya because this water is full of rugit (dirt) or dita (venom) found in itlog ti lamuk (mosquito eggs).

Respondents gave a range of responses to the question asking what caused the case(s) of malarya in their households, as shown in Table 13. The local cultural logic that underlies malarya causation has two complementary aspects. The first is that a person's everyday routine in relation to environmental conditions affects the functioning of the bagi. In this regard, strenuous activities (whether work, leisure, or even sexual activities) "burden" the body, predisposing it to sickness. The cause of malarya is, thus, partly explained in terms of the sudden exposure of the "strained" bagi to hot or cold elements. In short, malarya is believed to be caused by a disturbance of the balance between hot and cold in the body. This logic falls under a broader local term, pasma, meaning, "affliction due to sudden exposure," which parallels that of humoral pathology.²⁵

²⁵Hart (1969) and Jocano (1973) are in agreement that humoral pathology concepts in the Philippines were carried from Latin America (or directly from Spain) after most of the archipelago was conquered by the Spaniards in the sixteenth century.

Table 13. Causes of specific cases of malarya in the household

	no.	%
Tired and got rained on	23	25.8
Overworked	15	16.8
Lack of sleep	11	12.3
Exposure to cold weather	10	11.2
Drank water from spring	9	10.1
Bathed after heavy work	9	10.1
Bathed frequently in the river	8	8.9
Bathed habitually in the afternoon	8	8.9
Bathed after playing too much	3	3.3
Bathed after drinking alcohol	2	2.2
Bathed at the onset of a cold	1	1.1

n=89 respondents; percentages total to more than 100
because of multiple responses per respondent.

Table 14 shows responses to the question why villagers get easily afflicted with malaria, indicating the close link between malaria causation and the routines of everyday life.

Table 14. Reasons that villagers are vulnerable to malaria

	no.	%
Soaked in the rain after heavy work	16	18.1
Overworked	12	13.6
Bathing or washing after heavy work	10	11.3
Weak <u>naturalesa</u> (predisposition to sickness)	9	10.2
Frequent bathing and washing in the river	8	9.0
Drinking water from springs and uncovered dug-wells	8	9.0
Lack of sleep	7	7.9
Exposure to the cold temperature in the mountains	7	7.9
Bathing after too much playing	4	4.5
Bathing after drinking alcohol	4	4.5
Staying up late in the cold nights	4	4.5
Getting bitten by mosquitoes in the mountains	4	4.5
Bathing even without enough sleep	3	3.4

n=88 respondents; percentages total to more than 100 because of multiple responses per respondent.

Consistently, informants tell me that they cannot escape malarya, that all residents are predisposed to malarya. Farm work is heavy work, people say. Heavy farm work coincides with the onset of the rainy season, hence, they cannot avoid getting soaked. Harvest season is demanding, so getting overworked is the order of the day. Some men are engaged in logging or firewood gathering; hence, they are exposed to lamok ti bantay ("mosquitoes in the mountain") whose bites are "venomous." There, they drink spring water, making themselves vulnerable to malarya. Women wash clothes, utensils, and other household items in the river, then they take a bath, so their bodies absorb too much lamiis ("cold"). Also, children habitually swim and play in the river while they tend their carabaos (water buffalos). Still, some informants maintain that there are those who are born with weak naturalesa and, hence, are simply predisposed to saket, including malarya. Additionally, they contend that bathing a weak body (e.g., due to not having enough sleep) simply leads to saket, especially malarya.

Another aspect of the local logic is that malarya is caused by the intrusion of substances, such as rugit (dirt), dita (venom), and mikrobio (germs), into the bagi. These two properties of the local logic, moreover, implicate the body's naturalesa, with which individuals are differently endowed. Naturalesa, thus, as part of the local logic about sickness causation, renders intelligible the dynamics of human activities or "bodies in action" with environmental elements such as angin (air) and danum (water).

Table 15 indicates the explanations given by respondents who claim non-affliction of malarya in their household for the past year. Noteworthy, however, is

the invocation of the role of merciful Apo Dios ("God"), routinely acknowledged for any blessing--good health, bountiful harvest, peace, and so forth--a person, a family, or the whole community experiences. The rest of the explanations follow the local logic about malarya causation previously described.

Table 15. Reasons that nobody in the household has had malarya

	no.	%
With the mercy of <u>Apo Dios</u>	5	45.4
Use of mosquito nets	3	27.2
Maybe we have strong <u>naturalesa</u>	3	27.2
Husband seldom goes to the mountains	2	18.1
Perhaps no " <u>malarya</u> -giving" mosquito has bitten us	2	18.1
We observe cleanliness	1	9.0

n=11 respondents; percentages total to more than 100 because of multiple responses per respondent.

Local understandings about the spread of malarya by mosquitoes is based on the logic that mosquito bites contain sickness-causing "poisonous substances" such as rugit ("dirt"), mikrobyo ("germs"), and dita ("venom"). Mosquitoes ingest these substances for they thrive in toilets, garbage pits, and other nabangsit nga lugar ("odorous places"). Mosquito bites transmit these substances. It should be noted, however, that the spread of malarya is attributed not only to mosquitoes but also to other insects such as flies and cockroaches. Like the mosquitoes, these insects also spread rugit, mikrobyo, and dita. In addition, villagers classify mosquitoes into two

types, namely, bassit nga lamuk (small mosquitoes) and lamuk ti nuang (carabao mosquitoes). Also, they assert that it is the lamuk ti nuang that spread malarya while the bassit nga lamuk are considered as a mere nuisance especially at bedtime.

Table 16 shows the explanations given as to how malarya is transmitted. The responses point to a logic of pollution and contagion brought about by the intrusion into the bagi of the contaminating elements mentioned earlier.

Table 16. How malarya is transmitted

	no.	%
Bitten by a mosquito that came from a person with <u>malarya</u>	17	48.5
Inhaled the sick person's "hot" breath	8	22.8
Ate a sick person's leftover food	8	22.8
Shared a glass, plate, or spoon with a sick person	5	14.2

n=35 respondents; percentages total to more than 100 because of multiple responses per respondent.

I have indicated previously that from the villagers' point of view malarya has assumed a character of "naturalness" in that residents contend that they are all predisposed to the sickness and continue to live with it. As one informant put it: "When you get sick, you just get sick. When it comes, it just comes." It is perhaps due to this prevailing predisposition that most respondents dismiss the idea that malarya can be avoided or prevented (83 %, n=100).

Table 17 presents the various preventive strategies that were given by the remaining 17% (n=100). The perceived measures follow the logic of countering forces or avoiding activities that lead to malarya.

The "naturalness" of malarya (i.e., it is an inescapable sickness) relates to the villagers' sense of time. The pervasiveness of malarya in their locale is apparent in the concept of tyempo ti malarya ("time of malarya"). This time coincides with tyempo ti tudo ken lamiis, ("time of rain and cold"). Respondents said that it is during this time of rain and cold that malarya is rampant (77%, n=100; see Table 18).

Table 17. Measures to prevent malarya

	no.	%
Taking care of one's self by using mosquito net	6	35.2
Not using sick person's belongings	3	17.6
Not abusing your body by working so early, exposing yourself to the sun, and taking a bath afterwards	3	17.6
Not going near a sick person	3	17.6
Keeping surroundings clean	2	11.7
Total	17	99.7

n=17 respondents

Table 18. Characteristics of tyempo ti malarya

	no.	%
Cold season	21	27.2
Changeable hot and cold weather: it's rainy, it's chilly then the sun shines, the body cannot cope; it's sunny then it rains; cool in the morning and hot in the afternoon.	17	22.0
Cold and rainy	15	19.4
Get rained on in the farm	8	10.3
Cold weather, mosquitoes are plenty	6	7.7
Rainy months that induce the increase in the mosquito population	4	5.1
Lots of stagnant water in the surroundings	2	2.5
Rainy days and season of corn (planting or harvesting)	1	1.2
Time when mosquitoes lay eggs	1	1.2
Mosquitoes thrive on dirty surroundings, then bite you at night	1	1.2
Season when people come from the mountains	1	1.2
Total	77	100.2

n=77 respondents

The Ilokanos employ various strategies to ameliorate malarya (see Abaya 1987:63-80). Self-medication is a common practice, which includes the use of over-the-counter medicines, available at the local sari-sari stores and pharmacies in the towns of Cabagan and Tumauni. People also use erba (medicinal plants) for self-medication. Often, the villagers use both the services of local healers (mangagas) and medical doctors to ameliorate malarya because the bodily and behavioral manifestations of malarya overlap with sicknesses caused by unseen beings. This brings to mind the case of Ligaya, whose sickness involved multiple therapies. The interpenetrating treatment strategies employed by the Ilokanos in Masipi reflect a deep sense of pragmatism, involving the creative use of available therapeutic options. Thus, the introduction of biomedicine did not displace the local ethnomedical system but rather increased the therapeutic options available to the villagers (Abaya 1987:88).

Table 19 shows the responses given to the question asking what treatment actions were undertaken to alleviate malarya. Respondents view these strategies as not mutually exclusive but rather as complementing each other.

Table 19. Therapies for malarya

	no.	%
Self-medication		
Over-the-counter drugs	83	83
Herbal medicines	32	32
Service of traditional healers	43	43
Service of physicians	80	80

n=100 respondents; percentages total to more than 100 because of multiple responses per respondent.

Shown in Tables 20 and 21 are the various materia medica that respondents mentioned when asked what medicines do they use to treat malarya. The people combine available plant medicines with biomedical drugs, some of which are prescription drugs commonly sold over the counter.

Table 20. Biomedical drugs

	no.	%
<u>Antimalarial:</u>		
Aralin (Aralen)	42	50.6
Mitakilfin (Metakelfin)	31	37.3
Fansidar (Fansidar)	17	20.4
Klurukwin (Chloroquine)	11	13.2
Halupantrin (Halofantrin)	4	4.8
Atabrin (Atabrin)	1	1.2
<u>Anti-inflammatory:</u>		
Alaksan (Alaxan)	10	12.0
<u>Antipyretic/Analgesic:</u>		
Bayugisik (Biogesic)	12	14.4
Parasitamol (Paracetamol)	7	8.4
Midikol (Medicol)	5	6.0
Kurtal (Cortal)	1	1.2
Aspilits (Aspilets)	1	1.2
<u>Antibiotic:</u>		
Eritromaysin (Erythromycin)	1	1.2
Amusisilin (Amoxicillyn)	1	1.2
Ambrasin (Ambracin)	1	1.2
<u>Decongestant:</u>		
Niyosip (Neozep)	5	6.0

n=83 respondents; percentages total to more than 100 because of multiple responses per respondent.

Table 21. Plant medicines

	no.	%
Dangla (<u>Vitex lagundi</u> L.)	32	100.0
Andarayan (<u>Alstonia scholaria</u> L.)	6	18.7
Kabatiti (<u>Cucurbita maxima</u> L.)	5	15.6
Salamagi (<u>Tamarindus indica</u> L.)	5	15.6
Dalipaweng (<u>Alstonia scholaria</u> L.)	3	9.3
Kaymito (<u>Chrysophyllum cainito</u> L.)	3	9.3
Pengga (<u>Anisomeles indica</u> L.)	2	6.2
Subusub (<u>Blumea balsamifera</u> L.)	2	6.2
Tarong (<u>Solanum melongena</u> L.)	2	6.2
Taltalikug (<u>Phyllanthus niruri</u> L.)	1	3.1
Mangga (<u>Mangifera indica</u> L.)	1	3.1
Yukaliptus (<u>Eucalyptus robusta</u> Sm.)	1	3.1
Abokado (<u>Persea americana</u> Mill.)	1	3.1

n=32 respondents; percentages total to more than 100 because of multiple responses per respondent.

Villagers seek assistance from local healers, especially for a sickness that lingers despite attempts to ameliorate it through home remedies and commercial drugs and medical attention from private and government health professionals in municipal and provincial centers. A lingering sickness is a sign of sickness caused by "unseen" beings (e.g., environmental spirits, spirits of dead relatives) or by gamud (witchcraft). The bodily disturbances associated with malarya are recurrent and therefore signal the need to seek the help of local mangagas. There are at least five mangagas in Masipi.

The mangagas routinely employ divination called talado and massage, using poli, a decoction of different herbs mixed with "blessed" coconut oil. According to the three healers I interviewed, they procure their poli from healers in the town proper. The healers in the town proper get their supply of poli from traditional healers in San Fabian, a town in Pangasinan province in central Luzon. San Fabian is well-known for its traditional healers (including those who employ "psychic surgery").

Talado is a process of divination that involves the "interpretation" of the configuration of the rice grains spread on a dish covered with water, the position of an egg dipped in a glass of water, the configuration of candle drippings on fingernails and toenails, and dreams. Given the lingering nature of malarya, seeking the help of the mangagas is a practical strategy. Invariably, all 40 out of 43 respondents who sought help from mangagas for malarya said that they underwent talado, based on being told that their ill health was due to their encounter with al-alya (spirits) while at work and at play. The other three respondents were told that the sickness signalled the need to remember dead relatives. To appease these spirits, healers advise the

family of the sick person to make an offering (wari) to these spirits. The wari is composed of cooked glutinous rice, dishes, betel nuts, betel leaves, candles, cigarettes or tobacco, and alcohol. The wari is left in a spot where the encounter took place or on an altar inside the sick person's house.

Residents frequently express their appreciation for the kaasi ken anus ("compassion") of the mangagas, who do not expect "payment" for their help, instead they receive regalos ("gifts") such as rice, corn, and money, which, according to the healers, is used to purchase poli, candles, and other items used in the healing process.

Concluding Remarks

In arguing for the notion that malarya is rooted in culturally constructed practices with respect to health, sickness, and healing, I wanted to call attention to the limitations of the physical reductionism associated with the biomedical paradigm. As demonstrated in this chapter, the Ilokanos construe and act upon malarya in terms of their own ethnomedical schema. This schema grounds malarya in local understandings about the workings of the body in relation to heat and cold pathology, the notion of naturalesa ("inherent vitality of the body"), an individual's kinatao ("conduct"), and the moral obligations of the living to the spirit world. At the same time, this schema is a dynamic one in that villagers appropriate biomedical ideas and practices, resulting in the widening of treatment options available to them.

Chapter Five

ENCOUNTERS OF CULTURAL SCHEMAS

This chapter characterizes the encounters of cultural schemas orienting the struggles against malaria in Masipi. These encounters are manifested in the interactions between the local people and the implementors of the antimalarial program. The purpose of this chapter is to show the workings of domination, conformity, and resistance in the confrontations between two modes of understanding malaria and its control--that of the Ilokanos of Masipi and that of the state health functionaries involved in the antimalarial program.

The first part of the chapter provides a description and interpretation of an encounter involving the implementation of a new antimalarial strategy, referred to as "bed-net impregnation with insecticides." Several steps in the antimalarial program such as the spraying of houses with pesticides, finding cases and treating them, and community participation are mentioned in this encounter. The encounter is crucial to understanding the dynamics of cultural politics of malaria control because it represents a face-to-face confrontation between the Ilokanos and the program implementators--that is, a "public transcript" (after Scott 1990), an open interaction between subordinates and those who dominate. Attention is, thus, given to negotiations over definitions of reality actualized in the dissemination of official understandings of

malaria control (e.g., "mosquito as culprit," "malaria and economic progress," "malaria as a dreadful disease," "K-Othrine is safe") and their reception in a specific public assembly organized by the barangay officials in compliance with an order from the Provincial Health Office's Malaria Unit. The discussion shows the ways in which power differentials among the participants, the knowledge forms being disseminated, and the setting of the interactions condition the interplay of domination, submission, and resistance.

The second part of the chapter explores the "offstage" discourses and practices of the Ilokanos that confirm, contradict, or inflect what appears in direct encounters with the program implementors. Muted in face-to-face encounters with the powerful, these discourses and practices indicate, to a large extent, local ambivalence and resistance towards the antimalarial program.

Antimalarial Program-Community Dynamics

The observation that the antimalarial program has penetrated the consciousness of the Ilokanos cannot be overemphasized. The Ilokanos in Masipi are quick to identify malaria control as a longstanding government service in their area. They refer to it as malarya kontrol, and its workers as tagamalarya kontrol ("from the malarya kontrol"). They associate the program with panagispray kadagiti babbalay ("spraying of the dwellings"), panagala iti bladismir ("collection of blood smear"), and panagited iti libre nga agas para iti malarya ("giving free medicines for malaria").

The "bed net treatment" is another strategy launched recently by the Malaria Control Service. The inclusion of this in the overall schema of malaria control is in accordance with the global malaria control strategy of "individual protection

measures," formulated in the Ministerial Conference organized by WHO in Amsterdam in October 1992. This strategy involves the "impregnation" (i.e., "soaking") of bed nets with insecticides.

I learned from an official at the provincial malaria control service that this strategy has been introduced in various endemic areas in municipalities of the province of Isabela, one of which is Cabagan. She informed me that Masipi is one of the endemic malarial areas targeted to receive this intervention. She said that she had instructed the sector chief for the district of Cabagan (which includes the municipalities of Cabagan, Sta. Maria, and San Pablo) to do the initial step called "social preparation." This step meant informing the barangay officials about the intervention so that they could ensure participation by the people of the barangay. These officials, being the local representatives of the state and who are themselves members of the "local elite," are expected to facilitate the implementation of state programs, projects, and activities. Through them, state interests are articulated.

In Masipi, with services and other benefits from the state also comes state influence. This influence is exerted through the public elementary schools, the barangay health stations, and military detachments. In the area of health services, it is the midwife who is directly involved with the villagers as she is the government's community-based primary health care worker. She is in charge of the barangay health station.

Disseminating Official Knowledge: Voices from Above

The ongoing antimalarial program has sponsored various interventions in villages over the years entailing presentations by its personnel. In this case, a new

strategy was being launched involving the application of pesticides to bed nets. In many ways, the sociocultural configuration of this event is typical of health campaigns that I observed in various settings over the last five years.

One Friday morning in March 1993, a team of seven malaria control personnel arrived in Guingab from the Provincial Health Office in Ilagan, Isabela. The team included the provincial malaria coordinator (hereafter, the coordinator), the administrative officer, a microscopist, a sanitary engineer, the sector chief for the district of Cauayan, the sector chief for the district of Cabagan, and a driver. They arrived in Guingab in a vehicle; both sides of the vehicle had bold letters saying, Philippine Health Development Program. This specific program is funded by loans from the World Bank and the antimalarial program receives part of its support from this program.

To the great dismay of the team, especially the coordinator, there was nobody in Guingab but the barangay councilor and his wife. The team had expected a sizeable number of villagers to participate. They were informed by the barangay councilor, however, that he had encountered difficulties in convincing villagers to participate in this activity and had not succeeded because the villagers heard about a child who had died after having been vaccinated by the local midwife. He felt that their refusal to participate was due to that alleged incident. The villagers' refusal to participate marks their ambivalence and distrust towards government programs. This also amounted to the councilor losing face, which he had to accept, realizing the tenacity of people's concerns. As a barangay official, the councilor straddles two worlds--that of his people and that of the government. He faces a double bind

whenever the interests of the people and the government conflict.

The coordinator straightforwardly blamed the sector chief in charge of the Cabagan district, saying, "This is poor social preparation. We came all the way from Ilagan to help deal with the problem of malaria, yet it seems that the people here are not interested at all." The sector chief was very apologetic and suggested that the team could possibly proceed to Magallones, where in his view the people are "more accommodating." The coordinator acceded and asked the barangay councilor if it would be possible for him to try once again to summon the villagers to come with their mosquito nets later in the afternoon, so that the team, on the way back to the provincial headquarters, could undertake the bed net treatment. The barangay councilor agreed and, in an apologetic tone, said, "Wen, doktora" ("Yes, doctor"). I note here the referential term, doktora, as an expression of deference to the coordinator, whose position of authority is enhanced by the fact that she is a medical doctor, a profession of high status and prestige in the area. Also, that deferential treatment is reinforced as her subordinates publicly address her as doktora. In directly reprimanding the sector chief in the presence of the barangay councilor, the coordinator was not only able to assert their hierarchical relations, she also was able to convey to the barangay councilor her disappointment over the latter's failure to summon villagers to participate in the activity. In so doing, she compelled the barangay councilor to try to make sure that when the team returned villagers would be there. In deference to the coordinator, the councilor had to comply.

Arriving in Magallones, the team proceeded to the house of the kapitan, the head of the barangay. Again, the coordinator showed a bit of irritation because she

was told that the kapitan had left that early morning. She expressed a sigh of relief, however, when she was approached by Mrs. Reyes, known in the village as konselaha (female councilor). Konsehala, having garnered the most votes in the local election of barangay councilors, often takes over the role of the kapitan in receiving visitors from government agencies when he is not available. Konsehala welcomed the team but said that she had been told that the team was arriving after lunch; thus the villagers were not expected to assemble in the barangay hall until the early afternoon. The coordinator apologized, said that the people in Guingab "were not ready," so the team decided to proceed to Magallones.

As a gesture of hospitality, accorded routinely in deference to visiting government officials, the konsehala, with assistance from the kapitan's wife and the local midwife, served some snacks (Coca-Cola and cookies) bought at a nearby sari-sari store and then lunch. This act of deference serves to reinforce the superordinate-subordinate relationship acted out in this particular event. By virtue of her professional status as a medical doctor and her government position as a malaria control coordinator, the doktora is able to assert her authority and power over her subordinates, the barangay officials, and the barangay residents.

Meanwhile, the sanitary engineer, the two sector chiefs, and the driver prepared the barangay hall. They installed lines to hang up and dry the bed nets; set up the microscope, bottles of antimalarials, and other paraphernalia on a table; and placed the bottles of insecticides, basins, and pails in one corner of the hall. I note here that the barangay hall is a social space in which, frequently, official social encounters such as this campaign take place. The holding of this campaign in this

social space provides further legitimacy to the dominant position of the state's program actors over the local population. This asymmetrical relationship is further reinforced by the fact that the program actors drew upon the local power resource, namely, the barangay officials, who, as I indicated earlier, are themselves members of the local elite (the baknang).

After lunch, I talked with the team about the responses of other communities to this particular control strategy. They expressed their disappointment over the minimal participation. The coordinator pointed to two major reasons: the first being "wrong timing," that is, that the villagers were busy with farm work, and second, that the people were fearful of the effects of the insecticide on their well-being, especially that of their children. This suggests that the coordinator is aware of the reasons that people refuse to participate in the program. And, it is this reality of people's refusal to participate with which the program has to contend.

At this point, the coordinator expressed her concern over the inadequacy of the health education component of the program, to which she partly attributed the lack of participation. In her own words, "We have to educate the people about the program, especially its advantages, so that the people will change their attitude." At the same time, she pointed out the shortfalls of the health system and said, "The problem is that there is lack of coordination between the Rural Health Unit and the Provincial Malaria Control Unit. Often, the local midwife is not even present when we visit the barangay, so I am glad that Lorna [the midwife assigned in Masipi] is here to assist us." These views of the coordinator reflect the politics of coordination within the health care service itself. In a certain sense, the coordinator openly recognizes that

part of the problem in drawing participation rests on the manner in which health workers interact among themselves.

Moreover, these criticisms expressed by the coordinator suggest that the state health workers themselves do not necessarily maintain an uncritical attitude towards the antimalarial program. But this critical attitude seems to be directed mainly towards program implementation. In other words, the antimalarial program workers seem to be in agreement as to the goals and orientation of the program,²⁴ which they have to disseminate.

As another example of assertion of authority, the coordinator confronted Lorna, the midwife, about the claim of the councilor in Guingab that the villagers refused bed net treatment because of fear as a result of a child's death after vaccination. The midwife was stunned, expressed ignorance of the incident, and said that she would look into it by talking to the barangay councilor. The coordinator then expressed her appreciation of the midwife's assistance in the campaign and asked her if there would be a good turnout of people with their mosquito nets. With hesitancy, the midwife told the coordinator that she hoped that many people would attend, despite "the short notice that they had gotten from the sector chief." Here, Lorna alluded to the need for a sufficient amount of time to mobilize the people. In saying that they had to mobilize people on "short notice," she indirectly criticized the team's sense of coordination. As a subordinate, she was able to express subtly her resentment against being ordered to recruit participants instantly.

²⁴A caveat is in order. I am not suggesting that the workers, given their ethnic backgrounds, do not hold ideas about, say, the etiology and treatment of malaria that may be contrary to the prevailing biomedical explanations.

The villagers began to assemble in the barangay hall around two o'clock in the afternoon. A number of women and some children were waiting near the hall when the team arrived. For each mosquito net, the microscopist recorded the name of the owner, the size of the net (single or double), and the material of which the net is made (nylon or cotton). The driver put tags on each of the mosquito nets, indicating the number assigned to the owner. The two sector chiefs and the sanitary engineer prepared the solution and vessels in which to soak the bed nets. The barangay midwife assisted the microscopist in collecting blood smears, which were examined, right then and there, by the latter. The sector chief for Cabagan assisted in collecting blood smears later on. The coordinator and the administrative officer took charge of "educating" the villagers about the campaign. It appears that the team was guided by a clear division of labor, which itself indicates their hierarchical relationship, that is, aspects requiring technical knowledge were taken care of by the coordinator and the administrative officer while the actual soaking of bed nets was carried out by the driver, sector chiefs, and the sanitary engineer. More importantly, the team projected the image of an organized group of government health workers, whose agenda was that of delivering a health program to ensure the well-being of the community. They represented, in short, the helping profession or the so-called civil servants supported by the state. In the context of state-community relations, thus, the concept of "helping" turns into a political statement that ultimately bolsters the image of a benevolent state.

There were about 20 adult villagers and 10 children in the barangay hall when the coordinator and the administrative officer embarked on their task of informing the

public about their agenda. The rest of the team members were carrying out their routine tasks. While the campaign was taking place, other villagers, some of whom were from Comprá, entered the hall. The coordinator and the administrative officer stood in the center of the hall facing the villagers seated on the bleachers.

For a while, some children were playing in the basketball court adjacent to the hall as the campaign was taking place. The game was put to a halt by the barangay treasurer, who said that their game was interfering with the ongoing meeting and scolded them, "Awan babain dagitoy nga ububbing" ("These kids are shameless"). This gesture of the barangay treasurer signals his authority but, at the same time, declares publicly the value given to deference and demeanor by the villagers, especially in the face of outsiders (in this case, the "visitors" from the Provincial Health Office). In doing so, the barangay treasurer not only was able to assert his position of power in the village, but he also was able to extend his deference to the government health workers, particularly the coordinator.

An examination of the discourse among the program actors and the villagers provides a clear picture of the dynamics involved.²⁵ What follows is a complete

²⁵The following symbols were used in the transcription:

C for the coordinator

AO for the administrative officer

M for the microscopist

BT for barangay treasurer

K for the konsehala

AU for the audience

MW for the midwife

SC for malaria sector chief

Ellipsis (...) for pauses

Bracket (I) between lines for overlaps or interruptions

Italics for the English words and medical terms

Capital letters for a marked increase in loudness or emphasis

Underlining for Ilokano terms

transcript of a malaria campaign undertaken in the study area. The subheadings reflect the key cultural themes marking the encounter.

Local Participation Needed

The coordinator took control of the meeting and expressed her expectation of greater community attendance in this campaign. As I noted earlier, the barangay officials are expected to mobilize their constituents to attend government campaigns; thus, the coordinator publicly expressed that expectation to the konsehala.

- C: How is everybody? Where are the rest?
 K: Doktora, the people from Comprá are probably on their way here now.
 C: How about those who reside here?
 K: They are coming doktora.
 C: Get them to come. Is there a problem?
 K: Some people are asking me, doktora, if you will be giving away moskitero (bed nets).
 C: My God, we are not giving away bed nets. (She laughs.)
 K: Some don't want to come because they say that it is shameful to show their dirty moskitero, their moskitero with lots of holes, they say it is shameful. (She laughs.)
 C: We don't mind if the nets are dirty, we are supposed to soak them in insecticide.

The coordinator spoke Tagalog throughout the campaign. She did not know Ilokano, the local language. Very few people in Masipi understand Tagalog. Another feature in the campaign is the frequent use of English words and highly technical medical language which is also incomprehensible to nearly everyone. Not using the local language hinders the communication process.

The coordinator demanded greater participation ("Where are the rest?") through expressing concern over the villagers' life situation ("How is everybody?"),

Parentheses to enclose translations of local terms, clarifications of certain points in the discussion, and nonverbal forms of communication such as laughter and murmuring

an orthodox strategy of persuasion. Her demand, of course, rested on her authority, which in turn rests on her status as a government representative and a medical doctor. That demand was, of course, reinforced by the konsehala's assurance that more villagers were expected to attend ("They are coming, doktora"). The konsehala attempted to explain the lack of participation by pointing out the shame involved in "making public" dirty bed nets, and the expectation of free distribution of bed nets. Yet, the coordinator ignored those concerns as she dismissed them outright ("My God, we are not giving away bed nets"; "We don't mind if the bed nets are dirty"). Instead, she asserted their primary aim ("We are here to soak them in insecticide"). Thus, at the outset of the encounter, the coordinator was able not only to assert her dominance, which was reinforced by the konsehala's submissive stance ("They are coming, doktora"), but also to establish the submission of those present.

Malaria Control and Economic Progress

At this point, the coordinator glanced at the administrative officer, who immediately handed to her a bunch of brochures, containing information about the program and its activities. The brochure was written in Tagalog and had pictures depicting activities in the control of malaria. The coordinator and the administrative officer distributed the brochures to the villagers. Some members of the audience showed a degree of enthusiasm by opening the brochure and reading aloud some portions in the text. Others, however, browsed through it, folded it, and put it aside-- a gesture indicating a sense of disinterest, inability to understand Tagalog, or illiteracy.

C: We are here to tell you something about our malaria program. We

have some brochures here ... Could you help me distribute? ... *OK*, let's begin. (Reading the brochure) Malaria is a kind of disease caused by microbes transmitted by mosquitoes. How does malaria deter economic progress? Many of those victimized by malaria are those within the age range when they are most productive and needed by the nation ... Do you have any questions regarding this statement?

AU: (silence)

C: Don't you ask yourselves why many of those victimized are of the age when they are most productive? Don't you ask why the children and the elderly are not affected? Why are the active people the ones afflicted with malaria? Isn't this an important question? ...

AU: (murmurs)

C: Ahh, so you are now starting to think. Why do you think this is the case? Whatever is in your mind answer me. Why do you think this is so? Because they are the ones ... I hear some murmurs ... You just don't want to share, so people like you, your age, are the ones afflicted by malaria ...

The use of the brochure lent formality to the encounter. More than that, the brochure not only signalled the authoritative knowledge, on which the information being disseminated hinged, but it also enhanced the position of authority the coordinator had already assumed. In her attempt to connect with the audience, she took an interrogatory tone ("Could you help me distribute?"; "Isn't this an important question?"; "So you are now starting to think"). Obviously, she recognized the silence of the audience.

Her exhortation that malaria impairs people "needed by the nation" resonates with the idiom that "malaria blocks development," the state's principal justification for the institutionalization of this disease control program. Thus, since the people of Masipi are affected by malaria, it is incumbent upon them to take malaria control seriously. It appears, however, that this gesture is only remotely understood by the local population and is predicated on the assumption that local concerns are compatible with the national concerns. In my view, the silence of the audience to the

coordinator's urging for a response ("Do you have any questions regarding this statement?") suggests that there is a gulf between local and national concerns.

Contracting Malaria and Everyday Routines

Having introduced the idea that malaria is transmitted by mosquitoes, the coordinator called attention to how day-to-day activities put people at risk:

C: ... because most of you are the ones working; you do the laundry, you move from place to place. You move from place to place. You go to the river to wash clothes. Your spouses to go to the field to work-- work in the field, plow, plant corn. Then, your children, the teenagers, whom you ask for help, they are also affected, because they move from place to place. Now, the question that you can ask me is why is it that in our place there are no cases of malaria. But when your kids went to other places, they were afflicted with malaria upon return. That is the main reason why your age group is the one afflicted by the disease because you move from place to place. For example, Mrs. Reyes went to Compra. Somebody there ... upon her return ... if she was bitten by a mosquito with malaria, upon her return malaria has been observed. Do you understand?

AU: (silence)

C: OK. So this is what happened to cause people to get sick in the baryo (village). So it is possible to be a cynic (pilosopo)--Why do you come here? Or, why do you come here when malaria doesn't exist in our place?--There are people like this.

By linking malaria transmission with daily activities, and by specifically citing the konsehala's routines, the coordinator tried to impart a sense of urgency for the people to take the problem seriously. In order to obtain approval to her stance, she asked the question, "Do you understand?"--a strategy commonly employed in pedagogical encounters. The coordinator took an aggressive stance by outrightly labeling people who would question her ideas as "pilosopo or cynic."

It should be noted that all of Masipi is endemic with malaria. To suggest that the people in Magallones get their malaria from Compra is thus a mistaken notion.

Considering that the flight range of the mosquito vector is two kilometers (Cabrera and Arambulo 1977) and that the distance between Compra and Magallones is less than a kilometer, the coordinator committed a considerable error in saying that malaria is not endemic in Magallones. This mistake may well be due to the fact that the members of the team, except the sector chiefs, were visiting the area for the first time.

Surveillance and Submission

To continue, the coordinator took up the topic of blood examination:

C: Because you go to places that we call *endemic*. This word means these are the places where many cases are found. There are many malaria cases because through *blood examination*, *blood smear examination*, this is what Mr. Ocampo (the microscopist) will do, if you submit yourselves to blood smear, you will view this with the *microscope*. It will show whether it is *positive* or *negative*. Positive means when microbes are present. We don't have to talk about those *kinds* of microbes because it is difficult to talk about these matters in only one day. The important point is to know what *positive* means ... what *negative* means, because later on we will discuss the things that are related to the *examination*, and the *connection* of the *examination* with the *microscope* in our effort to avoid malaria.

AU: (silence)

The use of a specialist's language ("kinds of microbes"; "endemic") and medical technology (microscope) further bolstered the image of the coordinator as a bearer of authoritative knowledge. By making the linkages among malaria, microbes, and blood, the coordinator rationalized, if not strengthened, the on-the-spot surveillance ("*blood smear examination*, this is what Mr. Ocampo will do, if you submit yourselves to blood smear").

Dispelling "Local Misconceptions"

The coordinator, at this point, challenged local understandings of malaria:

- C: What are the misconceptions regarding malaria? Malaria is not caused by drinking dirty water. I say this time and again wherever we go, that you cannot get malaria from dirty water, because many people still believe that malaria is due to drinking dirty water. I don't say that you won't get sick from drinking dirty water. Yes, you can get sick from drinking dirty water. For example, you drink the water in your well, but it's very dirty, there are fallen dried leaves, there are *worms*, these *worms* multiply. There are microbes there. But if you drink water from there you don't get sick from malaria; rather you will get stomach problems. Here we have dysentery, cholera, typhoid, that which we call *gastroenteritis*. So, you still get sick but it is not malaria.

AU: (silence)

Here the bone of contention is the local conception of malaria causation ("drinking dirty water"). In contesting local knowledge about malaria and its modes of transmission, ("Malaria is not caused by drinking dirty water. I say this time and again wherever we go, that you cannot get malaria from dirty water") the coordinator dismisses local knowledge as "misconceptions" and tries to advance scientific knowledge ("But if you drink water from there you don't get sick from malaria; rather you will get ... *gastroenteritis*. So, you still get sick but it is not malaria"). However, as discussed in Chapter Four, the local conception of malaria causation is embedded in the logic of pollution and contagion and humoral pathology. Despite the coordinator's public denigration of deeply entrenched local conceptions, the audience remains silent. I interpret this silence, which punctuates the course of the encounter, as signaling the audience's tacit awareness that they are to submit or appear to submit in the face of authority. As I have noted earlier, the very arena of interaction (the barangay hall) and the lecture method of communication, typical of a classroom

setting, encourage the audience's subordinate posture.

Mosquitoes as Culprit

The coordinator called attention to the connection between mosquito and malaria:

C: So WHAT YOU SHOULD STICK INTO YOUR BRAINS IS THAT MALARIA REALLY COMES FROM MOSQUITOES. *So* if it comes from the mosquitoes, *so* what we should attack is the mosquito. There are three things--the mosquito, the individual bitten by the mosquito, and the place where the individual lives; if one of these is eliminated, malaria will disappear. If the mosquito disappears, malaria will disappear. If you all disappear, then malaria, in turn, will disappear. If there are no breeding places, the breeding places, malaria will disappear. *So* these three are MAGKASABWAT ("in connivance"). The mosquito, the individual, and the place you live in. *So* these three, it is sufficient for you to understand what to do to the individual, to the mosquito, and what to do to the places where mosquitoes are found, or to the breeding places. *So?* Do you understand the *point*? DO YOU HAVE ANY QUESTIONS?

AU: (silence)

C: If you do have, if the doctor is not clear, ask me, even in Ilokano, Ibanag, or whatever, many here could speak Ilokano fluently.

AU: (silence)

The coordinator drew on epidemiology as she underscored the interaction of the human host, the mosquito, and the parasite in the occurrence of malaria. Her dominative stance was clearly exhibited in her insistence that malaria comes from mosquitoes ("WHAT YOU SHOULD STICK INTO YOUR BRAINS IS THAT MALARIA REALLY COMES FROM MOSQUITOES"). Obviously, she wanted the audience to internalize this logic in dealing with malaria ("*So* if it comes from the mosquitoes, *so* what we should attack is the mosquito"). What is ignored here, however, is the embeddedness of malaria in the local conceptions of the interaction of bodily processes, everyday routines, and other elements, including the spirit world, as

elucidated in Chapter Four. Perhaps the coordinator realizes that her use of Tagalog is causing, in part, the silence of the audience. Thus, she invokes the ability of some members of the team to translate into the local parlance what she is trying to convey ("If you do have, if the doctor is not clear, ask me, even in Ilokano, Ibanag, or whatever, many here could speak Ilokano fluently"). And, again, the coordinator employs the pedagogical strategy that exudes an air of condescension ("So? Do you understand the *point*? DO YOU HAVE ANY QUESTIONS?").

Which Mosquito?

At this point, the coordinator focused attention on the types of mosquitoes:

- BT: There are many types of mosquitoes, one of which has a big mouth. When it bites, it is very itchy.
- C: *Treasurer* is right. *Actually*, the mosquito, IN TRUTH, the mosquito that malaria comes from is one of 4,300, 4,200 to be exact. I am not familiar with those 4,000. The whole afternoon will be wasted if I have to enumerate all of them. What is important is that the mosquito that transmits malaria is called *Anopheles flavirostris*. The mosquito that the *Treasurer* was talking about whose bites are painful and itchy, you can really feel the itch to the bone. This mosquito is *culex*. It comes from dirty water. Those that come from canals, those coming from, what do you call them, for example those that come from the artesian well, or from toilets, the water overflowed, these mosquitoes are called *culex*. I am not saying that this mosquito will not cause any illness. It can also bring illness, if you are bitten frequently. It brings *Japanese encephalitis*, but most of the time, Filipinos are not affected, through God's mercy ... However, it is not this mosquito that carries malaria. Later on, we will talk about what time the malaria mosquito bites us.

To the delight of the coordinator, she was able to catch the attention of the treasurer. Her response was patronizing ("*Treasurer* is right!"). Villagers defer to the treasurer because they regard him as one of the lakkalay (village elders); thus, the treasurer's statement ("There are many types of mosquitoes") broke the silence and

his response has provided greater impetus for the coordinator to move on with her project of disseminating scientific knowledge to a rather passive audience.

Plasmodia-Mosquito Connection

At this point, the coordinator dwelled on how malaria is acquired:

C: So now. How do you get sick with malaria? You get sick with malaria if you are bitten by a type of mosquito that carries microbes. In science, this is called *plasmodia*. So that's that. That is the name of the microbe. This microbe is transmitted to an individual bitten by the mosquito.

AU: (silence)

Here is another instance in which the coordinator takes a pedagogical stance.

To reinforce her assertions, she grounds her claims in the sphere of scientific knowledge ("In science, this is called *plasmodia*"). In emphasizing plasmodia as the ultimate cause of malaria, the coordinator establishes a framework in which local notions of malaria causation are not to be considered. As elaborated in the previous chapter, the Ilokano view of illness causation is embedded in a sociomoral matrix, in which personal conduct (*kinatao*), notions of the body (*naturalesa*, humoral pathology, *sawiri*), and relations with the spirit world figure prominently.

Deciphering and Treating Malaria

True to her profession as a medical doctor, the coordinator directed attention to the clinical signs of malaria and the "best" way to deal with malaria:

C: What are the signs or symptoms of malaria? First, we get shivers and chills; secondly, high and recurrent fever, severe headaches, profuse sweating, weakness and paleness. These are the usual symptoms of malaria, but this does not mean, for example, that when someone gets sick at home and exhibits *chills* or shivers, headaches, that malaria is always the cause. I am not saying this is always the case. Because these are also symptoms associated with other illnesses such as *influenza*, what we call *trangkaso*, has the same symptoms. What is the

best way if there is a member of the household, a relative, a sibling, or a neighbor, who is feverish or shivering--what is the best we can do?

AU: (silence)

C: The best we can do is to go to the nearest *barangay health station*, to Lorna, and tell Lorna the symptoms that your family is experiencing so that a blood smear can be done ... That is what you are supposed to do right away, take it for the doctor to examine; if he is not there, the *midwife* or *nurse*. After Lorna has referred you to the appropriate individual, she can inform the *rural malaria coordinator*, Mr. Lapus. He can come here, or Lorna can get your blood smear. That is, the pricking and then examination under the *microscope*. You have nothing to lose if you get examined as soon as possible. Whether the *cause* of his or her fever, headache, and shivering is malaria or not, if the *examination* does not show malaria, you will be given what we call *presumptive treatment*. If it was positive you will be given a *radical treatment*. That is that. You will have a lot of medicines to take in a week.

The coordinator's status as a medical doctor was markedly shown in this part of the encounter, as she spoke about malaria's signs and symptoms ("but this does not mean ... that when someone gets sick at home and exhibits *chills* or shivers, headaches, that malaria is always the cause") and the "best way" to deal with malaria. What this posturing presupposes is people's submission to the health establishment ("That is what you are supposed to do right away, take it for the doctor to examine; if he is not there, the *midwife* or *nurse*"), including its medical regimen ("After Lorna has referred you to the appropriate individual, she can inform the *rural malaria coordinator*, Mr. Lapus. He can come here, or Lorna can get your blood smear"). This posturing not only privileges biomedical knowledge and practice over local knowledge but also moves the locus of decision making from the home to the health establishment ("You have nothing to lose if you get examined as soon as possible"; "You will have a lot of medicines to take in a week").

Malaria Is Fatal and More: Scare Tactics

In this part of the encounter, the coordinator stressed the dreadful character of malaria:

- C: So we will continue ... Why should we dread malaria? Why do you think so? Don't look at the kodigo (referring to the brochure). Why do we have to dread malaria? Because if you get malaria, what will happen to you?
- BT: We will get sick.
- C: RIGHT. Your lives will be ruined ... Malaria is fatal. That is what you are not able to comprehend. Your earnings will get depleted ... the savings from your livelihood ... for your hospitalization. Why should we dread malaria? This can be transmitted by the mosquito to the people through bites and can be transmitted quickly. So, this is different from other illnesses. These can last for months, two months, three months. They will last, but can be cured. Malaria gets serious very easily. It quickly goes to the liver, the spleen, the brain. That's that. It damages the brain, the liver, the spleen ... what we call *cerebral malaria*. Because we find *blood formation* in the liver and *bone marrow*. That is that. So if malaria attacks these parts--if in the brain, sometimes, if someone recovers, that individual who had malaria in the brain, he gets tililling (Tagalog for "mentally derailed") or sevensevenseven (another expression for "mentally derailed"). That's how it is. It's a pity. If an individual gets this affliction, it is such a pity; what will happen to his life? He won't be able to work. Of course, because we are Filipinos, when something like that happens in the family, it becomes an embarrassment. So let us avoid getting afflicted with this illness. Then, it goes to the liver and the spleen ... malaria can cause death, if we don't quickly get medical attention. I have said this earlier.

The coordinator's statement was replete with ideas designed to call attention to malaria as a scary disease ("Your lives will be ruined ... Malaria is fatal"). More specifically she employed scare tactics such as the disruption of work and depletion of family resources ("Your earnings will get depleted ... the savings from your livelihood ... for your hospitalization"; "He won't be able to work"). This tactic was made even more evident in underscoring the potential shame that cerebral malaria can

bring an individual and his family ("that individual who had malaria in the brain, he gets tililing or sevensevenseven ... It's a pity ... when something like that happens in the family, it becomes an embarrassment"). She enveloped these tactics with paternalistic overtones, typical of a medical doctor ("So let us avoid getting afflicted with this illness"; "Malaria can cause death, if we don't quickly get medical attention").

Reconstituting the Bed Nets

At this juncture, the coordinator called attention to the biting habit of the mosquitoes and the importance of protective measures:

- C: What is the other important information regarding the mosquito that carries malaria? The mosquito that carries malaria bites between 6 p.m. and 6 a.m. What do we do when we go to sleep?
- AU: (a few women in the audience murmuring) Set up moskitero (mosquito net).
- C: There! Right! That is why we are here, to get the mosquito nets that you are using from six in the evening till dawn. Because the mosquito that lands on your mosquito nets, of course, it lands on the mosquito net first before it reaches you. If it enters inside ... When the mosquito lands on your mosquito net, *within* twenty four hours, the mosquito that landed on the mosquito net that was soaked in a gamot (Tagalog term for medicine), K-Othrine ... Later on, Mr. Reynoso (the administrative officer) will explain to you the insecticide we are using. It is important that this be explained to you clearly, that the insecticide we are using is not hazardous. It can easily kill mosquitoes, but not human beings.
- BT: Ma'am, I have a question. You said earlier that from 6 p.m. to 6 a.m., the mosquito net should be ready. For example, I am still out of the mosquito net and then I am bitten during that time, what happens then?
- C: That's it, *OK, so. Bed net treatment* is only one of the methods. *Very good question.* Let's thank him for his question. Let us applaud him.
- AU: (applause)
- C: He is right, very good question. What if he is outside the mosquito net at that time and the mosquito bites him? If bitten by a mosquito, you will have symptoms, if you are bitten by a malaria mosquito, a mosquito carrying malaria, that is why earlier I said that if you are bitten by a mosquito, you will have symptoms. You should have a

blood smear immediately so you will get medical attention immediately ... One way to kill mosquitoes that carry malaria--aside from the *bed net treatment* --there are other operations of the *malaria control program*. Do you know what these are? *Last year*, was Leo Lapus here?

AU: (with a beam on their faces, some members of the audience glancing at Leo Lapus)

SC: (with a grin on his face and scratching his head, perhaps showing embarrassment)

C: The other year, did he visit or not? Oh! Leo, you are in trouble. Did he visit? Wasn't he carrying a *sprayer*? (She laughs).

AU: Yes. (laughter).

C: Oh! *Yeah*.

Crucial to the coordinator's justification for the use of "impregnated bed nets" is the idiom of protection against malarial mosquitoes. From her perspective, this is enough reason for reconstituting a household item (i.e., the bed net) into an instrument for malaria control.

In my view, this act of reconstituting the bed nets represents a form of control, involving the regulation of people's day-to-day practice (i.e., sleeping habits) in ways that conform with mosquito control. It amounts to an intrusion of the people's private sphere, albeit veiled in the institutionalized idioms of prevention and control. To be sure, bed net treatment, along with house spraying, involves another strategy of shaping the social world of the communities affected by malaria, for it deeply penetrates the domain of the household. The transgression of the most intimate sphere of the household, thus, is integral to malaria control.

The pedagogical technique is made even more pronounced at this point of the encounter, with the treasurer taking the role of a student ("Ma'am, I have a question"), the coordinator that of a teacher ("*Very good question*. Let's thank him for his question. Let us applaud him"), and the audience that of students applauding

the treasurer upon the request of the coordinator.

Doubtless, by putting the sector chief on the spot ("*Last year, was Leo Lapus here?*"), the coordinator was not only able to amuse the audience at the expense of the sector chief. She was also able to subtly display her superiority to him in the public eye.

Official Malaria Control Measures

In this part of the encounter, the coordinator directed attention to other antimalarial strategies:

C: One of the ways to control malaria is the *bed net treatment*. Because our target is ... what did I say about the three? The malaria ... the individual ... or the environment, if we are using the *bed net treatment*?

AU: The mosquito.

C: *OK ... VERY GOOD*. The mosquito. Let us turn to that question. The environment. So what do we do? Mister (referring to the barangay treasurer) is way ahead of us. Let's just talk about it then, before I forget.

AU: (laughter)

C: Another way to avoid malaria is to be aware of the *breeding places*. What is a *breeding place* in Ilokano?

AU: Pagyanan ("place of abode"), waig ("body of water")

[
C: *Canal, rivers*, like that? I am not saying that you cover the canals, cover the brooks, the rivers, no. What this means is that we should prevent them from breeding, from living there, by clearing. Clear the areas around the brooks and rivers, the *rivers* and the *creeks*. *EXPOSE*. Let us expose them to sunlight. Right? So those who wash clothes and go to the edges of the rivers, tomorrow bring with you your bolos and your knives. There. You clear the surroundings so that there will be no

[
AU: Yes.

[
C: THERE, RIGHT. That is what we call *environmental measures*. So we attack the enemies of malaria through *bed net treatment*, *environmental measures* and other *biological measures* ... The *biological measures* that we call--we from the malaria control--you put in the breeding places, what we call--do you know what that is?

The small fish, you put them in places with water. Because they feed on mosquito larvae. That is it. The eggs. They eat those. *So* this is one way for us to kill the mosquitoes that bring malaria. *So* we have *bed net treatment, spraying operations, biological* and also *environmental*.

AU: (lively facial expression)

The infusion of humor into the "pedagogical process" seemed to have livened up the encounter, at this point. Yet, the encounter has increasingly become a "classroom-like" situation, with the coordinator "testing" the extent to which the audience has internalized information that she has been trying to impart.

So powerful is the pedagogical format that certain local cultural values are muted. For instance, the idea of "environmental measures" through clearing of the streams where mosquitoes breed is a strategy that runs counter to local precepts about the environment. The Ilokanos believe that they share the environment with "unseen beings." They regard rivers, streams, forests, and so forth as places of abode of environmental spirits. For instance, the al-alawig, a group of "mischievous spirits," inhabit the river banks, creeks, and streams. People who go to these areas are to behave in specific ways to avoid the displeasure of the spirits. Cutting down the growth on riverbanks would be a transgression against the spirits and could result in illness and misfortune. The strategy of environmental engineering for malaria control, thus, amounts to a blatant disregard of local knowledge. The program as proposed, thus, from a local perspective, would jeopardize relationships to the spirits that people endeavor to maintain in a harmonious state.

Instilling A Sense of Community Responsibility

In this part of the encounter, the coordinator advocated community involvement in the antimalarial strategies advanced by the program:

C: *So we are not the only ones responsible for successfully carrying out the malaria control program. We may differ, but we should help each other to eliminate mosquitoes and other factors that propagate malaria. So we are not the only ones responsible. In the environmental, environment, you live here. That is why you will find a way, won't you?*

AU: (silence)

C: *OK. Let us continue talking about what we know about the mosquito that carries malaria. The mosquito rests on the wall before biting people. That is why we have what we call spraying operations. The spraying, the sprayman, he sprays the walls. When the mosquito rests on the wall, and your wall has been sprayed, it will die. Because your walls had been sprayed. It won't bite you anymore. Because it rested on the walls before it bit you. That is the reason why we have the spraying operations. That is it.*

AU: (silence)

C: *Now you understand why Leo Lapus comes around. And his aids, the spraymen and canvassers. They spray your walls. You have to cooperate because that is what we need. So it lands on the wall before it bites ... This mosquito thrives in clear waters, and in slow-flowing streams and creeks, as I said earlier. The mosquitoes that thrive in dirty waters are not the ones that carry malaria. The mosquitoes that carry malaria can be detected. That is that. Where they thrive, you wouldn't expect, because they are found in clear water. They are not found in dirty water but in clean water. That is why we have to clear (the streams), and let the water flow. If there are obstructions in the river, there is a need, if possible, to straighten, straighten. Straighten the flow, so as to facilitate the water flow.*

In taking a humorous stance, the coordinator seemed to have established some rapport with the audience, hence, acquiring attention to her ardent rationalization for house spraying and environmental engineering. Also, with her enthusiasm went a rather aggressive advocacy for community involvement in these activities ("So we are not the only ones responsible for successfully carrying out the *malaria control*

program"; "You have to cooperate because that is what we need"). That cooperation meant submission to and compliance with the state's antimalarial schemes ("We may differ, but we should help each other to eliminate mosquitoes and other factors that propagate malaria"; "You have to cooperate because that is what we need"). The audience, in turn, remained silent, like school children listening to their teacher's demand for attentiveness and submission.

Personal and Collective Obligation

The subject at this point was individual and collective responsibility in malaria prevention and control:

C: So how can we prevent and avoid the spread of malaria? We already have answered this. We have to avoid the mosquito, use mosquito nets, wear clothes with long sleeves--these are your protection. But I ran into a cynic, where did I meet this individual? In Villa, I guess. He said *long sleeves*? The hands (looking at her hands), it is still possible; he is probably right, so the best way is to combine all the ways that can kill the mosquito...

OK, you have to tie the big animals in the backyard. Why are we asking you to tie the big animals in the backyard?

AU: So the mosquito can have a place to settle.

C: There. We do this so that the mosquito, instead of entering the house, and biting you--right?--the animals will do. Do you have any questions?

BT: How about this, doktora. There are those who don't like the animals (around the house), because it is the animals that draw the mosquitoes around the houses.

C: (With manual gestures) Behind the house, like if this is the house, a little further. Like this. There, a little further. Yes, this reminds me of somebody who asked me ... if they happen to eat the animal, for example a water buffalo, or a cow on which the mosquitoes feed, will they get malaria? No, you won't get malaria because it is the bite of the mosquito that carries malaria. If you ate the malaria, the microbes have already been digested. The malaria doesn't pass through your blood, you will digest the malaria and you won't get malaria ...

OK, *so* eliminate the mosquitoes; how?

AU: (attentive expression)

C: As I already said, straighten and let the streams flow, you seed in the

rivers and streams larvivarous fish such as the tilapia. So build a fish pond here, if you are not too busy. Then make some fishing gear, then invite me to go fishing.

AU: (laughter)

C: I am just joking, to amuse everybody, right? All right, what is this? (reading the brochure) Clear the streams. Oh, I have already said this. You already know this.

The coordinator has a great deal of awareness of the prevailing problems confronting the program. She thus anticipated potential resistance to the control measures. Aggressively, she took up and dispelled instances of cynicism ("But I ran into a cynic"; "Yes, this reminds of somebody who asked me"). In doing so, she endeavored to preempt potential contestations from the audience. I view this move as a way of muting the audience and thus maintaining control over the whole encounter. This subtle form of domination was embedded in continuous joking ("I am just joking, to amuse everybody, right?").

Contesting Resistance to House Spraying

An effort was made to address the perennial problem of people's refusal of residual house spraying:

C: Have your houses sprayed with insecticide. But don't close your houses when you see a sprayman--"That doesn't have any effect." "The house will just become smelly." But wow! Our spray is now odorless, *colorless*, *odorless*, *harmless*; so what else could you ask for?

AU: (attentive appearance)

C: But don't you wipe it off, don't you wipe off the walls for six months, because if you wipe off the walls, the insecticide will be removed.

BT: You know, doktora, before, there were those who allowed DDT spraying. It killed the chickens and the pigs.

C: No, this is powder, this is powder--F, I, C, A, M--Ficam. This is the spray that we are using now; no, it is not a spray, I made a mistake; this is powder that we mix with water which we use to spray. You see, last year, it was done in a pilot area. A pilot area is where they study the results. It turned out to be a success.

BT: Do you have any explanation?

- C: Answer that, Mang Tomas (name of the administrative officer).
 AO: We don't have, but this mix is for mosquitoes which have small bodies; we have big bodies.
 BT: Yes, as I said earlier, before so many people were affected.
 AU: (showing greater attentiveness)
 AO: That was in 1957.
 C: That is right. Ficam, if it is not, ... what is *deliberately* in Tagalog? (nobody responded) If not *deliberately* drank, intentionally drink [Ficam], you won't get poisoned. For example, if you happen to get in contact with it by leaning on the wall, or you happen to put your fingers in your mouth, you won't get poisoned. This is *considered moderately hazardous*, meaning that it is not poisonous like DDT. If you intentionally swallow it, yes; but if you just lean on it, it is not. Thus, K-Othrine is not hazardous. It makes you itchy a bit, though.
 BT: You know ma'am, we are just asking.
 C: That's all right. We prefer that you do so, so that you can avoid any hazard. When the kids wake up, of course you are also up by then. So why would you allow your child to put the mosquito net into his mouth? But if he puts the net inside his mouth, if it is the whole net--which is impossible for him to do--he would be affected.

The coordinator was aware of the prevailing problem of refusal of DDT spraying. In this part of the encounter greater effort was made to promote the program, with the coordinator's mode of speaking similar to that of radio and T.V. commercials ("Our spray is now odorless, *colorless, odorless, harmless*; so what else could you ask for?").

Moreover, what was striking here was the treasurer's bold move to let the team know about their unfavorable experience with DDT ("You know, doktora, before, there were those who allowed DDT spraying. It killed the chickens and the pigs."). The treasurer was echoing a prevailing concern of the villagers about the hazards of insecticides. Thus, at this instance, he aligned himself with the villagers.

To dissipate people's concern about the safety of the insecticide, both the coordinator and the administrative officer had to make certain statements that, in their

view, would convince the audience. What struck me was the clever way of suggesting that the "mix is for mosquitoes which have small bodies," and thus will not affect humans' "big bodies." The power of this claim lies in its simplicity as it draws on "common sense." I surmise that the audience would find this view plausible. But what is ignored here is the complexity of people's conception of the body as exemplified by their notion of naturalesa and humoral pathology. Added to this was the use of English words that are iconic of expert knowledge and prestige in ways that suggest credibility. The use of English, here and elsewhere, thus represents another powerful force in cultural domination.

Having sensed perhaps that the coordinator was taking great pains to persuade the audience, the treasurer took a defensive role ("You know ma'am, we are just asking"). By virtue of his use of the pronoun "we," the stance of the treasurer represents that of the audience as a whole. I regard this move as symptomatic of a dilemma the treasurer faces arising from a conflict of interest--that is, taking the role as a mouthpiece for the community and at the same time complying with his role as a local purveyor of state programs and interests. As a power-broker, he strives to please both parties. In the end, he reinforces both the coordinator's paternalistic stance ("That's all right. We prefer that you do so, so that you can avoid any hazard") and the submissive position of the audience.

Undermining the Reserba Mentality

The coordinator began to conclude her lecture:

- C: *So OK after your house has been sprayed, have your blood examined by the roving malaria canvassers from DOH, health center, district hospital, and complete the drinking of the medicine, following the*

advice of the doctor or the *health worker*. When told, "Misis (Tagalog for a married woman), everyday, one tablet within a period of seven days, within a period of five days, or within fourteen days," you have to do so. Don't, after drinking one or two, and then noticing that you are feeling better, stop, and then think that you can put the rest of the pills aside as reserba ("stored for future use"). Don't think about reserba. We have plenty of medicines. *So OK*, submit yourself for examination, let Lorna or Mr. Lapus do it, or come visit Ilagan, visit our office, the Malaria Control Office, *you are most welcome ... OK so do you have other questions about this?*

- [
Mi: If you have questions, apo (elders), if there are parts in the lecture of doktora, just ask so they can be answered.
MW: Don't be ashamed, manang (elder sister).
Mi: Just ask. As they say: awan ti bain-bain ("don't be ashamed").
MW: So that things can become more clear.
M: Oh yes. (laughing)
C: Mang Tomas and my other companions have something to say about K-Othrine. All right, who will talk about the K-Othrine?

The coordinator once again displays her superiority by reiterating what they are expected to comply with ("*So OK* after your house has been sprayed, have your blood examined by the roving *malaria canvassers*"). She exhibits her accusatory effort of control by ordering the audience to get rid of their reserba mentality in taking prescribed medicines ("Don't, after drinking one or two, and then noticing that you are feeling better, stop, and then think that you can put the rest of the pills aside for future use or reserba. Don't think about reserba. We have plenty of medicines"). Her claim that there is sufficient medicine for the people is an empty claim since it is common knowledge that the barangay health station faces a lack of medical supplies. Thus, in an encounter such as this where the audience is reduced to being subservient listeners, the shortfalls of the health services are readily skirted.

True, there were efforts to encourage the audience to raise questions ("Do you have any questions?"; "Don't be ashamed, manang (elder sister)"; "Just ask"). In this

context, however, these efforts are not entirely genuine. Participation would be contradictory in this kind of a pedagogical encounter.

K-Othrine Is Safe

The coordinator yielded the floor to the administrative officer, whose task was to promote bed net treatment as a malaria control strategy. The administrative officer spoke Ilokano, but he also used English and technical terms:

C: All right, who is going to talk about K-Othrine?

AO: What I will explain is this new method. You know, this malaria, it is not only us, it is not only the government, who is responsible. You are too. First, you have to protect your bodies. If you see a mosquito, kill it right away. (He laughs.) Chances are, you just let the mosquito bite you. (He laughs again.) It is important ... *personal protection*; kill the mosquitoes. As doktora said, wear long-sleeved clothing and use mosquito nets. And, for instance, if the problem is not so big, you who live in this barangay can help. You can clear the streams and creeks. Right? The government supports you by coming here to collect *blood slides*, give you free medicine, and sometimes hospitalization. That's what the government can do. But don't wait until you get sick with malaria. All right? (He laughs again.) We have a new strategy here. You know about *house spraying*, house spraying, twice a year or just once, but not all parts of Cabagan are covered. Only this mountainous area. You know about blood smear collection for examination. And, the latest is this activity in which maikan iti agas iti moskito yo ("to put medicine in your mosquito nets"). It's just like spraying your houses. This K-Othrine, which we will use later, is *very moderately hazardous*.

M: *Moderately hazardous*.

AO: If you see an insecticide, they are labelled. If you see *red, violet, like that* ...

C: [*yellow, orange*

AO: [*yellow, orange, green*, if it is *green*, it is *less toxic, very moderately*. Our mixture of K-Othrine is six to ten *ml* which we mix with water. This K-Othrine that we put in your bed nets, when it dries up, even if the children bite it, they won't get affected, because its *active ingredients* are not toxic, because it is only *.001.5 to .002.5* [sic] *per thousand liters*, so it is not that much. If you drink this, of course it will really poison you, but when you mix it with water, it is

no longer that poisonous. This mixture is 40 *ml*.

To establish his authority, the administrative officer reiterated the points that had already been made by the coordinator. Undoubtedly, the administrative officer faced a formidable task of dispelling doubts about the safety of K-Othrine. Thus, he had to mobilize, once again, the idiom of personal and community responsibility, which the coordinator had attempted to instill in the minds of the audience. He also had to invoke the idea of a supportive government ("The government supports you"). Yet, in dealing with the audience, the administrative officer also had to take a dominative stance as he spoke in a commanding tone ("You have to"). In couching this "new strategy" in terms of maikan iti agas iti moskito yo ("to put medicine in your mosquito nets"), the coordinator veils the toxic potential of pesticides even as he emphatically claims that the insecticide is "very moderately hazardous."²⁶

Presuming People's Acceptance

The administrative officer, here, was in the process of winding up his lecture by going into details pertaining to the adoption of this control measure in the community:

AO: You know this program, our program, we are supposed to turn it over to the barangay. You will be the ones to do it; we are to instruct, then you will do it yourselves. You just tell Mr. Lopus, you just tell him which day you prefer, *after six months, four to eight*. You tell him the day, you *schedule bed net treatment*, you tell Leo and so that they can *schedule* their visit.

M: (Addressing the AO) How about its effectiveness, pare ("companion")?

AO: For instance, you have children who shit on it, which we can't prevent because they are our children; sometimes they also piss on it, thus, you

²⁶This reminds me of Whyte's observation about the semantics of medicine. Drawing on her fieldwork in Uganda, she noted that the term medicine is construed as a "substance that transforms something--for better or worse" (1988:217).

have to wash the moskitero. But you have to dry it indoors; you *air dry* it.

C: You should not put it under the heat of the sun; put it in a shaded place.

AO: Yes, in shaded areas.

C: Why? Because the chemicals will be destroyed.

AO: Here (referring to the barangay hall), it can dry up, and even if you smell it and put it next to your noses (showing actual act of smelling), it is all right. The mosquitoes have small bodies. They don't die right away though. Their *culicles*, their feet are *irritated* because they get into the poison, which gets into their bodies, it gets into their bodies. They can't live, *within 24 hours*, they die. They don't die right in the mosquito nets; you might look for them (he laughs); you won't find any.

C: The mosquitoes are *paralyzed*.

AO: No, it is not *toxic*, the mosquitoes will just be *paralyzed*; this is a *stomach poison* for the mosquitoes ... The mixture is--if you can already do it--because we will be giving you this agas (medicine). It is all right, pails are available, measuring cups too. Every mosquito net, you mix *2.5 cc with 6 to 10 ml*, just for a small mosquito net; so that is the exact mixture.

[

C: Do you know what *ml* means? (directed to the audience).

AO: *milliliter, ahhh ... one liter, 1,000 ml.*

M: *cc* before, it is now *ml*; you know, *cc* is *ml* now.

C: These two are the same.

AO: One liter of water, that is equivalent to *1000 ml*, yes. This, you should not be afraid of, we are introducing this in the Cabagan district, but the Cabagan district is no longer that *malarious*. It is better here, the people have high intelligence, you know how to avoid malaria. If you didn't know how to avoid it, you would get it, and it is costly.

C: There are lots of positive cases here.

AO: In Compra, there's a lot.

C: (Talking to AO) Are you done with your lecture? (addressing the audience) Do you have questions for Mr. Reynoso?

AO: Do you have any questions?

BT: You said earlier that the effect of the agas ("medicine," referring to the K-Othrine) lasts for six to eight months. If you stop using the mosquito net after a month, will the agas still be effective?

AO: This is what it is, the effect is *continuous*. The effectivity is *eight months*. But we will come back. You tell Lorna or Mr. Lopus about the day you are available so the medicine can be put in your bed nets. Mr. Lopus will schedule this with you. Don't wait for *eight months*. After six months, you can do so. *Every six months*.

C: *Every six months*, we will come back.

BT: *Every six months.*

C: If this *bed net operation* becomes a success--what this means is that we have to have data showing that, for example, we will see from the *feedback* from the people if malaria increased or decreased or remained the same. Time will come when we will just leave the medicine in your place, and you will do this yourselves.

BT: Ahh, is that so?

AO: It is he, (pointing his finger at Mr. Lapus) Mr. Lapus. He will supervise because we will not just give this (holding a bottle of K-Othrine) to you. You might commit mistakes in using it. It might be used for other purposes, not for the mosquito nets.

By giving instructions as to what is expected of the community in implementing this control measure, the administrative officer (and, by extension, the whole team) proceeded with a preconceived notion that there will be a community-wide acceptance of the measure. The administrative officer was indeed banking on the barangay to continue the program as he went into the details on how to undertake bed net treatment and under whose supervision. With the treasurer inquiring about the duration of effectiveness of the insecticide, a semblance of community acceptance was lent to the "new method."

Marking the closure to this encounter was the coordinator's calling the attention of the team about their commitment in Guingab. So they decided that the sector chiefs, the sanitary engineer, and the administrative officer would pack up and go ahead. The microscopist and the midwife continued collecting blood smears. Based on the records, 35 bed nets were soaked and 50 blood smears collected. In closing, the coordinator thanked the people who were there and expressed hope for better attendance in future visits. In return, the konsehala and the treasurer expressed gratitude for the visit and apologized for whatever inconvenience the team may have experienced--a gesture signalling once again the deferential treatment that local leaders

had to display in public.

The driver came to pick up the coordinator, the microscopist, and me at around 4:30 in the afternoon and left for Guingab. There, the team did not conduct a "public information campaign." At least 30 individuals (adults and children) had blood collected for later examination and a few bed nets were treated. The "operations" were carried out in the front yard of the barangay councilor's house, an area where barangay-wide activities are usually held. Like the barangay hall, it is a space where official meetings and government supported campaigns are commonly held.

The campaign in Guingab was hurriedly undertaken in anticipation of the three-hour drive back to the Provincial Health Office in Ilagan, the provincial capital. Besides, the team appeared exhausted due to the amount of work they did in Magallones. Snacks were served as the collection of blood smears and soaking of bed nets were taking place. The coordinator and the administrative officer conversed with the barangay councilor while they were having snacks. I believe that the acceptance of the councilor's hospitality by the team amounted to absolving the councilor's inability to summon people to participate earlier that day. Of course, that hospitality also signalled a concrete act of deference.

Concluding Remarks

Viewed overall, the whole encounter reflects the dynamics of power in the arena of disease control. By drawing on the barangay as a power resource, the team was able to advance their work in malaria control and in the process displayed their authority and control over people's lives, albeit bound by time, that is, at the moment

of the encounter. True the team drew deference from the people in the barangay, and thus, asserted their power over them. Yet, in following the protocol of going through the "office of the barangay," they reciprocally reinforced and legitimized the position of power of the barangay officials. As I earlier noted, this situation puts the barangay officials in a dilemma as they have to reconcile the interests of the state with the interests of their constituencies. Given this situation, the subordinated villagers are silenced in the face of the powerful. This is not to say that their interests are left unarticulated; rather, their concerns are often laid out in the open and then dismissed as "misconceptions" simply because they run the program's cultural schema.

Moreover, inscribed in the encounter is the state's logic of economic development. The coordinator's exhortation that the people are "needed by the nation" reflects the dominant ideological underpinning of the malaria control program. To participate in malaria control, thus, is a moral obligation, to which the program insists the people should subscribe. The interests of the state, however, do not necessarily concur with local interests, and the conflict is implied by the characteristic responses of the people to the program, responses which are guided by their understandings of malaria in relation to their sense of health and well-being.

Contributing to the structuring of the negotiation of meanings is the barangay hall, which called for a passive demeanor on the part of the villagers. This structuring is complemented by the deployment of techniques of persuasion (e.g., humor, the authoritative language of science, and pedagogical techniques).

Responses to the Malaria Control Program: Voices from Below

To explore further the interactions between the antimalarial program and the Ilokanos, this section deals with the ways in which the people perceive and relate to the program and its actors. Attention is given to what the people say and do outside the direct observation of health authorities.

House Spraying

The program categorizes Masipi among what it labels as a "hard-core" malarious barangay in the municipality of Cabagan, given Masipi's annual parasite incidence of more than 10 individuals per 1000 population. Accordingly, Masipi is to be subjected to residual house spraying twice a year by a team composed of a "squad leader" and his "spraymen." They are referred to by the municipal health officer as "malaria boys." This team is guided by the principle of "total coverage," that is, the team should not leave any dwelling unsprayed. Their performance is evaluated in terms of whether they have met the targeted number of dwellings to be sprayed.

According to the sector chief, whose task is to supervise the spraying operation, the boys follow "s.o.p." ("standard operating procedure"). Initially, the kapitan is personally informed by the sector chief a few days before any spraying activity takes place. In turn, the kapitan orders the barangay councilors to announce the activity to their respective purok (a neighborhood). These purok are divided among the councilors for closer control and supervision. Making the barangay structure the link between the community and the state health care services, local health officials contend, was an effort to ensure the cooperation and participation of the villagers. This s.o.p, however, has proved ineffective, according to the sector

chief and the malaria boys. They contend that prior notification of house spraying only leads to a situation in which some villagers leave their houses on the scheduled day to avoid spraying. Thus, these houses are left unsprayed.

How is spraying perceived in the community? Asked whether the malaria workers come to spray houses in the village with pesticide, the majority responded positively (98%; n=100); most said that DDT was being used (80.6%; n=98). A few (17.3%; n=98), however, did not know a name of a pesticide that was being sprayed.

Table 22 shows the responses to a question about the purpose of house spraying. The dominant view is that it is done to eliminate mosquitoes. There are claims that spraying gets rid of pests other than mosquitoes and that it removes venom (dita) carried by mosquitoes. A few did not know the purpose of house spraying, and some commented that the spraymen had not bothered to tell them.

Table 22. Purposes of spraying

	no.	%
To get rid of mosquitoes	57	58.1
To get rid of mosquitoes that bring <u>malarya</u>	16	16.3
To remove venom (<u>dita</u>) in the mosquito	10	10.2
To get rid of mosquitoes, flies, cockroaches, or ants	10	10.2
Do not know	8	8.1

n=98 respondents; percentages total to more than 100 because of multiple responses per respondent.

The purpose of DDT has been locally reconfigured. The Ilokanos regard DDT as quelling the venom in mosquito bites. It is also believed that DDT is meant to eliminate the mosquito, which carry rugit (dirt), in line with their notions of pollution in illness causation.

Respondents were asked about what they had been told by the spraymen regarding the duration of the efficacy (bileg) of the pesticide. Table 23 shows that the majority (91.8%; n=90) were unaware that the residual effect of the insecticide lasts for at least six months because the spraymen had not informed them.

Table 23. Duration of the efficacy of the pesticide

	no.	%
Not informed	90	91.8
Less than 1 week	2	2.0
One month	2	2.0
Two to three months	2	2.0
Five to six months	2	2.0

n=98 respondents

Asked whether their houses had ever been sprayed, a majority responded affirmatively (82%; n=100). Tables 24 and 25 list the reasons respondents gave for their acceptance or rejection of house spraying. I note here that aside from the dominant rationale that house spraying is directed towards the control of the mosquito population, the responses also indicated that submission to house spraying is mandatory (30.4%; n=82).

Table 24. Reasons that households submit to house spraying

	no.	%
To kill mosquitoes	47	57.3
To drive away mosquitoes so we can sleep well	22	26.8
To get rid of mosquitoes so they won't transmit illness	12	14.6
To get rid of mosquitoes, flies, cockroaches, or ants	10	12.1
House spraying is mandatory	25	30.4

n=82 respondents; percentages total to more than 100 because of multiple responses per respondent.

Table 25. Reasons that households refuse house spraying

	no.	%
Repulsive smell of DDT	10	55.5
House is newly built	5	27.7
The smell makes chickens dizzy and they die	4	22.2
Children are affected by the smell	4	22.2
Pets die	3	16.6
Wife just gave birth	2	11.0
Might contaminate bread (bakery)	1	5.5

n=18 respondents; percentages total to more than 100 because of multiple responses per respondent.

What appears to be a widespread acceptance of this control measure, however, should be appraised in relation to the practice of washing off areas sprayed with DDT. A majority (76.8%; n=82) washes off the pesticide because, as shown in Table 26, house spraying runs counter not only to the villagers' sense of cleanliness but also their sense of safety and comfort, including that of their domestic animals and pets.

Table 26. Reasons that the pesticide is washed off

	no.	%
Messes up the sleeping area	27	42.8
Messes up the kitchen	25	39.6
Children might touch and ingest DDT	17	26.9
Leaves a nauseating smell	12	19.0
Leaves white spots on the floor and the walls	12	19.0

n=63 respondents; percentages total to more than 100 because of multiple responses per respondent.

The practice of washing DDT off the walls and floor, in my view, reflects ambivalence on the part of those who submit to house spraying. DDT spraying is tolerated in that it quells the rugit and dita in mosquitoes. Yet, it is washed off because it poisons their domestic animals, soils their houses, and causes nausea. This ambivalence towards DDT spraying allows the continuation of the malaria control program in the area, despite outright resistance from some members of the

community.

Moreover, resistance by the people is reinforced by a common view that questions the efficacy (bileg) of DDT in wiping out alimbubuyog, the local term for pests. A resident in his late eighties expressed this cogently:

Dagitoy nga alimbubuyog ket parte ti pagyanan isu gapu nga saan nga mabalen nga ikatten ken iwasanen. Mabalen met nga matay da ngem dagidyay mabati umadu da manen sadantu sumubli.

These pests are part of the environs so it is not possible to get rid of them totally. While some may die, others would just multiply and then would come back.

Others contend that part of the reason why the spraying is not effective is that the malaria workers deliberately "weaken the mixture" (pakapsuten da ti timpla) by adding more water to DDT. They argue that this practice enables the spraymen to set aside insecticides to be sold to commercial farms outside the municipality. This accusation suggests that the people are mindful not only of the effects of DDT but also of the conduct of the spraymen. In fact, this accusation is so common that the program officials had to institute measures to control the smuggling of insecticides. The spraymen are now required to return empty insecticide packages for strict accounting.

It could also be said that the smuggling of pesticides is symptomatic of the problem of corruption, which is popularly referred to as panagkurakot, pervading the government service. Some informants, however, justify panagkurakot as a way of augmenting the very low salaries health workers receive from the government.

Case Finding

Another control strategy, referred to officially as case finding, involves treatment of active cases of malaria through passive case finding (investigation of febrile cases) and active case finding (serological surveys). The local midwife manages the barangay health station and takes care of passive case finding. The 20-year-old midwife said that her role in the program is to routinely collect blood smears from febrile patients visiting the station and she is also to give them a single dose of an antimalarial drug as a presumptive treatment. These blood smears are then brought to the Rural Health Unit at the poblacion for examination by a microscopist. In turn, the microscopist informs the midwife about the positive cases for treatment.

The malaria boys undertake active case finding. Technically referred to as malaria canvassers, they are assigned a monthly target, a percentage of blood smears per barangay population in the district. Thus, they periodically visit Masipi to collect smears from the residents. It should not come as a surprise that, rather than performing time-consuming house-to-house visits, the canvassers choose school classrooms, public meetings, and even funeral wakes as settings for collecting smears. This strategy allows them to meet their targets in a shorter period of time.

Results of the survey concerning this particular control strategy indicate that about three-fourths of the respondents (77.3%; n=84) had, at one time or another, participated in active case finding. We asked if the canvassers had promised to inform them about the result of the blood test. The majority (84.6%; n=65) answered no. The rest (15.3%; n=65), who answered yes, expressed some disappointment because the canvassers did not fulfill their promise.

Respondents were also asked about the rationale for collecting blood smears. Table 27 indicates that they see the collection of blood smears as not solely linked to testing for malarya. Rather, they associate it with the notion of "thin blood," which is construed as "weak"; with the notion of "thick blood," which is associated with "high blood"; with a test for "blood type"; or with free medicines. Blood smear collection is also viewed as a way to entitle participants to free antimalarial pills.

Table 27. Reasons for collecting blood smears

	no.	%
To test if we have <u>malarya</u>	53	63.0
To test if our blood is "thin" or "weak"	20	23.8
To test if blood is thick or if one has "high blood"	15	17.8
To entitle one to free medicines	6	7.1
To test your "blood type"	2	2.3
I do not know, they do not tell us	3	3.5

n=84 respondents; percentages total to more than 100 because of multiple responses per respondent.

Further probing on what respondents meant by "to test if we have malarya" and "to test your blood type" yielded a straightforward answer, "That is what we are told by the collectors." These responses seem to suggest that the villagers recognize the connection between blood smear collection and the presence or absence of malarya, viewed as a reified entity that resides in the blood. In a sense, this signals a local accommodation of the literal meaning of "blood smear" and "blood type." At the same time, the purpose of blood smear collection has also been inflected,

following their notions of napalit nga dara ("thin blood") and nabengbeng nga dara ("thick blood"). Locally, these are inborn qualities of the body and are understood in terms of the notion of naturalesa.

Others, however, have constructed the meaning of participating in blood smear collection as obtaining free antimalarial drugs. I regard this view as rooted in their experience with malaria canvassers who routinely gave away malaria pills in exchange for blood smears.

Drug Distribution

A common image of the tagamalarya kontrol is that they give antimalarial pills libre ("for free"). In a sense, the antimalarial pills are iconic of the long-standing links between the workers and the people of Masipi. The pills serve as a powerful incentive for local participation in or submission to case-finding and house-spraying activities. Free pill distribution made the malaria workers popular in the village. The malaria workers use pills to establish rapport with the people in the community. Frequently, villagers ask for antimalarial pills para reserba ("for future use"), to which requests the malaria workers usually accede. Officially, however, free antimalarial pills are to be given only to those who exhibit clinical symptoms of malaria such as fever and chills. At present, the workers no longer have access to these pills, and it is now the midwife only who is authorized to give presumptive treatment and, only upon instructions from the Rural Health Unit, radical treatment. Moreover, the barangay health station is left without an adequate supply of drugs, including antimalarials. As a result, some villagers make such disparaging remarks as "Awan met sibli da dagita; awan met ti agas nga ited da" ("They are useless; they

don't have medicines to give").

The people's responses to the program's control strategies (i.e., house spraying, case finding, and treatment) suggest that there is a pervasive feeling of ambivalence towards house spraying. Apparently, the idea of controlling malaria through eliminating the mosquitoes has been subjected to local interpretations. Many allow their houses to be sprayed not only because it is mandatory but also because they believe that it is useful in eliminating the dita (poison) and the rugit (dirt) in mosquito bites. Most villagers wipe off the insecticides afterwards simply because spraying violates their sense of cleanliness, which, by extension, relates to their sense of well-being. The ambivalence also stems from a common precept that mosquitoes will always remain in the environment. With respect to case finding, people seem to have mechanically subjected themselves to this strategy, because it sometimes allows them to obtain free antimalarial drugs. However, the failure of the malaria workers to provide free antimalarial pills has also caused a sense of skepticism about the sincerity of the workers, and by extension, the state's health service.

Community Participation

The strategy of community participation is predicated upon the Primary Health Care (PHC) approach, which has been embraced by the Philippine government as a member of the World Health Organization. As health officials put it, "community participation" is PHC's cornerstone. As we have seen in the previous section, the state is banking on the barangay to pursue its health agenda, an agenda that has been designed and formulated independent of local ways of dealing with problematic life situations. In other words, the state's sense of community participation is one that

rests on what Rifkin (1985) refers to as the "health planning approach," which relies heavily on the expertise of health planners and policymakers in developing strategies to make health services accessible to large numbers of people. Accordingly, local communities are expected to get involved in plans of action designed by health planners and policymakers.

How is "community participation in malaria control" construed by the Ilokanos? In addressing this question, we asked whether the residents can do something to control malarya. More than half gave a negative response (see Table 28).

Table 28. Whether the residents can control malarya

	no.	%
Yes	42	42
No	55	55
Do not know	3	3
Total	100	100

Table 29 shows specific reasons given by 55 villagers for their inability to control malarya. By and large, these reasons point to the close links respondents make among everyday activities, work habits, naturalesa, the environment, and malarya. To these respondents, malaria control seems impossible.

Table 29. Reasons that villagers cannot control malarya

	no.	%
People wash up even when they are tired or after overworking	14	25.4
It is natural for people residing in a mountainous area such as ours to get sick with <u>malarya</u>	12	21.8
We allow our houses to be sprayed yet mosquitoes still abound	12	21.8
Many villagers are prone to getting sick because of weak <u>naturalesa</u>	9	16.3
We are surrounded by bushes and thickets, where mosquitoes and other pests hide, so <u>malarya</u> remains	8	14.5
<u>Malarya</u> just comes and goes	3	5.4

n=55 respondents; percentages total to more than 100 because of multiple responses per respondent.

Table 30 lists the activities that 42 of the respondents report they can do to control malarya. In examining the nature of these activities, I note that cleanliness figures as a dominant value in the framework of action. This local framework signals an obvious departure from the official malaria control schema. In recognizing the merit in cooperating with program personnel in order to control malaria, however, the people reaffirm the reason for the existence of the program.

Table 30. Activities that residents can do to control malarya

	no.	%
Residents should keep their houses, toilets, and surroundings clean	16	38.0
Residents should cooperate with the malaria personnel by submitting to house spraying	15	35.7
Residents should cut the grasses surrounding their houses to drive away the mosquitoes	8	19.0
Residents should use mosquito nets	4	9.5
Residents should participate in blood smear collection	2	4.7

n=42 respondents; percentages total to more than 100 because of multiple responses per respondent.

We asked respondents whether government health personnel and the residents should join hands in order to control malaria in the area. As shown in Table 31, more than half answered affirmatively which, again, tends to suggest their sense of openness to this government program.

Table 31. Whether health personnel and residents should become partners

	no.	%
Yes	56	56
No	39	39
No response	5	5
Total	100	100

Those who answered yes were asked about the nature of that potential partnership, specifically, the activities and responsibilities they envision. These responses are listed in Table 32. The predominant view is that the residents should not only observe cleanliness, which is informed by the local logic of contagion and pollution, but also conform to malaria control program requirements. They, however, expect the health workers to carry out their responsibilities in controlling malaria--a view that signals people's dependence on the health services of the government. Frequently, people's dissatisfaction about the health care system is expressed through personal criticisms directed at the frontline health workers (i.e., the midwife, the sector chief, the canvassers, and the spraymen who get the brunt of criticism). These workers, thus, serve as buffers of the state against people's sentiments about the

inadequacies of the public health services.

Table 32. Activities of residents and health workers to control malarya

	no.	%
Residents should clean surroundings	15	26.7
Building toilets is necessary; every household should have a toilet	14	25.0
Residents should not refuse house spraying	12	21.4
Health workers should supply residents with malaria pills	12	21.4
Health workers should come regularly to take blood samples to find out whom to give medicine	7	12.5
Health workers should conduct lectures on how to get rid of <u>malarya</u>	3	5.3
Health workers should conduct lectures on cleanliness and eating nutritious foods	2	3.5

n=56 respondents; percentages total to more than 100
because of multiple responses per respondent.

Those who contended otherwise were asked why they reject the idea of partnership. Responses to that question are listed in Table 33. These responses underscore local awareness of cases of residents refusing house spraying, the perceived inadequacies of the program, the shortcomings of the barangay officials, and the notion that malaria is something natural, all of which shape the ambivalence of local people towards the efforts to reduce malaria in Masipi.

Table 33. Reasons that partnership is not feasible

	no.	%
Several residents do not cooperate; many refuse house spraying	13	33.3
<u>Malarya</u> is here to stay	9	23.0
Our <u>barangay</u> officials do not seem to take the problem seriously	9	23.0
It is natural for people residing in the mountains to get sick with <u>malarya</u>	7	17.9
Oftentimes the health workers do not have medicines to give	4	10.2
People take a bath even when they are tired	2	5.1
There are still plenty of mosquitoes despite house spraying	2	5.1

n=39 respondents; percentages total to more than 100 because of multiple responses per respondent.

What emerges from the preceding discussion is a situation in which villagers vacillate as to the merit of community participation in controlling malaria. In their view, malaria is one illness that cannot be controlled, considering the conditions of their existence--heavy farm work, weak naturalesa, and an environment that makes them vulnerable to getting sick with malaria. Their idea of partnership with the government to control malaria is one that underscores conformity with the program's activities. However, it is one that is not devoid of reservations as attested by their ambivalent attitude towards house spraying.

The picture that one gets is that the people tend to reinforce a relationship of dependency, with the health workers taking the sole responsibility of controlling malaria and thus the people complying with the program's requisites. Therefore, notwithstanding their ambivalence towards the program, the villagers, ultimately, reproduce the structure and orientation of the state-led malaria control program.

Concluding Remarks

In this section, I paid close attention to discourses and acts articulated outside the direct observation of program actors. The reactions of the villagers towards the program are constructed in terms of their actual experience with the program and malarya. The program has been incorporated into local consciousness but in a reconfigured form that is in accordance with the local cultural schema (e.g., house spraying, blood smear collecting). In addition, people's ambivalence towards the antimalarial program could be attributed to the reconfiguration of the meaning of the cause of malaria, the mode of its transmission, and the strategies deployed to control it; the negative experience of the people with DDT spraying; the local understandings

of "community participation"; and the unfavorable views about the conduct of some malaria control workers. The villagers, however, are not able to articulate this ambivalence in their own terms in face-to-face interactions with health authorities because such interactions are situated in settings that have been preempted by state power. As indicated in the previous section, the barangay officials play a key role in the perpetuation of silence and passivity in the face of state authority.

Chapter Six

CONCLUSIONS

Truth Claims and Malaria: The Limits of Cultural Domination and Resistance

In addressing the interactions between the state and local communities in the struggles against malaria in the Philippines, I drew inspiration from critical-interpretive medical anthropology, which, as I have noted in Chapter One, begins with the supposition that social discourses and practices are fundamentally negotiations of meanings, and, by extension, are expressions of power relations. Thus, I examined the convergence of two forms of struggle against malaria in the Philippines--the institutionalized malaria control program and the Ilokano ethnomedical knowledge and practice with respect to malaria and the antimalarial program itself--as an example of the inseparability of culture, power, and history in the politics of disease control (cf. Comaroff and Comaroff 1992:28). I developed a concept of cultural politics as an analytic device to examine the confrontations of cultural schemas in social encounters involving different understandings of and responses to reality. I viewed the predicaments faced by the state and the Ilokans in their struggles against malaria as expressions of cultural politics in the arena of public health interventions.

Central to my analysis is an explication of the social context within which these confrontations of cultural frameworks take place. The antimalarial program is grounded in the state's public institutions that hold varying degrees of coercive power that sustain the superordinate-subordinate relationship between the state health functionaries and the public.

From a dialectical perspective, that superordinate-subordinate relationship is one of reciprocal interdependence (cf. Comaroff 1985:252). In this study, I took the task of unraveling the nature of that relationship by interpreting the "truth" claims borne of the cultural schemas deployed by the state health personnel and the Ilokans in confronting the problem of malaria. To achieve this task, I attended to situated practices and discourses that reflect the culturally constructed "multiple truths" about malaria and its effects on individuals and society.

Fundamentally, these two forms of struggle are diametrically opposed given their characteristic cultural logics. This situation, I believe, underlies the contestations over the strategies to deal with the impact of malaria. What emerges from these contestations is a process in which a state intervention such as disease control, carried out by the state health care apparatus, is challenged by local cultural forms, albeit expressed in diffused and inchoate practices.

The process of cultural domination inherent in the malaria program is always subject to the constitution of the social arenas within which it takes place. Settings such as the barangay hall, where the hegemonic state power is implicitly inscribed, legitimizes the dominant role played by health workers as they act as the mouthpiece for the state agenda. Here, cultural domination is most forceful as the subordinated

group takes a passive role by the sheer presence of the state representatives. Passivity in the face of authority could be viewed as an expected demeanor of the subordinated, who, to begin with, were summoned to participate by their local leaders. To challenge government authorities openly in the face of their leaders could mean challenging the local leaders themselves. Passivity could also be viewed, however, as holding back one's dissent but expressing it in an appropriate time and place.

The practice of cultural domination in the antimalarial program is reinforced by the barangay officials, who collectively serve as a conduit between the state and the community. As "power-brokers," they perpetuate the patron-client relationship between the state and its citizens. So deeply entrenched is this power relation that it breeds deference to authority, a demeanor expected of the subordinated group. In effect, the barangay and its functionaries contribute to the perpetuation of superordinate-subordinate relations between the state-supported health workers and the villagers, leading to an attenuation of the villagers' sentiments and concerns over certain aspects of the program.

A face-to-face encounter such as the bednet treatment campaign reflects the display of a dominative stance, if not the outright denigration of local cultural knowledge and practices by program actors. This open expression of domination and subordination exemplifies what Scott (1990) called the "public transcript" of the dynamics of power.

I also indicated the relative freedom of the subordinated to express themselves outside the direct observation of the powerful by describing the "offstage" practices and claims of the subordinated. The local discourse challenges the efficacy of DDT

spraying, expresses disgust with malaria workers, who burden the community because they have to be provided with meals, and defies the idea of community participation because the program activities interfere with work on the farm and other daily activities of the local people.

However, I hasten to add that the Ilokanos view the antimalarial program as not totally detrimental to their existence. They assert their resistance by evading house spraying, but they also take advantage of free health services and medicines from the government. They are pragmatic enough not to reject completely the health establishment. Thus, ambivalence towards the antimalarial program is a strategy that allows villagers to either accept or reject aspects of the program, depending on their assessment of the effects of the program on their daily lives.

Indeed, the state health functionaries are able to denigrate the cultural precepts and practices of the Ilokanos by imposing the authoritative knowledge of science and medicine. However, the Ilokanos are able to maintain their cultural integrity by upholding a cultural schema that provides order and meaning to their day-to-day lives. In practice, this cultural schema not only allows them to reconfigure the meaning of malaria and its control, but it also fuels their reactions to the antimalarial program, reactions that oscillate between conformity and resistance.

Because local resistance (whether expressed overtly through outright refusal of house spraying or covertly through apathy) is expressed in a manner that is unorganized and diffused, the people are unable to effect any changes in the structure and orientation of the program. More importantly, these forms of resistance are constrained by their articulation within a barangay structure, which is an instrument of

state control. The strength of state control is bolstered by the presence of a military detachment in Masipi, as well as other barangays in the militarized zone of the Cagayan Valley.

Accounting for actual encounters and "offstage" discourse leads us to regard power as residing in human dispositions and strategies and thus defies the conventional view of power as simply acts of domination (cf. Giddens 1979). It is in the best interest of the subordinate not to contest openly the claims of the powerful because, ultimately, the cultural endowment of the powerful will prevail. At the same time, the dominance of state representatives could be viewed as deliberate acts of domination for, as "public servants," they hold the view that they are delivering services that will alleviate the sufferings of the people.

The Ilokanos have managed to appropriate creatively some biomedical knowledge and technology associated with malaria in accordance with the practical logic of their own meaning system. Biomedical knowledge about malaria (e.g., the role of the mosquito vector in malaria transmission, key symptoms associated with malaria, and treatment) has been reformulated in terms of Ilokano theories of illness causation such as pollution, contagion, and actions of environmental spirits and the spirits of deceased relatives. In addition, they combine locally based treatments such as plant medicines and healing rituals with biomedically oriented therapies. This characteristic response to malaria by the Ilokanos is guided by an ethnomedical schema requiring therapy that has to uphold the synthesis of moral, social, and physical presentations of sickness.

This localized view of malaria radically departs from that of the state, which,

given its adherence to biomedicine, denies the "essential interconnection of physical, social and moral being, both in health and illness" (Comaroff 1982:58). Trapped in this view of malaria, the state health planners and policy makers emphasize technical solutions that revolve around the mosquito-plasmodia axis.

Consequently, this externally imposed, state-led schema of disease control finds itself challenged, if not undermined, by the tenacity of local cultural schemas. Under this condition, the state finds itself compelled to develop ways and means to pursue its agenda of subjugating what it has constructed as "traditional beliefs and practices" of recalcitrant malaria-ridden rural populations. From the point of view of the state, health education, which is based largely on the knowledge claims of biomedicine and biomedical sciences, constitutes a powerful weapon to achieve people's participation. This strategy suffers from, what I would call, the "fallacy of the undiscerning mind" attributed to "traditional rural societies." In this connection, Gramscia's observations are instructive:

Malaria is part of a socioeconomic depression complex from which people have difficulty singling out malaria for particular concern. People in malarious areas have for centuries regarded malaria as part of their everyday lives; they have been conditioned to live with it and with other scourges, such as poverty, hunger in certain seasons, and other diseases. The people cannot understand why malaria should be selected for elimination rather than poverty, hunger, or other diseases or conditions.... The multiplicity of afflictions the people suffer takes away a good part of their motivation they might have for self-help in controlling malaria. [1981:386]

In my examination of the antimalarial program in the Philippines, I also paid heed to the call for transcending a strictly localized view of social dynamics by implicating the role of larger socioeconomic and political forces. I have endeavored

to explicate the historical roots of the malaria control program, in which I underscored the political and economic goals underlying the establishment of public health programs. The health condition of the rural work force was and still is a paramount concern in the "U.S.-supervised Philippine economy" (Neher 1991:75). In addition, I have noted the support given by international agencies towards the realization of these goals.

The malaria control program illuminates the patron-client relationship that has been forged between the Philippines and foreign aid agencies responsible for setting up the public health system in the Philippines. The antimalarial program is part and parcel of the global health agenda set by international health agencies, whose work historically included the following assumptions:

(1) that wealthier countries have the capital, the talent, and the "know-how" to solve the health problems of poorer countries; (2) that the wealthier countries should therefore plan and direct such efforts; and (3) that Western health institutions and approaches will work in solving health problems in LDCs [less developed countries].... [Rubenstein and Lane 1990:367]

Increasingly, medical anthropologists and social scientists alike have begun calling attention to the politics of international health and have come up with critiques of the cultural assumptions that underlie its *modus operandi* (e.g., Crandon 1983; Justice 1986, 1987; Morgan 1989; Taussig 1978). My inquiry speaks to that concern. The medico-technological bias of the Western health enterprise has been central to the conceptualization, financing, and implementation of antimalarial efforts of the global malaria control program. As indicated in Chapter Three, the Philippine state has always subscribed to the policies and strategies of WHO, which, together with

USAID and other international private foundations, has been providing technical and financial support for the antimalarial campaign in the country. What this suggests is that the Philippine state as a "less developed country" has to contend continually with its position in the global political economy.

The analysis of antimalarial control in Masipi developed here reflects the interplay of the structures of domination (i.e., the authoritative knowledge of science and biomedicine, the barangay structure, top-down health planning and implementation, and international health and development schemes) with the socioculturally constructed modes of thought and action of the Ilokanos in Masipi. It represents a case for an understanding of the processes responsible for the constraints faced by a state-led disease control intervention, constraints that are shaped by the dynamics between an ethnomedical system that is rooted in local experience and a disease control schema that is grounded in biomedicine and the logic of economic development.

As a final remark, my analysis of the antimalarial campaign among the Ilokanos of Masipi eschewed an analytic framework of "traditional medical system versus modern medical system," a framework that tends to view culture as a conservative force. I analyzed local apathy, ambivalence, and resistance towards the antimalarial program in terms of the concept of cultural politics to call attention to the dynamics of power and meaning taking place in the interactions of the Ilokanos with the state-supported health functionaries. Rejecting the tendency to view culture as static, my analysis highlighted the ways in which the Ilokanos have reconfigured the antimalarial program in terms of their own cultural schema. Thus, apathy,

ambivalence, and resistance represent the Ilokanos' responses to the state's antimalarial program that gives primacy to "mosquito control," an orientation that tends to overlook the complexities of the cultural experience of the Ilokanos.

APPENDIX

APPENDIX

Presidential Decree No. 70

**INSURING THE SUCCESSFUL OPERATION OF MALARIA ERADICATION
CAMPAIGNS IN THE PHILIPPINES**

WHEREAS, there were pending before Congress prior to the promulgation of Proclamation No. 1081 dated September 21, 1972, certain measures vital to the health and economic conditions of the people; and

WHEREAS, one of these measures is a bill entitled "An Act Insuring the Successful Operation of the Malaria Eradication Campaigns in the Philippines;" and

WHEREAS, this measure will greatly help in reducing to the minimum the incidence of malaria, if not totally eradicate it, thereby removing one of the deterrents to our economic endeavor;

NOW, THEREFORE, I, FERDINAND E. MARCOS, President of the Philippines, by virtue of the powers vested in me by the Constitution as Commander-in-Chief of all the Armed Forces of the Philippines, and pursuant to Proclamation No. 1081 dated September 21, 1972, and General Order No. 1 dated September 22, 1972, as amended, and in order to overcome serious setbacks in malaria eradication campaigns on account of the refusal of houseowners to cooperate in this campaign, do hereby decree that H. No. 15077, entitled "An Act Insuring the Successful Operation of Malaria Eradication Campaigns in the Philippines," as herein incorporated, is hereby adopted and approved, and made part of the law of the land.

SECTION 1. To insure a successful campaign for the eradication of malaria in the Philippines in order to promote the general health and welfare of the people as a whole and to alleviate specifically the injurious effects of malaria on agricultural productivity, rural development, industrial endeavor and community development, anti-malaria workers of the Malaria Eradication Service of the Department of Health are hereby authorized:

(a) To enter private premises, dwellings and yards without being guilty of trespass thereof, in order to spray the houses or to canvass for malaria cases, take blood films, give treatment and other anti-malaria activities necessary to eradicate malaria;

(b) To gather data from other agencies for consolidation of records on the incidence of malaria and to conduct investigation, studies, research and demonstration with the view of discovering a solution to the problems incidental to the purpose of

this Decree.

SECTION 2. Government and private hospitals, clinics and other health agencies are required to report to the Malaria Eradication Service in the Department of Health any incidence that may come to their knowledge.

SECTION 3. Anti-malaria workers shall see to it that the insecticide residue on sprayed surfaces, being essential to the success of the anti-malaria program, shall not be willfully removed but must be allowed to stay on the wall until the termination of the spraying campaign.

SECTION 4. Any person who refuses or obstructs an anti-malaria worker from the performance of the duties provided in this Decree or refuses, without just cause, to allow said worker free entry to his premises during a malaria control campaign shall be fined not less than three hundred pesos nor more than five hundred pesos, or by imprisonment for not less than one month but not more than three months, or both, depending upon the discretion of the court.

SECTION 5. The Director of the Malaria Eradication Service, with the approval of the Secretary of the Department of the Health, is hereby authorized to issue rules and regulations for the proper implementation of the other provisions of this Decree.

SECTION 6. All Acts, parts of Acts and executive orders inconsistent with the provisions of this Decree are hereby repealed.

SECTION 7. This Decree shall take effect immediately.

Done in the City of Manila, this 27th day of November in the year of Our Lord, nineteen hundred and seventy-two.

By the President:

(Sgd.) ALEJANDRO MELCHOR
Executive Secretary

BIBLIOGRAPHY

BIBLIOGRAPHY

Abaya, Eufracio C.

- 1987 Dynamics of Environment, Illness, and Society: Confronting Malaria Amongst the People of Cabagan, Isabela. Unpublished master's thesis, Department of Anthropology, University of the Philippines.

Agoncillo, Teodoro, and Oscar Alfonso

- 1967 History of the Filipino People. Quezon City, Philippines: Malaya Books.

Alfiler, Concepcion P., et al.

- 1990 The Organization and Management of Disease Control Programs in the Philippines: Schistomiasis, Malaria and Tuberculosis. Prepared for the Clark Foundation and the World Bank. ms.

Aquino, Belinda

- 1982 "The Philippine Barangays as Instruments of Central Control." Proceedings of the Fourth Symposium on Asian Studies. Hong kong: Asian Research Service.

Azurin, J.C.

- 1988 Primary Health Care: Innovations in the Philippine Health System, 1981-1985. Makati, Philippines: J.C. Azurin Foundation.

Baer, Hans

- 1982 On the Political Economy of Health. Medical Anthropology Newsletter 14(1):1-2, 13-17.

Bell, Daniel W.

- 1950 United States Economic Survey Mission Report on the Philippines. Department of State Bulletin.

Bourdieu, Pierre

- 1977 Outline of a Theory of Practice. Cambridge Studies in Social Anthropology, Vol. 16. Cambridge: Cambridge University Press.

Brown, Richard

- 1976 Public Health in Imperialism: Early Rockefeller Programs at Home and Abroad. American Journal of Public Health 66(9):897-903.

Cabrera, B.D., and P.V. Arambulo III

- 1977 Malaria in the Republic of the Philippines. Acta Tropica 34:265-279.

Comaroff, Jean

1982 *Medicine: Symbol and Ideology. In The Problem of Medical Knowledge.* Peter Wright and Andrew Treacher, eds. Pp. 49-68. Edinburgh: Edinburgh University Press.

1985 *Body of Power, Spirit of Resistance: The Culture and History of a South African People.* Chicago: University of Chicago Press.

Comaroff, John, and Jean Comaroff

1992 *Ethnography and the Historical Imagination.* Boulder, CO: Westview Press.

Constantino, Renato

1967 *The Making of a Filipino.* Quezon City, Philippines: Malaya Books.

Crandon, Libbet

1983 *Grass Roots, Herbs, Promoters and Preventions: A Reevaluation of Contemporary Health Care Planning--The Bolivian Case.* *Social Science & Medicine* 17:1281-89.

de Certeau, Michel

1984 *The Practice of Everyday Life.* Berkeley: University of California Press.

Department of Environment and Natural Resources

1991 *Annual Report (Region II).* Manila: DENR.

Department of Health, Philippines

1963 *"Plan of Operations, Malaria Eradication Service."* Vol. 1, Part IV. Pp. 60-94. Manila: Department of Health.

Dirks, Nicholas B., Geoff Eley, and Sherry Ortner

1994 *Introduction. In Culture/Power/History.* Nicholas B. Dirks, Geoff Eley, and Sherry Ortner, eds. Pp. 3-45. Princeton, NJ: Princeton University Press.

Doria, Socorro Cuento

1964 *Malaria Eradication in the Philippines: A Case Study in Administration of a Technical Assistance Program.* Unpublished master's thesis, Institute of Public Administration, University of the Philippines.

Doyal, Lesley

1979 *The Political Economy of Health.* London: Pluto Press.

Elliot, Charles Burke

1917 *The Philippines: A Study in Tropical Democracy*. Brooklyn, NY: Braunworth and Co.

Fonacier, Jose

1953 *The Great Ilokano Movement*. *Diliman Review* 2(1):12-23.

Foster, George M., and Barbara Gallatin Anderson

1978 *Medical Anthropology*. New York: John Wiley and Sons.

Frankenberg, Ronald

1980 *Medical Anthropology and Development: A Theoretical Perspective*. *Social Science & Medicine* 13C:203-211.

Giddens, Anthony

1979 *Central Problems in Social Theory: Action, Structure and Contradiction in Social Analysis*. Berkeley: University of California Press.

Good, Byron J.

1977 *The Heart of What's the Matter: The Semantics of Illness in Iran*. *Culture, Medicine, and Psychiatry* 1:25-58.

1986 *Explanatory Models and Care-Seeking: A Critical Account*. *In Illness Behavior: A Multidisciplinary Model*. Sean McHugh and T. Michael Vallis, eds. Pp. 161-172. New York: Plenum Press.

Good, Byron J., and Mary-Jo Del Vecchio-Good

1982 *Toward a Meaning-Centered Analysis of Popular Illness Categories: "Fright Illness" and "Heart Distress" in Iran*. *In Cultural Conceptions of Mental Health and Therapy*. Anthony J. Marsella and Geoffrey M. White, eds. Pp. 141-166. Dordrecht, Holland: D. Reidel Publishing Co.

Gramiccia, G.

1981 *Health Education in Malaria Control*. *World Health Forum* 2(3):385-393.

Hardie, Robert S.

1952 *Philippine Land Tenure Reform: Analysis and Recommendations*. Manila: U.S. Special Technical Mission.

Hart, Donn V.

1969 *Bisayan Filipino and Malayan Humoral Pathologies: Folk Medicine and Ethno-history in Southeast Asia*. Southeast Asian Program, Data Paper No. 76. Ithaca, NY: Cornell University.

Heiser, Victor

1936 *An American Doctor's Odyssey*. New York: W.W. Norton and Co.

Janzen, John M.

1978 *The Quest for Therapy in Lower Zaire*. Berkeley: University of California Press.

Jocano, Landa F.

1973 *Folk Medicine in a Philippine Municipality: An Analysis of the System of Folk Healing in Bay, Laguna, and its Implications for the Introduction of Modern Medicine*. Manila: The National Museum.

Justice, Judith

1986 *Policies, Plans, and People: Cultural and Health Development in Nepal*. Berkeley: University of California Press.

1987 *The Bureaucratic Context of International Health: A Social Scientist's View*. *Social Science & Medicine* 25(12):1301-1306.

Keessing, Felix

1962 *The Ethnohistory of Northern Luzon*. Stanford, CA: Stanford University Press.

Kerkvliet, Benedict J.

1990 *Everyday Politics in the Philippines*. Berkeley: University of California Press.

Kleinman, Arthur

1978 *Concepts and a Model for the Comparison of Medical Systems as Cultural Systems*. *Social Science & Medicine* 1:85-93.

Lariosa, Theresita R.

1986 *Culture, Environment and People's Perceptions: Considerations in Malaria Control in the Philippines*. *Southeast Asian Journal of Tropical Medicine* 17(3):360-370.

Lewis, Henry T.

1971 *Ilocano Rice Farmers: A Comparative Study of Two Philippine Barrios*. Honolulu: University of Hawaii Press.

Lindenbaum, Shirley, and Margaret Lock

1993 *Introduction*. In *Knowledge, Power, and Practice*. Shirley Lindenbaum and Margaret Lock, eds. Pp. 3-5. Berkeley: University of California Press.

Malaria Control Service

1987 Annual Report. Manila: Department of Health.

McGregor, I.A.

1985 Epidemiology and Control of Malaria. *In* Epidemiology and the Community Control of Disease in Warm Climate Countries. Derek Robinson, ed. Pp. 413-429. Edinburgh: Churchill Livingstone.

Morgan, Lynn M.

1987 Dependency Theory in the Political Economy of Health: An Anthropological Perspective. *Medical Anthropology Quarterly* 1(2):131-151.

1989 The Importance of the State in Primary Health Care Initiatives. *Medical Anthropology Quarterly* 3(3):227-321.

Morsy, Soheir

1990 Political Economy in Medical Anthropology. *In* Medical Anthropology: Contemporary Theory and Method. Thomas M. Johnson and Carolyn F. Sargent, eds. Pp. 26-46. New York: Praeger.

Neher, Clark D.

1991 Southeast Asia in the New International Era. Boulder, CO: Westview Press.

Ortner, Sherry

1989a Cultural Politics: Religious Activism and Ideological Transformation among 20th Century Sherpas. *Dialectical Anthropology* 14:197-211.

1989b High Religion: A Cultural and Political History of Sherpa Buddhism. Princeton, NJ: Princeton University Press.

Palmer, Kevin, et al.

1993 The Philippines Malaria Control Programme. Report of an External Review. ms.

Paul, Benjamin, ed.

1955 Health, Culture, and Community. New York: Russell Sage Foundation.

Rifkin, Susan

1985 Health Planning and Community Participation: Case studies in Southeast Asia. Guildford and King's Lynn, Great Britain: Biddles Ltd.

Rivera, Generoso F., and Robert McMillan

1952 The Rural Philippines. Manila: Office of Information, Mutual Security Agency.

Rosal, Rosvida

- 1974 Annotated Bibliography of Malaria in the Philippines. Institute of Public Health, University of the Philippines. ms.

Rubenstein, Robert and Sandra Lane

- 1990 International Health and Development. *In Medical Anthropology: Contemporary Theory and Method*. Thomas M. Johnson and Carolyn F. Sargent, eds. Pp. 367-390. New York: Preager.

Russell, Paul F.

- 1933 Malaria in the Philippine Islands. *American Journal of Tropical Medicine* 13:167-178.
- 1934 Malaria and Culicidae in the Philippine Islands: History and Critical Bibliography, 1898 to 1933. Manila: Bureau of Printing.
- 1952 Malaria: Basic Principles Briefly Stated. Oxford: A.R. Mowbray and Co. Limited.

Sahlins, Marshall

- 1976 Culture and Practical Reason. Chicago: University of Chicago Press.

Scheper-Hughes, Nancy, and Margaret M. Lock

- 1986 Speaking "Truth" to Illness: Metaphor, Reification, and a Pedagogy for Patients. *Medical Anthropology Quarterly* 17:137-140.
- 1987 The Mindful Body: A Prolegomenon to Future Work in Medical Anthropology. *Medical Anthropology Quarterly* 1:6-41.

Scott, James C.

- 1990 Domination and the Arts of Resistance: Hidden Transcripts. New Haven, CT: Yale University Press.

Singer, Merrill

- 1986 Developing a Critical Perspective in Medical Anthropology. *Medical Anthropology Quarterly* 17(5):128-129.
- 1989 The Coming of Age of Critical Medical Anthropology. *Social Science & Medicine* 28(11):1193-1203.

Taussig, Michael

- 1978 Nutrition, Development, and Foreign Aid: A Case Study of U.S.-Directed Health Care in a Colombian Plantation Zone. *International Journal of Health Services* 8:101-121.

- 1980 Reification and the Consciousness of the Patient. *Social Science & Medicine* 14B:3-13.

Tiglao, Teodora

- 1975 *Seven Decades of Public Health in the Philippines (1898-1972)*. Tokyo: Southeast Asian Medical Information Center.

USAID

- 1961 *The Current Status of the Malaria Eradication in the Philippines. A Special Report to the Secretary of Health*. Manila: Agency for International Development.

Voulgaropoulos, Emmanuel

- n.d. *Foreign Aid: Asset or Liability? In Selected Readings on the Community-Based Approach to Health*. Manila: Community Medicine, Inc.

Waitzkin, Howard

- 1991 *The Politics of Medical Encounters*. New Haven, CT: Yale University Press.

Walker, David

- 1953 *Selected Bibliography on Malaria in the Philippines*. Manila: Bureau of Printing.

Walker, E.L., and M.A. Barber

- 1914 *Malaria in the Philippine Islands*. *Philippine Journal of Science* 9:381-439.

Whyte, Susan Reynolds

- 1988 *The Power of Medicines in Africa. In The Context of Medicines in Developing Countries: Studies in Pharmaceutical Anthropology*. Sjaak van der Geest and Susan Reynolds Whyte, eds. Pp. 217-233. London: Kluwer Academic Publishers.

Williams, Raymond

- 1977 *Marxism and Literature*. Oxford: Oxford University Press.

Worcester, Dean C.

- 1914 *The Philippines, Past and Present*. New York: The MacMillan Co.

WHO

- 1973 *Handbook of Resolutions and Decisions of the World Health Assembly and the Executive Board*. Vol. 1. Geneva: WHO publications.

Young, Allan

1978 Mode of Production of Medical Knowledge. *Medical Anthropology* 2:97-124.

1980 The Discourse on Stress and the Reproduction of Medical Knowledge. *Social Science & Medicine* 14B:133-146.

1982 The Anthropologies of Illness and Sickness. *Annual Review of Anthropology* 11:257-285.

Yekutieli, Perez

1981 Lessons from the Big Eradication Campaigns. *World Health Forum* 2(4):465-490.

MICHIGAN STATE UNIV. LIBRARIES



31293010465387