SILLIMAN JOURNAL

A JOURNAL, PUBLISHED TWICE YEARLY,
DEVOTED TO DISCUSSION AND INVESTIGATION
IN THE HUMANITIES, SOCIAL SCIENCES, AND SCIENCES

VOLUME 46 NO.1 JANUARY - JUNE 2005

ISSN 0037-5284

SILLIMAN JOURNAL

Volume 46 Number 1 , January - June 2005

The Silliman Journal is published twice a year under the auspices of Silliman University, Dumaguete City, Philippines. Entered as second class mail matter at Dumaguete City Post Office on September 1, 1954.

ISSN 0037-5284

Annual subscription rates are at PhP600 for local subscribers, and $35 for overseas subscribers. Subscriptions and orders for current and back issues should be addressed to:

The Circulation Manager
Silliman Journal
Silliman University Main Library
Dumaguete City, Negros Oriental
6200 PHILIPPINES

Issues are also available in microfilm format from:

University Microfilms International
300 N. Zeeb Road, Ann Arbor
Michigan 48106 USA

Inquiries regarding editorial policies and contributions may be addressed to the Circulation Manager or the Editor at the following email address: english@su.edu.ph
http://www.su.edu.ph/english

Imaging by Philip Van Peel
Photo credits: SU website
Cover image: Freedom Wall, SUCampus
Cover and book design by Philip Van Peel

Printed by SU Printing Press, Dumaguete City

SILLIMAN JOURNAL
Vol. 46 No.1 2005

CONTENTS

Notice to Authors

The Silliman Journal welcomes contributions in all fields from both Philippine and foreign scholars, but papers should preferably have some relevance to the Philippines, Asia, or the Pacific. All submissions are refereed.

Articles should be products of research, taken in its broadest sense; a scientific paper should make an original contribution to its field. Authors are advised to keep in mind that Silliman Journal has a general and international readership, and to structure their papers accordingly.

Silliman Journal also welcomes the submission of "Notes," which generally are briefer and more tentative than full-length articles. Reports on work in progress, queries, updates, reports of impressions rather than research, responses to the works of others, even reminiscences are appropriate here. Book reviews and review articles will also be considered for publication.

Manuscripts should conform to the conventions of format and style exemplified in this issue. Whenever possible, citations should appear in the body of the paper, holding footnotes to a minimum. Documentation of sources should be discipline-based. Pictures or illustrations will be accepted only when absolutely necessary. All articles must be accompanied by an abstract and must use gender fair language. All authors must submit their manuscripts in duplicate, word-processed double-space on good quality paper. A diskette copy of the paper, formatted in MSWord 6.0 should accompany the submitted hard copy.

The Editorial Board will endeavor to acknowledge all submissions, consider them promptly, and notify authors of its decision as soon as possible. Each author of a full-length article is entitled to 20 off-print copies of his/her submitted paper. Additional copies are available by arrangement with the Editor or Circulation Manager before the issue goes to press.

editor's notes

He is wise who knows the sources of knowledge –
who knows who has written and where it is to be found.
A. A. Hodge

It is important that students bring a certain ragamuffin, barefoot,
irreverence to their studies;
they are not here to worship what is known, but to question it.
Jacob Chanowski

The important thing is not to stop questioning.
Albert Einstein

To repeat what others have said, requires education;
to challenge it, requires brains.
Mary Pettibone Poole

In this Issue. Fifty years since its publication, Silliman Journal continues to function as a dynamic forum for the presentation of research whose diversity of topics and high quality of content demonstrate the journal's vibrant role as a discursive site and space for intellectual exchange of ideas, academic debates, critical dialogues, and stimulating conversations and disputations. Although the limitations of a multidisciplinary publication are familiar, what must be acknowledged is that multidisciplinarity–and its myriad rebirths as interdisciplinarity, intra/trans/crossdisciplinarity–is rooted in the multiplicity and fluidity of contemporary perspectives which underscore the essential link between theory and practice. Perhaps among its greatest moments is not only the breaching of once-discrete boundaries between highly specialized disciplines but in proving that they can work productively together. As our era witnesses the constant receding or expanding of boundaries of knowledge–geographic and intellectual–in the face of powerful communication technologies, the impulse towards interdisciplinarity takes on an even greater significance. Silliman Journal aims to continue being the site for presenting stimulating new work and promoting a diversity of views.

ꕥ ꕥ ✂ ꕥ ꕥ

The interdisciplinary essays in this collection cover a wide variety of terrain and are informed by an equally varied ways of readings and approaches that reflect Silliman Journal's mandate and the spaces it occupies. Arguing for diverse scholarship,

intercultural and radical pedagogies, and community involvement, the writers in this issue draw our attention to the global implications of our engagement with local communities by connecting critical academic research with practical concerns and agenda and socially relevant themes. Their most significant interdisciplinary appeal is in their attempt to extend established educational and theoretical perspectives by linking them to alternative modes of thinking about contemporary culture. As such, they help us to think through what it is that we want to do as scholars and academics within and outside of the academe.

Heading this collection is Gina Fontejon-Bonior's article entitled Schooling as Investment: The Need for a Poststructuralist Perspective in Educational Research in the Philippines. In this insightful essay, Fontejon-Bonior confronts two of the most challenging questions in the academe: one from educational researchers who wonder why on earth anyone would bother with poststructuralism and the other from scholars working with Poststructuralist theories and research methodologies who ask why on earth anyone would bother with Education!

As the paper acknowledges, Poststructuralist theory is difficult, but it allows, among other things, an investigation into relations between the individual and the social in specific sites, which it does through a focus on the centrality of language in the organization of human experience. Central in the poststructuralist frame is the notion that there is no access to 'reality' which is not necessarily mediated through semiotic systems, the most powerful of which is language. On the other hand, research questions concern the complex ways in which individual human subjects come to understand themselves and the world in specific locations. In the area of educational research, poststructuralist theories and methodologies allow for an understanding of the necessary complexity of the school as an institution and a set of social practices. Fontejon-Bonior takes on the challenge of poststructuralist perspective and engages on one methodological issue arising from the poststructuralist focus on the question of language and discourse—that of the binary structuration of knowledge—through reference to research into the complex dynamics of schooling in socio-economically disadvantaged communities in the Philippines.

From this standpoint, the author addresses this problem and argues that schooling is not only an investment that makes possible upward social mobility but also enables the construction of identity that positions learners in stances of power and helps

them counter marginalization and exclusion. Schooling, or the notion of literacy, clearly implies an understanding of both power and the context, historical, cultural, and personal aspects of discourse, and, of greater urgency among the poor communities of this country, access to the language of power–English. Noting that the potential for an educational system like the Philippines to provide opportunities for socio-economic mobility is largely dependent on one's ability to use the language of power, the author stresses, among other things, the importance of getting learners to master the secondary Discourse.

Taking a parallel path in his discussion of the role of education in social mobility, Enrique G. Oracion, in Not an Easy Way Up: A Life History of a Middle Class Filipino Family, uses an entire family as a case study as he navigates his way through arguments that human agency remains the determining factor for social mobility amidst cultural and structural restrictions. Using the notion of contradictory class locations and Bourdieu's concept of the cultural capital as analytical frame, the author delves into the life history of an emerging Filipino family's struggle to break out of the impoverishment of lower class life.

Following Bourdieu's work, the author examines the various theoretical roles cultural capital plays in this small rural community and the various types of high status signals that determine social stratification. Importantly, the paper looks at the impact of culture on the class system and the relationship between action and social structure. As Bourdieu has done, Oracion also looks at the contribution of education and family socialization to the reproduction of the structure of power relations and symbolic relations between classes by contributing to the structure of distribution of cultural capital. Oracion's case study presents with sympathetic eyes the subjects' private class struggle for self-improvement and notes rather poignantly that entrenched cultural restrictions continue to be a factor in social stratification and for those in the lower class a barrier to access to cultural capital.

The next article entitled Reverse Colonialism: A Theoretical Inquiry Into the Social Construction of the Filipino Community in Diaspora by Efren N. Padilla is an addition to the expanding library of writings on Filipino and/in diaspora. A critical inquiry on the unique and dynamic Filipino-American relation and its impact on the Filipino immigrant community in the United States, the paper examines the nature of Filipino/a American-ness and the many possible ways to inhabit and creatively negotiate

that identity. In particular, the paper looks at the connection between Filipino ethnic and cultural identity and history–colonial/neocolonial/postcolonial relation with the US and, to some degree, with Spain and has for its expressed intent the reversal of the negative impact of American colonialism.

As this paper suggests, however, the project of constructing Filipino American identities is fraught with tension, contradictions, and ambiguities. Issues relating to diasporic identity emerge as more problematic than is usually acknowledged by theorists. Addressing the current debates between deconstructive cultural criticism and the project of indigenization as these are played out in the struggles of Filipino and Filipino American academics seeking empowerment for their respective communities, Susanah L. Mendoza (2003) argues that writing about diasporic subjectivities requires alternative ways of looking at theorizing and cultural politics.[1] Clearly, there is a need to explore approaches which take into account the complex dynamics of power, identity, and subject position of dis/located ethnic subjectivities, dialogue with alternative spatial locations, and consider alternative communal formations.

The Brief History of the Chamorros and Filipinos in Guam by Peter E. Patacsil also engages the issue of diaspora but from a different trajectory. In this paper, the author traces the history of migration of Filipinos to Guam since 1638 first as shipwrecked sailors of the Spanish galleon Concepcion and later as soldiers and laborers, and as professionals in contemporary times. According to this historical account, those early Filipinos stayed and intermarried with the indigenous Chamorros and raised families whose ethnic and cultural heritage straddle the traditions of both Filipino and Chamorro cultures, and more importantly, share the experience of colonization first by Spain and later by the Americans.

At the same time, the essay also examines the problematic relationship between the Filipino migrants and the indigenous Chamorros. Evincing a sympathetic understanding of the uneasy cultural divide that continues to characterize the Chamorro-Filipino relations, the author points out that although these two groups share a common history of oppression, they have little in common by way of cultural links–neither in indigenous traditions,

[1] Mendoza, S.L. (2002). *Between the Home and the Diaspora: The Politics of Theorizing Filipino and the Filipino American Identities* (A Second Look at the Poststructuralism-Indigenization Debates). *New York & UK: Routledge.*

language, nor family structure. As a consequence, the relationship between these two groups has always been fraught with tension as indigenous Chamorros view the arrival of migrants as a threat to their economic, cultural, and political wellbeing. Interestingly, both Filipinos and Chamorros in Guam, according to the author, find themselves on the same side in facing the threat of Euro-American encroachment. Nonetheless, in the face of this threat, their solidarity in the struggle to maintain their cultural identities can only be best described as "asymmetrical."

Regular readers of our special conservation issues in the past are by now familiar with the works of the authors included in the science section of this collection. Frequent contributors to or reviewers for Silliman Journal, the authors of the following articles have distinguished themselves as much for the quality of their research work and their publications as well as for the seriousness of their commitment to diversity conservation in this country.

In the first of these articles, Dr. Maren Gaulke, consultant for the Zoologische Staatssammlung in Munich, collaborates with colleagues, Dr. Alexander Volker Altenbach and Ulrich Struck from the Ludwig-Maximilians-University in Munich as well as with Arnold Demegillo from the Philippine Endemic Species Conservation Project in Panay Island to bring us an update On the distribution and biology of Varanus mabitang. A rare, arboreal lizard of the varanus species, the Mabitang was first introduced to science only in 2001 through the work of Dr. Gaulke. Silliman Journal was privileged to feature this threatened species in its 2002 Special Visayas Conservation issue.

Following this article is another collaborative work by Douglas Fenner, Ryan C. J. Walker, and Peter Raines providing A checklist of stony corals from the Malitbog area of Western Sogod Bay, Southern Leyte, Philippines as part of the Philippine-based conservation project of Coral Cay Conservation in London. Using a rapid diversity assessment of the coral communities in the area, the study concludes that the high coral diversity of Sogod Bay suggests that the reefs of the area are of high conservation importance.

In the final science article on the Bycatch Associated with the Artisanal Tuna Fishery of Bunaken National Park, North Sulawesi, Indonesia, Ryan C. J. Walker writes about the result of an investigation on tuna bycatch conducted in Indonesia between May and July 2001. In this paper, Walker defines bycatch as a very general term for every species or individual organism captured

by a fishing operation that is not the intended target species. Results of the study support the view that the local anthropogenic pressure on finfish populations in the form of bycatch and wastage can be mitigated by certain artisanal fishing practices.

ꕥ ꕥ ✂ ꕥ ꕥ

The *Notes* section of this issue includes an introductory essay to a preliminary study aimed at writing a "total" national history following Fernand Braudel's modern historiography model, which uses the maritime perspective as analytical framework for the reconstruction of history. As a starting point for the construction of a historical discourse, the article entitled Maritime Historiography of the Visayas: A Prologue to the History of the Islands in the Seas by Earl Jude Paul L. Cleope explores the bodies of water surrounding the Visayas Islands and their role in the development of the region.

ꕥ ꕥ ✂ ꕥ ꕥ

On this 51st year of publication, Silliman Journal, reaffirms its mandate as a multidisciplinary journal by continuing the exploration of multidisciplinary interconnectedness through a plurality of lenses, perspectives, and models which challenge prior or existing perspectives as well as offer alternative ways of seeing, thinking, theorizing, and learning. In charting the future course of Silliman Journal into the next 50 years, at least three major questions need to be addressed: (1) What crucial topics, themes, and issues will demand special attention and special issues in a world plagued by perpetual crisis and emergency and fragmented by the consequences of postmodernism? (2) What transformations in research paradigms, critical theories, analytical practice, or scholarship will become available in the succeeding years and how will such transformations affect the mandate and practice of multidisciplinary publications like Silliman Journal? (3) How will rapid transformations in contemporary media and developments in communications technology affect the production and dissemination of knowledge in the coming years? Finally, what should be the role of Silliman Journal in addressing these issues, and what would make possible effective interventions on its part? As it has always done, Silliman Journal will continue to challenge its readers to become better scholars, colleagues, and students and grow and move skillfully and without fear into the future.

In this spirit, Silliman Journal opened this year with a new project, the *Silliman Journal Lecture Series Program*, aimed primarily at continuing this conversation among disciplines, inspiring more active participation from the academic community to engage in research and publication, as well as contributing to the education and professional development of faculty and students of Silliman University. The launching of this program in February this year had as first guest lecturer the eminent British ornithologist and rare bird specialist, Jon Hornbuckle, himself a member of Silliman Journal Board of Reviewers, speaking on biodiversity conservation and calling for more serious commitment to save the threatened fauna and flora of this country.

In August, the Program hosted the visit of Dr. Lester Edwin Ruiz, Professor of Theology and Culture of the New York Theological Seminary. A member of Silliman Journal's overseas Editorial Board, Professor Ruiz spoke during the first day of his visit on the topic Engaged Pedagogies for the social science faculty and graduate students. The next day, Prof. Ruiz engrossed the members of the Peace Advisory Council of Silliman University and Silliman Church pastors in a dialogue on Cultures of Peace: The Other Side of the War.

In addition to hosting lectures by local and visiting professors and specialists, the *Silliman Journal Lecture Series Program*, also organizes workshops, seminars, symposia, and group discussions whose output may serve as source of publishable papers. In July this year, as part of the University's Christian Life Emphasis Week, the Program coordinated the sharing discussion between the Silliman Church staff and the Divinity School and Religious Studies Program faculty. The resource speaker, Rev. Dr. Andrew Wai Man NG, Chaplain of Chung Chi College, The Chinese University of Hong Kong, spoke on the topic Christianity in Hong Kong and Mainland China.

As part of Silliman Journal's commitment to quality publications, the Program has lined up for the nearest future a writing-for-research-and-publication workshop intended to improve the writing skills of prospective contributors among the faculty. This project will be a collaboration between Silliman Journal and the Department of English and Literature. In the spirit of multidisciplinarity, Silliman Journal welcomes initiatives and collaborations which foster interdisciplinary conversations and dialogues around which special issues may be constituted. This invitation is addressed especially to the members of the Editorial Board, as well as to the Silliman University's academic

community—we hope they will take up this challenge and contact us at the first opportunity.

ꕥ

I would like to express my thanks to all the contributors for their professionalism and their patience. I am particularly grateful to our reviewers—their generosity with their expertise and time is matched only by the depth of their comments and the keenness of their critiques.

Expressions of gratitude also go to the many people who have supported *Silliman Journal* for the last 50 years and continue to do so to this day.

I wish to make a special mention of the work of Dr. Margie Udarbe in organizing the *Silliman Journal Lecture Series Program*. Her competence, creative energies, and commitment were essential in bringing this project to life. Because Silliman Journal only has modest resources, I thank our visiting lecturers for generously sharing their time and expertise. In particular, I am grateful to Dr. Agustin Pulido, Silliman University President, for hosting the visit of our lecturers. His unfailing support and much-needed financial assistance helped to bring this project into being and allowed us to show our guests the hospitality that Silliman University has come to be known for.

Finally, this gives me great pleasure to welcome this year's new members of the Editorial Board whose diverse disciplinary backgrounds reflect Silliman Journal's mandate: Prof. Gina Fontejon-Bonior of the Department of English and Literature and the College of Education, Dr. Hope M. Bandal of the Physics Department, and Dr. Betsy Joy B. Tan, the current Vice President for Academic Affairs. Starting last June, they joined Prof. Norma Caluscusan, Dr. Earl Jude Paul Cleope, Prof. Philip van Peel, Ms. Lorna Yso, and Ms. Naty Sojor in mapping the direction of Silliman Journal. Dr. Margie Udarbe's acceptance to chair the Editorial Board this year meant only one thing—Silliman Journal is in good hands, and from this end, halfway across the globe, I can breathe a little more easily! But my greatest debt to Margie is in allowing me to convince her to become my Associate Editor starting with this issue. More that her corporeal presence at our production site and her intellectual vigor, it is her dedication and commitment to Silliman Journal that will eventually guide our forthcoming issues into print. For being the reservoir of so much creative and positive energies—thank you, Marge!

Ceres E. Pioquinto

SCHOOLING AS INVESTMENT: THE NEED FOR A POSTSTRUCTURALIST PERSPECTIVE IN EDUCATIONAL RESEARCH IN THE PHILIPPINES

Gina A. Fontejon-Bonior

ABSTRACT

This paper argues for a poststructuralist perspective in studying the complex dynamics of schooling in socio-economically disadvantaged communities in the Philippines. It presents the limitations of interpreting learning in relation to learners' motivation particularly in the context where access to the language of power, English, plays a significant role in schooling. It then suggests that a more robust interpretation of schooling may be achieved by considering learning as apprenticeship to secondary Discourses. Schooling is not only an investment that allows for upward socio-economic mobility; it is also an experience of the construction of identity that positions learners in stances of power and enables them to counter hegemonic practices that further marginalize them. The paper attempts to justify the need for such perspective in research to inform educational reforms in the Philippines and raises questions that need to be addressed in such studies.

Introduction

Research and theory in the field of Second Language Studies in the past 15 years have challenged, extended, and supplemented the theoretical concepts of motivation as well as the extent to which learners' perceived investment in learning in general, or acquiring a second or a foreign language in particular, influence their decisions and actions in particular academic contexts (Peirce, 1995; Davidson, 1996; Stevenson & Ellsworth,1993). Such studies seem to indicate that students are more complex than were initially conceived. For example, Peirce's (1995) study indicates that the notion of motivation, i.e., a learners' commitment to learn a foreign language based on *instrumental* reasons, such as getting

a job or *integrative* reasons, such as the desire to assimilate into a community (Gardner, 1985), inadequately explains the dynamics of learning. This is because such notion "do[es] not capture the complex relationship between relations of power, identity, and language learning" (p. 17).

When students commit to learning a language, it is primarily because they see language not simply as an investment that allows for social and economic mobility but also as an experience of the construction of identity. This differs from instrumental motivation since such concept "generally presupposes a unitary, fixed, and a historic language learner who desires access to material goods" enjoyed by a privileged group. Motivation, therefore, is conceived as a "fixed personality trait". Investment, however, projects the complex relationship between the learner and the "changing social world", and considers the learner as a complex being of multiple desires and social identities. When learners communicate with powerful others in the community, they position themselves or are positioned in certain ways and constantly negotiate such positions as they organize or reorganize "a sense of who they are and how they relate to the social world" (Peirce, 1995, p. 18). Language learning therefore depends largely on the efficacy with which learners negotiate or position themselves in relation to significant others, i.e., their ability to advance their "agency".

However, such theoretical developments on investment, identity, agency, and language learning emerged primarily from case studies on immigrant populations SL contexts in economically advantaged countries such as the United States or Canada. In this research, I review such recent theoretical developments, explore briefly the contexts within which such theories were initially grounded, and employ such to inform a case study in an academic setting in a village high school in the Philippines. In this context, like many other economically challenged communities in the country, a) English, a foreign language to most students, is used as medium of instruction in core courses, i.e., Science, Math, and English; b) most of the participants—the community, school, administration, parents, and students constantly negotiate their identities for upward

socio-economic mobility; and c) academic resources and individuals familiar with schooling as a community of practice are scarce.

In the Philippines, as in many other countries where literacy is considered an essential part of government policy, most families regard education as the portal to social and economic mobility. It is not uncommon for economically disadvantaged Filipino families in rural villages to sell tracts of land, raise livestock, or sink into debt so that the children can complete their college education, get a well-paying job, and elevate the family's economic status. In a country of 75.33 million, an average rural family's annual income of about P73,319 (about US$1,500), and an overall poverty incidence of 37% (http://www.unfpa.org/modules/focus/philippines), any opportunity at socio-economic mobility is an investment worthy of every family's efforts. In many rural communities, the school is not only an academic institution. The school is also perceived as a context where students from poor, working class families can negotiate new identities as they participate in schooling as a potentially liberating community of practice.

In economically disadvantaged rural communities, the school is a vital space where children from materially disadvantaged families find opportunities and discourses that contest commonly held stereotypes. In this context, the school may provide a "third space," a context or condition that "ensure[s] that the meaning and symbols of culture have no primordial unity or fixity; that even the same signs can be appropriated, translated, and rehistoricized" (Bhabha, 1994, p. 37). Schools may be the context where individuals positioned in marginalized stances could "oppose stereotypes and assert novel interpretations of their shifting identities, interest and needs" (Fraser, 1997 in Fine, Weiss, Centrie, & Roberts, 2000, p.132). However, it appears that the potential for an educational system like the Philippines to provide opportunities for socio-economic mobility is largely dependent on one's ability to use the language of power. In a study conducted among a sampling of Filipinos in Metro Manila, Sibayan and

Segovia (1984) found that "about 47.3% think the use of English as medium of instruction has made Filipinos "a greater people" and expressed their belief that it is essential for the country's economic recovery (p.15). In the same study, "seventy-seven percent of the respondents (government and private agency employees) consider the schools as the place where they learnt most of their skills in [English]," with only 8% indicating the home as the source of learning (p.47). This study seems to show that the school is seen as the space where practices for economic prosperity is possible and suggests that English is a major vehicle to such an end.

Recently, the Department of Education implemented the Bridging Program, a system where graduates of Philippine elementary schools who do not reach the passing mark in an examination on English, Science, and Mathematics are required to take a one-year bridging course of the above three subjects before they are allowed entry in the secondary schools. Such program highlights the Philippine government's acknowledgment of the crucial role of English in schools. Failure in English, for instance, denies them access to higher education.

In this context, the school's potential for liberating possibilities is therefore dependent primarily on students' ability to strategically negotiate and project their identities and voices against silencing and marginalizing particularly as regards access to the language of power. In the Philippines, English has historically been a "stratifier" rather than a socio-economic "equalizer". This phenomenon is rooted in the introduction of English during the American colonization of the Philippine islands. According to Sibayan, because the American occupation in the islands in the late 1890s facilitated the use of the English language in most courses in higher education, "it did not take long before an elite speaking, reading, and writing English was formed" (Sibayan, 1999, p. 3). Many poor students in economically challenged rural villages (*barangays*) whose family cannot afford quality English language teaching in private schools; whose parents are neither familiar with the medium of instruction nor the culture of schooling; and whose family do

not have the academic resources at home, e.g., books and reference materials in English, are thereby disadvantaged. As such, how such students construct their identities as they invest in schooling in a post-colonial context where English is used for academic purposes is worth investigating. Such contexts can serve as a litmus test for the concept of agency as an aspect of second language use and learning, and the extent to which students can successfully navigate through systemic, socio-economic inequalities and disempowering authoritative discourses (Bakhtin, 1981, in Schuster, 1997).

In sum, there is a need for research that focuses on how poor students in a socio-economically challenged village school in the Philippines negotiate their identity and advance their agency in a context where English is the medium of instruction in subjects considered essential for academic success in spite of compelling circumstances, such as poverty; difficulty with the medium of instruction; and lack of academic resources and "oldtimers", i.e., individuals familiar with the practices and expectations in schooling readily available to assist students when they need academic scaffolding (Wenger, 1998). Moreover, such study must draw on three concepts relating to schooling as identity construction: first, literacy [primarily in English] as mastery of secondary Discourses; second, learning as legitimate peripheral participation in a community of practice, e.g., apprenticeship to the use of English for academic purposes; and third, power, agency, and identity from a post structural perspective.

Literacy as mastery of secondary discourses

In problematizing the traditional approaches to the notion of literacy as one's ability to read and write, Gee (1996), drawing on Scribner and Cole (1981), suggests that "what matters is not literacy as some decontextualized ability to write or read, but the social practices into which people are apprenticed as part of a social group" (p. 59). These practices are what he calls Discourses, "a sort of identity kit which comes complete with the appropriate costume and instructions on how to act, talk, and often write, so

as to take on a particular social role that others will recognize" (p. 127).

Discourses, according to Gee, are "socially accepted association[s] among ways of using language, other symbolic expressions, and 'artifacts', of thinking, feeling, believing, valuing, acting that can be used to identify oneself as a member of a socially meaningful group or 'social network', or to signal (that one is playing) a socially meaningful 'role'"(p. 131). Gee distinguishes between ***primary discourse,*** i.e., the discourse people are born into, and ***secondary discourse***, i.e., "discourses in institutions outside of the family such as schools and are learned by engaging in their practices" (Gee, 1987, in Zamel and Spack, 1998, p. 56). Gee further posits that learners' success at literacy is determined, to a great extent, by students' ability or inability to be apprenticed into the secondary Discourse. "Discourses are mastered through acquisition, not through learning.... [They are] not mastered by overt instruction, but by enculturation (apprenticeship) into social practices through scaffolded and supported interactions with people who have already mastered the Discourses" (Gee, 1996, p. 139).

In this study, for instance, English, the language for academic purposes, is a secondary Discourse into which students need to be apprenticed. In the absence of "old-timers", students in rural communities are faced with the difficult task of efficiently participating in schooling as a community of practice and at the same time apprenticing themselves into the use of English for academic purposes, e.g., note-taking, summarizing, discussing, and reporting in English. Such a daunting task, recorded by an American educator who evaluated the use of English as medium of instruction in 1950, continues to present a challenge to the Philippine government today:

> [It] is as if an American child had to learn Turkish before he could be taught anything else... [It] is indeed a disheartening experience to visit a barrio school in the Islands, see this average child, sense his many

> imperative needs, but find him devoting most of his efforts in learning a distorted smattering of a language for which he has little need and which he will probably forget (Prator, 1950, in Sibayan, 1999, p. 3).

Although the role of English in the socio-economic life of Filipinos has certainly changed, the fact remains that many students experience the same difficulties observed by Prator in the 1950s. Students need to grapple with the complexities of Math and Science in a language that they are not proficient in. If they have to gain access to schooling, they have to gain access to the language of power. If they have to gain access to the language of power, they have to efficiently apprentice themselves into the use of English as a secondary Discourse. Learning the language is not simply memorizing vocabulary lists or working on grammar exercises. It encompasses embracing a new identity, a new way of communicating, a different way of dealing with novel circumstances, a new way of knowing.

Because Discourses reflect "certain concepts, viewpoints, and values" that may disadvantage other Discourses and influence the distribution of power in society, people's control of dominant Discourses can give them wider access to social goods, such as money, power, and status. People whose primary Discourse is congruent with the Discourse of the dominant group therefore have greater access to social goods while those whose primary Discourse differs from or conflicts with the secondary Discourse are immensely disadvantaged (Gee, 1987, in Zamel and Spack, 1998, p. 56).

While mainstream middle class students simply extend and expand what they already acquired in their homes, non-mainstream students have to negotiate the difficult process of learning a novel dominant Discourse (Gee, 1987, in Zamel & Spack, 1998, p. 57). Mainstream students have the advantage of what Gee calls "filtering, a social group building into its primary Discourses practices and values of later school-based Discourses" (1996, p.157). For example, students who are raised in an environment

rich with literacy resources, e. g., printed materials and audio-visual equipment and are exposed to literacy practices such as being read to at home do not find literacy resources and practices at school a novelty. On the other hand, students who are not exposed to such literacy practices need to apprentice themselves into such new secondary Discourse.

Moreover, these students lack opportunities for apprenticeship into the dominant Discourse because of 1) power relations and social structures that marginalize them or constrain their opportunities to gain access to the dominant discourse; and 2) the failure of schools to invest on the wealth of knowledge about language and language learning that students already have when they go to school (Willett, 1995; Watson-Gegeo & Welchman-Gegeo, 1995; Peirce, 1995). For example, some teachers fail to recognize the rich oral tradition of some groups of students and consequently fail to use it as a learning resource in the classroom. As a result, instead of using the students' primary Discourse as a bridge to the acquisition of the secondary Discourse and position them as sources of knowledge, the teacher positions students in a stance of powerlessness.

However, Gee's position has been criticized for failing to focus on the learner's agency. Delpit (1998), for instance, argues that while she agrees with Gee's theory on literacy and discourse, she disagrees with his contention that people who are not born into the dominant Discourse will find it difficult, if not impossible, to acquire such discourse. She argues that teachers with a critical approach to literacy can successfully teach what Gee refers to as "superficial features" of middle class Discourse, e.g., grammar, style, mechanics, and move beyond that by using these Discourses to develop or find their "true authentic voice". In other words, they can use the Discourse of power to gain access to the dominant group without abandoning their home identity and values. Delpit asserts that "discourses are not static, but are shaped—however reluctantly—by those who participate within them and by the form of that participation" (p. 215). If learners decide to gain access to the second language culture, it should be because they know they

can invest in the second language to acquire a wealth of "symbolic and material resources, which will in turn increase the value of their cultural capital" and subsequently vest in them the power to re-examine their identities (Norton & Toohey, in press).

Delpit (1998) further suggests that the teacher's role is to a) "acknowledge and validate students' home language without using it to limit... their potential"; b) recognize the conflicting Discourses students might have and invest on the socio-cultural and linguistic knowledge they already have; and c) "acknowledge the unfair 'discourse stacking' in the society... [by openly discussing] injustices" and hegemonic practices that marginalize certain groups of people (pp. 215- 17).

Delpit's work has been widely applied to the acquisition of Standard American English by African-Americans and may be applicable to the acquisition of EFL in post-colonial situations like the Philippines. In fact, influential Philippine educators such as Andrew Gonzalez have initiated programs and conducted pilot studies to identify means of using English for restricted purposes and empowering communities through the use of the home language in schools. In a seminar on Language and Development, Gonzalez (1999) states that

> ... considering present economic realities, English is still the language of aspiration and social mobility... The need for English for utilitarian purposes [therefore] demands differentiation of society, degrees of competence, and topics (or registers). In other words, in Philippine society in the twenty-first century, who needs English? To what degree of competence? In what domains? For which topics (or registers?) up to what proportion of society's members? (p. 68)

Power, agency, and identity from a post-structural perspective

Anthropological studies on identity and academic engagement among minority students in the United States in the

late 80s and early 90s have primarily focused on "how cultural differences or the group's minority status (immigrant or involuntary) shape behaviors and perceptions" (Davidson, 1996, p. 3). Such studies (Suarez-Orosco & Suarez-Orosco, 1993; Fordham & Ogbu, 1986; Matute-Bianche, 1986) seem to indicate that "the nature of the history, subordination, and exploitation of a group affect the meanings that its members attach to ethnic and racial differences, and thus the willingness of group members to assert an academic identity" (Davidson, 1996, p. 3). Ogbu (1987) asserts that "involuntary minorities" such as African-Americans who were forced to migrate to the US through slavery or colonization "develop an oppositional identity in which succeeding in school is perceived as selling out to one's oppressors". On the other hand, Asian-Americans tend to succeed in school because they come from families who "volunteered" to settle in the United for the proverbial greener pastures and see schooling as a portal to economic and social mobility (p.3).

Davidson (1996), however, argues that although such hypothesis and research advance dialogue about "differences in minority group achievement" and "the role that broader historical and economic circumstances play in day-to-day classroom activity", they could be dangerous when taken to the extreme. The danger is in the implication "that the meanings, behaviors, and perceptions associated with a specific background are relatively fixed, exerting a constant influence on students' academic work". It is important, therefore, to consider "the role of school and classroom processes in nurturing, resisting, or shaping the meanings students bring with them to school" (Davidson, 1996, p.3).

Davidson posits that schools, being "primary cultural arenas in which issues of identity are enacted" therefore "structure and guide the meaning of social categories and the construction of ethnic and racial identities". She further argues that students' "voices and experiences ... demonstrate the connections between identity and academic engagement, and justify the "critical need to consider school-based practices and processes in the analyses of student action" (p. 5).

Davidson (1996) further argues that a more careful analysis of the "links between ethnic and social self-conceptions, academic engagement, and factors within school setting" must employ poststructuralist conceptions of power and identity. This includes the emphases on *disciplinary technology* and *serious speech acts*. According to Davidson,

> disciplinary technology and serious speech acts both contribute to a definition of what is 'normal' in advance and, therefore, can be viewed as practices that teach, or 'discipline' participants to the meaning of institutional and (social) categories.... In schools, for example, the hegemonic projection of academic tracks as an objective classification of students may be considered disciplinary technology since 'tracking highlights differences and disciplines students and teachers to particular conceptions about the meaning of high and low achieving students' (p. 4).

An example of academic tracks would be a class for immigrant students and another for "mainstream" students. In the Philippine context, categorizing students for "bridging" and another for "mainstream" (as suggested in the Department of Education proposed bridging program) could be considered academic tracking.

In similar manner, when students consider school authorities (e.g., guidance counselors, teachers, etc.) privy to specific knowledge that enables students to legitimately participate in schooling and access to cultural capital, their assertions may be viewed as serious speech acts--knowledge to be studied, repeated, and passed on to friends. A network of serious speech acts may come to constitute a discursive system; that is, the system that works to control both what is said and how others are conceptualized (Davidson, 1996, p. 5).

Moreover, Davidson argues that studies on academic engagement and identity need to consider the concept of power

as an "action upon action" (Foucault, 1983, p. 221). Power relates to positionality, not ownership. Power is exercised, not possessed (Foucault, 1977, 1990). Drawing on Foucault, Davidson (1996) argues that

> embodied and enacted in personal relationships, power relations are present as individuals make active efforts to force others into comprehensible categories. At the same time, individuals are not inert objects; rather, individuals can and do resist the meanings they encounter even as others seek to push them toward comprehensible categories. In short, power is not a system of domination that leaves no room for resistance, but rather practices and discourse that define normality in advance. (p.5)

This conception of power relates to current understandings of human agency in the area of second language studies. Individuals are not conceived of as passive entities. Rather, they are considered, in Peirce's view, as "both subject of and subject to relations within a particular site, community, and society. Individuals have human agency. Thus the subject positions that a person takes up within a particular discourse are open to argument. Although a person may be positioned in a particular way within a given discourse, the person might resist the subject position or even set up counterdiscourses which place him/her in a powerful rather than marginalized position" (Peirce, 1995, pp. 15-16).

Within this framework, Peirce challenged the concept of motivation because it fails to "capture the complex relationship between relations of power, identity, and language learning" (p. 17). The conception of motivation presupposes individuals as "fixed" language learners who are moved into action by the desire to access material goods possessed by a privileged group. Investment, however, projects the complex relationship between the learner and the "changing social world", and considers the learner as a complex being of multiple desires and social identities.

When learners communicate with powerful others in the community, they position themselves or are positioned in certain ways and constantly negotiate such positions as they are "constantly organizing or reorganizing a sense of who they are and how they relate to the social world" (Peirce, 1995, p. 18).

How individuals position themselves to advance their agency as they invest in schooling as a potentially liberating community of practice where the language of power [English] is not easily accessible to poor students has not been thoroughly explored. Moreover, there is a need for studies that identify the strategies students and other participants in a school setting employ to counter existing disciplinary technologies and serious speech acts. This is particularly compelling in contexts where the agency of supposed persons of authority such as teachers and administrators is constrained by socio-economic difficulties.

As Davidson (1996) points out, "because schools participate in negotiating the meanings students attach to their identity, the ways in which teachers and schools handle power... become relevant to the conceptualization of students' behaviors" and the molding of their social identity (p. 5). Since learning is constrained by one's positionality and identity, academic institutions must look into how school practices and Discourses influence students' identity construction as they negotiate their way through the realization of socio-economically liberating spaces. The need for such research is particularly relevant in school settings where students coming from disadvantaged families are not familiar with academic discourses and where disciplinary technologies and powerful speech acts are hegemonically perpetuated. Specifically, the following questions may be asked:

A. What school practices position students in stances of power and powerlessness as they engage in apprenticeship into the secondary Discourse? How do students and teachers in this school context position themselves to advance their agency in situations that hinder or limit opportunities for apprenticeship?

B. What role do students, parents, and teachers play in students' participation or non-participation in schooling? What factors influence students' ability to visualize imagined communities and invest in education as a meaningful enterprise?
C. How does the school participate in negotiating meanings students attach to students' identity? To what extent can students project their agency in a school context where disciplinary technology and serious speech acts are hegemonically perpetuated?
D. How does the use of English as a secondary Discourse in a context where most students have limited access to academic resources and "old-timers" further constrain students' agency? What strategies could students use to advance their agency?
E. What strategies could educators and other stake holders in students' schooling employ to assist students' acquisition of dominant secondary Discourses so they could have access to upward socio-economic mobility?

The above questions need to be addressed so that educators, students, and parents would be informed on the complex dynamics of schooling in specific contexts. Any educational reform must be based on a thorough examination of power relations, investment, and agency of students, teachers, parents, the community, and the larger environment, e.g., government policies, that influence decisions and actions in the school setting. To do anything less would defeat the purpose of the school as a site for potentially liberating possibilities, e.g., upward socio-economic mobility. To do anything less would position the school as an environment where existing power differentials and oppressive practices are maintained and reproduced to further benefit persons in power and further marginalize the poor.

Acknowledgments

I am grateful to Dr. Kathryn Davis, my adviser, and Dr. Graham Crookes, SP reader, for their insightful comments and suggestions in the conceptualization and writing of the Scholarly Paper (SP) I submitted as a requirement for MA-Second Language Studies degree at the University of Hawaii at Manoa. Much of this paper is lifted from the introduction of the aforementioned SP. My participation in the program was funded by Fulbright and Delta Kappa Gamma International. Dr. Fred Abraham refereed this article for the Silliman Journal.

References

Bhabha, H. K. (1994). *The location of culture*. London: Routledge.

Davidson, A. L. (1996). *Making and molding identity in schools: Student narratives on race, gender, and academic engagement*. Albany: State University of New York Press.

Delpit, L. (1993). The silenced dialogue: Power and pedagogy in educating other people's children. In L Weis., & M. Fine (Eds.), *Beyond silenced voices: Class, race and gender in United States schools* (pp. 119-139). New York: State University of New York Press.

Eckert. P. (1989). *Jocks and burnouts: Social categories and identity in high school*. New York: Teachers College Press.

Fine M., Weis, L., Centrie, C., & Roberts, R. (2000). Educating beyond the borders of schooling. *Anthropology & Education Quarterly, 31* (2), 131-151.

Foucault, M. (1977). *Discipline and punish: The birth of the prison*. (A.M. Sheridan-Smith, Trans.). Harmondsworth, UK: Penguin.

Foucault, M. (1990). *The uses of pleasure*. (R. Hurley, Trans.). New York: Vintage Books.

Fraser, N. (1997). *Justice interruptus: Critical reflections on the "postsocialist" condition*. New York: Routledge.

Gardner, R.C. (1985). *Social psychology and language learning: The role of attitudes and motivation*. London: Edward Arnold.

Gee, J. (1996). *Social linguistics and literacies: Ideology in discourses (2nd ed.)*. UK: The Farmer Press

Gee, J. (1998). What is literacy? In V. Zamel & R. Spack (Eds.), *Negotiating Academic Literacies* (pp. 51-59). NJ: Lawrence Erlbaum.

Gonzalez, A. B. (1999). English in the Philippines: Whereto? *Journal of Asian English Studies, 2* (2), 68.

Norton, B., & Toohey, K. (in press). Identity and language learning. In R. Kaplan (Ed.), *Oxford University Handbook of Applied Linguistics.*

Ogbu (1987). In A. L.Davidson (1996). *Making and molding identity in schools: Student narratives on race, gender, and academic engagement.* Albany: State University of New York Press.

Peirce, B. (1995) Social identity, investment, and language learning. *TESOL Quarterly, 29* (1), 9-13.

Scribner, S., & Cole, M. (1981).*The psychology of literacy.* Cambridge, MA: Harvard University Press.

Sibayan, B. P. (1999). Language planning in the Philippines: A historical perspective with English as focus. *Journal of Asian English Studies, 2* (2), 1-16.

Sibayan, B. P., & Segovia, L. Z. (1984). *Language, identity, and socioeconomic development.* Occasional papers no. 32. RELC P 186-84. Singapore: SEAMEO Regional Language Centre.

Schuster, C. I. (1997). Mikhail Bakhtin as rhetorical theorist. In V. Villanueva (Ed.), *Cross-talk in Comp Theory* (pp. 457-474). Illinois: National Council of Teachers.

Stevenson, R. & Ellsworth, J. (1993). Dropouts and the silencing of critical voices. In L. Weiss.& M. Fine (Eds.) *Beyond silenced voices: Class, race, & gender in United States schools,* (pp. 259-271). Albany: State University of New York Press.

UNFPA: Socio-economic background on Philippines-Personalizing population. Retrieved March 02, 2002, from http://www.unfpa.org/modules/focus/philippines

Watson-Gegeo, K., & Welchman-Gegeo, D. (1995). Understanding language and power in the Solomon Islands: Methodological lessons for educational intervention. In J. Tollefson (Ed.) *Power and inequality in language education* (pp. 59-72). Cambridge: Cambridge University Press.

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity.* Cambridge: CUP.

Willet, J. (1995). Becoming a first grader in a second language: An ethnographic study of language socialization. *TESOL Quarterly,* 29 (3), 473-503.

Zamel, V., & Spack, R., (Eds.), *Negotiating academic literacies* (pp. 51-59). NJ: Lawrence Erlbaum.

NOT AN EASY WAY UP: A LIFE HISTORY OF A MIDDLE CLASS FILIPINO FAMILY

Enrique G. Oracion

ABSTRACT

This case study focuses on an emerging middle class Filipino family, its life history, its struggle to break out of the economic marginalities and impoverishment of lower class life, and its attempts to find a niche within the upper class. In my analysis, I situate the middle class along the notions of contradictory class locations and economic marginalities in order to understand its private class struggle for self-improvement. Specifically, the study examines how this family negotiates the two contradictory class positions it occupies, on the one hand, as proletariat, and on the other, as a petty capitalist, and how these positions have accorded it a more comfortable and dignified life at present than when this family was newly formed. Results of the case study show that the economic capital this family accumulated through many years of hard work, perseverance, determination, and frugality has been transformed into cultural capital that the children now enjoy.

However, the study also found out that with cultural restrictions legitimizing one's membership in the privileged class of the rich, this family has no prospect of moving beyond their present social position. Additionally, the study also revealed that the ability of the latter generation to reproduce the middle class status they inherit from their parents is largely determined by the personal qualities they had emulated. Therefore, this paper argues that human agency remains the determining factor for social mobility amidst cultural and structural restrictions.

Introduction

After spending several years studying the lives of people in a migrant community in Manila, Philippines, Pinches (1992a) noted that in order to survive the majority of the poor have only their labor as capital. The few rich, on the other hand, have the means of production and do not need to exert physical labor to produce wealth. Furthermore, the rich tend to display conspicuous consumption, many of them living comfortably in gated communities located in suburban areas replete with all the amenities that signify both their affluence and influence (Connell, 1999: 421-422). Nevertheless, the rich are also distinguished from each other either as old or new rich, according to the size of their economic resources and the cultural sophistication they exhibit (Panopio, Cordero-McDonald, & Raymundo, 1994: 382; Robison & Goodman, 1996: 5; Pinches, 1999b: 296). Among the poor, variations in economic status and life chances are also discernible depending on how they make the most out of their involvement in the capitalist labor market and other livelihood opportunities.

The growth of capitalism and the greater chances for social mobility through individual achievement have produced a class of people who are neither rich nor poor. The rise of this intermediate class in the context of present economic conditions and changes is often overlooked because of the tendency of dualist analysis of class structure to concentrate on distribution of wealth. This social reality has thus made a dualist analysis of class inadequate in capturing the dynamics of this emergent class. This present study argues that the struggle of the intermediate class also needs to be explored.

I will explore this notion by focusing on the economic and cultural struggle of a Filipino family towards becoming part of the middle class, or perhaps eventually of the new rich. But more than simply telling this family's life history, I will instead situate its experiences along the existing discourses about class and cultural identity within the contexts of contradictory class locations and economic marginalities. Needless to mention, this

case study of the couple's life history will provide the empirical basis for my discussion. Proceeding basically from Weber's concept of subjectivity of meanings of actions, my analysis aims to underscore that human agency still plays an important role in social mobility despite cultural and structural restrictions.

THEORETICAL DISCUSSION

Beyond class dichotomy

While the dichotomous representation of class and labor relations in the Marxist tradition—a legacy of the Industrial Revolution—was responsive to the realities of that period, it has ceased to have any significance for the present. According to Ossowski (1963: 151), the concept of class dichotomy is so ideal it has no longer a place in the real capitalist world of the present. The alternatives available for labor migration (Pinches, 2001) and the accumulation of capital for new entrepreneurs (Pinches, 1999a) brought about by the democratization of travel, formal education, intermarriages, and business opportunities have already made possible intermediate shift in class structure, identity, and relations (Pinches, 1999b: 12-13). Furthermore, the spread of capitalism and the growth of cities close to the countryside offer new economic fields to people endowed with skills, personal qualities, and capital. These conditions allow individuals to move from one occupational category to the next motivated by whatever economic gains they calculate at each stage relative to their needs.

Exemplifying this development are an exceptional number of Filipinos at present who have found ways to move from agriculture to industrial employment in urban centers and overseas or from being wage laborers to petty employers. This shift could be attributed largely to the entrepreneurial investment they have built from many years of savings and hard work (Pinches, 1992a; 1999a). From the perspective of class relations, it is obvious that this emerging breed of middle class or new rich Filipinos, with their multifaceted economic

engagement, could not just be lumped under certain category based on the dualist representation of class. They belong to the intermediate class (Ossowski, 1963: 151), and their position and identity in the class structure are determined by their ability to sustain or improve whatever resources they currently accumulate, enjoy, and pass on to the succeeding generation.

In the wake of this development, it becomes imperative to view social class not only as a system of structural categorization of people fixed at certain period and dimension, but also as a spatial-temporal process involving individuals or groups struggling for self-improvement as revealed in their life histories (*e.g.* Eder, 2000). This view is in consonance with Lipuman and Meltzoff's (1989: 329) suggestion that anthropology must treat class "as living, emergent, and constantly transforming categories" exemplified by a more mobile middle class as opposed "to rock-stable, predetermined categories" suggested by the proletariat-capitalist distinction of social class.

The struggle of the intermediate class

I find the growing phenomenon of middle class or new rich[1] in the Philippines interesting to explore because it illustrates the dynamic nature of social class and the way it is influenced by individual initiatives and differing levels of motivation. This view departs from the usual Marxist notion that the restructuring of class position could be achieved through collective actions. Varied interpretations about class struggle in the writings of Karl Marx and Friedrich Engels have highlighted the pervasive military metaphors they contain showing the use of force as an option in winning over capitalist dominance. However, Metcalfe (1991: 79) believes that the military metaphors associated with class struggle prevent a broader understanding of class relations and a better appreciation of social mobility experienced by the middle class.

This paper argues that a Weberian individualistic approach to class struggle provides a better way of

understanding the choices, decisions, and actions that individuals take in response to the opportunities around them. According to Max Weber, it is the individual who acts, not the state or the group, while the collectivities of actions we see are actually a multitude of individual actions (Duke, 1983: 258). Too much emphasis on collectivities as determinant of individual actions undermines the potential of private actions for initiating a social transformation. These individual actions are often ignored or taken for granted because they purportedly do not represent the social reality. But social reality is a matter of individual perception and therefore has subjective meanings that eventually draw out different responses. It may be said that collective actions are actually the imposition of a prevailing discourse aimed at suppressing the potentials of private or individual actions.

Although I do not dispute the potent power of the collectivities of actions such as protest movements or even arm struggle to resist economic and political repression, they often end in indiscriminate destruction and violence and rarely lead to the victory of the working classes-turned-proletarian soldiers. I believe there is a need to reconsider what Metcalfe (1991: 90) calls private class struggle by individuals whose subjective experience of economic degradation, humiliation, and exploitation has given them the impetus to fight against all odds in order to regain their dignity and identity as human beings. There is that need to recognize and appreciate from a Weberian perspective (Duke, 1983: 88) individual abilities in interpreting, adapting, and taking advantage of new economic opportunities in this age of globalization (*e.g.* Eder, 2000) when collective struggle is often met with political and structural obstacles.

Hence, the analysis of actual class relationships at a micro-level has to consider different historical circumstances surrounding the experiences of people who are struggling for economic betterment. In the Philippines, Pinches (1999a) has shown how the new middle class or the new rich are produced

and reproduced despite the many political and cultural impediments they have to overcome, and how some come out successful. This suggests that responses to shared suffering or repression are not always unified or predictable but relative to the moral choices made by individuals (Metcalfe, 1988: 30). Therefore, studies of class relations would do well to focus not only on the dynamics of class or collective struggle, but also on the ability of the middle class to respond positively to the economic marginalities they experience rather than be simply engulfed by them. Unfortunately, according to Metcalfe (1990: 57), the struggle of the middle class is oftentimes overlooked because of the tendency of social analysts to take the politics of the industrial workers (*e.g.* coalminers) as a model of the "proper" class struggle. Moreover, the success stories of prominent members of the middle class or new rich, who make big names in the field of business or politics, have a way of captivating public attention. Meanwhile, because they create little impact on the community, success stories of the average middle class tend to be overlooked.

Despite the rising number of success stories, however, studies on the middle class have also shown that individuals in this group are not always successful in appropriating the dominant cultural attributes of the elite class. In other words, not all of these life stories are successful because of certain social and structural impediments beyond the individuals' personal control. Part of the reason lies mainly on the peculiar location of the middle class in the existing class hierarchy. Despite the economic successes of the middle class, its cultural roots remain entrenched in the working class. A distinct mark of the cultural identity of the middle class is its part membership in the working class, albeit demarcated by whatever visible economic improvements they have realized. These economic improvements are themselves indexical of the private struggles that successful members of this class have pursued.

Negotiating contradictory class locations

I view the intermediate position of the middle class between the lower and the upper social classes as a successful move away from deprivation that characterizes much of lower class experience, as well as a continuing struggle to breach the economic and cultural barrier set by the more privileged class. The structural movement that the middle class negotiates within the middle range of the economic continuum exemplifies the contradictory class location of the middle class. Robison and Goodman (1996: 9) believe that there are significant internal divisions within the middle class. These internal divisions highlight the question whether members of the middle class possess a coherent identity considering their divergent interests and agendas particularly when they are categorized as old and new middle class.

On the other hand, studies by Robison and Goodman (1996) and Pinches (1999b) consider the new middle class as the new rich despite the economic and cultural ambiguities associated with this position. These studies argue that, as the new rich, members of the middle class are distinguished from the lower and upper social classes by their way of life. According to these studies, the work relations, income, occupational prestige, educational status, or place of residence of members of this group are considered as economically and culturally distinct from those below and above them. Therefore, their position could only be defined and appreciated in relation to the economic and cultural characteristics of the poor and the rich. This situation suggests that the cultural construction of the middle class identity is an unintended byproduct of the dualist representation of social class. Meanwhile, Lallana (1987: 329) explains that unbounded relationship of the middle class to the mode of actual production determined by occupational categories is indicative of the existence of contradictory class locations. He identifies these contradictions within a mode of production (*e.g.*, managers but not decision-

makers) and between modes of production (*e.g.*, independent peasants but still wage laborers).

Contradictory class locations also explain the economic marginalities experienced by certain individuals and reflect their simultaneous empowerment and disempowerment at different modes or levels of the production process. Therefore, individuals situated in contradictory class locations are at once faced with the challenge of transforming available resources in order to benefit economically from intermediate roles and at the same time threatened with dislodgment by the capitalists who fear the possible competition from the emerging new rich (Robison & Goodman, 1996; Pinches, 1999b).

In the foregoing discussion, I find Bourdieu's notion of "field of struggle" relevant in explaining how certain individuals, despite being caught in contradictory class locations, are able to improve their life chances. In fact, Bourdieu's mode of theorizing offers a more dynamic understanding of class relations and allows an optimistic treatment of the chances for social mobility of marginalized people. Bourdieu refers to capital, either economic or cultural (Garnham, 1986: 426) as endowments. Even if capital maybe historically endowed, Bourdieu argues that certain chosen subfields may offer individuals several options or strategies of investments, which could yield the highest profit and subsequently result in investment in other fields. Education, for example, has always been considered a cultural capital with its proven worth as a passport for entry in the labor market and access to economic capital. Investing hard-earned money in education then becomes for the marginalized one of the best means for gaining access into the labor market and subsequently in the acquisition of economic capital (Garnham, 1986: 427).

This belief lies at the heart of many poor Filipino parents' struggle to give their children a bright future. For these parents, investing in the education of their children provides one of the best assurances for social mobility. While land inheritance enables the old rich to maintain their status, education provides

the new rich opportunities for social mobility. For many of this new rich, it is precisely their experience of economic marginality that principally motivates them to explore all means in search for a better life. Often, this means navigating contradictory modes of production activities and relationships.

Building upon economic marginalities

Marginality is a condition commonly viewed as negative for its implications of exclusion and peripheralization. As a process, marginalization is theoretically rooted in the essentialist claim of biological or cultural superiority by the privileged or elite class. In the context of class relations, the concept promotes the representation of workers as incapable of self-development. In its bleakest sense, it undermines the capability of individuals to escape from and rise above economic degradation and destitution. As studies show, however, the experience of marginalization can serve as the strongest impetus for even the poorest of the poor to work at improving their lives economically and overcoming the challenges imposed by their poverty.

For example, studies by Pinches (1992a: 126) have shown that highly motivated individuals who migrated to the city to escape economic denigration at home have experienced a sense of having prospered in their new life compared to their former lives in the countryside. This is particularly true among those who have risen to middle class status. Although marginalized from the capitalist mode of production, these successful migrants consider their present life better off relative to their access to wider economic options in the place of migration or urban centers compared to what was available to them in their hometown. An interesting offshoot of these migrations is enhanced labor recruitment. Studies reveal that early migrants who are now economically well established and who either hold managerial positions or have become employers in their own right prefer to hire workers from members of their family or among neighbors in the old hometown, consequently

enhancing labor recruitment from their place of origin (Pinches, 1992a: 128). Their ability to help find employment for poorer relations or former neighbors in the countryside has raised their status in their old community and earned them the respect of their former neighbors. Needless to mention, this has been for many of these people a source of much psychological gratification.

In one migrant community in Manila, Pinches (1992a) has observed that successful migrants are able to spend more money, provide their children education, and enjoy the pleasure of city life. They are more able to cope with various forms of marginalization because of their past experiences in their respective places of origin. Unsuccessful migrants, however, who decide to go back to their communities face the stigma of failure and censure by both successful migrants as well as by neighbors in their hometown. Meanwhile, the success stories of some migrants continue to inspire others to follow the same path toward self-improvement, their direction leading them away from agricultural work and toward industrial employment.

Subjective meanings of social class

The life chances of individuals vary not only among different social classes, but within the class itself particularly among the members of the middle class—considered as the most mobile and exemplifying the most significant internal divisions. For example, the study conducted by Pelaez (1986: 128) on one community in Cebu City, Philippines revealed three categories of middle class based on the self-evaluation of her informants. These categories include the lower-middle class, middle-middle class, and upper-middle class. Most of the members of the upper-middle class describe themselves as *labaw sa kasarangan*[2] (above average), the middle-middle class as *kasarangan* (average), and the lower-middle class as *igo-igo lang gyud intawon* (just enough). Results of this study showed that many considered themselves to belong to the middle-middle class while only very few classified themselves

in the upper-middle class. This self-evaluation mirrors differential modes and rate of rising up.

The local terminologies used by the informants of Pelaez (1986: 129) in describing their economic well being in relation to the other members of the middle class demonstrate that within this class an indigenous mode of social differentiation operates. The varying self-identity of members of the middle class further suggests divergent interests and agenda as well as alliances aimed at protecting their current status (Robison & Goodman, 1996: 8-9). Meanwhile, those who qualify as members of the new rich (*e.g.*, Robison & Goodman, 1996; Connell, 1999; Pinches, 1999a, 1999b) originate mostly from the upper-middle class although exceptional cases do come from either the lower-middle class or the middle-middle class.

It is widely accepted that the aspirations for self-improvement are psychologically motivated. This view has often been used to explain the endeavors of members of the middle class to improve their lot as well as to justify the sense of complacency that members of the lower class are said to feel towards their condition. A widespread perception is that the poor tend to be fatalistic towards life while the middle class are individualistic, competitive, frugal, and more sacrificing, generally exhibiting strong deferred gratification syndrome (Panopio, Cordero-MacDonald & Raymundo, 1994: 383-384; *cf.* Pinches, 1999a, 1999b). On the other hand, the upper class are said to be disdainful of the middle class's lifestyle—their choice of fashion, architectural design of house, model of service vehicle, schools where children attend— which they view as indicators of the latter's lack of culture or good taste.

However, these comments redound to stereotyping, a practice that is not only simplistic but also obviously overlooks the background, nature, and characteristics of the new middle class. Class categorization based on personalities only tends to create prejudices while undermining the individual's ability to achieve social mobility. Class personalities are only results rather than causes of class locations. It is possible that the

education will eventually endow the middle class some of the cultural sophistication of the upper class.

The tendency to use an individual's psychological make up to explain the difference between the lower class and the middle class is inadequate if not outright flawed. Rather, the difference lies in the respective class's interpretation of the antecedent and concomitant events surrounding their lives. Anthropologist Leslie A. White (1949: 176) believes that the behavioral manifestations so frequently presumed to be psychological are actually the result of a socio-cultural process overtly expressed in resultant behavior. Consequently, the ability of the poor and the middle class to overcome the challenges they face depends upon their response to the situation and to their appropriate assessment of the needs and resources available to them. Interestingly, even when two groups are subjected to the same external circumstances, their responses are rarely similar. Differing response even to the same stimulation may explain the upward or downward mobility of certain individuals within the class origins.

Cultural navigation by new middle class

As pointed out elsewhere in this paper, members of the emerging middle class find themselves pressed between the binary representations of class identity because of their intermediate location within the hierarchy of class. On the one hand, they have successfully overcome the economic marginalities and degradation of their former lower class position. On the other hand, they now find themselves faced with the challenge of projecting and maintaining their identity as new members of the middle class. Their agenda is to strive to be distinct from the lower class where they were once members and at the same time to be identified with the upper class, which has an established set of normative expectations for anyone who desires to become part of its enclave (*cf.* White, 1949: 159). This means that displaying newly accumulated wealth alone does not guarantee the middle class

acceptance into the world of the upper class. Their newly acquired status, however, is still to be legitimated by cultural sophistication and its attendant refinement that must still be learned (Jenkins, 1992: 142), if not by themselves at least by their children through formal education (Pinches, 1999b: 36).

Theoretically, social boundaries are established to legitimize class distinctions and are reflected in terms of class relation, *i.e.* how the members of the middle class view and relate with the other social classes and vice versa. This may also be discerned in the way the new members of the middle class conduct themselves along class boundaries, usually according to what matters to them most or to the fears confronting them. In effect, the contradictory class locations and the economic marginalities they experience expose them to two forms of fear that underlie their current struggle. According to their response to these fears, we see one group whose earlier worries involved the success or failure of their climb up the social ladder and whose present concern is about falling back to the lower class while anticipating their rejection by the upper class. In the other group belong those who put a premium on achieving their aspirations for themselves and for their children independent of the views or perceptions of the upper class. Though they worry about falling down, acceptance by the upper class is the last of their concerns.

CASE STUDY

Building a family from limited resources

The couple, I will name Jose and Maria in this study, are presently in their late sixties and reside in one of the newly created cities in Negros Oriental. Their life history elucidates the struggle of people from poor beginnings. However, their significant rise was not an overnight success story, but a compilation of events, right and timely decision-making, and efficient management of modest resources accumulated from many years of hard work. When Maria and Jose married, some of Maria's relatives doubted Jose's ability to raise a decent

family because he was only a migrant factory laborer with no stable economic capital. In time, however, Jose and Maria managed to dispel everyone's doubts about their ability to overcome the difficulties of their early life.

The prominent status that Jose and Maria now enjoy in their neighborhood, as well as among their relatives, is the outcome of their efforts to produce the most out of the limited resources they had when they began their life together as a married couple. Perseverance and strong motivation to escape the relative poverty of their respective families, rather than through inheritance or education, had enabled them to generate their capital. Coming from large families, neither Jose nor Maria had any opportunity to get a college education due to financial constraints. Having finished only second year high school, Jose worked as a laborer in a plywood factory through the help of a relative who held supervisory position in the company. Maria, on the other hand, completed only the secondary level and contributed additional income to the family by working as a seamstress, a skill she learned from a six-month sewing course in a vocational school.

Skillful management of their meager resources and frugal lifestyle enabled the couple to save enough money. In less than ten years they were able to buy farmlands and raised some domestic animals, such as swine, cows, and carabaos. The first farmland they bought was owned by Maria's parents, who were in turn forced to sell some parcels to support the college expenses of Maria's younger siblings. Jose continued his work in the factory while also starting rice farming through a tenant. These were the sources of their income until he decided in 1973 to concentrate on developing his rice farm. By the time the plywood factory finally closed in the late 70s, when the forest areas in Negros Oriental were almost denuded, he was already a full-time farmer.

To escape the imminent implementation of the land reform program, he decided to get back the rice lands, which had been originally leased to tenants, and started sugarcane farming

using a small parcel of their land that had been mainly planted to rice. Jose's decision was influenced partly by the exemption of sugarcane farms from the land reform program and mainly by the establishment of a sugar mill in the area, which created a boom in the sugar industry at the time. It should be noted that the rise of some middle class families in this area has been largely attributed to the growth of the sugar industry. Ironically, this was also responsible for the bankruptcy of some who were not able to manage their resources during the crisis in the industry.

Engagement in two modes of production

Although Jose personally cultivates his farm, he also hires workers and once had some tenants in the more remote parts of the farm. Similarly, Maria also employs other seamstresses when work is plentiful, particularly during *fiesta* (feasting in honor of a patron saint) celebrations and school programs like graduation rites. At present, Jose and Maria are engaged in financing business, providing capital to small time rice and sugar farmers, as well as extending loans to those in need of cash for household or other emergency needs.[3] Maria particularly deals with small rice farmers while Jose transacts with small sugarcane planters.

Interests from every transaction comprise the profits that Jose and Maria earn from their financing business. Rice farmers repay their loans in the form of *palay* (unhusked rice) after harvest (3 to 4 months), whereas the sugarcane farmers pay in cash after the milling season (10 months). Maria has the *palay* milled and packed in 50 kg bags to sell in cash or on credit to teachers and other salaried professionals in the neighborhood. She also retails the rice, usually on credit, to poorer neighbors, who pay on installment basis.

The economic transition experienced by Jose and Maria illustrates how they maintain an unbounded relationship to the means of production, for example, as wage laborers in one context and employers or landlords and financiers in another.

As a factory laborer, Jose knew he was disempowered in the sense that he was not in the position to determine the value of his labor or decide when to work or take a break. But as a farmer, an occupation he performed alongside his factory job, he felt empowered by being able to make decisions involving what, when, and how he was to cultivate his farm.

While managing tenants as well as hired workers in his farm gives Jose a sense of empowerment, the rise or fall of prices of rice and sugar in the capitalist market over which he has no control also leaves him feeling disempowered at the same time. In fact, farmers who engaged in mono-production of sugarcane and went bankrupt when the industry collapsed in the mid-80s because of the unstable price of sugar in the world market provide a human face to the severity of the disempowerment caused by capitalism.

Aware of the vulnerability of the sugarcane economy to external forces, Maria worked hard at her own tailoring business, demonstrating her exemplary ability not just in supplementing Jose's income, but in maintaining the stability of their financial resources particularly during the sugar industry crisis. This situation exemplifies Eder's (2000: 13) view that gender equality in household decision making and economic activities underlies much of the success that households achieve in hurdling economic limitations and rising above their current status. In this sense, not only Jose but also Maria deserves the credit for this family's improved life and rise to the middle class status.

Self-identity and maintenance as middle class

As this case study illustrates, sheer hard work has enabled this couple to build their family and push it beyond economic marginality. However, their story does not end here. Having moved up the social ladder, they are now faced with the challenge of presenting and maintaining their identity as new members of the middle class. Nevertheless, despite their significantly improved lifestyle, they are content to consider

themselves as belonging to the "middle-middle class". This self-identity prompts them to be more careful in managing their financial resources, fearful that any miscalculation on their part could cause them to lose what they have accumulated through years of hard work.

Old age has also mellowed their desire to achieve more and struggle to go beyond their present social level. Instead, they continue to aspire for their children what they have not themselves achieved in their own lifetime. In their early years, they doubted their ability to send their children to school to earn college degrees. Their fears that their children would end up working as farmers, factory workers, farm workers or domestic helpers in Manila or somewhere provided the impetus for their hard work and self-sacrifice.[4]

At the height of their sugarcane-farming venture, Jose and Maria feared what all other sugarcane farmers feared—the uncertainty of this undertaking particularly when the industry was in crisis. They knew many of the farmers who lost most of their properties to the bank to which they owed money. They saw many of their contemporaries sell all they had in order to support their children's education. Jose and Maria were not spared the consequences of the sugar crisis, but the produce from their rice farm mitigated the effects of this crisis. Rice farming gave them something to fall back on when sugarcane production was not good. They also managed to overcome financial problems over their children's college expenses by selling cows and swine and through the earnings of Maria as seamstress.

It is evident from their life story that the ability of the couple to manage their limited resources enabled them to weather many economic storms that otherwise swept away many of their contemporaries. Moreover, the support and understanding of their children also allowed them to cope with the crisis with greater chances of success. For their part, the couple's children rewarded their parents' sacrifices by successfully finishing their studies. The oldest of the children

worked as student assistant while in college. Today, all of Jose and Maria's six children have college degrees and work as professionals.

At last, Jose and Maria now find themselves no longer burdened by financial obligations. Nevertheless, they remain economically productive and even more active at present than they ever were in the past. Their present earnings have enabled them to renovate their old house and to buy Jose a second-hand motorcycle, which replaced his now old and rusty bicycle, for many years his only means of transport to the farm or the market. Interestingly, despite the prodding of his children, Jose remains unconvinced of the need to buy a four-wheel service vehicle, which he considers simply as a luxury. If he had his way, he preferred to invest on a cargo truck to start a new business in hauling sugarcane. Unfortunately, his family remains skeptical of this venture and has discouraged him from this plan. To this day, the couple's business endeavors continue to prosper, their earnings wisely invested in farmlands recently acquired from members of their own family who were no longer interested in the property. Possessing neither retirement pension nor health insurance, both Jose and Maria now earmark their savings for their old age.

Social attachment to roots

Despite the significant shift of their economic condition, Jose and Maria remain attached to their roots in the community and cognizant of their humble beginnings. Although displaying some material evidence of prosperity, they never flaunt their wealth. Jose continues to work at the farm, preferring to be known as a farmer rather than a farm manager, and believing that farm work would help him stay physically healthy. Despite his affluence in the neighborhood, he remains socially in touch with the poor farm workers and maintains friendly relations with them.

Meanwhile, the *fiesta* as a ritual is one of several other social venues in which to examine how Jose and Maria maintain

class relationships with the poor farm workers as well as with the professionals particularly teachers who are guests of their children. During *fiesta,* Jose and Maria are also asked by the *barangay* (village) chapel leaders to host lunch at their house for the priest who officiates the mass. The opportunity to entertain important people or public figures symbolically endows recognition to the family's social standing in the community. In the past, the families of the *barangay* captain and teachers used to be given this privilege.

During *fiesta*, the house of Jose and Maria gathers a mix of farm workers and professionals but it is interesting to note that the spatial arrangement in this household is more or less determined by the social distinction of the guests. For instance, the living room is the designated space for the professionals. Meanwhile, a special place near the kitchen, which can be entered by the back door, has been designated for entertaining Jose's former farm workers. Here, the farm workers feel they can behave more freely and more comfortably, preferring the company of their own kind to mixing with people of a different social class, such as the professionals, who occupy the living room during this occasion. Jose effectively bridges this social gap by moving between the two groups regularly in the course of the celebration. In this way, he is able to make a link with a socially higher class, in this case of professionals, in which he has just become a member while maintaining his connections with his roots represented by the farm workers.

But more significantly, *fiesta* permits people to gain entry into one's private domain, allowing the public a rare view of the evidence of material success of its owners. In the case of Jose and Maria, this is an occasion for showing off the improvements in their newly renovated house, itself an indexical sign of their economic affluence and their social standing in the community. As a status symbol, a house and what is inside it are significant indicators of the current economic status of its owner upon which the guests usually base their judgments.

Meanwhile, Pinches (1992b) had also observed in his study how unity and division within a *fiesta* celebration demonstrate class identity and relation. Although all people in the community join hands to celebrate *fiesta* as a tradition, encoded in the kind of food they prepare, the guests they entertain, the activities either in the church or community programs in which they are involved, including their clothes and many other visible indicators, are the social distinctions that separate one class from another.

Intergenerational mobility and class reproduction

It is generally viewed that although education is considered a basic factor in occupational mobility, it is its quality that counts, in most cases interpreted as the academic institution from where such education has been acquired. According to Panopio, Cordero-MacDonald, and Raymundo (1994: 386), the quality of one's education depends to a considerable degree on the parents' socioeconomic status. This observation is, however, belied by the experience of Jose and Maria who, despite economic odds, managed to send their children to a private university in Dumaguete City known as a school for the middle and upper social classes. Three of their children are teachers, two are engineers, and one is a commerce graduate. Five of the children have their own respective families now and live separately, while the youngest is still single but also gainfully employed as a processing plant engineer somewhere in Luzon.

Jose and Maria's life history demonstrates intergenerational or social mobility in terms of educational attainment and occupation. Their children are now engaged in salaried professions or business and are moving away from agriculture upon which Jose and Maria depended heavily during the early years of their life. This occupational shift supports the findings of Pelaez (1986: 282) that most of the grandfathers of the middle class were self-employed farmers and most of the fathers are self-employed traders.

In their own time, Jose and Maria had to start from scratch but eventually managed to move up, sparing their children the hardships that they themselves experienced. For their part, their children are, so to speak, more endowed, having their start in life already at the middle rung of the economic ladder and did not have to experience the same sacrifices their parents underwent. Unlike their parents who had only labor as capital and frugality as virtue when they began life together as couple, their children had quality education as capital. This enables them entry into more rewarding and better paying jobs in a highly competitive labor market which in turn allow them to enjoy the fruits of their labor with greater dignity.

Currently, Jose and Maria have only economic capital to legitimize their status as middle class whereas their children are endowed with both economic and cultural capitals. But for Jose and Maria, seeing all their children enjoy a family life far different from their own is a major achievement. Theoretically speaking then, the children's economic chances are better than their parents, but only time will tell whether Jose and Maria have indeed reproduced families who will at least maintain their middle class status if not exceed their present station. The success or failure of Jose and Maria's own children will further test the notion of the importance of personal abilities in overcoming economic marginalities in life. These qualities of hard work, perseverance, determination, and frugality are significant marks of Jose and Maria's private struggle to be members of the middle class. Whether or not all the six children could sustain and even surpass the class status handed down to them by their parents remains an open question. In the end, this will largely depend on the kind of struggle each child will also pursue.

INSIGHTS AND RECOMMENDATION

I have theoretically and empirically illustrated in this paper that the rise of a family to a middle class status and the manner of its maintenance and reproduction are influenced by

its ability to cope with contradictory class locations and economic marginalities. Members of the middle class have more fluid interests relative to available resources and opportunities but exhibit a stable desire for self-improvement. The intermediate position between the lower and the upper social classes exposes the members of the middle class to conflicting interests and alliances. This makes collective struggle by the middle class for social mobility unimaginable because its members are divided between those who align with either of the two opposite social classes. But such could be remedied by examining the life history and the private struggle that each of its members pursued. The case study presented in this paper has shown the uniqueness of the couple's struggles as they simultaneously tread along the proletarian and petty capitalist modes of life, economically and culturally. As Jose and Maria's experience exemplified, such struggle is not easy to undertake without the joint effort of husband and wife.

There is a need to conduct more ethnographic studies on life histories of new middle class families with different sources of capital. These include overseas Filipino workers, those married to foreigners, salaried professionals, local politicians, petty capitalists, among others. A compilation of life histories of middle class families would further increase our understanding of the dynamic, unique, and diverse patterns of their production and reproduction. One area in urgent need of examination is the intergenerational social mobility of middle class families, particularly one focusing on private class struggles. This will provide more empirical basis for the exploration of the role of private class struggle behind the successful move to the middle class of those who came from very poor beginnings. Although isolated private class struggle may have no significant influence on social class restructuring and distinction, the strategies individuals employ can provide inspirations and lessons to others still struggling to overcome economic marginalities. As Jose and Maria have illustrated in

this case study, the way to get there is never easy, but we know that it is possible.

Acknowledgement
I would like to thank Dr. Michael Pinches and Dr. Efren N. Padilla for the reviews and comments they made on the early draft ofthis paper. Needless to say, I hold responsibility for all the ideas and opinions expressed here.

Notes

[1] For its apparent descriptive simplicity as well as its common use as an expression, "new rich" is the term preferred by Pinches (1999b) in contrast to the old middle class to describe this emerging social phenomenon in Asia. However, I have opted to retain the term middle class in this paper to indicate its intermediate location between lower and upper class. This is supported by a study in Negros Oriental (Abregana, 1998: 19) which shows that when individuals are asked to classify the economic status of their families, some tend to locate themselves in the borderline (21%), between poor (63%), and rich (16%). This distribution is also reflective of the situation in the Philippines.

[2] The terms used here are in Cebuano - one of the several regional languages in the Philippines and used prominently in Central Visayas and Mindanao.

[3] This is locally known as *alili* and it is undeniably a capitalist mode of transaction. The interest rate ranges from 10% to 12% per month based on cropping period. To some extent, it may be adjusted according to the status or ability to pay of the transacting parties, but generally the practice puts many farmers in perennial indebtedness to the creditor, especially when production is poor. Meanwhile, the risk of losing is always high on the part of the creditor because the informal

arrangement of lending requires no collateral other than social familiarities. Nonetheless, failure to repay means severing of ties for future engagement.

[4] The community has been known as recruitment area for factory workers and domestic helpers called sacadas, who are brought to Manila.

References

Abregana, B. C. (1998). Negros Oriental poll: Public opinion on provincial issues and gubernatorial candidates. *Convergence 4,* 17-29.

Eder, J. F. (2000). *A generation later: Household strategies and economic change in rural Philippines.* Honolulu: University of Hawaii Press.

Connell, J. (1999). Beyond Manila: Walls, malls, and private spaces. *Environment and planning, 31,* 417-439.

Crompton, R. (1993). *Class and stratification* (pp. 21-48). Cambridge: Polity.

Duke, J.T. (1983). *Issues in sociological theory: Another look at the "old masters."* Lanham: University Press of America.

Garnham, N. (1986). Extended review: Bourdieu's distinction. *Sociological Review, 34,* 423-433.

Jenkins, R. (1992). *Pierre Bourdieu.* London: Routledge.

Lallana, E. (1987). An alternative conception of Philippine class structure: A critique of orthodox understanding. *Philippine Journal of Public Administration, 31,* 309-335.

Lipuma, E., & Meltzoff, S. (1989). Toward a theory of culture and class: An Iberian example. *American Ethnologist, 16,* 313- 334.

Metcalfe, A. (1988). The struggle to be human. *Critique of Anthropology, 8,* 7-42.

Metcalfe, A. (1990). The demology of class. *Critique of Anthropology, 10,* 39-63.

Metcalfe, A. (1991). Myths of class struggle: The metaphor of war and the misunderstanding of class. *Social Analysis, 30,* 77-97.

Ossowski, S. (1963). *Class structure in the social consciousness* (pp. 145-155). London: Routledge and Kegan Paul.

Panopio, I.S., Cordero-MacDonald, F.V.,& Raymundo, A. (1994). *Sociology: Focus on the Philippines.* Quezon City: Ken.

Pelaez, J. F. (1986). *The Cebuano middle-class: Its origins, characteristics and functions.* Doctoral Dissertation in Anthropology, University of San Carlos, Cebu City, Philippines.

Pinches, M. (1992a). All that we have is our muscle and sweat: The rise of wage labor in a Manila community. In M. Pinches and S. Lakha

(Eds.) *Wage labor and social change (pp.105-143).* Quezon City: New Day.

Pinches, M. (1992b). Proletarian ritual: Class degradation and the dialectics of resistance in Manila. *Pilipinas, 19,* 67-92.

Pinches, M. (1999a). Entrepreneurship, consumption, ethnicity and national identity in the making of the Philippines' new rich. In M. Pinches (Ed.) *Culture and privilege in capitalist Asia* (pp. 275-301). London: Routledge.

Pinches, M. (1999b). Cultural relations, class and the new rich of Asia. In M. Pinches (Ed.) *Culture and privilege in capitalist Asia* (pp. 1-55). London: Routledge.

Pinches, M. (2001). Class and national identity: The case of Filipino contract workers. In (J. Hutchison and A. Brown (Eds.) *Organizing labor in globalizing Asia* (pp. 187-213). London: Routledge.

Robison, R., & Goodman, D. (1996). The new rich in Asia: Economic development, social status and political consciousness. In R. Robison and D. Goodman (Eds.) *The new rich in Asia* (pp. 1-16). London: Routledge.

White, L. (1949). *The science of culture: A study of man and civilization.* New York: Farrar, Straus.

REVERSE COLONIALISM: A THEORETICAL INQUIRY INTO THE SOCIAL CONSTRUCTION OF THE FILIPINO COMMUNITY IN DIASPORA

Efren N. Padilla

ABSTRACT

This article is a theoretical inquiry on the unique and dynamic Filipino-American relation and its impact on the Filipino immigrant community in the United States. Specifically, it examines the social construction of Filipino-American community in the context of reversing the negative impact of American colonialism. In doing so, this article frames the question not in terms of *what America has done to us*, but *what we have done* or *what we are doing despite America*. The former represents the danger of looking at our identity as the by-product of victimization—a form of pathology that often requires the pills of entitlement to cure its symptoms. The latter, on the one hand, represents a departure from the pathology of victimization towards a reconstructed and recovering community. It is my hope that this essay will help us to confront the continuing legacies of American colonialism, as well as to better understand the dynamics of contemporary Filipino-American experience.

Introduction

I do not remember a period in contemporary Asian American experience when there has been so widespread, so persistent, and so agonizing an interest in decolonizing Filipino-American relation. The long colonial history between the United States and the Philippines and its attendant contradictions and ironies still haunt the Filipino-American imagination (Ceniza-Choy, 2003; Strobel, 2001; Vergara, 1996; Hill, 1994; Enriquez, 1994). Beneath this interest is the undisputed fact that Americanization has intruded into our lives and imposed a way of life that we feel

we must continually contend with—trying to shed our skins as colonials, so to speak.

Particularly, it has become fashionable to decry the patterns of Filipino-American attitude and behavior as consequences of colonialism and to ascribe them some measure of inherent malignancy, an inner defect, a self-perpetuating pathology. And yet, I think this contention often takes the form of an over-reaction which comes, I believe, from the fundamental absence of critical analysis and study of what it is that the Filipino-American community has become, where it is now, and what it will be.

The Question of Identity

To interpret the Filipino-American experience today is to bear down straight away upon the most pressing of our problems—the question of identity in the "new world." Much of what I shall say will necessarily simplify our very complex lived experiences. Still, I hope my points will come out clearly and above all, accurately.

I argue that in order to understand the question of identity, we must understand how to analyze our Filipino-American relation in terms that are more precise and sensitive than the ones to which we have become all too familiar. I do not suggest that we must stop using terms like *colonial mentality, contracting colonialism, neo-colonialism,* or *internal colonialism,* when describing our relation, but that we must subject these terms within the context that is relatively free of old clichés that often say more about our own inadequacies than they do about the phenomenon we attempt to explain.

Any serious analysis must proceed from the right questions. So far as the Filipino-American identity is concerned, I think, we must raise the question of identity not in terms of *what America has done to us,* but *what we have done* or *what we are doing despite America.* The former, in my opinion, represents the danger of looking at our identity as the by-product of victimization—a form of pathology that often requires the pills of entitlement to cure its symptoms. The latter, on the one hand, for me, represents a departure from the pathology of victimization towards an identity that is recovering

and nurtured by a vigorous and healthy way of life. I shall return to this matter a little later.

Filipino Migration to the United States

The history of Filipino migration to the United States is bound to the Spanish and American imperial occupations of the Philippines. As early as 1587, many Filipinos who worked with the Spanish galleon that plied the Manila-Acapulco trade route jumped ship when the ships reached Acapulco or California rather than return to the Philippines. In 1763 the Spanish-speaking Filipinos who deserted ship, or "Manilamen" as they were commonly called then, were already living along the bayous and marshes of Louisiana (Espina, 1988). However, the first Filipino mass migration to the United States was initiated by the 1898 Treaty of Paris. Spain ceded the Philippines, Puerto Rico, and Guam to the United States for the payment of $20 million.

The acquisition of the Philippines as a territory by the United States allowed Filipinos to immigrate as nationals without any quota system. The first influx of migrants (from 1900 until 1930) consisted, along with government-sponsored "pensionados" (children of the Filipino elite) and self-supporting students, mainly of young, unskilled bachelors who had been recruited as farm workers for the agricultural fields of Hawaii and California, as stewards for the U.S. Navy, and as laborers for the salmon canneries of Alaska. Their numbers totaled approximately 100.000 by the middle of the 1930s.

The second period of Filipino migration (from 1931 until 1965) intersected with the Great Depression of the 1930s. The anti-Filipino sentiments led to the passage of the Tydings-McDuffie Law which guaranteed independence to the Philippines in ten years. The law declared all Filipino nationals as aliens and restricted their immigration quota to fifty a year. Most Filipinos gaining entry to the U.S. were persons who were able to bypass discriminatory regulations. Many served gallantly in the American military during World War II. Others claimed to have relatives as citizens. Despite stiff restrictions,

the Filipino population grew steadily and had reached 250,000 by 1964.

The third period of Filipino migration to the United States greatly increased with the passage of the liberalized Immigration Act of 1965. This act neutralized the highly selective system of national quota and increased the number of temporary visitor and preference-immigrant visas based on family relationships and desired professional skills. Today, the number of immigrant visas granted annually to Filipinos exceeds 35,000. Presently, the total population of Filipino-Americans numbers about 2 million (more than 1 million live in California), making us the second largest Asian ethnic group in this country, Chinese-American, being the first.

The Matrices of Filipino Identity

If this is so, then what matters more? Here, we must proceed to make some preliminary distinctions and point-of-references to understand our presence. Historically, there are three matrices that cradle the Filipino-American identity. These matrices had certain peculiar elements which left their indelible imprints on our lives. They provide us the basic metaphor and vocabulary for our individual, as well as our communal experiences. And these, in turn, supply both the language of discourse and the rationale of our very existence. It provides us the framework of discourse of *who we are, how we see ourselves, how we claim ourselves,* and *how we reproduce our communities,* in short, *how we live.*

The first is the **folkloric matrix**. Conceived in precolonial times, its symbol is the self-sufficient *barangay* (village or tribe) and the autonomous *Datu* (chieftain). It is our way of life based on familism, kinship, and blood relationships. Nourished by the tropical economy of compulsion and group survival, it is still found among members of the family, distant relatives, old acquaintances, honored friends, and hometown friends. It is in this type of matrix that a totality of beliefs and sentiments common to many Filipinos exist—a socialized feeling of face-to-face and primary relationships embedded in mutualism,

collective orientation, and "we" feeling of the village life. The American sociologist, Charles Horton Cooley (1918), suggests that:

> Such groups are primary...in that they are fundamental in forming the social nature and ideals of the individual. The result of intimate association, psychologically, is a certain fusion of individualities in a common whole, so that one's very self, for many purposes at least, is the common life and purpose of the group. Perhaps the simplest way of describing this wholeness is by saying that it is a "we"; it involves the sort of sympathy and mutual identification for which "we" is the natural expression. One lives in the feeling of the whole and finds the chief aim of his will in that feeling.

The second is the **colonial matrix**. Here was the imperial imprimatur of the Spanish principle of **Transference of Sanctity** and the American ideology of **Manifest Destiny**. The Spaniards constructed their Catholic churches and government buildings, and plaza complexes on sites previously occupied by the native religious or village structures. By using this principle, the sacredness of the indigenous places was transferred to their Christian successors and the power of the "old order" was usurped by the "new order" (Brunn & Williams, 1993). On the other hand, the Americans debated the morality of the conquest and possession of the Philippines, but in the end, succumbed to what John Fiske (1885) claimed in his essay entitled *Manifest Destiny*.

The work which the English race began when it colonized North America is destined to go on until every land on the earth's surface that is not already the seat of an old civilization shall become English in its language, in its political habits and traditions, and to a predominant extent in the blood of its people.

On December 21, 1898 President William Mckinley announced his decision to keep the Philippines as an American colonial possession. He described the mission of the United States as one of **Benevolent Assimilation**. On January 4, 1899 General Elwell Otis was named the commander of American ground forces in the Philippines, which was to "extend by force American sovereignty over this country."

The colonizers found themselves bound by an unprecedented drive to take possession of a territory; and their histories were histories of uncontrollable people who grabbed the forest and skinned it, who turned rice fields to sugarcane fields; soldiers who prospected with friars, priests, and missionaries, and sometimes stupidly, tortured and massacred Filipinos, in the mad scramble to pacify and control the natives. It is estimated that about eight hundred thousand to one million Filipinos died during the Filipino-American War of 1899-1902. Devoid of sacred sentiments, the colonizers imposed a secular and calculating superordination-subordination relations which replaced the "ways of the folk." The rationalistic system of colonialism destroyed social solidarity and promoted the worst form of alienated individualism without the spirit of community.

One particular condition emerged out of this experience—the Filipino elite was produced and reproduced (Majul, 1977). During the Spanish regime, this elitism embodied a new manner of compulsion legitimated by *caciquism* where the *barangay* chiefs became the native elite, who now collaborated with the colonial masters and bossed their way over the unfortunate *timawa* (common people). Under American tutelage, the "policy of attraction" was instituted where wealthy and conservative *ilustrados*, the self-described "oligarchy of the enlightened," who had a history of willingness to negotiate with colonial masters eventually advocated acceptance of American rule.

And yet, as colonial subjects, they were the mouthpieces (sometimes unwilling) of the Spanish and American authorities. Consequently, when the traditional chief's authority declined, the ways of the folk embedded in the village also declined.

The result is clear; in due time, the *Datu* evolved into a *cacique*, and eventually into a *boss*. Interestingly, after a century of independence, the Philippines still stands today as a bossist society sustained by "pork barrel" and patronage politics.

The scattering of Filipinos all over the world refers to the **diasporic matrix**. According to the Filipino writer N.V.M. Gonzalez (1996):

> It is a myth we live by unknowingly as individuals, and more so, as a people. In the Philippine imagination it has been seeded for generations in the **Ibon Adarna** story about an ailing father with three sons. They must set into the world and return with the cure for their suffering parent.

Diaspora comes from the Greek words *dia* (through) and *speirein* (spores). In biology, the *diaspores* carried by various media like heat, water, or wind are scattered to regenerate life where they fall, perhaps resembling a new colony. As a metaphor for the Filipino labor migration, it represents to us an opportunity to grow and recover in the "new world."

Dispossession in the Old World

As a former colony, we lived lives rendered by the colonial masters in terms of paternalistic arrogance. We were the "savages" and the "people sitting in darkness," and for these reasons, deserved to be ruled as wards (Bain, 1984). As wards, majority of the Filipinos were dispossessed in their own land, while the elite, thirsting for political and economic participation, were coopted by the American rulers. The Americans granted them privileged political and economic positions. In tandem with each other, they appropriated to themselves large tracts of national posterity for agricultural and commercial pursuits—a legacy of dispossession that still

smolders contemporary Philippine society with an unending land and agrarian conflict (Kerkvliet, 1990).

Denied our name and birthright, some Filipinos revolted and some migrated, while the elite defended and protected their privileged positions. Unfortunately, after independence, Filipino leaders and the elite did not fare well. Still beholden to the former colonial masters for monetary support and trade preference, they resorted to panhandling, an interesting affair with an effect of producing what one American diplomat calls "a neurotic, manipulative, psychically crippling form of dependency" (Underhill, 1977).

And yet, despite this myopic vision of mendicancy, many Filipinos in diaspora did not forget the "ways of the folk." Taken as a whole, neither the internal or external polemics against Filipino culture, nor the numerous news and articles on Philippine corruption, nor the attempt to evaluate Filipino politics in terms of thievery, greed, and selfishness have noticeably prejudiced the humility and will of many Filipinos to redeem and recover themselves in the place of relocation.

Indeed, there is much more to the Philippines than her destitute state. It is my thinking that from the subsequent wreckage of our culture and people will emerge the **Filipino Presence,** which will bear the unmistakable marks of a reconstructed and transformed immigrant community.

Transformation in the New World

In the United States, given the theoretical construction of minority relations within the framework of what we consider as political principles, our relation with the former masters had to be viewed against the background of their adherence to democratic ideals. For many Filipinos, this is very significant because it represents to us a rejection of the colonizer-colonized relationship and landlord-peasant mentality of the plantation economy of the old world.

Unlike the old world, the new world places us on a vantage point where we face the so-called colonial masters in a different light. Perhaps, in the new world, the colonial masters

became victims of their own democratic propaganda (which they freely violated in the old world), so to speak. Interestingly, no problem in America is more serious than that of minority groups being unfairly treated. Because injustice and violence still plague majority-minority relations in America, it has become not only apparent but even more urgent that the treatment of all people on equal basis is the only solution.

If this is so, what happens then to Filipinos who have been accustomed to being subordinated when suddenly placed in social positions of more or less equal footing with those whom they used to consider their masters? Are there processes of transformation? Do we continue our subordination as colonials? Do we undo the colonial relationship by carving an ethnic space and reconstructing our communities in the new world? Are we now undoing and reversing the negative impact of colonial subjugation?

Nowhere is such transformation more evident than in the United States. Take for example a selected socioeconomic profile of the Filipino community based on the 2000 U.S. Census:

Of the 948,364 employed Filipinos aged 16 years old and over, more than half are working in three industries: 29% in education, health, and social services, 13% in manufacturing, 10% in retail, and 9% in white-collar jobs.

The median income of the Filipino family is $65,189.00, third behind the Japanese Americans ($70,849.00) and Asian Indians ($70,708.00). Other Asian groups registered the following: Chinese Americans ($60,058.00); Korean Americans ($47,624.00); Vietnamese Americans ($47,103). When compared to the median family income of whites ($50,046.00), Filipino income is about 23% higher; about 47% higher than Hispanics ($34,397.00); and about 49% higher than Blacks ($33,255.00). Twenty five percent of the Filipino households have incomes over $50,000.00/year and slightly over 7% makes income under $15,000.00/year.

Another feature of that fundamental change is the overseas remittances for the home country. Starting from a little more

than $100 million in 1975, it hit the $12 billion mark in 2004. The Philippine government incorporates overseas remittances into the GNP as part of export earnings. To date, the share of overseas remittances in total yearly exports has already reached a record high of 20.3 percent.

For a country whose per capita gross national income is a meager $1,080.00/year (BBC News, 2004), the Filipino diaspora makes a critical difference not only in the economy of the home country, but also in the psyche of the Filipino community abroad. The growing participation of our community through our regional associations and social organizations in raising funds and donations for various local projects in the home country attests to the transforming power of our community. But more importantly, in the process of participating in the affairs of the home country, we transform our community as a transnational agent of change and recovery.

Reverse Colonialism

The realization that the "rules of the game" have changed and are changing in the new world is crucial to our understanding of **reverse colonialism**. To define what I mean by this psycho-geographic phenomenon, allow me to propose the following hypotheses:

1. *Reverse colonialism is a function of relative power.*
2. *Relative power is a function of the ability to appropriate and control space.*
3. *The ability to appropriate and control space is a function of enclave formation.*
4. *Therefore, reverse colonialism is a function of enclave formation.*

Territoriality and Sense of Place

It is my thinking that reverse colonialism occurs because the immigrants carry in themselves the seeds of transformation in their place of relocation. It is also my thinking that the place of relocation becomes that space which materializes itself in

terms of "territoriality" and "sense of place." The obvious importance of these two elements is undeniable. It is a cant that biologists, ecologists, geographers, psychologists, and sociologists pay attention to because it provides a fertile ground for the study of autonomy and situated action (Canlas, 2002; Ardrey, 1966; Bell, Fisher, & Loomis, 1978; Goffman, 1963, 1971; Tuan, 1977).

Territoriality refers to the tendency to partition space and to maintain and defend it as an exclusive preserve which may involve the following: 1) as an expression of social organization that supplies a stable basis for the smooth functioning of society; 2) as a mechanism that people employ in order to bring their living spaces under their control; and 3) as an expression of ownership, appropriate conduct, or identity (Gold, 1982). **Sense of Place**, on the other hand, while may be bound to the former, connotes a more symbolic meaning. People are not only territorial, but also recreate and attach meanings to their surroundings. Thus, urban enclaves such as San Francisco's South of Market, Daly City, Union City, and Stockton in California are not only spatial settings for us, but also localities that remind us of the taste, smell, looks, and sound of the "old world." Once again, in the metaphors of N.V.M. Gonzalez (1996): "California is just a province of the Philippines."

Conclusion

What I have been discussing is a cursory and superficial treatment of a complex idea. To some of us, reverse colonialism is both a conscious or unconscious recovery born out of our humility and will to rediscover the primordial idealisms and realities we have forgotten and continue to forget in the course of our histories as peoples. Unlike imperial colonialism conceived through conquest and aggression, reverse colonialism is a mutualistic process of continual reconstruction of materials drawn from the past and located in a specific time and space. Thereafter, it becomes a practice of everyday life's

production and reproduction toward a reconstructed and transformed community.

I know there is no simple way of explaining this important aspect of the Filipinos in diaspora, except to say , as I have been saying of it, that it is the way of life of our community and it will be in the future. The title of a poem by the Filipino poet Jose Garcia Villa (1941) impressed me a great deal. Alluding to himself in America, he wrote, "Have Come, Am Here." Here in America, Filipino Americans could not be presented better than in those words.

References

Ardrey, R. (1966). *The territorial imperative.* Kingsport, TN: Kingsport Press.

Bain, D.H. (1984). *Sitting in darkness: Americans in the Philippines.* Boston: Houghton Mifflin.

BBC News. (2004). Country profile: The Philippines. http://news.bbc.co.uk (15 September 2004).

Bell, P., Fisher, J., & Loomis, R. (1978). *Environmental psychology.* Philadelphia: Saunders.

Berry, B, & Tischler, H.L. (1978). *Race and ethnic relations.* Boston: Houghton Mifflin.

Brunn, S.D., &Williams, J.F. (1993). *Cities of the world.* New York: Harper Collins College Publishers.

Canlas, M.C. (2002). *SoMa Pilipinas: Studies 2000 in two languages.* San Francisco: Arkipelago Books.

Ceniza-Choy, C. (2003). *Empire of care.* Durham and London: Duke University Press.

Cooley, C.H. (1918). *Social process.* Carbondale: Southern Illinois University Press.

Enriquez, V.G. (1994) Indigenous psychology: From traditional indigenous concepts to modern psychological practice. *Journal of the American Association for Philippine Psychology, 1* (1), 4-23.

Espina, M. (1988). *Filipinos in Louisiana.* New Orleans: A.F. Laborde & Sons.

Fiske, J. (1885). Manifest Destiny. *Harpers, 70,* 578-590.

Goffman, E. (1963). *Behavior in public places.* New York: The Free Press.

_____ (1971). *Relations in public.* New York: Harper & Row Publishers.

Gold, J. (1982). Territoriality and the organization of urban society: A bibliography. Public Administration Series: Vance Bibliographies 909, 1-2.

Gonzalez, N.V.M. (1996). The Filipino American Literature Forum. California State University, Hayward, May 20, 1996.

Hill, R.C. (1994). Liminal identity: Clinical observation. *Journal of the American Association for Philippine Psychology,1* (1), 69-74.

Kerkvliet, B.J.T. (1990). *Everyday politics in the Philippines*. Berkeley: University of California Press.

Majul, C.A. (1977). Principales, ilustrados, intellectuals and the original concept of a Filipino national community. *Asian Studies, 15*, 1-19.

Strobel, L.M. (2001). *Coming full circle: The process of decolonization among post-1965 Filipino Americans*. Quezon City, Philippines: Giraffe Books.

Tuan, Y. (1977). *Space and place*. London: Arnold.

Underhill, F. (1971). Underhill Memo to Department of State. Washington: National Security Archive.

United States Bureau of Census. (2000). Profile of Selected Economic Characteristics: 2000. http://factfinder.census.gov/home/en/datanote/expsf4.htm

Vergara, B.M. (1996). Betrayal, class fantasies, and the Filipino nation in Daly City. *Philippine Sociological Review, 44* (1-4), 79-100.

Villa, J.G. (1941). *Have come, am here*. New York City: Viking.

BRIEF HISTORY OF THE CHAMORROS AND FILIPINOS IN GUAM

Peter E. Patacsil*

ABSTRACT

The indigenous Chamorros of Guam and the rest of the Marianas were seafaring people who migrated from Southeast Asia to the Pacific. Guam was a Spanish colony from 1565 to 1898 when it was ceded to the United States after the Spanish-American War. When Father San Vitores established a Jesuit mission in Guam in 1668, the Chamorros numbered between 24,000 and 30,000 throughout the Marianas with approximately12,000 living in Guam. At the end of the Spanish era in 1898, there were approximately 9,800 people living in Guam including 8,600 to 8,700 Chamorros. According to the 2000 census, Chamorros comprised 37% of the island's population of 155,000. Chamorro customs still pervade the everyday life of the island. The Chamorros have absorbed immigrants into a neo-Chamorro society but still perpetuate Chamorro consciousness at the grass roots level. The Filipinos, on the other hand, have been the primary immigrants to Guam since 1638 when shipwrecked sailors from the Spanish galleon Concepcion married Chamorros and raised families. Since that time, Filipino soldiers, political exiles, construction workers, laborers, doctors, nurses, teachers, and others have migrated to the island and have made Guam their home. According to the 2000 census, Filipinos comprised 26.3% of Guam's population. The continuous immigration from the Philippines has perpetuated the heterogeneity of the "Filipino community."

---

* Dr. Peter E. Patacsil, Associate Professor of Mathematics at the University of Guam, submitted this article to *Silliman Journal* long before he passed away unexpectedly on March 31, 2005. In publishing this article, *Silliman Journal* wishes to honor the memory of a man whose many interests in life, especially in mathematics and history, have touched his colleagues and students in different ways. A true Filipino and a Chamorro to the end of his days, as this article affirms, Prof. Patacsil will be remembered by those in whose life he was a daily presence and who must miss him from minute to minute and hour to hour. *Silliman Journal* is grateful to Prof. Dirk Ballendorf and Prof. Larry Cunningham of the University of Guam as well as the other readers of Prof. Patacsil's paper for helping to get this article to print. (Ed.)

The long history of Spanish and American colonial rule has shaped and distorted relations between Chamorros and Filipinos who have waged common struggles against the colonial mentality. On the other hand, the Chamorros' struggle to maintain their identity and their land accosts immigrants who are pursuing their own piece of the mythical "American pie" but who, at the same time, refuse to abandon their own identity and culture. In addition to ancient ties in location of origin, language, and material culture, Chamorros and Filipinos share an asymmetrical solidarity in their struggles for dignity and human freedom to maintain their identities in the face of Euro-American encroachment.

Introduction

Located approximately 1,500 miles south of Japan and approximately 1,200 miles east of the Philippines, Guam is America's westernmost territory in the Pacific Ocean. In 1521, Ferdinand Magellan discovered Guam for Europe during his circumnavigation of the globe. Spain commenced its colonization of Guam and the rest of the Mariana Islands in 1668 when Father San Vitores, a Jesuit priest, established a mission at Guam. Spain's rule continued until 1898 when the island was taken over by the U.S. Navy. Guam was ceded to the United States at the end of the Spanish-American War while the rest of the Marianas Islands was purchased by Germany from Spain. Guam was placed under the administration of a naval government until December 8, 1941 when it was invaded, then occupied by Japan during the Second World War. The U.S. Marines liberated the island on July 21, 1944, which is still celebrated as a local holiday. A naval government was again established and continued to administer the island until 1950 when a civilian government under the Department of Interior was formed.

Because of its proximity to Asia, Guam is a U.S. strategic outpost in the western Pacific. In recent decades it has evolved into a tourist mecca for the Japanese and other Asians. Guam has a multicultural and multiethnic population. According to the *Pacific*

Daily News, the 2000 census indicates that this population numbers approximately 155,000. The ethnic breakdown of Guam's population by percent is as follows: Chamorro (37%); Filipino (26.3%); Caucasian (6.8%); Chuukese (4%); Korean (2.5%); Chinese (1.7%); Palauan (1.4%); Japanese (1.3%); Black (1%); two or more ethnic groups (14%); and others (4%). This paper describes the history, characteristics, and impact of the two primary ethnic groups in Guam, the indigenous Chamorros and the Filipinos.

The Indigenous Chamorros

Origin of the Chamorros

The Chamorros were originally seafaring people of Austronesian (formerly called Malayo-Polynesian) stock who migrated from Southeast Asia to the Pacific. Their route and how long their journey took are not known. One theory is that the Chamorros came via the island of Luzon in the Philippines. According to Sanchez (1988), another theory asserts that they came by way of the islands to the south and southwest of Guam, possibly through New Guinea or Indonesia and the Western Caroline Islands. Since these places were already populated by different races, Chamorros probably visited them only long enough to rest and to gather and load provisions into their canoes.

Sanchez (1988) narrates that when Magellan visited Guam in 1521, the indigenous natives of Guam were described as stalwart men. Taller than the Spaniards, they had straight black hair, brownskin, and wore no clothing. Since the Spaniards were searching for the Indies, they referred to the natives as *indios* (Indians). When Spain formally claimed Guam in 1565, they called the islanders of the Marianas *chamurres*, the Spanish version of *chamorri*, the native word for high caste. Spanish sailors interpreted *chamurre* to mean "friend." After Father Diego Luis de San Vitores established a Jesuit mission on Guam in 1668, the local natives were called Chamorros. According to Rogers (1995), the word *Chamorro* is apparently indigenous in origin and may have been adapted from the Spanish word *Chamorro,* which

means "bald" or "shorn." The word was descriptive of some of the native men who had shaven heads except for a top knot.

The Chamorro Population

Rogers (1995) reports that in 1668 the Chamorros numbered a total of between 24,000 and 30,000—approximately 12,000 of them on Guam and 12,000 to 18,000 throughout the rest of the Mariana Islands. However, disease and warfare decimated the Chamorro population. In 1688 the brigantine San Francisco arrived in Guam from Acapulco with supplies. The crew or passengers or both infected the Chamorros with a disease then referred to as blood rheum with fever, which was probably either influenza or small pox. The following year a Spanish galleon brought another disease that struck down the indigenous natives. Within three months, 80 people or five percent of the people died from the disease. Rogers (1995) states that although eighty may seem such a modest figure, in 1690 the population of the island was estimated at 1,800, including Spaniards and Filipinos. The decline in Guam's population from an estimated 12,000 to 1,800 (or fewer) was therefore disastrous. In 1690 Father Jose Hernandez of the Umatac church estimated that there were still 7,000 Chamorros in existence. These were the Chamorros who had fled to either the other Mariana Islands or to the Caroline Islands, which are south of Guam.

Warfare also diminished the ranks of the Chamorros. Between 1671 and 1685, numerous small-scale clashes took place between the Chamorros and Spanish soldiers resulting in the deaths of hundreds of Chamorros. Even larger numbers of Chamorros died in battle during unsuccessful sieges of Hagatna forts during the same period: Hurao's attacks with 2,000 warriors (1671-1672); Aguarin's "hundreds" of warriors (1676-1677); and the Apurguan uprising (1684). Despite their ancient weapons, the Chamorros attacked courageously and repeatedly in the face of musket fire and cannon barrages. In 1695 Jose de Quiroga captured the last Chamorro rebel stronghold with the help of his Chamorro allies led by Antonio Inoc, a converted chamorri. In

1698 an expedition of 400 Spanish and Chamorro troops rounded up the last Chamorro refugees, approximately 1,000 people, in the far northern islands of the Marianas. While being transported to Guam, many of these refugees perished on the way, their boats wrecked by typhoons in high seas. Thirty years after Father San Vitores established the first mission on Guam, the *reduccion* of the Chamorros ended. Rogers (1995) defines *reduccion* as an effort by the Spaniards to "subdue, convert, and gather pagans into Christian congregations."

Chicken pox epidemic on Guam in 1779 killed Chamorros but few Spaniards, mestizos, or Filipinos. Consequently, the Spanish census of 1783 indicated that there were more non-Chamorros than Chamorros for the first time in the Mariana Islands. There were 1,623 non-Chamorros (Spaniards, mestizos, Filipinos and their descendants, including many Chamorro mixtures) compared to 1,608 pure-blooded Chamorros. Between 1783 and 1816, Spanish censuses showed that the pure-blooded Chamorros were approximately equal in numbers to the non-Chamorros. After 1816, the pure-blooded Chamorros became a diminishing minority in their homeland until they were finally absorbed into a hybrid "neo Chamorro" (Underwood, 1976) mixture at the end of the nineteenth century. At the end of the Spanish era in 1898, there were approximately 9,800 people living in Guam including 8,600 to 8,700 Chamorros. Although the absolute number of Chamorros has increased since 1898 when Guam became a U.S. territory, the percentage of Chamorros has decreased from 99% in 1901 to 37% in 2000. Note that during the 1950s and 1960s Chamorro families left Guam and migrated to the continental U.S. and this migration continued into the 1970s in increasing amounts. Consequently, half of the Chamorro population (about 50,000 persons) live in the continental U.S.

Caste System

The ancient Chamorros had two family castes: the high-ranking one had rights to property and was called chamorri; the low status one or commoner was called *manachang*. Members

of the chamorri did not normally intermarry with members of the manachang. The chamorri was comprised of two classes: the *matua* and the *achoti*. The *matua* was the highest class and both the *maga'lani* (headman) and the *maga'haga* (headman's wife) came from this class. Members of the *achoti* were fishermen and sailors. The manachang were primarily farmers and did not own property. However, they were not slaves to be bought and sold.

During the Spanish era, Chamorro land tenure changed. That is, communal ownership of ancestral lands by Chamorro families gradually degenerated with ownership passing on to the principalia, the new class that had replaced the chamorri. Simply put, the traditional Chamorro matrilineal system was supplanted by the Spanish first-born male inheritance system. The principalia class was the forerunner of the *manak'kilo*, a small elite class of families known as the "high people." This privileged class had houses normally made of coral masonry called *mamposteria* in the center of Hagatna. The manak'kilo adopted Spanish and Filipino clothing and manners. Although they were educated in the Spanish language, they continued to speak Chamorro at home. The manak'kilo families gradually came to own the largest parcels of private land on Guam. The manak'kilo was the local "city" gentry comprised of about twelve families. They had a tendency to marry Spaniards and to become mestizos. The manak'kilo remained aloof from the *manak'papa*, the ordinary "low people" of predominantly Chamorro blood. The latter group lived primarily in the outskirts of Hagatna and in the rural villages. According to Rogers (1995), many of the manak'papa did not own land during the Spanish rule.

Chamorro Customs

During the Spanish era, the family in Chamorro society was strengthened by the acceptance by the Chamorros of Spanish Catholic marriage rites and the observance of godfathers (*compadre* in Spanish, or *kumpaire/kumpaile* in Chamorro) and godmothers (*comadre* or *kumaire/kumaile*). By the nineteenth century a church marriage became an inseparable union

much unlike the marriage arrangements during the precontact period. The obligations and roles of godparents were formalized through baptism. These kinship ties created extended families resulting in the family and the church becoming the centers of social loyalty.

The absorption of introduced customs by the Chamorros indicates that they were agents of their own transformation and not just victims of foreigners. Chamorro women, in particular, quietly manipulated foreign systems for their own purposes. They adopted new practices and concepts to meet local needs while at the same time obstinately held on to control of the family and the core of their language. Because of this family-language lineage coupled with Guam's isolation, the Chamorros were neither totally Hispanicized nor supplanted by a hybrid non-indigenous population, as occurred in Puerto Rico and Cuba. Rather, the Chamorros absorbed immigrants into a neo-Chamorro society but still perpetuated their Chamorro consciousness at the grass roots level. Chamorro customs still pervade the everyday life of the island. For example, when the Guam Federation of Teachers (GFT) went on strike in 1981, many of the actions and interactions were based on the customs of the Chamorros.

When Governor Paul Calvo and Bishop Felixberto Flores joined together and appealed for support of the local government, they noted that Guam's cultural traditions were derived from *ina'fa'moalek* or cooperation and interdependence, and not on confrontation. Confrontation during the GFT strike was inconsistent with Chamorro cultural values. One of the core values is for a family member to avoid *mamahlao*, the embarrassment or shame of a family when a member acts in a confrontational or self-serving way. Closely related to mamahlao is the local custom of respect for a benefactor, person of authority, or protector called the patron. The patron helps the family by providing benefits (e.g., jobs) to family members. The governor and the bishop are the most authoritative figures to Chamorros. Moreover, the Chamorros were reluctant to strike against their *mangga'chong* (close friends) and godparents who were

employed by the local government. The strike called by GFT failed.

The Filipino Immigrants

Early History

Since the seventeenth century, Filipinos have been the primary immigrants to Guam. The first Filipino settlers in the Marianas were shipwrecked sailors. On September 20, 1638, the Manila galleon Nuestra Senora de la Concepcion ran aground on a reef at Agingan Bay on the southwest tip of Saipan. Some of the shipwrecked Filipinos and Spaniards from the Concepcion married Chamorros and raised families. In 1668 the San Diego arrived in the Mariana Islands with Father Diego Luis de San Vitores, fellow Jesuit Tomas de Cardenas, some Filipino catechists, and a complement of 19 soldiers. The small group of missionaries included Esteban, a Filipino survivor of the Concepcion shipwreck. Retrieved in 1662 on Guam by the San Damian, Esteban had earlier been hired by Father San Vitores in the Philippines to teach the Jesuit friar Chamorro and to serve as an interpreter for the Marianas mission. When Father San Vitores arrived in Guam, Pedro Calonsor, a Christian Visayan Filipino, came aboard the San Diego. Calonsor was also one of the shipwrecked survivors from the Concepcion.

According to Rogers (1995), he brought aboard his two-year-old daughter who was baptized and given the baptismal name Mariana. Calonsor became a trusted companion of Father San Vitores as well as a catechist. Lorenzo de Morales, a Malabar native and another Concepcion survivor, also joined Father San Vitores' mission as a catechist. Calonsor and Morales were among 40 non-Spaniards who were part of the mission. The Marianas mission consisted of five Jesuit priests; Lorenzo, a scholastic brother; three Spanish officers; and the 40 non-Spaniards. The latter group was comprised of mostly Filipinos and Mexican mestizos of Spanish and Indian descent. The non-Spaniards included 31 soldiers and the rest were either catechists or servants. Rogers (1995) reports that from 1674 on, almost every

complement of soldiers arriving on Guam included Filipinos (usually Pampangos) and Spanish-Indian mestizos from Mexico.

The Spaniards maintained social distinctions between peninsulares (people born in Spain), criollos (Spaniards born outside Spain), insulares (Spaniards born in the islands), mestizos (people of Spanish and Indian blood), Filipinos, and indios (Chamorros). Filipino, mestizo, and Spanish soldiers began to marry Chamorro women in church ceremonies in the 1670s, and set up permanent households. During the Spanish-Chamorro Wars (1671-1695), the Spanish forces lost 118 to 128 men. Rogers (1995) states that the dead included six Jesuit priests, six catechists, and soldiers, mostly Filipinos. Since the Chamorro population was dwindling due to war and diseases, several proposals were made starting in 1772 and over the years to transport Filipino families to the Marianas for voluntary resettlement. Finally, a ship with Filipino migrants sailed for Guam in 1748 but sank enroute. All on board drowned, ending all mass migration attempts.

In 1702, the War of the Spanish Succession erupted upon the death of Charles II. Spanish authorities in both Mexico and the Philippines were concerned about the threat posed by English privateers. At the time the Spanish troop strength in Guam consisted of 130 men in three companies. The men in two of these companies were listed as Spaniards who probably included many mestizos. The third company was comprised of Filipino Pampangos who also worked as carpenters and stone masons for the mission and the garrison. A Spanish census of 1727 listed more than 400 families of Spanish and Filipino soldiers and retirees, most of whom had married Chamorro women. A recurring social phenomenon, the migration of Filipinos to Guam has impacted the history and development of the island.

In the 1750s, British men-of-war sailed the Pacific Ocean. During the Seven Years' War (1754-1763), the city of Manila fell to the British in 1762. When Jose de Soroa, a naval officer and Governor of the Mariana Islands, learned of the fall of Manila, he mobilized all able-bodied men in the event the British invaded Guam. In addition to 60 soldiers assigned to the presidio, there

were 67 Spaniards, 57 mestizos, 100 Filipinos, and several hundred Chamorros. Fortunately, the British ignored Guam. Sargento Mayor Mariano Tobias served as governor between 1771 and 1774. He organized a 200-man volunteer militia to back up the regular troops. The militia had Spanish officers and Filipino non-commissioned officers.

Filipino Rebels

Filipinos were sent to Guam as *deportados* since the early 1870s. The 1870s was a period of political turmoil for Spain. As Spain's government changed, supporters of the previous regime were arrested and deported to the colonies as political convicts or deportados. The deportados, especially the educated Filipinos who advocated radical political ideas pertaining to "native rights," had a subversive impact on the Chamorros. The first groups were sent after rebellious acts (e.g., the Cavite Mutiny) occurred in the Philippines. Oftentimes the deportados were not imprisoned and were allowed to work and live among the Chamorros. In January 1872 Filipino priests led the Cavite Mutiny in the Philippines, which was crushed by the Spaniards. Three priests were executed and numerous others were sentenced to be deportados. Consequently, approximately 1,200 political exiles from Spain and the Philippines were deported between 1872 and 1877 to the Marianas along with ordinary convicts. In June 1876, all deportados were freed and repatriated by King Alphonso XII, leaving military convicts and ordinary civilian convicts in the Marianas.

After an unsuccessful insurrection against the Spaniards in August 1896, Filipino rebels were exiled to Guam. Many of these deportados were massacred during an escape attempt on the night of December 20, 1896. After the Spanish-American War, Filipino patriots fought against the U.S. Army and were defeated, then imprisoned. Stade (1998) defines an "irreconcilable" as a Filipino who fought against the U.S. for Philippine independence and who refused to swear an oath of allegiance to the U.S. after being captured by the U.S. Army. Several "irreconcilables" were transported to Guam as political prisoners. Forty-five Filipinos

plus 14 servants arrived in Guam in early 1901 and were held in a temporary prison site in Asan. The group included Apolinario Mabini (one of the leaders of the insurrection), his brother Prudencio, and five generals. In 1903 most of the Filipino insurgents returned to the Philippines. Three "irreconcilables" opted to remain in Guam: teacher-lawyer Leon Flores, lawyer Panracio Palting, and Maximo Lorenzo Tolentino, a young cook. Felixberto Camacho Flores, one of Leon Flores' sons, became the first Chamorro archbishop of Guam in 1971. Jose Aguon Flores, another descendant, became leader of the Baptist church and mission of Guam in the 1930s. As for Palting, he later became a judge. Meanwhile, Tolentino married Tomasa Crisostomo Lizama and raised a large family. On July 4, 1961 the Filipino community erected a memorial to the former exiles at the Asan site. During the dedication ceremony, Monsignor Felixberto Flores who later became Bishop of Hagatna, rendered the invocation. Maximo Lorenzo Tolentino, the former cook and the last survivor of the exiles, proudly stood at the dedication ceremony.

Filipino Laborers

In May 1947, the U.S. and Philippine governments entered into an agreement regarding the recruitment and hiring of Filipinos by U.S. armed services and their contractors in the Pacific area, including Guam. The agreement was in violation of U.S. immigration laws but was an expedient that allowed the military and its contractors to quickly acquire Filipino laborers. According to Rogers (1995), the Brown-Pacific-Mason consortium and the Marianas Stevedoring and Development Company were allowed to import as many alien laborers as they needed on Guam. These laborers were hired under one- or two-year contracts without Philippine passports or U.S. visas. The U.S.-Philippine agreement stated that Filipino laborers would be paid the current Philippine salary, with a 25 percent overseas differential. They were also to receive medical care, room and board, and round-trip air transportation from point of hire.

Huge camps or towns were built to accommodate these men and the few Filipinas with them. Camp Roxas was the largest, housing 7,000 men (mostly Visayans), and was located north of Agat-Santa Rita on former Bordallo land. The camp consisted not only of barracks, but also included mess halls, movie houses, and a beach. The Tagalogs and Ilocanos were housed in Camp Edusa near Dededo and in Camp Marbo (named after the Air Force's Marianas-Bonin command area and also called Magsaysay City) in Yigo. Camp Quezon was located near the present site of the University of Guam in Mangilao. Meanwhile, the military's American civilian employees were housed in Camp Asan located on the site of the old Asan presidio, which was used to incarcerate Filipino rebels in 1902-1903. Camp Asan was unlike the other camps as it contained a bowling alley and other amenities.

Early 1949 saw an influx of thousands of American contractors and Filipino construction workers whose salaries and allowance differed widely on the basis of ethnicity rather than on work performance. In 1950 the U.S. Congress passed an Organic Act that ended U.S. Naval Rule, established a local civilian government structure, granted limited U.S. Citizenship, and defined Guam's political status as an "unincorporated territory." The passage of the Act also authorized the newly created Government of Guam to permit private businesses and merchants to import Filipino contract workers. Consequently, labor migrants were brought to Guam through both the Immigration and Naturalization Service (INS) and the U.S. Navy. The Navy recruited workers independent of the INS. During the Korean War (June 25, 1950 to July 27, 1953), Guam served as a busy support base for military operations. For some time the military remained dependent on a large number of alien workers from the Philippines for the completion of construction projects in the western Pacific region. The Immigration and Naturalization Act of 1952 changed the control and administration of contract workers on Guam. H-2, one of the worker categories established by the act, allowed aliens to perform labor or temporary services, if unemployed persons

capable of performing such labor or service could not be found in the U.S.

The Immigration and Naturalization Act of 1952 granted permanent resident status to all contract workers who had resided in Guam before or during 1950. Consequently, many Filipino immigrants departed Guam for either the continental U.S. or Hawaii. Rogers (1995) points out that the Act of 1952 also specified the conditions under which additional labor immigrants would be permitted to enter Guam: "An alien having a residence in a foreign country which he has no intention of abandoning... who is coming to the U.S. to perform other temporary services of labor if unemployed persons capable of performing such service or labor cannot be found in this country." Since this section of the act was designated (H) and (ii), contract workers in Guam came to be referred to as "H-2 workers." However, the influx of Filipino contract laborers did not diminish as most of them were brought in by the U.S. military. Additionally, the military did not want to send back any of these laborers as they constituted cheap labor and permitting them to remain resulted in cost savings associated with recruitment, travel, and training.

The act allowed the military to continue using Filipino contract workers. The Philippines established a consulate on Guam in 1950 to assist the Filipino laborers. In 1952 there were approximately 17,000 Filipino H-2 workers on Guam. In the late 1950s, the number of Filipino workers dropped as military projects were completed and the large labor camps closed. In 1960 the INS commenced a three-year phase out of H-2 workers and by 1962, most alien contract workers were gone from Guam. While the H-2 program was being phased out, steps were being taken to alter the alien labor situation. The "Aquino Ruling" (based on a Board of Immigration Appeals case) of 1960 allowed certain categories of non-immigrant alien workers to remain as permanent U.S. residents. As a result, about 1,700 Filipino non-immigrant aliens became permanent residents by 1962. These new residents, along with other Filipino contractors who had married American citizens, eventually became U.S. citizens by applying for a "green card."

As U.S. citizens, Filipinos who remained in Guam petitioned for immediate family members in the Philippines to enter Guam.

Despite the phasing out of H-2 workers, laborers were still needed for military construction. Consequently, the H-2 program was replaced by the Defense Parolee Program under the provisions of the 1952 Immigration and Naturalization Act. The parolees, unlike the H-2 workers, worked under the old discriminatory wage scales that were low. Thus, as before the parolee program provided military contractors with the same source of cheap alien labor for U.S. defense purposes. Through the years, this flow of immigration, which was over and above the regular U.S. immigrant quota for the Philippines, gathered momentum. Consequently, Americans of Filipino ancestry have become the largest minority on Guam, comprising about one-quarter of the island's population. They also comprise the majority of the residents of Dededo, Guam's largest village.

Supertyphoon Karen struck Guam on the evening of November 11, 1962, devastating the island and wiping out entire villages in its wake. To re-build the island, a federal reconstruction and rehabilitation program as well as a public law providing grants and long-term loans for Guam residents resulted in a construction boom on the island. Rogers (1995) reports that to provide labor for rehabilitating Guam after Typhoon Karen (November 1962) and Typhoon Olive (April 1963) struck the island, INS allowed Filipino workers (and several hundred Micronesians for the first time) into Guam under the Reconstruction and Rehabilitation Program, a second parolee program. These workers were hired under six-month contracts, which were extended until May 1970. As a result, the number of alien workers again began to increase to almost 4,500 by the end of 1967. Exploitation of these workers, however, continued and according to reports they were given poor food and lived in filth and squalor. The abuses led to the formation of the first labor union in Guam in December1964. There were 1,500 members (mostly Filipinos) in Operating Engineers Union Local 3 of the AFL-CIO.

According to Rogers (1995), tourism developed into a major industry in Guam in the early 1980s. Guam's income from tourism rose to $200 million a year in 1985. The tourism surge served as a catalyst in the construction industry resulting in the hiring of H-2 workers including Chinese, Koreans, Malaysians, as well as Filipinos.

Filipino Professionals

In 1950 Governor Carlton Skinner separated the civilian hospital from the naval hospital and named it the Guam Memorial Hospital (GMH). At the time, the civilian hospital was located in two Butler buildings in Oka. The governor recruited doctors and nurses from the Philippines and hired them under contract. Although these doctors and nurses were granted American credentials after passing examinations, their remuneration remained well below U.S. standards. Nevertheless, many of these medical professionals remained in Guam after fulfilling their contracts and became U.S. citizens, forming the nucleus of Guam's private medical sector for many years. To date, hundreds of Filipinos are employed as teachers in the public school system. In February 1981, the Guam Federation of Teachers (GFT), the teachers' union in Guam, called a strike. Rogers (1995) reports that the strike evolved into a clash of values between statesiders (who comprised the majority of the strikers) on one side, and Chamorros and Filipinos (most of whom remained on the job) on the other side. The statesiders were primarily non-Catholic, individualistic in demeanor, and liberal in their viewpoints. Many of these islanders (unlike most Chamorro and Filipino teachers) dressed in shorts, T-shirts, and zorii for work. Because Chamorros and Filipinos have always held the teaching profession in high esteem, they viewed this casual attitude displayed by the statesiders as lack of respect for students and for the teaching profession.

The Filipino Population

During the first decades of American rule, Filipinos comprised less than five percent of Guam's population. About the

time the Philippines became an independent nation in 1946, there was a strong wave of immigration from the Philippines to Hawaii and the continental U.S. via Guam. In 1965 when the U.S. government changed the policies that limited immigration from Asia, there was another significant increase in Filipino immigration. Since that time, the number of Filipino immigrants to Guam has increased steadily. By 1990 ethnic Filipinos comprised 22.6 percent (30,043) of the population. According to the 2000 census, this number has increased to 26.3 percent (40,714).

Filipino Community

Stade (1998) states that to speak of "*a*" or "*the*" Filipino community of Guam is misleading with regard to culture communion as well as political homogeneity partly because members of the "Filipino community" have arrived on Guam at different points in time and mainly because they came from different parts of the Philippines—from the north and south, from metropolitan Manila and remote villages, from wealthy and poor families, and so forth. A Filipino construction laborer who lives in a barracks, and saves his money to send back home to support his family, to build a house, or to open a business, may care little about the aspirations of the socialites who dress up and play the part of royalty during coronation balls when they participate in the "Mr. and Mrs. Filipino Community of Guam." The contract laborer who has recently arrived on-island may not be interested in the issue of dual citizenship for Philippine expatriates. On the other hand, Filipino residents in Guam who have acquired U.S. citizenship may closely follow the Filipino Dual Citizenship Bill in the Philippine Senate and House of Representatives. The point to be made here is that the continuous immigration from the Philippines perpetuates the heterogeneity of the "Filipino community". It is important to also note that the Filipino immigrants may have brought different political loyalties with them.

The Filipino population also includes young adults who have been born and raised in Guam. Although many of them speak their parents' dialect, they have few ties with the Philippines. Some

of them call themselves Guamanians, unsure of what their identity is. It is an even more complex identity problem for a young adult who has a Chamorro father and Filipino mother or vice versa.

Chamorro-Filipino Relations

The historical relations between Chamorros and Filipinos in Guam can be viewed from two perspectives. First of all, their ancient migrations from Southeast Asia and the long history of Spanish and American colonial rule have shaped and distorted the relations. Second, Chamorros and Filipinos have waged common struggles against colonial mentality.

Diaz (1995) provides a historical perspective of the local relations between Chamorros and Filipinos. These two ethnic groups share similar origins in Southeast Asia. Chamorros are the descendants of seafarers and traders from Southeast Asia. Their ancestors passed through Indonesia, Malaysia, or the Philippines and settled in the Marianas. Chamorros and Filipinos speak languages that have a common origin. They also have common ceramic traditions as well as common navigation and maritime technologies, including the use of the outrigger. During colonial and neocolonial struggles, first under Spain then under the U.S. and Japan respectively, the Chamorros and Filipinos shared similar experiences. During the Spanish era, government authorities enlisted and forced Filipino soldiers to help maintain its subjugation of the Chamorros from the seventeenth century to the end of the nineteenth century. The Marianas provided the setting for voluntary and forced Filipino labor in support of missionaries and civil authorities against rebellious Chamorros.

In the aftermath of the Chamorro-Spanish Wars of the seventeenth century, most of the Chamorro men had died. Consequently, Filipino men were imported to Guam to help rejuvenate Chamorro society. Chamorro women married Filipinos and other non-Chamorro men, bearing children who were raised to speak the Chamorro language. Souder (1992) points out that Chamorro women in their roles as mothers and as protectors of the family distinguished themselves as the makers and shapers of

Chamorro history and cultural continuity. It can be said in this vein that Filipino men were assimilated into Chamorro society by the workings of what is now referred to as "kustumbren Chamorro," the term used widely to refer to a local Chamorro cultural system that combines elements of a precontact aboriginal culture and those of later arrivals. According to Forbes (2000), Filipinos who were settled in Guam in the eighteenth century had family names such as Manibusan, Pangelinan, and Untalan. These Filipinos have been assimilated into neocolonial Chamorro society along with their Caucasian (e.g., Johnston, Sgambelluri, and Underwood), Chinese (e.g., Chaco, Tydingco, and Unpingco), Japanese (e.g., Onedera, Shimizu, and Tayama), and Spanish (e.g., Leon Guerrero, Martinez, and Perez) counterparts.

The militarization and reconstruction that occurred after the Second World War signify the beginning of some of the most profound shifts in Chamorro-Filipino relations. This reconstruction resulted in the importation of thousands of Filipino workers. The arrival of these workers, complaints of adverse effects, and the relaxation of immigration quotas led to a troublesome period characterized by federal policies and local interventions to cope with national security concerns and local growing pains. Guam's postwar context also included population explosion and growth. It was during this period that the fear of Chamorro culture extinction first manifested itself in recent times. Diaz (1995) argues that American colonial history has manipulated relations between Chamorros and non-Chamorros, providing a troubled legacy that has pitted the indigenous Chamorros against non-Chamorros like the Filipinos. The U.S. military, Congress, and the Departments of Interior and Justice have largely dictated immigration conditions, labor requirements, and economic and political development resulting in the troubled growth and social situations confronting Guam. Chamorros' struggle to maintain their identity and their land collides with the immigrants' own pursuit of a piece of the mythical "American pie" and refusal to abandon their own identity and culture. This confrontation occurred during Guam's early recorded history and has recurred since the end of the Second

World War but especially in the last two decades often resulting in hostility and/or resentment, and sometimes violence

Some Chamorros discriminate against Filipino residents. On the other hand, many Filipinos look down on Chamorros for not being as culturally rich as the people in the Philippines. Moreover, many Filipinos often ridicule facets of Chamorro culture as being "borrowed" from the Philippines, behaving as if a culture has never borrowed things from other cultures. Diaz (1995) asserts that mutual respect can go a long way in improving relations between Chamorros and Filipinos providing that a certain asymmetry or lopsidedness in their respective histories is recognized. He identifies this asymmetry in the unequal way in which Chamorros and Filipinos were allowed to exist under the conditions of a Spanish and American colonial history. This historical asymmetry continues to adversely affect Chamorros in Guam. As for Filipinos, a neocolonial history continues to drive them out of their homeland.

Both Spain and the U.S. have used Guam for their own ends and both have made inroads into Chamorro society to the point where the Chamorro language is the dominant feature of the culture that still remains. The Philippines, on the other hand, was ruled by Spain for centuries and by the United States for decades. However, neither Spain nor the U.S. was able to improve the lot of the Filipino people who have been leaving their homeland for decades and who are still migrating to other lands in pursuit of better economic opportunities. The point to be made here is that in addition to ancient ties in location of origin, language, and material culture, Chamorros and Filipinos share an asymmetrical solidarity in their struggles for dignity and human freedom to maintain their respective identities in the face of Euro-American encroachment.

Summary and conclusion

The ancient Chamorros were seafarers and traders who migrated from Southeast Asia to the Pacific. After settling in the Marianas, their first contact with westerners was in the sixteenth

century. There were approximately 30,000 Chamorros in 1668 but warfare and diseases decimated this population to the point where fewer than 1,400 Chamorros existed in 1786. Through the centuries, Caucasians, Chinese, Filipinos, Japanese, and others have been assimilated into a neocolonial Chamorro society. Although immigrants have been absorbed into this society, the Chamorros have been able to maintain their language, some of their customs, and identity. The Filipinos first settled in Guam in 1638. Throughout Guam's history, they continued to migrate to Guam as soldiers, catechists, and servants and in recent decades, as doctors, nurses, teachers, other professionals, and laborers. Guam's Filipino population is a heterogeneous group whose members differ in terms of place of origin, cultural backgrounds, occupation, interests, and arrival times in Guam. Accordingly, it is inappropriate to refer to "*a*" or "*the*" Filipino community of Guam.

The Chamorros and Filipinos share many things in common. Both are descendants of seafarers and traders from Southeast Asia and speak languages that have a common origin. Also, both Guam and the Philippines have been ruled as colonies by both the Spaniards and the Americans and both were occupied by the Japanese during the Second World War. Although the Chamorros and Filipinos have many things in common, the asymmetry in the unequal way in which they have been allowed to exist under the conditions of Spanish and American colonial history continues to undermine the relations between the two groups. Recognition of this asymmetry will lead to mutual respect and only then the thorny relations between the Chamorros and Filipinos may be improved.

References

Diaz, V. M. (1995). Bye bye Ms. American pie: The historical relations between Chamorros and Filipinos and the American dream, *ISLA: A Journal of Micronesian Studies, 3* (1), 147-160.

Forbes, E. (2000, March 17). *Origin, meaning and history of family names in the Marianas*. Paper presented at the Micronesian Area Research Center Lecture Series, University of Guam.

Limtiaco, S. (2000, February 9). Population 154,805. *Pacific Daily News*.

Rogers, R. F. (1995). *Destiny's landfall.* Honolulu, HI: University of Hawaii Publishing House.

Souder, L.T. (1992). *Daughters of the island: Contemporary Chamorro woman organizers on Guam.* Lanham, MD: University Press of America; Guam: Micronesian Area Research Center, University of Guam (co-published).

Stade, R. (1998). *Pacific passages: World culture and local politics in Guam.* Stockholm: Gotab.

Underwood, J.H. (1976). The native origins of the Neo-Chamorros of the Mariana Islands. *Micronesica, 12*(2), 203-209.

ON THE DISTRIBUTION AND BIOLOGY OF *VARANUS MABITANG*[1]

Maren Gaulke, Alexander Volker Altenbach, Arnold Demegillo, & Ulrich Struck

ABSTRACT

During the past two years, our knowledge on the distribution, morphology, and biology of the Mabitang (*Varanus mabitang*) has enhanced significantly. Captured *Varanus mabitang* were examined and marked permanently by passive integrated transponders before being released. While the first recapture provided initial information on activity range, observations of live animals, the examination of feces, and isotope analyses revealed a dominant frugivorous diet, comprising a minimum of 16 different food plants. Invertebrates such as crabs, insects, and snails are an additional food source for *V. mabitang*.

Sightings and spoor of *V. mabitang* show that this animal is rare, but not as rare as originally feared. It is confined to primary forests and only rarely can be seen in secondary growth areas adjacent to primary forests. Results of distribution surveys on neighboring islands leave little hope that this animal exists outside of Panay.

Introduction

Gaulke *et al.* (2002) published the first information on the ecology of the Mabitang. At that time, only two specimens of this rare, arboreal, large monitor lizard were known to science, and very few observations were available. Distribution surveys have been conducted throughout Panay, as well as on different islands of the Semirara Island Group, and on Cebu Island. Results of the distribution surveys indicated that within Panay *V. mabitang* is restricted to the

forested regions in the northwestern and western parts of this island. However, no indications of its existence on the other visited islands were found.

To gain further information on its biology and distribution, two projects were initiated: (1) the continuation of the distribution survey on Panay and on other neighboring islands, and (2) the resumption of the field research in different investigation areas in lowland evergreen rainforests of NW-Panay. These activities are necessary in order to estimate the population status and the ecological requirements of this unique lizard, indispensable prerequisites for well-aimed conservation measures.

At present, the distribution survey has been completed, and the field research has been progressing for more than 2.5 years. Using a non-invasive method to gain insight into food web structures, Struck *et al.* (2002) examined the stable isotopic composition of a Mabitang and their findings showed that the animal is herbivorous.

This paper endeavors to report many more data that have since become available.

Methods

Two factors influenced the choice of islands for the continuation of our distribution survey. First, these islands had to belong to the West-Visayan faunal region (Heaney, 1985; Heaney & Regalado, 1998; Kennedy *et al.*, 2000); second, information on the occurrence of a large, black monitor lizard had become available from residents or former residents of the respective islands. Following these considerations, the Romblon Island Group (Tablas, Romblon, Sibuyan), Negros, and Mindoro were surveyed. The islands of the Romblon Island Group were visited only once (February 2003), Mindoro was visited twice (March 2003, April 2004), and Negros four times (May 2002, April 2003, March 2004, and May 2004). The distribution survey on

Panay Island has been continuing for the past two years. In all visited areas, local inhabitants (especially hunters or former hunters and *kaingineros* living at the forest edge) were interviewed using standardized questionnaires and photos (for further details see Gaulke *et al.*, 2002).

Field research began in June 2002. After preliminary surveys, three promising research areas with a size between 20 and 25 km^2 were identified: one area is located in the forest of the NW-Panay-Peninsula (in the Municipalities of Libertad and Buruanga), and two areas are in the northern part of the West-Panay-Mountain-Range (one in the South-Pandan-Forest, Municipality of Pandan; one in the Alegre-Forest, Municipality of Sebaste). In June 2004 the research area of the NW-Panay-Peninsula was replaced by a third one in the West-Panay-Mountain-Range, in the North-Culasi-Forest at the foothills of Mt. Madja-as, Municipality of Culasi (Fig. 1, Appendix).

From June 2002 until April 2004, the field assistants worked 10 full days per month.[2] Since May 2004 their working days have increased to 12 per month. Their task included searching in their former hunting areas for the Mabitang (*Varanus mabitang*) or its spoor (tracks, scratch marks on trees, fecal pellets, food plants, and trees used as resting places). Scratch marks of the Mabitang are differentiated from the scratch marks of other similarly sized, tree-climbing animals (in this region mainly wild cats or civet cats) by their size. Because a Mabitang has extremely long fingers and claws, the single scratches of its scratch marks are longer and set wider apart from each other than those of other animals. Another task of the field assistants was to capture sighted Mabitangs by hand. Traps were not used in order to avoid the risk of harming other wildlife such as civet cats or macaques. The equipment used by field assistants in the field research included altimeters, binoculars, and a GPS.

Captured Mabitangs are carefully examined, and standard mensural and meristic data are collected (including body measurements, body mass, scale counts, description of scars and wounds, recording of ectoparasites, and clipping of claw tips for later isotope analyses). Excreted feces are kept for identification of food remains such as seeds. Animals are marked with a transponder (reading-device Minimax with integrated LD display and 9 V battery, injector IIID 100, and ID 162 transponders; from ANITECH, Friedrichsfehn), so that they can be identified in case of a recapture. Following the collection of organismal data, animals are released at capture sites.

A herbarium and a species list of botanical food items and tree species used by the Mabitang as refugia have been assembled; data on phenology and altitudinal ranges have been included. Plant identification followed Salvosa (1963), and Madulid (2001; 2002).

Small amounts of claw material from most captured Mabitangs, food remains in Mabitang feces, and some fresh food were collected for later isotope analyses as well as for comparison purposes with a *V. salvator* and *Hydrosaurus pustulatus*. The analyses will be conducted at the GeoBio Center, Ludwig-Maximilians-University Munich (LMU). For the analyses of the claw material of the holotype and its stomach contents, and some museum material of Philippine *Varanus salvator* and *Hydrosaurus pustulatus*, approximately 1mg of claw material or (due to much lower nitrogen concentrations) around 20mg of plant tissue has been used. Samples were dried at 40°C in a heating oven for more than 12h. Before stable isotope analyses, all dried samples were homogenized with a pestle and mortar. Stable isotope analyses of nitrogen and carbon were performed simultaneously using a Thermo/Finnigan MAT Delta plus isotope ratio mass spectrometer, coupled to a Thermo NA

2500CN elemental analyzer via a Thermo/Finnigan Conflo II interface. Stable isotope ratios are expressed in the conventional delta notation ($\delta^{13}C/\delta^{15}N$) relative to atmospheric nitrogen (Mariotti, 1984) and PDB (PeeDee Belemnite standard). The standard deviation for repeated measurements of laboratory standard material (peptone) is better than 0.15‰ for both nitrogen and carbon. Linear regressions and correlation coefficients of $\delta^{15}N$ and $\delta^{13}C$ from claw samples were calculated using the Xact software package version 7.1 (SciLab, Hamburg).

Abbreviations used include: AF = Alegre-Forest; asl = above sea level; NCF = North-Culasi-Forest; NWPP = NW-Panay-Peninsula; SPF = South-Pandan-Forest; SVL = snout-vent-length; TaL = tail-length.

Results

Distribution survey. The interviews conducted on Negros, Romblon, Sibuyan, and Tablas yielded no indication of the existence of the Mabitang on any of these islands. The monitor lizard known on these islands is the Rough-necked Water Monitor (*Varanus salvator nuchalis*), a typical member of the West-Visayan faunal region.

On Mindoro, some information on the occurrence of a large, black monitor lizard, besides the common water monitor (on Mindoro represented by the subspecies *V. s. marmoratus*), in two regions had been received. One of the regions is the well-known Siburan Forest, in the Municipality Sablayan, in Mindoro Occidental; the other is a small limestone forest relict between the Municipalities of Bulalacao and Mansalay in Mindoro Oriental. Information gathered from respondents in the distributional survey revealed their knowledge of the water monitor. Meanwhile, at least one resident from each area reported the presence of a large, completely black, monitor lizard living in the forest. However, inhabitants of this area had no distinctive local name for this

lizard, unlike in West-Panay, where the *V. mabitang* is known as Mabitang, and the *V. s. nuchalis* as Halo. Moreover, apart from the color, respondents could not tell the difference between this black lizard and *V. s. marmoratus*. Consequently, it remains unclear whether the respondents were referring to a melanistic form of the water monitor, or possibly another species. For this reason, the black *Varanus* from Mindoro is at the moment tentatively considered as a dark form of *V. s. marmoratus*. This can only be clarified when a specimen of this blackish monitor lizard becomes available for identification.

The continuation of our survey throughout Panay confirms the restriction of the Mabitang to the forested areas of the western and northwestern part of the island, within the West-Panay-Mountain-Range and the NW-Panay Peninsula.

Field research. The research areas (Figure 1) consist mainly of lowland and lower montane evergreen rainforest, with some patches of secondary forest along their outer edges. While the forest remnants on the NW-Panay Peninsula are isolated from the forested areas of mainland Panay, the South-Pandan-, the Alegre-, and the North-Culasi-Forest belong to one continuous, larger forest area, which stretches up to the high elevation forest of the West-Panay-Mountain-Range.

Tables 1 and 2 (Appendix) give the number of sightings of Mabitangs or scratch marks, and the number of collected Mabitang fecal pellets in the four research areas. The tables show a significant difference in the percentage of records among the different areas. This difference mainly depends on one factor: elevation. As Table 3 shows, more than 80 % of all sightings were made below 500 m asl. All four areas are mountainous, with a maximum altitudinal range between 90 m and 930 m (in the AF area). However, the percentage of low, medium, and higher areas differs significantly between the four research areas. This is reflected by the number of

fieldwork-days spent by the field assistants within the different altitudinal ranges of their respective research areas, as shown in Table 4. While the field assistants working in the NWPP and the SPF spent 87% of their time in regions below 501 m asl, the field assistant working in the AF spent only 54 % of his time below 501 m asl. Meanwhile, in the only area not reaching altitudes below 400 m asl, the assistants working in the NCF spent 9% of their time in the region.

Most direct sightings took place in primary forests during sunny, or at least dry weather conditions; only two sightings were made in secondary forests. Fourteen (14) out of the 20 observed Mabitangs were on the forest floor during sighting. Usually the animal would immediately climb up a nearby tree as soon as it detected human presence in its proximity. On one occasion, the Mabitang was observed taking refuge in a crevice of a large rock. One Mabitang was observed resting on the branch of a dead but still erect tree near a riverbank, in a height of more than 10 m. This was the largest of the sighted animals, with an estimated total length of more than two meters. Another Mabitang was observed resting on a bird's nest on a tree trunk. According to the observer (N. Paulino), it was clearly a pregnant female with a visibly swollen belly. An individual (total length 132 cm, measured after capture) was observed sunbathing on the trunk of a Bonglew tree (*Polyscias nodosa*); another (total length 136,5 cm, measured after capture) was resting on the top of a fig tree (*Ficus minahassae*); and one more was sighted high up on a branch of a huge Lauan tree (*Shorea* sp.). Still another individual (total length 105 cm, measured after capture) was seen climbing down a fig tree (*Ficus* sp.) during the observation. On separate occasions, 2 Mabitangs were observed feeding on the ground: one (estimated total length around one meter) was feeding on a small, red land crab (local name *Kwataw* or *Man-ok*, scientifically still unidentified); the other (total length 124,2 cm, measured after

capture) was feeding on the ripe fruits of a fig tree (*Ficus* sp.) that had fallen on the ground.

Ten of the 20 sighted individuals were caught for further examination and injected with transponders. Two more *V. mabitang* were turned over to the project by hunters of adjacent areas, and after these were examined and permanently marked, were subsequently released at their capture sites. All 12 individuals were caught on trees, either because they already were on a tree during sighting, or because they climbed up a tree when spotting the field assistant. None of the animals tried to jump down from the tree when pursued by the field assistant. The exact capture positions were recorded with a GPS.

Examinations of the 12 *V. mabitang* confirm the species diagnosis (Table 5) and their distinctive characteristics distinguish them from the Philippine Monitor (*V. olivaceus*), its closest relative (Ziegler, Gaulke, & Böhme, unpublished data). All examined Mabitangs are entirely or almost entirely dark grey to black. In some individuals a few scales of the neck and the extremities have yellow edges identical to the holotype; other individuals show no traces of yellow. Ventral and dorsal scale counts are significantly higher (ventrals average 127; dorsals average 139; n = 13) than in the Philippine Monitor (ventrals average 109, n = 106; dorsals average 112.2; n = 5); the ventrals are always strongly keeled, and the tail has a distinctive, triangular shape.

The average SVL of the measured individuals is 51.6 cm (n = 13). They are significantly larger than the other monitor lizard species occurring in the area, the Rough-necked Water Monitor (*V. salvator nuchalis*), with an average SVL of 40.4 cm for 26 adults (Gaulke & Reiter, 2001). The SVL is almost identical to that of *V. olivaceus* (51.2 cm, n = 99; Auffenberg, 1988), but the average weight of *V. mabitang* (2,200 g, n = 13) is lower than in *V. olivaceus* (3,130 g, n = 97; Auffenberg 1988). The allometric

curves of body weight versus total body length for *V. mabitang* and *V. olivaceus* (Figure 2) indicate the higher weight of *V. olivaceus*, most significant for large individuals. One Mabitang (no. X, see Table 5) had a SVL of 68 cm (total length 163 cm), the largest SVL measured for a Mabitang so far (Rough-necked Water Monitors of this size are unknown). The first Mabitang ever measured had a total length of 175 cm, but its SVL was only 64 cm (Gaulke & Curio, 2001), suggesting that no. X might be missing a bigger portion of its tail. Several of the measured individuals were missing a small portion of the tail tip; however, it is impossible to estimate the percentage. With the TaL/SVL ratio ranging from 1.36 to 1.62 (average 1.5; n = 13), the relation between size and TaL/SVL ratio is not evident.

With an estimated total length of more than two meters, the largest Mabitang sighted during this study was visibly larger than any of the measured individuals (see above). As given by control measures during different opportunities, the field assistants tended to underestimate rather than overestimate sizes. However, it is necessary to wait for larger individuals to turn up for measurement before it can be safely stated that the Mabitang can attain a total length of more than two meters. A length of two meters or more is only reached by very few *Varanus* species (Pianka & King, 2004).

Sex determination of most varanid species in the field is very difficult, and often impossible with 100% reliability (Gaulke, 1997). This is the case with the Mabitang. While the sex of the holotype was determined by dissection, and four males everted their hemipenes during handling, in other individuals sex could only be estimated using the controversial "hemipeneal pocket probing method" (see Gaulke, 1997). In three individuals even a sex estimate with this method was impossible, due to the intermediate length of their pockets. However, we observed behavioral differences during handling, which might be of help in sexing: three of the four obvious

males were very aggressive, while the obvious female (holotype) and the presumed females (F?) were completely calm during handling (see also Gaulke & Curio, 2001). All the animals with questionable sexing were calm during handling; considering this characteristic, Table 5 would presumably present 7 females and 6 males.

Other data gathered from the examined Mabitangs are number and location of ectoparasites. Although they had an average of 18.4 ticks each, tick infestation varied highly among the individuals. While two were free of ectoparasites (and the recaptured one during recapture, but not during initial capture), the others were infested with 2 to 62 ticks. Most ticks were found at the insertion of the front- and hindlimbs, in the gular region, and around the cloaca. Samples of the ticks were collected, but not yet identified. Most probably, they belong to the species *Amblyomma helvolum* and/or *Aponomma fimbriatum*, very common and widespread ticks of Southeast Asian varanids (e.g. Auffenberg, 1988). Other ectoparasites, such as mites, were not found. Fresh feces of some *V. mabitang* contained nematodes; no internal parasites have yet been detected.

Compared to Water Monitors, Mabitangs have few and usually very small scars, and none showed signs of serious new or old injuries. The typical scratch marks in the middle of the back of larger Water Monitors, being a result of their bipedal combat fights (e.g. Gaulke, 1989), have not yet been observed in *V. mabitang*, indicating that these ritualistic fights are not part of their behavioral inventory.

Before the examined animals were returned to the capture site, a transponder was injected below the skin of their left shoulder region. So far, one Mabitang (no. VIII [698475]) was recaptured, after a period of around 10 weeks (Table 6). A recheck of the transponder showed no changes in the Mabitang's original condition during time of capture; no signs of an infection were discernible at the puncture. There

was no increase in SVL or weight. The direct distance between both capture sites, as measured with a 50 m rope, is 1100 m, with the trail leading across the ridge of a hill. Both capture sites were close to Sarawag trees (*Pinanga insignis*) bearing ripe fruits.

More than 60 different tree species were recorded, on which *V. mabitang* or its scratch marks were sighted. Due to taxonomic problems, many tree species can not yet be safely determined. According to Madulid (2002), NW Panay is a species-rich and ecologically-diverse area. Tree density and total tree basal area are remarkably higher than in many other regions of the Philippines. On the Peninsula, Madulid (2002) differentiated three forest types: the lowland evergreen rainforest (dominated by dipterocarps), with high endemism, tree density, and species diversity; the forest over limestone (dominated by deciduous or semi-deciduous species), with high endemism, but low tree density and diversity; and the forest over ultrabasic soils, also with high endemism. Several species were recorded for the first time for Panay, 24% of the trees from the lowland evergreen rainforest, and 10% of the trees from forest over limestone (no data given for the forest over ultrabasic soils) could not be identified. In several instances even genus and family could not be identified and only the local names are known. The comparison of the local names as reported by our field assistants with the local names mentioned in Madulid (2002) suggests that the same local name might mean several different species. This implies that the actual number of trees being used by *V. mabitang* might be higher than reflected by our data.

On most tree species, scratch marks were discovered only once or twice during the observation period. Others, especially the different dipterocarp species, were climbed often. Several of the climbed trees had bigger holes in their trunks. From direct observations we know that the Mabitang uses tree holes as shelter (see also Gaulke *et al.*, 2002).

Table 7 lists plants whose fruits are eaten by *V. mabitang*. Several of the identified food plants, like the small Sarawag (*Pinanga insignis*), a palm tree with a small diameter (12 – 20 cm), are only determined from fecal pellets. In others, such as *Combretodendron quadrialatus,* and particularly *Pandanus* spp., which are often climbed by *V. mabitang*, many scratches have been recorded. During the fruiting season of these trees, their seeds comprise the most frequent components found in fecal pellets of the Mabitang. Many fecal pellets contain exclusively *Pandanus* seeds, oftentimes reaching a high percentage. Next frequently discovered are the seeds of palm trees, especially *Pinanga insignis* (year round), while the small seeds of fig trees (fruiting season depending on species) are found less frequently. The other food plants are known from significantly less, a few of them from unique, records. We refrain from giving percentages here. As many of the collected fecal pellets were old during time of discovery, it is likely that the remains of smaller food items (e.g. the small seeds of fig trees) were either washed away by rain or carried away by insects, while the large, resistant seeds of screw palms remain in place for a much longer time. It is remarkable that the Mabitang feeds not only on fruits. Remains found in feces also show that the Mabitang eat the leaves and flowers of a plant belonging to the family Begoniaceae (with the local name *Topsi*). From all other known food plants, the ripe fruits are eaten.

Direct observation and examined fecal pellets of *V. mabitang* show that contrary to first observations, these animals are not strictly frugivorous. While most feces contain exclusively plant materials, others also contain shells of freshwater- and/or landcrabs, insects (beetles, grasshoppers), and in two cases, of land snails.

Stable isotope analyses. The nitrogen and carbon isotope composition of claw material from *V. mabitang*, *V.*

salvator, *Hydrosaurus pustulatus*, and for some food items of *V. mabitang* is given in Table 8. A relatively high interspecific variability in $\delta^{15}N$ was determined for *V. salvator* (6 - 10.2‰). The variability of the carbon isotopic record is less pronounced. The low nitrogen values for *V. mabitang* and the two specimens of *H. pustulatus* (1.8 - 3.5‰ $\delta^{15}N$) indicate a congruent trophic level similar for both species. In contrast, completely different feeding habits on a much higher trophic level are given for *V. salvator* (6 - 10.2‰ $\delta^{15}N$). Plant material collected from the stomach of *V. mabitang* appears strongly depleted in $\delta^{15}N$ (-3.1‰ for *Pandanus* sp.).

Discussion

With indications of the existence of a blackish monitor lizard in the forests of Mindoro remaining vague, results of our distribution survey point to the assumption that *V. mabitang* is an endemic species of Panay, restricted to the forested areas in the northwest and west of this region. This restricted range is somewhat puzzling. Many Philippine island endemics are inhabitants of isolated mountain regions, but the Mabitang is more common in lowland areas. It is very likely that in earlier times, when the forest cover of the Philippines was much larger than it is at present, it had a wider distribution at least within the West-Visayan-Subprovince.

A very important issue to determine is altitudinal distribution of *V. mabitang* within the West-Panay-Mountain-Range. Besides the NW-Panay Peninsula, with a forest cover of 5000 ha (50 km^2), this mountain range holds the last remaining primary forests on Panay (approximately 40,000 ha, or 400 km^2). The majority is montane forest (the range reaches elevations of more than 2000 m asl; the highest mountains are Mt. Madja-as with 2090 m, and Mt. Nangtud with 2050 m), while most of the lowland forest is either cleared or degraded.

The results of our field research show clearly that the preferred habitat of *V. mabitang* is the lowland forest below 500 m asl. Much fewer sightings were made in higher altitudes. However, two observations confirm the presence of *V. mabitang* up to elevations of approximately 1000 m asl: G. Operiano found scratch marks and feces on Mt. Banderahan, NW-Panay Peninsula, at around 950 m asl, while a hunter living at the lower Mt. Madja-as region (around 1000 m asl) informed us that he had once caught a Mabitang at this location. Nevertheless, we assume that the survival of *V. mabitang* depends on the existence of lowland forests. It is highly improbable that the few animals occurring in higher altitudes might stabilize a vital population; they have to be presumed as occasional migrants.

The closest relative to *V. mabitang*, the Philippine Monitor (*V. olivaceus*), a member of the Luzon-Faunal subprovince, is also a frugivore varanid. The known maximum vertical distribution of *V. olivaceus* is significantly lower, occurring from sea level to a maximum elevation of about 400 m (Auffenberg, 1988). In full agreement with Auffenberg (1988), we consider the distribution of the main food plants as an important limiting factor for the vertical distribution. The main food plants of *V. mabitang* and *V. olivaceus* are not identical (see below), and this might be one of the reasons for the difference in vertical distribution. However, some of the known food species occur in higher areas than are occupied by either *V. mabitang* or *V. olivaceus*, thus additional factors related to food sources should be responsible for the distributional patterns observed, as also noted by Auffenberg (1988).

We assume that the presence of dipterocarp trees is one of these additional factors. By far the highest percentage of Philippine dipterocarps is restricted to elevations below, most of them significantly below, 1000 m (De Guzman *et al.*, 1986), and none of the few species growing at higher altitudes

is recorded from our research areas on Panay. As our surveys show, dipterocarps are the preferred resting trees for *V. mabitang*, and it seems quite possible that tree holes in the trunk of dipterocarps are used as egg-laying sites. Many larger animals are not able to climb the smooth and high trunks of dipterocarps, which offer a good protection against a number of potential predators from the ground. This also would explain that up to now no egg-laying sites have been discovered during the field surveys, neither for the Mabitang nor for the Philippine Monitor. The presence of suitable shelter trees was discussed as a limiting factor for the distribution of *V. olivaceus* on Polillo Island (Bennett, 2001).

With only one successful recapture so far, information on the activity range of the Mabitang is still lacking. Auffenberg (1988) calculated the annual activity range areas from 0.22 to 2.71 ha for adult *V. olivaceus* (using radiotelemetry), which is very small for a large varanid. Long-term radiotelemetry data for two carnivore varanids can be given for comparison: *V. griseus* 13.7 – 116 ha (Stanner & Mendelssohn, 1987), *V. albigularis* 5,400 – 9,200 ha (Phillips, 1995). The reason for this difference in annual activity range size is most probably due to the frugivory of *V. olivaceus* and the carnivory of the other varanids (Auffenberg, 1988). Under this assumption, we would expect a small home range for *V. mabitang*. But the distance of more than 1 km traveled within 10 weeks by our recapture is rather long, and makes larger activity areas more likely. This would imply that food availability in our research areas on Panay is small in comparison to the food availability in Auffenberg's *V. olivaceus* research area on Luzon. Within less favorable feeding grounds, the Mabitang would need to explore wider areas and even search for food trees at higher altitudes, despite the decreasing density of these areas.

Citing Parmentier (1976), Auffenberg (1988) emphasized that even the most refined methods for estimating

population densities of natural populations are often grossly inaccurate. Only extremely high sampling intensities might be able to reduce the biases to reasonable levels. This certainly is not the case in our study. However, the data are sufficient to compare them with information available for *V. olivaceus*. Auffenberg (1988) and Bennett (2001) base their population density estimations on search hours per team, related to captures/sightings of *V. olivaceus*. In Auffenberg's research area (15 km^2) in the province of Camarines Sur in southern Luzon, a team searching for five hours a day caught an animal every one or two days (based on this he gives an estimate of 0.61 animals per hectare). In Bennett's research area (2.6 km^2) on Polillo, 119 search hours resulted in six captures and two sightings.

Converted to "Auffenberg units", with five search hours a day, this would mean a catching/sighting success of one animal every third day (he made a rough estimate of 0.03 individuals per hectare). If we transfer this to our investigation, it means that the field assistants must spend five hours each field day intensively searching for *V. mabitang* (this is a conservative assessment as the actual time spent in the field during working days might be longer). Since the three teams (a "team" may be composed of one or two people; part of the time the field assistants work alone and sometimes accompanied by a friend or relative) had 906 field days, and only 20 sightings/captures, this translates to only one sighting/capture every 45 days!

How can this enormous difference between the research results on *V. olivaceus* and *V. mabitang* be explained? One factor certainly is methodology. Both, Auffenberg's (1988) and Bennett's (2001) field teams were working with hunting dogs, making the search much more effective. But the disadvantage of this method is overwhelming. Of the 126 *V. olivaceus* caught during Auffenberg (1988) study, 61 were injured by the dogs and all of them died as a result of

infections, even though the initial bite appeared minor. For this reason, the use of hunting dogs is banned in our research. However, we can fall back upon the previous experiences of our field assistants. Before they started to work on the project, most of these field assistants used dogs to hunt in the current research areas, although in an irregular basis. Yet, even during those times, they only rarely caught a Mabitang (the preferred game were wild boars.) Moreover, the dogs were untrained and pursued whatever prey they could track down. As a consequence, we are fairly certain that the population density of *V. mabitang* is indeed significantly lower than that of *V. olivaceus*. Low food sources are the most plausible explanation for this difference.

So far, 16 different food plant species belonging to at least six families have been determined for *V. mabitang*. Unfortunately several of them are still unidentified (for reasons see under Results). Auffenberg (1988) determined 16 different food plant species from 8 families (some of them were only eaten in captivity) for *V. olivaceus* within his 22 month-investigation period in southern Luzon, while Bennett (2001) identified the fruits of 9 different plant species from 5 families within a 3 months study on Polillo.

During fruiting season, the fruits of *Pandanus* are the most important food for the Mabitang. Most fecal pellets found during this time contain high numbers of *Pandanus* seeds, and most screw palms bearing ripe fruits show scratch marks of *V. mabitang*. Another very important fruit tree, which is available throughout the year, is the palm tree *Pinanga insignis*. Up to 53 *P. insignis* seeds were found in one Mabitang dropping! The importance of fig trees is impossible to assess because their small seeds are difficult to identify. However, we assume that they are more important than the actual proof from sightings would suggest, with regards to the high number of different fig tree species in the

area (most of them still unidentified), and the perennial availability of ripe fruits of some species.

Fruits of screw palms, palm trees, and fig trees (mostly different species from those on Panay) are eaten by *V. olivaceus* too (Auffenberg, 1988; Bennett, 2001), but they are of less importance as source of nutrition. Among the most important fruits for *V. olivaceus* in both research areas are those of *Canarium* spp. (Fam. Burseraceae). On Luzon, another very important food plant is *Grewia stylocarpa* (Tiliaceae), and on Polillo *Gnetum gnemon* (a gymnosperm; Fam. Gnetaceae). At least one *Canarium* species occurs in our areas, but so far we have no proof that it is eaten by *V. mabitang*. Even when we assume it is eaten, *Canarium* sp. is obviously not an important food plant; otherwise we would have discovered its seeds in fecal pellets long ago, and besides, *Canarium* trees are rare in the area. Neither *Gentum gnemon* nor *Grewia stylocarpa* are reported for NW-Panay. Possibly, the diet of *V. mabitang* (e.g. screw palm and palmfruits) has a lower nutritional value in comparison to the staple food of *V. olivaceus*. This would explain both findings: the much lower population density of *V. mabitang* as compared to *V. olivaceus*, and its significantly lower body mass (see Figure 2). It also suggests that carnivorous food, even though it is taken, is of little importance for the nutrition of the Mabitang. A wide range of insects, crustaceans, and gastropods is available in the area, and we doubt that their density is lower at NW-Panay than in the distribution range of *V. olivaceus*.

Auffenberg (1988) demonstrated a seasonal shift in the dominance of the different food types (he differentiated three food types: sugar-rich fruits, oil-rich fruits, and animals rich in proteins and calcium), and an ontogenetic shift in food preferences. As in several omnivore reptiles, juvenile *V. olivaceus* consume a higher percentage of animals than adults. His very detailed analyses of food and feeding habits were

possible because of the examination of gut contents of more than 100 dissected specimens. So far, our data show no correlation between size and feeding habits. However, all caught Mabitangs, whether considered small or large in table 7, are mature. We have to wait for juveniles before we can address the question about an ontogenetic shift in diet.

A typical $\delta^{15}N$- enrichment of consumers with respect to their ingested food of generally 3 ‰ can be considered, generated during digestion processes causing $\delta^{15}N$ enrichment in body tissues while feces stay depleted in $\delta^{15}N$ (Peterson & Fry, 1987; Kelly, 2000). It is not possible to exactly date the time span recovered by the isotopic analyses of a claw tip. However, it can be assumed that the measured claw tips provide an integrated record for the feeding habits when this particular part of the claw was growing, perhaps within weeks or month. Therefore, the claw material of *V. mabitang* documents only a short and discrete time span of its feeding habits. If changing feeding habits throughout the year is assumed, on account of seasonal and local availability of specific food sources, variability in isotopic compositions can be expected.

The comparison of the nitrogen and carbon isotope composition between that of *V. mabitang* and that of *H. pustulatus*, a well-known herbivore lizard (Werning, 2002), and *V. salvator*, a well-known carnivore lizard (Gaulke, 1991) shows very clearly that *V. mabitang* and *H. pustulatus* occupy a similar low trophic level (Struck *et al.*, 2002), while *V. salvator* occupies the much higher trophic level of carnivores (Peterson & Fry, 1987). Summarizing all observations and isotopic measures, it can be stated that a sporadic carnivorous feeding behavior is given for *V. mabitang*, but with minor nutritional impact. Its trophic level is identical to herbivorous lizards such as *H. pustulatus*, but by no means comparable to carnivorous varanids such as *V. salvator*.

Conclusions and Prospects

Varanus mabitang is highly specialized in diet and habitat requirements. This monitor lizard depends for food and shelter on specific rainforest trees whose altitudinal distributions are primarily below 500 m asl. The density of these trees decreases rapidly with increasing elevation, and none of the important trees grow above 1000 m asl. The extremely low population density of the Mabitang, as compared to its closest relative *V. olivaceus*, indicates that even its preferred habitat, the lowland evergreen rainforest, supplies food only for a very small number of individuals. Due to habitat destruction, it can be assumed that the Mabitang population has already reached a critical stage.

Unlike the forest on the NW-Panay Peninsula, which has been declared a Protected Area, the forests of the West-Panay-Mountain-Range, the most important habitat of *V. mabitang*, are not yet protected. If this situation does not change drastically in the shortest possible time, the continuing habitat loss will threaten the existence of this large varanid, its extinction possibly within the next decades.

Acknowledgments

The work of the Philippine Endemic Species Conservation Project of the Frankfurt Zoological Society has been formalized under the aegis of a Memorandum of Agreement with the Department of Environment and Natural Resources (Quezon City, Philippines). For this, the help of the Protected Areas and Wildlife Bureau under Director M. Lim, and former Director W.S. Pollisco, is gratefully acknowledged. Much appreciation for their close cooperation in this project goes to Aklan State University, through its President, Dr. B. Palma, as well as to Dr. G. Canoy.

The distribution survey was sponsored by the Frankfurt Zoological Society (FZS) while the field research is sponsored by the Patrons for Biodiversity (BIOPAT e.V.), and supported

by the German Society for Herpetology and Herpetoculture (DGHT). Their support is highly appreciated. We are very grateful to H.-G. Horn, whose strong recommendation of our project to the DGHT resulted in the above mentioned financial support.

The field research could not have materialized without the committed participation of the field assistants: F. Geronimo, J. Mangga, R. Mangga, G. Operiano, and N. Paulino. Their experience and knowledge are very much valued. PESCP veterinarian E. Sanchez was responsible for the transponder injection, while PESCP forester J. Espiritu as well as Dr. M.M.J. van Balgooy from the Nationaal Herbarium Nederland patiently helped with plant identification; sincere thanks are due to the three of them. Several other staff members of the Philippine Endemic Species Conservation Project (PESCP) supported our work with practical help and relevant information. Special mention go to B. Tacud and R. Ebon, but deepest gratitude goes to all those who supported our work.

Dr. Rafe Brown and Dr. Kai Philipp reviewed the draft of the manuscript and made many helpful comments.

Notes

[1]This paper is publication No. 58 of the Philippine Endemic Species Conservation Project of the Frankfurt Zoological Society; in close cooperation with Aklan State University President, Dr. B. Palma.

[2] Because of their extensive experience, former hunters, namely, F. Geronimo (replaced in June 2004 by J. Mangga and R. Mangga), N. Paulino, and G. Operiano were hired as field assistants.

References

Auffenberg, W. (1988). *Gray's Monitor Lizard.* Gainesville, FL: University of Florida Press.

Bennett, D. (Ed.) (2001). *Wildlife of Polillo Island, Philippines.* University of Oxford – University of the Philippines at Los Banos Polillo '99 Project, Final Report.

De Guzman, E.D., Umali, R.M., & Sotalbo, E.D. (1986). *Guide to Philippine flora and fauna, Dipterocarps, Non-Dipterocarps* (Vol. 3). Quezon City, Philippines: JMC Press.

Gaulke, M. (1989). Zur Biologie des Bindenwaranes, unter Berücksichtigung der paläogeographischen Verbreitung und der phylogenetischen Entwicklung der Varanidae. *Cour. Forsch.- Inst. Senckenberg 112*, 1-242.

Gaulke, M. (1991). On the diet of the water monitor, *Varanus salvator*, in the Philippines. *Mertensiella 2*, 143-153.

Gaulke, M. (1997). Sex determination of monitor lizards in the field. *Hamadryad*, 22(1),28-31.

Gaulke, M., & Curio, E. (2001). A new monitor lizard from Panay Island, Philippines (Reptilia, Sauria, Varanidae). *Spixiana*, 24(3), 275-286.

Gaulke, M. & J. Reiter (2001). Zur Biologie des Raunacken-Bindenwaranes. *Draco*, 7, 42-49.

Gaulke, M., Curio, E., Demegillo, A., & Paulino, N. (2002). *Varanus mabitang*, a rare monitor lizard from Panay Island and a new conservation target. *Silliman Journal*, 43(1), 24-41.

Heaney, L.R. (1985). Zoogeographic evidence for middle and late Pleistocene land bridges to the Philippines. *Modern Quaternary Research of SE Asia*, 9, 127-143.

Heaney, L.R., & Regalado, J.C. (1998). Vanishing Treasures of the Philippine Rain Forest. Chicago, ILL: The Field Museum.

Kelly, J.F. (2000). Stable isotopes of carbon and nitrogen in the study of avian and mammalian ecology. *Can. J. Zool.*, 78, 1-27.

Kennedy, R.S., Gonzales, P.C., Dickinson, E.C., Miranda, H.C., & Fisher, T.H. (2000). *A Guide to the birds of the Philippines.* Oxford, U.K.: Oxford University Press.

Madulid, D.A. (2001). *A dictionary of Philippine plant names* (Vol. 1). Makati City, Philippines: Bookmark.

Madulid, D.A. (2002). *Vegetation study of the forests in Northwest Panay.* Philippine National Museum, Manila, Unpubl. Report.

Mariotti, A. (1984). Atmospheric nitrogen is a reliable standard for natural 15N abundance measurements. *Nature*, 303,685-687.

Parmentier, C.J. (1976). The natural history of the Australian freshwater turtle *Chelodina longicollis* Shaw (Testudinata: Chelidae). Doctotral dissertation, Univ. New England, Perth, Australia.

Peterson, B.J. & B. Fry (1987). Stable isotopes in ecosystem studies. *Ann. Rev. Ecol. Syst., 18,* 293-320.

Phillips, J.A. (1995). Movement patterns and density of *Varanus albigularis. J. Herpetol., 29*(3),407-416.

Pianka, E.R. & D.R. King (2004). Varanoid lizards of the world. Bloomington: Indiana University Press.

Salvosa, F.M. (1963). Lexicon of Philippine trees (Bull. No.1). Laguna, Phillippines: Forest Products Research Institute College.

Stanner, M., & Mendelssohn, H. (1987). Sex ratio, population density and home range of the desert monitor (*Varanus griseus*) in the southern coastal plain of Israel. *Amphibia-Reptilia, 8*(2), 153-163.

Struck, U., Altenbach, A.V., Gaulke, M., & Glaw, F. (2002). Tracing the diet of the monitor lizard *Varanus mabitang* by stable isotope analysis (delta 15N, delta 13C). *Naturwisssenschaften, 89,* 470-473.

Werning, H. (2002). *Wasseragamen und Segelechsen.* Münster: Natur und Tier-Verlag.

Ziegler, Th., Gaulke,M., & Böhme, W. (2005). Genital morphology and systematics of *Varanus mabitang* Gaulke and Curio 2001 (Sauria: Varanidae). Current Herpetology, 24(1):13-17.

APPENDIX

Figure 1: Arrows indicate the position of the four research areas; from North to South: NW-Panay-Peninsula (NWPP), South-Pandan-Forest (SPF), Alegre-Forest (AF), North-Culasi-Forest (NCF). Hatched areas show Panay's remaining forest cover. Map modified from report Green Forum – Western Visayas (2000).

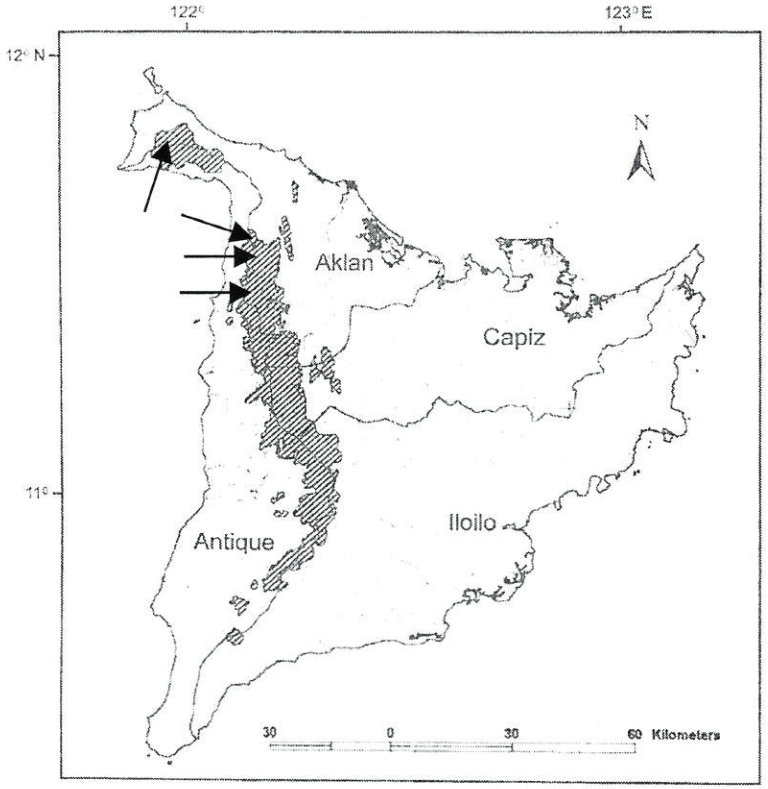

Figure 2: Weight-total length curvilinear relationship in *V. mabitang* (N = 14) and *V. olivaceus* (N = 106). Data for *V. olivaceus* from Auffenberg (1988, page 18, Fig. 2-2).

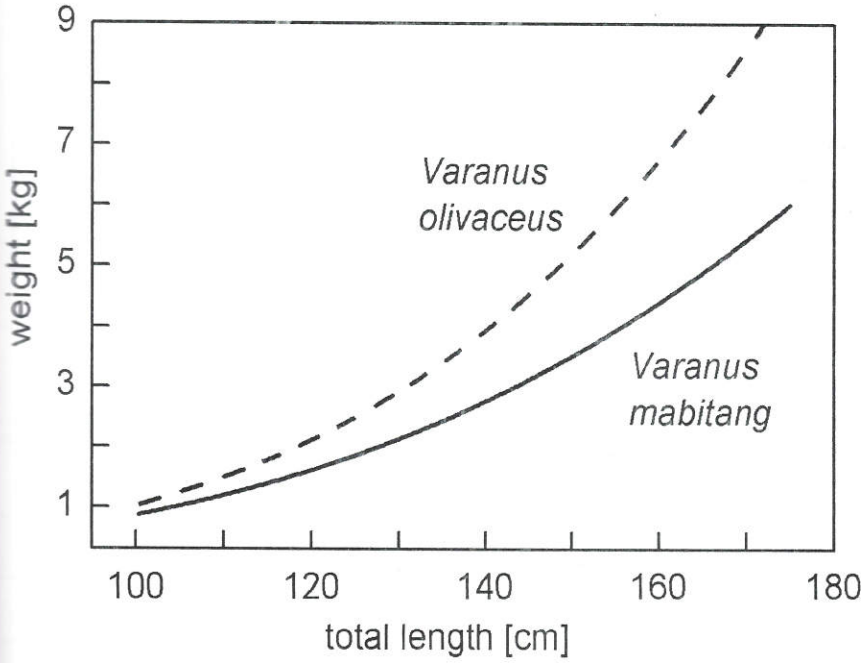

Table 1: Number of Mabitang sightings, identified Mabitang scratch marks on trees, and collected Mabitang feces in the three original research areas (beginning of June 2002 to end of May 2004). The number in brackets gives the number of Mabitang individuals that were caught during the sighting. % is the percentage of all sightings (n = 164) made during this time span.

RESEARCH AREA	SIGHTINGS	SCRATCH MARKS	FECES	%
NW-Panay Peninsula	3	43	7	32.3%
South-Pandan-Forest	5 (2)	55	20	48.8%
Alegre-Forest	4 (2)	18	9	18.9%

Table 2: Number of Mabitang sightings, identified Mabitang scratch marks on trees, and collected Mabitang feces in the two original areas and the new research areas (begin of June 2004 to end of November 2004). The number in brackets gives the number of Mabitangs, which were caught during the sighting. % gives the percentage of all sightings (n = 29) made during this time span.

RESEARCH AREA	SIGHTINGS	SCRATCH MARKS	FECES	%
South-Pandan-Forest	5(4)	7	7	65.5
Alegre-Forest	2(2)	2	2	20.7
North-Culasi-Forest	1(1)	3		13.8

Table 3: Number of sightings related to altitudes (direct sightings, scratch marks, and feces) in all four research areas, from the beginning of June 2002 to end of November 2004; n = 161 (during the first four months of the project no altimeters were available to the field assistants, therefore n in this table is lower than the total sightings from tables 1 and 2). Column 3 gives the number of sightings in percent, column 4 the accumulated percentage.

ALTITUDE (M)	SIGHTINGS	%	ACCUM. %
0 – 100	1	0.6	0.6
101 – 200	2	1.2	1.8
201 – 300	37	23.0	24.8
301 – 400	54	33.5	58.3
401 – 500	37	23.0	81.3
501 – 600	13	8.1	89.4
601 – 700	10	6.2	95.6
701 – 800	4	2.5	98.1
801 – 1000	3	1.9	100

Table 4 (next page): Percentage of fieldwork-days (n) spent by the respective field assistant within the different altitudinal ranges of his research area.

ELEVATION (M)	NWPP (N = 201)	SPF (N = 279)	AF (N = 267)	NCF (N = 74)
0 – 100	4 %	1 %	--	--
101 – 200	12 %	7 %	5 %	--
201 – 300	23 %	27 %	9 %	--
301 – 400	25 %	31 %	17 %	--
401 – 500	23 %	21 %	23 %	9 %
501 – 600	11 %	8 %	19 %	22 %
601 – 700	1 %	4 %	18 %	50 %
701 – 800	--	1 %	6 %	19 %
801 – 1000	1 %	--	3 %	--

Table 5: Length, body mass, and scale counts of *Varanus mabitang*. **ID** (identification) gives the transponder numbers of the individuals caught during our project activities, arranged according to date of capture; **SVL** = snout-vent-length, measured from tip of snout to cloaca; **Tal** = tail-length, measured from cloaca to tip of tail; **sex**: **F** = female and **M** = male, identified either by dissection (only in the holotype) or by everted hemipenes; **M?** = hemipeneal pocket longer than 4 cm, **F?** = shorter than 3 cm, **?** = length in between 3 and 4 cm; **Ventrals** = transverse rows of ventral scales from gular fold to a virtual line connecting the insertion of hindlegs ventrally; **Dorsals** = transverse rows of dorsal scales from gular fold to a virtual line connecting the insertion of hindlegs dorsally.

ID	SVL (CM)	TAL (CM)	MASS (G)	SEX	VENTRALS	DORSALS
Holotype	52.7	74.1	1,850	F	124	138
I(16831)	46	70	1,300	M?	114	130
II(868775)	53.9	74.6	2,030	?	123	133
III(869159)	56	76	2,900	F?	125	153
IV(863513)	51	80	1,980	M?	116	124
V(867645)	47.7	76.5	1,600	F?	111	132
VI(763144)	54.5	82	2,430	M	134	136
VII(763607)	42	68	1,100	M	138	148
VIII(698475)	42	68	1,000	?	128	133
IX(714575)	42	63	1,000	?	125	132
X(867205)	68	95	5,000	M	143	175
XI(870222)	62	93	4,000	M	136	135
XII(722895)	53	80	2,400	F?	135	136

Table 6: Recapture data; SPF = South-Pandan-Forest

ID	DATE OF CAPTURE	CAPTURE SITE	DATE OF RECAPTURE	RECAPTURE SITE	DISTANCE BETWEEN CAPTURE SITES
VIII (698475)	Aug. 24, 2004	SPF, "Ligotan"-area, 439 m asl	Nov. 7, 2004	SPF, "Empogadan"-area, 384 m asl	appr. 1100 m

Table 7: Food plants of *V. mabitang* (several only known with their local name), as determined from seeds found in fecal pellets and direct observations. Relative Abundance refers to frequency of seeds found in fecal pellets.

LOCAL NAME	FAMILY/SPECIES	PART OF PLANT USED AS FOOD	FRUITING SEASON	RELATIVE ABUNDANCE
Small Sarawag	Palmae/*Pinanga insignis*	fruits	year round	common
Big Sarawag	Palmae	fruits	year round	common
Apoy	Palmae	fruits	year round	rel. common
Bariw	Pandanaceae	fruits	May to June, some trees up to August	very common
Karagumay	Pandanaceae	fruits	May to June, some trees up to August	very common
Biribid	Pandanaceae	fruits	May to June, some trees up to August	rare
Lunok/Balite	Moraceae	fruits	April	rare
Hagimit	Moraceae/*Ficus minahassae*	fruits	year round	rel. common
Nabukado/ Lanipaw	Combretaceae/ **Terminalia copelandii**	fruits	August to September	rare
Tapsi	Begoniaceae	leaves, flowers	year round	rare
Toog	Lecythidaceae/ *Combretodendron quadrialatus*	fruits	August to September	rare
Mamali	Leeaceae	fruits	Year round	rare
Kukud	?	fruits	September to October	rare
Malig-Ang	?	fruits	July to August	rare
Mangkilon	?	fruits	year round	rare
Polon	?	fruits	June to July	rare

Table 8: Nitrogen and carbon isotope composition of claw material collected from the holotype of *V. mabitang* (three claws measured), *V. salvator*, *H. pustulatus*, and stomach content of *V. mabitang*.

SPECIES	TYPE OF SAMPLE	LOCALITY	$\delta^{15}N$	$\delta^{13}C$
VARANUS MABITANG, HOLOTYPE	claw material	NW-Panay	2.5	-24.6
Varanus mabitang, Holotype	claw material	NW-Panay	2.1	-23.6
Varanus mabitang, Holotype	claw material	NW-Panay	2.5	-25.2
Varanus salvator	claw material	Philippines	8.8	-24.0
Varanus salvator	claw material	Philippines	8.8	-21.9
Varanus salvator	claw material	Philippines	6.0	-22.1
Varanus salvator	claw material	NW-Panay	10.2	-21.1
Hydrosaurus pustulatus	claw material	NW-Panay	3.5	-24.0
Hydrosaurus pustulatus	claw material	NW-Panay	1.8	-26.2
Pandanus sp.	stomach content of V. mabitang	NW-Panay	-3.1	-30.9

A CHECKLIST OF STONY CORALS FROM THE MALITBOG AREA OF WESTERN SOGOD BAY, SOUTHERN LEYTE, PHILIPPINES

Douglas Fenner, Ryan Walker, & Peter Raines

ABSTRACT

The coral reefs of the Philippines are some of the most biodiverse in the world. This study consisted of a rapid diversity assessment of the coral communities in Sogod Bay, southern Leyte. A total of 276 species and 72 genera of stony corals were found across 7 dive sites, averaging 110 species per site. This number represents approximately 59% of all coral species reported for the Philippines. Four species were found that are considered to be uncommon to rare, and a total of 5 species found have not been reported to occur in the Philippines in previous published literature. The high coral diversity of Sogod Bay suggests that the reefs of the area are of high conservation importance.

Introduction

Coral species of the Philippines have been studied by several scientists beginning with Faustino (1927). Francisco Nemenzo spent a lifetime studying Philippine corals (Nemenzo, 1986), and described a plethora of new species. Gregor Hodgson studied corals with Nemenzo (Nemenzo & Hodgson, 1983), and described several new species from the Philippines (Hodgson & Ross, 1981; Hodgson, 1985). J. E .N. Veron and Hodgson reviewed all new species described by Nemenzo and presented a checklist of 411 species of Philippine corals based on the locations they had studied (Veron & Hodgson, 1989). Veron and Fenner (2000) presented a checklist of 305 species that they found in the Calamianes Islands of northern Palawan, and concluded that 462 species were known from the Philippines. They also concluded that the Philippines appeared to have the world's richest coral fauna at that time, although the fauna of Indonesia was not

well enough known. Recent papers by Licuanan and Capili (2003, in press) have further added to the number of coral species known from the Philippines.

This study is a rapid diversity assessment of the coral communities and coral species found in a small segment of western Sogod Bay, southern Leyte, Philippines. The study was part of a much broader reef survey program by Coral Cay Conservation, the United Kingdom based non-government organization (NGO), in support of coral reef conservation and sustainable reef use (Doyle *et al.*, 2003).

Methods

Coral species checklists were taken at seven sites in Sogod Bay, Leyte in 2003 (Table 1), across approximately 8 km of fringing reef. The location of study areas is shown in Figure 1. Situated near the project base, the sites were surveyed by the Coral Cay program at the time. A rapid assessment method was used. Corals were surveyed in about 12 hours of diving in 14 scuba dives and one snorkel by D. Fenner to a maximum depth of 27.5 m. Most dives were to a maximum depth of 17 meters, and the area was searched for coral species in a roving fashion generally going from deep to shallow. Corals were recorded on each dive for presence/absence, not for abundance or for live cover. Such a technique searches a larger area than transects, and is thus more likely to find rare species (McClanahan & Muthiga, 1992). Identifications were based primarily on Veron (2000; 2002), Wallace (1999a; 1999b), Hoeksema (1987), Cairns and Zibrowius (1997), Randall and Cheng (1984), and references therein. Identification was done visually and collections were not made due to the conservation nature of the Coral Cay Conservation program. The stony corals recorded included the zooxanthellate scleractinian corals, a small number of zooxanthellate non-scleractinian corals (e.g., *Millepora, Heliopora*, and *Tubipora*: fire coral, blue coral, organ-pipe coral, respectively), and a small number of azooxanthellate scleractinian corals (*Tubastrea, Dendrophyllia, Rhizopsammia,* and

Balanophyllia). All produce calcium carbonate skeletons that contribute to reef building to some degree.

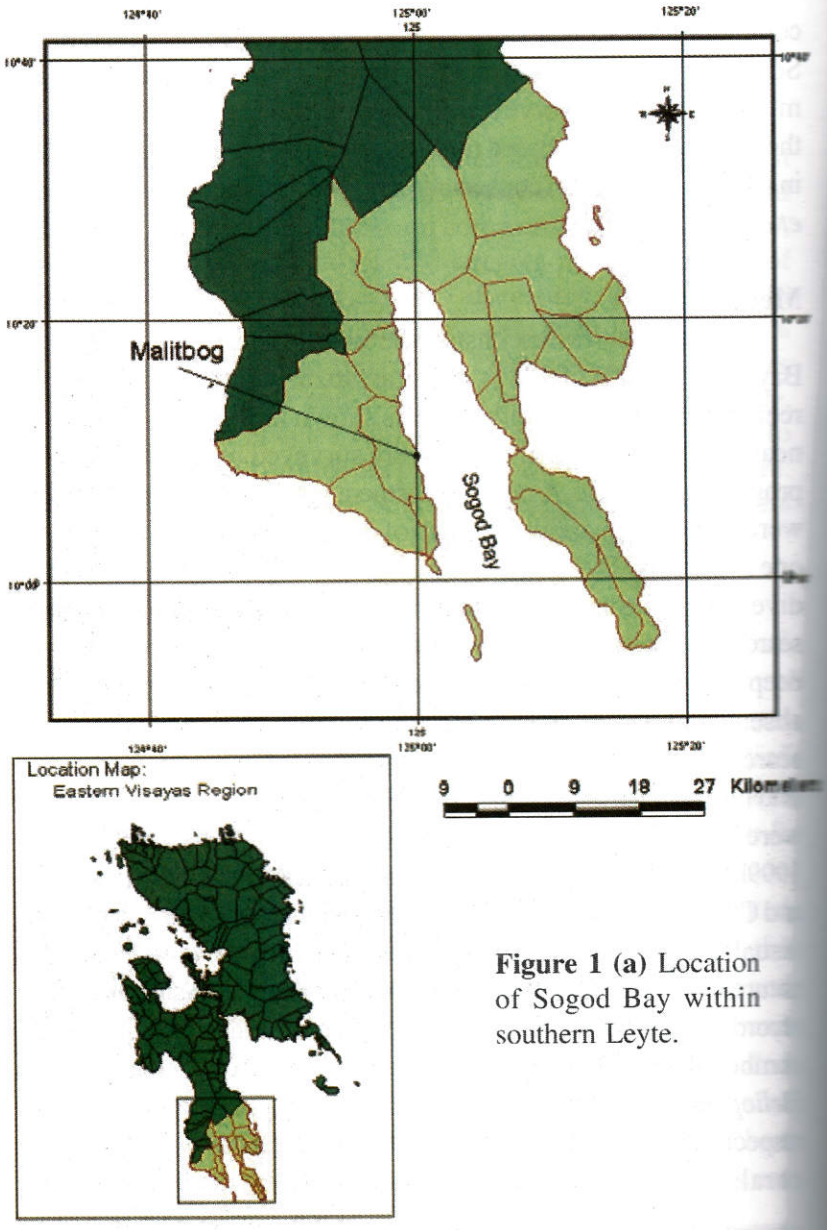

Figure 1 (a) Location of Sogod Bay within southern Leyte.

Figure 1 (b) Location of survey sites within Sogod Bay.

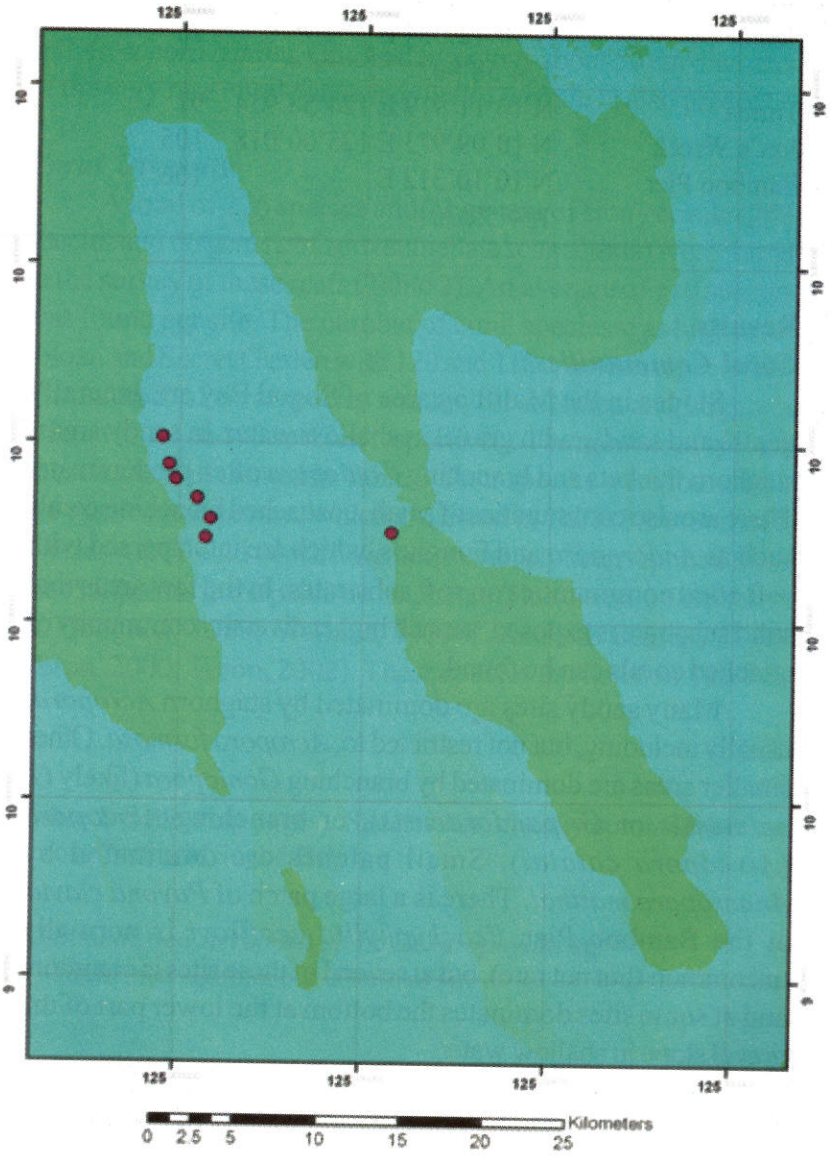

Table 1 Location and number of coral species found at each site

Site	Coordinates	Number of species
1. Secret Gardens	N 10'10'452 E 124'59'612	118
2. Logger's Eden	N 10'10'737 E 124'59'502	93
3. Sector 10	N 10'12'084 E 124'58'902	96
4. Timba	N 10'11'919 E 124'58'974	91
5. Jon's Wreck	N 10'09'973 E 125'00'018	105
6. Bamboo Pier	N 10'10'312 E 124'59'751	106

Results

Coral Communities

Slopes in the Malitbog area of Sogod Bay are generally gentle and sandy, with gravel in shallow water. In sandy areas, staghorn thickets and branching *Goniopora* often predominate. There are also communities of small, unattached branching corals such as *Anacropora* and Fungiids, which are interspersed with soft coral communities on soft substrates. In the few areas that solid substrate is exposed, a much higher diversity community of attached corals can be found.

Many sandy sites are dominated by staghorn *Acropora*, usually including, but not restricted to, *Acropora formosa*. Other smaller areas are dominated by branching *Goniopora* (likely *G. palmensis* or *G. pandoraensis*), or branching *Alveopora* (*Alveopora catalai*). Small patches are dominated by *Anacropora matthai*. There is a large patch of *Pavona clavus* at the Bamboo Pier. *Trachyphyllia geoffroyi* is normally uncommon (but not rare), but at several of these sites is common, and at some sites dominates the bottom at the lower part of the gravel slope in shallow water.

An unusual community is present in deeper water (about 15-25 m depth) at Timba. This is a community of deep foliose corals. It includes large fields of foliose *Mycedium elephantotis*,

Pachyseris foliosa, Echinopora lamellosa, Montipora florida and *Montipora mactanensis*, the latter two of which are uncommon to rare species in the Philippines and Southeast Asia. Also present are patches of an unidentified plating *Acropora* (possibly a new species), large fields of branching *Goniopora*, and *Alveopora catalai*. One healthy colony about 50 cm diameter of the very rare coral *Nemenzophyllia turbida* is also present.

Coral Diversity

A total of 276 species and 72 genera of stony corals (263 species and 66 genera of zooxanthellate scleractinia) were found in the survey of these reefs (Table 2). An average of 110 species was found per site. The number of coral species was highest at Liloan and Secret Garden with 120 and 118 species, respectively. The number of coral species was lowest at Timba and Logger's Eden with 91 and 93 species, respectively. The number of species at each site is presented in Table 2. Four species were found that are uncommon to rare, which are listed in Table 3. A total of 5 species were found which have not previously been reported from the Philippines in the published literature (Hoeksema, 1989; Veron & Hodgson, 1989; Wallace, 1999a; Veron & Fenner, 2000; Veron, 2000; Veron, 2002). These species are listed in Table 4.

Table 2 (following pages). Species list of stony corals identified across 7 sites in Sogod Bay.

* Unidentified *Acropora* sp or *Dendrophyllia* sp
**Confirmed sighting but unsure of site

	Species	Sites
	Family Astrocoeniidae	
1.	*Palauastrea ramosa* (Yabe & Sugiyama, 1941)	3,6
2.	*Stylocoeniella armata* (Ehrenberg, 1834)	2
3.	*Stylocoeniella guentheri* (Bassett-Smith, 1890)	1,3
	Family Pocilloporidae	
4.	*Pocillopora damicornis* (Linnaeus, 1758)	1,2,3,4,5,6
5.	*Pocillopora verrucosa* (Ellis & Solander, 1786)	1,2,4,6,8
6.	*Seriatopora caliendrum* (Ehrenberg, 1834)	1,2,6,7
7.	*Seriatopora hystrix* (Dana, 1846)	1,3,4,5,6
8.	*Stylophora subseriata* (Ehrenberg, 1834)	1,2,3,5,6,7
	Family Acroporidae	
9.	*Acropora abrolhosensis* (Veron, 1985)	4,5,6,
10.	*Acropora aculeus* (Dana, 1846)	1,2,3,5
11.	*Acropora aspera* (Dana, 1846)	1
12.	*Acropora brueggemanni* (Brook, 1893)	1,2
13.	*Acropora carolineana* Nemenzo, 1976	1,4
14.	*Acropora cerealis* (Dana, 1846)	1,3,4,5,7
15.	*Acropora cytherea* (Dana, 1846)	3,4,6,7
16	*Acropora digitifera* (Dana, 1846)	7
17.	*Acropora divaricata* (Dana, 1846)	1,2,3,4,5,6,7
18.	*Acropora echinata* (Dana, 1846)	1,3,7
19.	*Acropora elegans* (Milne Edwards and Haime, 1860)	4
20.	*Acropora exquisita* (Nemenzo, 1971)	2,5
21.	*Acropora fenneri* (Veron, 2000)	3
22.	*Acropora florida* (Dana, 1846)	1,2,3,4,5,6,7
23.	**Acropora* sp. 1	1
24.	*Acropora formosa* (Dana, 1846)	1,2,3,5,6,7
25.	*Acropora grandis* (Brook, 1892)	4
26.	**Acropora* sp. 2	1,2
27.	*Acropora granulosa* (Milne Edwards & Haime, 1860)	1,2,3,4,5,6
28.	*Acropora hoeksemai* (Wallace, 1997)	5
29.	*Acropora horrida* (Dana, 1846)	3,7
30	*Acropora humilis* (Dana, 1846)	7
31.	*Acropora hyacinthus* (Dana, 1846)	5
32.	*Acropora insignis* (Nemenzo, 1967)	1,3,5
33.	*Acropora latistella* (Brook, 1891)	1,2,3,5,6,7
34.	*Acropora longicyathus* (Milne Edwards & Haime, 1860)	1,5,6
35.	*Acropora loripes* (Brook, 1892)	1,7
36.	*Acropora millepora* (Ehrenberg, 1834)	1,2,7
37.	*Acropora nasuta* (Dana, 1846)	3,5,7
38.	*Acropora palifera* (Lamarck, 1816)	1,2,4,
39.	*Acropora parilis* (Quelch, 1886)	1
40.	*Acropora plumosa* (Wallace & Wolstenholme, 1998)	1

41.	*Acropora samoensis* (Brook, 1891)	1,3,6
42.	*Acropora selago* (Studer, 1878)	1,2,3,4,5,6,7
43.	*Acropora simplex* (Wallace and Wolstenholme, 1998)	1
44.	*Acropora solitaryensis* (Veron & Wallace, 1984)	1,2,4,6
45.	*Acropora speciosa* (Quelch, 1886) as in Veron, 2000	1,4
46.	*Acropora speciosa* as in Wallace 1999	1,2,3
47.	*Acropora subglabra* (Brook, 1891)	1,6
48.	*Acropora subulata* (Dana, 1846)	3,5
49.	*Acropora tenuis* (Dana, 1846)	3,5,7
50.	*Acropora valenciennesi* (Milne Edwards & Haime, 1860)	2,6,7
51.	*Acropora vaughani* (Wells, 1954)	1,3,5
52.	*Anacropora forebesi* (Ridley, 1884)	3,7
53.	*Anacropora matthai* (Pillai, 1973)	3,4, 5, 6,7
54.	*Anacropora puertogalerae* (Nemenzo, 1964)	7
55.	*Anacropora reticulata* (Veron and Wallace, 1984)	1,4
56.	*Anacropora spinosa* (Rehberg, 1892)	1,7
57.	*Astreopora gracilis* (Bernard, 1896)	1,3
58.	*Astreopora myriophthalma* (Lamarck, 1816)	1,2,4,6,7
59.	*Astreopora ocellata* (Bernard, 1896)	7
60.	*Astreopora randalli* (Lamberts, 1980)	1,4,6
61.	*Astreopora suggesta* (Wells, 1954)	5
62.	*Montipora aequituberculata* (Bernard, 1897)	1,6,7
63.	*Montipora altasepta* (Nemenzo, 1967)	1,7
64.	*Montipora cactus* (Bernard, 1897)	3
65.	*Montipora capitata* (Dana, 1846)	1,7
66.	*Montipora confusa* (Nemenzo, 1967)	1,5
67.	*Montipora corbettensis* (Veron & Wallace, 1984)	5
68.	*Montipora digitata* (Dana, 1846)	1,2,3,4,7
69.	*Montipora florida* (Nemenzo, 1967)	4
70.	*Montipora gaimardi* (Bernard, 1897)	1,6
71.	*Montipora hispida* (Dana, 1846)	1,4,5,7
72.	*Montipora incrassata* (Dana, 1846)	5,6
73.	*Montipora informis* (Bernard, 1897)	1
74.	*Montipora mactanensis* (Nemenzo, 1979)	4
75.	*Montipora malampaya* (Nemenzo, 1967)	1,4
76.	*Montipora mollis* (Bernard, 1897)	6
77.	*Montipora palawanensis* (Veron, 2000)	4
78.	*Montipora spongodes* (Bernard, 1897)	1,3,7
79.	*Montipora stellata* (Bernard, 1897)	1,2,3,4,5,6,7
80.	*Montipora tuberculosa* Lamarck, 1816)	1,2,3

81.	*Montipora undata* (Bernard, 1897)	6,
82.	*Montipora venosa* (Ehrenberg, 1834)	1,2
83.	*Montipora vietnamensis* (Veron, 2000)	1,6
	Family Poritidae	
84.	*Alveopora catalai* (Wells, 1968)	4,5,6
85.	*Alveopora gigas* (Veron, 1985)	4,6
86.	*Alveopora spongiosa* (Dana, 1846)	3,5
87.	*Goniopora columna* (Dana, 1846)	5
88.	*Goniopora lobata* (Milne Edwards and Haime, 1860)	1,6
89.	*Goniopora pandoraensis* (Veron and Pichon, 1982)	4
90.	*Goniopora stutchburyi* (Wells, 1955)	3
91.	*Porites annae* (Crossland, 1952)	1,2,3,7
92.	*Porites attenuata* (Nemenzo, 1955)	1,3,4,5,6,7
93.	***Porites* cf *Bernardi* (Vaughan 1907)	1
94.	*Porites cylindrica* (Dana, 1846)	1,2,6,7
95.	*Porites evermanni* (Vaughan, 1907)	6
96.	*Porites horizontalata* (Hoffmeister, 1925)	7
97.	*Porites lobata* (Dana, 1846)	1,6,7
98.	*Porites lutea* (Milne Edwards and Haime, 1851)	1,2,4,7
99.	*Porites monticulosa* (Dana, 1846)	4
100.	*Porites rus* (Forskål, 1775)	4,7
101.	*Porites solida* (Forskål, 1775)	2,7
102.	*Porites vaughani* (Crossland, 1952)	1,2,7
	Family Siderastreidae	
103.	*Coscinaraea columna* (Dana, 1846)	1
104.	*Psammocora contigua* (Esper, 1797)	4
105.	*Psammocora digitata* (Milne Edwards & Haime, 1851)	1
106.	*Psammocora explanulata* (van der Horst, 1922)	6
107.	*Psammocora nierstraszi* (van der Horst, 1921)	1,2,3
108.	*Psammocora profundacella* (Gardiner, 1898)	1,2,3,4,5,6
109.	*Psammocora superficialis* (Gardiner, 1898)	4,5
	Family Agariciidae	
110.	*Coeloseris mayeri* (Vaughan, 1918)	1,2,4,7
111.	*Gardineroseris planulata* (Dana, 1846)	1,3,4,5,6,7
112.	*Leptoseris explanata* (Yabe & Sugiyama, 1941)	1,2,3,5
113.	*Leptoseris mycetoseroides* (Wells, 1954)	1,2,3,4,6
114.	*Leptoseris papyracea* (Dana, 1846)	1,3,4,5,6
115.	*Leptoseris scabra* (Vaughan, 1907)	2,3,4
116.	*Leptoseris striata* (Fenner & Veron, 2000)	4
117.	*Pachyseris foliosa* (Veron, 1990)	4,7
118.	*Pachyseris gemmae* (Nemenzo, 1955)	3,4,6
119.	*Pachyseris rugosa* (Lamarck, 1801)	1,2,3,4,7
120.	*Pachyseris speciosa* (Dana, 1846)	1,2,3,4,5,6,7

121.	*Pavona bipartita* (Nemenzo, 1980)	2,3,5,6,7
122.	*Pavona cactus* (Forskål, 1775)	2,4,6,7
123.	*Pavona clavus* (Dana, 1846)	6
124.	*Pavona decussata* (Dana, 1846)	3,5,7
125.	*Pavona explanulata* (Lamarck, 1816)	1,2,3,4,5,6,7
126.	*Pavona frondifera* (Lamarck, 1816)	1,3,7
127.	*Pavona varians* (Verrill, 1864)	1,2,3,4,5,6,7
128.	*Pavona venosa* (Ehrenberg, 1834)	7
	Family Fungiidae	
129.	*Ctenactis crassa* (Dana, 1846)	1,3,6,7
130.	*Ctenactis echinata* (Pallas, 1766)	1,3,5,7
131.	*Cycloseris colini* (Veron, 2000)	4
132.	*Cycloseris costulata* (Ortmann, 1889)	1,4
133.	*Cycloseris cyclolites* (Lamarck, 1801)	1,2,3,3,5
134.	*Cycloseris erosa* (Döderlein, 1901)	1,7
135.	*Cycloseris sinensis* (Milne Edwards and Haime, 1851)	3,6
136.	*Cycloseris tenuis* (Dana, 1846)	1,2
137.	*Cycloseris vaughani* (Boschma, 1923)	1,3,7
138.	*Diaseris distorta* (Michelin, 1843)	13,6
139.	*Diaseris fragilis* (Alcock, 1893)	4,6
140.	*Fungia concinna* (Verrill, 1864)	1,6,7
141.	*Fungia fungites* (Linneaus, 1758)	1
142.	*Fungia granulosa* (Klunzinger, 1879)	1,2,4,5
143.	*Fungia horrida* (Dana, 1846)	1,4,5,6
144.	*Fungia moluccensis* (Horst, 1919)	1,2,3,4,5,6,7
145.	*Fungia paumotensis* (Stutchbury, 1833)	2,4,5,6,7
146.	*Fungia scruposa* (Klunzinger, 1816)	1,3,4,5,6
147.	*Fungia spinifer* (Claereboudt & Hoeksema 1987)	7
148.	*Halomitra clavator* (Hoeksema, 1989)	6
149.	*Halomitra pileus* (Linnaeus, 1758)	1,4,5,6
150.	*Heliofungia actiniformis* (Quoy & Gaimard, 1837)	1,2,3,4,6,7
151.	*Herpolitha limax* (Houttuyn, 1772)	1,2,3,4,5,6,7
152.	*Herpolitha weberi* (Horst, 1921)	6
153.	*Lithophyllon mokai* (Hoeksema, 1989)	1,2,3,5,
154.	*Lithophyllon undulatum* (Rehberg, 1892)	1,2,3,5,7
155.	*Podabacia crustacea* (Pallas, 1766)	1,2,3,4,5,6,7
156.	*Podabacia motuporensis* (Veron, 1990)	3
157.	*Polyphyllia talpina* (Lamarck, 1801)	1,3,6,7
158.	*Sandalolitha dentata* (Quelch, 1884)	1
159.	*Sandalolitha robusta* (Quelch, 1886)	5,7

	Family Oculinidae	
160.	*Galaxea astreata* (Lamarck,. 1816)	1,4,7
161.	*Galaxea fascicularis* (Linnaeus, 1767)	1,2,3,4,5,6,7
162.	*Galaxea horrescens* (Dana, 1846)	7
	Family Pectinidae	
163.	*Echinophyllia aspera* (Ellis & Solander, 1788)	1,2,5,6
164.	*Echinophyllia echinoporoides* (Veron & Pichon, 1979)	7
165.	*Echinophyllia orpheensis* (Veron & Pichon, 1980)	1,7
166.	*Echinophyllia patula* (Hodgson & Ross, 1982)	3,5,6
167.	*Mycedium elephantotus* (Pallas, 1766)	1,2,3,4,5
168.	*Mycedium robokaki* (Moll & Borel-Best, 1984)	1,3,4,5,6
169.	*Oxypora crassispinosa* (Nemenzo, 1979)	4,6
170.	*Oxypora lacera* (Verrill, 1864)	1,2,3,4,5,6,7
171.	*Oxypora* sp. 1	4
172.	*Pectinia alcicornis* (Saville-Kent, 1871)	3,5
173.	*Pectinia lactuca* (Pallas, 1766)	1,2,3,4,5,6,7
174.	*Pectinia paeonia* (Dana, 1846)	1,2,3,4
175.	*Pectinia teres* (Nemenzo & Montecillo, 1981)	6,7
	Family Mussidae	
176.	*Acanthastrea echinata* (Dana, 1846)	1,3
177.	***Acanthastrea faviaformis* (Veron, 2000)	1
178.	*Acanthastrea hemprichii* (Ehrenberg, 1834)	2
179.	*Acanthastrea lordhowensis* (Veron & Pichon, 1982)	1,3,5
180.	*Acanthastrea rotundoflora* (Chevalier, 1975)	6
181.	***Australomussa rowleyensis* (Veron, 1985)	1
182.	*Cynarina lacrimalis* (Milne Edwards & Haime, 1848)	1,3,4
183.	*Micromussa amakusensis* (Veron, 2000)	1
184.	*Lobophyllia corymbosa* (Forskål, 1775)	1,2,4,5,7
185.	*Lobophyllia flabelliformis* (Veron, 2000)	1,4,7
186.	*Lobophyllia hataii* (Yabe & Sugiyama, 1936)	1,3
187.	*Lobophyllia hemprichii* (Ehrenberg, 1834)	1,2,3,4,5,6,7
188.	*Lobophyllia robusta* (Yabe & Sugiyama, 1936)	5,6
189.	*Lobophyllia* cf. *serratus* (Veron, 2000)	1,2,3,5,6
190.	*Scolymia vitiensis* (Brüggemann, 1877)	1,3
191.	*Symphyllia agaricia* (Milne Edwards & Haime, 1849)	1,3,6,7
192.	*Symphyllia hassi* (Pillai & Scheer, 1976)	3
193.	*Symphyllia radians* (Milne Edwards & Haime, 1849)	1,4,5,7
194.	*Symphyllia recta* (Dana, 1846)	1,2,5,6,7
195.	*Symphyllia valenciennesii* (Milne Edwards & Haime, 1849)	3
	Family Merulinidae	
196.	*Hydnophora exesa* (Pallas, 1766)	1,2,3,5,6,7
197.	*Hydnophora grandis* (Gardiner, 1904)	1,2,3,5,6
198.	*Hydnophora microconos* (Lamarck, 1816)	1,7
199.	*Hydnophora pilosa* (Veron, 1985)	3
200.	*Hydnophora rigida* (Dana, 1846)	1,3,6,7

201.	*Merulina ampliata* (Ellis & Solander, 1786)	1,2,3,4,5,6,7
202.	*Merulina scabricula* (Dana, 1846)	1,4,5,6,7
203.	*Scapophyllia cylindrica* (Milne Edwards & Haime, 1848)	2,5,7
	Family Faviidae	
204.	*Barabattoia amicorum* (Milne Edwards & Haime, 1850)	6,7
205.	*Caulastrea curvata* (Wijsman-Best, 1972)	1,3,5,5
206.	*Caulastrea echinulata* (Milne Edwards & Haime, 1849)	7
207.	*Cyphastrea decadia* (Moll and Borel-Best, 1984)	4,7
208.	*Diploastrea heliopora* (Lamarck, 1816)	1,2,3,4,5,6,7
209.	*Echinopora gemmacea* (Lamarck, 1816)	1,3,4,5,6,7
210.	*Echinopora hirsutissima* (Milne Edwards & Haime, 1849)	1,2,4,7
211	*Echinopora horrida* (Dana, 1846)	7
212.	*Echinopora lamellosa* (Esper, 1795)	1,3,4,5,6,7
213.	*Echinopora mammiformis* (Nemenzo, 1959)	1
214.	*Echinopora pacificus* (Veron, 1990)	1,2,3,7
215.	*Favia matthai* (Vaughan, 1918)	3
216.	*Favia pallida* (Dana, 1846)	7
217.	*Favia rotundata* (Veron & Pichon, 1977)	1,7
218.	*Favia stelligera* (Dana, 1846)	1,3,5
219.	*Favia truncatus* (Veron, 2000)	1,2,7
220.	*Favia vietnamensis* (Veron 2000)	3
221.	*Favites abdita* (Ellis & Solander, 1786)	1,2,3,5,7
222.	*Favites acuticollis* (Ortmann, 1889)	3
223.	*Favites halicora* (Ehrenberg, 1834)	1,2,6,7
224.	*Favites paraflexuosa* (Veron, 2000)	1,5,6
225.	*Favites pentagona* (Esper, 1794)	1,5
226.	*Goniastrea aspera* (Verrill, 1905)	1,2,3,7
227.	*Goniastrea edwardsi* (Chevalier, 1971)	1,6,7
228.	*Goniastrea favulus* (Dana, 1846)	5,6
229.	*Goniastrea minuta* (Veron, 2000)	1,2,6,7
230.	*Goniastrea pectinata* (Ehrenberg, 1834)	1,2,3,4,5,7
231.	*Goniastrea retiformis* (Lamarck, 1816)	1,4,6
232.	*Leptastrea pruinosa* Crossland, 1952	5,7
233.	*Leptastrea purpurea* (Dana, 1846)	1,2,4,6,7
234.	*Leptastrea transversa* Klunzinger, 1879	1,2,3,4,6
235.	*Leptoria phrygia* (Ellis & Solander)	1,6,7
236.	*Montastrea colemani* Veron, 2000	1,2,7
237.	*Montastrea curta* (Dana, 1846)	1
238.	*Montastrea magnistellata* Chevalier, 1971	1,2,7
239	*Montastrea salebrosa* (Nemenzo, 1959)	1

240.	*Oulastrea crispata* (Lamarck, 1816)	4,5
241.	*Oulophyllia bennettae* (Veron, Pichon, & Wijsman-Best, 1977)	1,3,6,7
242.	*Oulophyllia crispa* (Lamarck, 1816)	1,2,4,5,6,7
243.	*Platygyra daedalea* (Ellis & Solander, 1786)	1,2,5,6,7
244.	*Platygyra lamellina* (Ehrenberg, 1834)	1,6
245.	*Platygyra pini* (Chevalier, 1975)	7
246.	*Platygyra sinensis* (Milne Edwards & Haime, 1849)	7
247.	*Platygyra verweyi* (Wijsman-Best, 1976)	2
248.	*Plesiastrea versipora* (Lamarck, 1816)	1,3,5,6
	Family Trachyphyllidae	
249.	*Trachyphyllia geoffroyi* (Audouin, 1826)	1,2,3,4,5,6,7
	Family Euphilliidae	
250.	*Catalaphyllia jardinei* (Saville-Kent, 1893)	2,3
251.	*Euphyllia ancora* (Veron & Pichon, 1979)	1,2,3,6,7
252.	*Euphyllia cristata* (Chevalier, 1971)	1,2
253.	*Euphyllia divisa* (Veron & Pichon, 1979)	2
254.	*Euphyllia glabrescens* (Chamisso & Eysenhardt, 1821)	1,3,4,5,7
255.	*Nemenzophyllia turbida* (Hodgson & Ross, 1981)	4
256.	*Plerogyra sinuosa* (Dana, 1846)	1,2,3,4,5,6,7
	Family Dendrophylliidae	
257.	**Balanophyllia* sp. 1	3
258.	*Dendrophyllia* cf *gracilis* (Milne Edwards & Haime, 1848)	2,3,5
259.	**Dendrophyllia* sp. 1	1,2,5
260.	*Rhizopsammia verrilli* (van der Horst, 1922)	2
261.	*Tubastraea coccinea* (Lesson, 1829)	5
262	*Tubastraea diaphana* (Dana, 1846)	6
263.	*Tubastraea micranthus* (Ehrenberg, 1834)	1,2,5
264.	*Turbinaria frondens* (Dana, 1846)	1,5,6,7
265.	*Turbinaria heronensis* (Wells, 1958)	1,3,4,5,6,7
266.	*Turbinaria irregularis* (Bernard, 1896)	2,3
267.	*Turbinaria mesenterina* (Lamarck, 1816)	1,2,3,5,7
268.	*Turbinaria peltata* (Esper, 1794)	1,2,3,4,5,6,7
269.	*Turbinaria reniformis* Bernard, 1896	1
270.	*Turbinaria stellulata* (Lamarck, 1816)	5
	Family Heliporidae	
271.	*Heliopora coerulea* (Pallas, 1776)	2
	Family Clavulariidae	
272.	*Tubipora musica* (Linnaeus, 1758)	2,3,
	Family Milleporidae	
273.	*Millepora dichotoma* (Forskål, 1775)	1,2,3,5,6
274.	*Millepora exaesa* (Forskål, 1775)	1,5,6
275.	*Millepora intricata* (Milne-Edwards & Haime, 1857)	1,2,5,6,7
276.	*Millepora platyphylla* (Hemprich and Ehrenberg, 1834)	1,2,5,7

Table 3. Rare corals recorded in Sogod bay.

Species	Status
Nemenzophyllia turbida	Known from only about 17 sites in the world
Halomitra clavator	Rarely reported
Catalaphyllia jardenei	Rare or uncommon in most places
Micromussa amakusensis	Rarely reported

Table 4. Coral species not previously reported from the Philippines in published literature.

Rare species
*Acropora plumosa**#*
*Favia truncatus**
Goniopora albiconus+
Lobophyllia flabelliformis#*
*Montipora vietnamensis**

*Also found by the DF in Tubbataha and Cagancillio
+Also found by the DF in Sierra Madre
#Also found by the DF at Mabini

Discussion

The total of 276 coral species found in the 7 dive sites in this study is about 59% of all the coral species reported from the Philippines. The total is slightly more than the mean number of coral species (270) found by the author (DF) in 12 different areas of the Philippines in other studies. However, the total number of species found in an area is strongly dependent on the area searched or amount of search effort and time, in this case the number of dive sites. The average number of coral species found per dive site in this study (110) was a little more than the average number of coral species found per dive site (102) in nine different areas of the Philippines where the author has recorded the number of coral species per dive site. Thus, the coral species diversity in the small area surveyed of Sogod Bay, Leyte, was typical for the Philippines. This was in spite of the fact that the area was sandy often with

gravel in shallow water, and thus perhaps not the best coral habitat. The Philippines has a coral species fauna that is among the most diverse in the world and the coral diversity at Sogod Bay is very high indeed compared to coral diversity on reefs around the world. The coral diversity at one dive site at Sogod Bay is equal to all the coral species known from the entire Hawaiian Island chain from the Big Island to Midway, plus the entire Caribbean and Gulf of Mexico combined. Such world-class diversity therefore deserves protection and sustainable use, as do many Philippine reefs.

Since the time of this survey, landslides in the area have had some impact. Landslides occurred in the area of Jon's Wreck in December 2003. Reef Check surveys carried out by Coral Cay Conservation volunteers in October 2003 and then repeated in February 2004 showed a decrease in *Acropora* cover by 5% and a decrease in non-*Acropora* cover by 10%, attributable to sediment from the landslides. Thus this event had a modest effect on this reef. Subsequently, in 2005, a Crown-of-Thorns seastar (*Acanthaster planci*) outbreak was reported to be having a major impact on reefs in this area, but this has yet to be quantified.

Acknowledgments

Many thanks to James Comely for map production, and the Coral Cay Conservation field staff and volunteers involved in the Southern Leyte Coral Reef Conservation Project.

References

Cairns, S. D., & Zibrowius, H. (1997). *Cnidaria Anthozoa: Azooxanthellate Scleractinia* from the Philippine and Indonesian regions. In A. Crosnier and P. Bauchet (Eds.), Résultats des Campagnes Musorstom, Vol. 16, *Mém. Mus. natr. Hist. Nat.* 172, 27-243.

Doyle, J. S. Harding, & Raines, P. (2003). Southern Leyte Conservation Project, 1st Biannual report. Report by Coral Cay Conservation to the Provincial Government of Southern Leyte and the Philippines Reef and Rainforest Foundation Inc.

Faustino, L.A. (1927). Recent Madreporaria of the Philippine Islands. *Bul. Sci., Manila: Monogr., 22,* 1-310.

Hodgson, G. (1985). A new species of *Montastrea* (Cnidaria, Scleractinia) from the Philippines. *Pacific Sci., 39,* 283-290.

Hodgson, G., & Ross, M.A. (1981). Unreported scleractinian corals from the Philippines. *Proc. Fourth Int. Coral Reef Symp., 2,* 171.

Hoeksema, B. W. (1989). Taxonomy, phylogeny and biogeography of mushroom corals (Scleractinia: Fungiidae). *Zool. Verh., Leiden, 254,* 1-295.

Licuanan, W. Y., & Capili, E.B. (2003). Range extensions of Japanese Scleractinia to the Philippines. *Galaxea, JCRS, 5,* 1-6.

Licuanan, W. Y., & Capili, E.B. (in press). New records of stony corals from the Philippines previously known from peripheral areas of the Indo-Pacific. *Raffles Bulletin.*

McClanahan, T. R., & Muthiga, N.A. (1992). Comparative sampling of epibenthic subtidal gastropods. *J. Exp. Mar. Biol. Ecol., 164,*87-101.

Nemenzo, F., Sr. (1986). Guide to Philippine Flora and Fauna: Corals. Natural Resources Management Center and the University of the Philippines, 273 pp.

Nemenzo, F., and G. Hodgson. 1983. Philippine scleractinian corals, additional records. *Philipp J Sci, 112*(1-2), 29-67.

Randall, R. H., & Cheng, Y-M. (1984). Recent corals of Taiwan. Part III. Shallow water Hydrozoan Corals. *Acta Geol. Taiw., 22,* 35-99.

Veron, J. E. N. (2000). Corals of the world (Vols. 1-3). Townsville: Australian Institute of Marine Science.

Veron, J. E. N. (2002). New species described in corals of the world. *Australian Institute of Marine Science Monograph Series 11,* 1-206.

Veron, J. E. N., & Fenner, D. (2000). Corals (zooxanthellate Scleractinia) of the Calamianes Islands, Palawan Province, Philippines. In Werner, T. B. and G. R. Allen (Eds.), A rapid marine biodiversity assessment of the Calamianes Islands, Palawan Province, Philippines (pp. 24-26). *RAP Bulletin of Biological Assessment 17.*Washington, DC: Conservation International.

Veron, J. E. N., & Hodgson, G. (1989). Annotated checklist of the hermatypic corals of the Philippines. *Pac. Sci., 43,* 234-287.

Wallace, C. C. (1999a). Staghorn corals of the world, a revision of the genus *Acropora.* Collingwood, Australia: CSIRO.

Wallace, C. C. (1999b). Staghorn corals of the world: a key to species of *Acropora.* CD-ROM. Collingwood, Australia: CSIRO.

BYCATCH ASSOCIATED WITH THE ARTISANAL TUNA FISHERY OF BUNAKEN NATIONAL PARK, NORTH SULAWESI, INDONESIA

Ryan C.J. Walker

ABSTRACT

An investigation into the bycatch produced by the artisanal tuna fishery of Bunaken National Park was undertaken between May and July 2001. The fishery employs two types of gear: pole and line and purse seine. Mahi mahi (*Coryphaena hippurus*) was the most common bycatch species of the pole and line gear, while juvenile trevally (*Carangoides* spp.) dominated the bycatch associated with the purse seine gear. Both biomass transfer efficiency (BTE) and bycatch per unit effort (BpUE) were very low for both gears. Bycatch and wastage was very low at <1% of the catch, a stark contrast to many commercial tuna fishing operations which create high bycatch. This research supports the hypothesis that certain artisanal fishing practices can relieve local anthropogenic pressure on finfish populations in the form of bycatch and wastage and can be generally more selective in comparison to more industrial fishing methods.

Introduction

Discards and bycatch of non-target species, or undersized target species form some component of the catch of almost all fishing activities (Alverson, 1999). Alverson *et al.* (1994) estimated that 27 million tons were discarded annually, based on an annual target catch of 77 million tons. Bycatch is a very general term for every species or individual organism captured by a fishing operation that is not the intended target species. Bycatch can be categorized dependent on its fate after landing. McCaughran (1992) defined all retained catch of non-target species of marketable or use value as incidental catch while

discarded catch is that portion of the catch returned to the sea as a result of economic, legal, or personal consideration.

The world's tuna fisheries have been well documented within fisheries literature (Fonteneau *et al.*, 2000; Gales *et al.*, 1998; Garcia & Hall, 1996; Hall, 1996; Shomura *et al.*, 1996). Non-target species include, but are not limited to elasmobranches (FAO, 1994; Williams, 1999; Francis *et al.*, 2001), seabirds (Brothers, 1991; Brothers *et al.*, 1999; *Gales et al.*, 1998), and marine mammals (Balazs & Pooley, 1994; Hall, 1996). The Eastern Pacific tuna fishery was subjected to considerable public pressure for its apparent disregard of the high mortality of dolphins *Stenella attenuata* and *S. longirostris*, prior to the introduction of the Marine Mammal Protection Act by the United Sates during the early 1990s.

Literature dealing with the issues of tuna bycatch contains several methods used to describe and assess the bycatch produced by a particular tuna fishery. Several authors have used descriptive statistics to describe bycatch species composition and ratio of bycatch organisms to target species (Alverson *et al.*, 1994; Hall, 1996; Garcia & Hall, 1996). Hall *et al.* (2000) introduced the idea of establishing a biomass transfer efficiency (BTE) for a catch, therefore gaining a total figure in kilograms (kg) of catch needed to be attained by the fishery to gain 1 kg of marketable target species. Bycatch per unit effort (BpUE) is described for shark bycatch from the Pacific tuna fishery by Francis *et al.* (2001) and Williams (1999). Using the total weight of the bycatch produced and the effort invested for a day's fishing enables the BpUE to be calculated, thus both BTE and BpUE figures give an indication as to the selectivity of the gear employed within any given fishery.

Pelagic fishing effort accounts for 80% of the total production for capture fisheries in North Sulawesi (Kahn & Fauz, 2001). The principal target species are bonito tuna (*Sarda sarda*), big eyed scad (*Selar crumenophthalmus*), mackerel scad (*Decapterus* spp.), skipjack tuna (*Katsuwonus pelamis*), and yellowfin tuna (*Thunnus albacares*). Both *K.*

pelamis and *T. albacares* are prized for canning and sashimi and provide considerable in-country commerce. Asian Pacific marine fisheries land approximately three million tons of fish annually, about 65% of the world's catch (Shomura *et al.*, 1996). In North Sulawesi alone annual marine fish production from capture fisheries amounts to 176,000 metric tons/ yr^{-1}, with 32.8% of this comprising *K. pelamis,* valued at US$ 352 million (Kahn & Fauz, 2001). Citing a lack of research centered on these fisheries, FAO (1997) recommended increased effort to collect both catch and bycatch data for small scale fisheries. Such fisheries account for 90% of the fishing effort in Indonesia (Kahn & Fauz, 2001). This study aims to investigate the bycatch and subsequent fate of all non-target species associated with the artisanal pole and line and purse seine tuna fishery of Bunaken National Park, by comparing the BTE and BpUE of each gear.

Study Area and Methods

Bunaken National Park is located in the province of Minahasa, North Sulawesi, Indonesia (Fig. 1), positioned in the Wallacea bioregion, the global center of marine biodiversity (Kahn & Fauz, 2001). The Park is principally made up of the five islands: Bunaken, Siladen, Manado Tua, Mantehage, and Nain (Fig.1), plus the adjacent coastal area. There are 15 villages located on the five islands within the Park, which have conducted subsistence fishing and farming for over 100 years. Park resources generate $3.8 million per annum for the local population (Kahn & Fauz, 2001). The artisanal pelagic pole and line and purse seine tuna fishery is the principal local livelihood, with boats operating out of most villages within the park. Pole and line fishing for tuna dates back hundreds of years (Fonteneau *et al.*, 2000) and is considered to be one of the traditional tuna fishing methods. Since the 1950s pole and line has been increasingly replaced by purse seine gear (Hall, 1999).

Throughout a period of seven weeks between May and July 2001, 20 pole and line and 20 purse seine boats were chosen at random from the artisanal tuna fishing fleet within the Park, and accompanied by an observer for fishing trips. Total time at sea and number of fishers per vessel were recorded. The total weight of target species was gained when the catch was sold at the end of each day's fishing. As bycatch taxa were landed, each individual animal was positively identified and weighed, then noted if the fishers retained the specimen or returned it to the sea. Specimens removed by the fishers from deployed "in water" fishing gear, as in the case of purse seining for bait, were not recorded.

Results

The pole and line vessels fish the waters around small pelagic fish aggregating devices (FADs), anchored in 200-4,000m of water, within or just outside the park boundaries (Fig. 2). The feeding characteristics of the tuna are exploited by chumming the water directly behind the boat with live bait, typically, shorthead anchovy (*Encrasicolus hetroloba*). Sprinklers are used to create the illusion of a greater number of bait fish, creating a tuna feeding frenzy. Bait is collected on route to the fishing grounds using a seine net over seagrass beds or more often from lift net pontoons used to supply the pole and line fishing fleet. Alternatively, vessels using purse seine gear are also active in and around the park boundaries. FADs are also employed, along with the use of a "fish eye", a member of the crew who reaches the FAD some hours before the main fishing vessel, and watches the behavior of the aggregating tuna or scad from the water or the FAD platform. On the command of the fish eye, who decides when the maximum number of target species are within the vicinity of the FAD, the purse seine is deployed. Major characteristics of each type of fishing vessel are summarized in Table 1.

Of the landed pole and line biomass, 99.62% was target species, with the remaining 0.38% bycatch. Comprising 23

species, this bycatch included six pelagic fish species, 11 reef fish species, three molluscs, two cephalopods, three echinoderms, and one crustacean (Table 2). The total bycatch produced by the purse seine fishery was slightly greater, totaling 0.61% of the harvested biomass. This included 10 species of pelagic fish and 1 undersized target species, with the remaining 99.39% of the catch consisting of target species.

Mahi mahi (*Coryphaena hippurus*) comprised 40% of the pole and line bycatch with five other pelagic fish species making up the remaining bycatch (Fig. 3). Incidentally, 26% of the non-target biomass is captured during the bait fishing process. Bait collection often captured sessile benthic fauna. Molluscs, predominantly the clams *Tridacna* spp. and *Hippopus hippopus*, contributed 14% of the bycatch biomass. Small species of reef fish made up 6% of the bycatch (Table 2), and commonly included guineafowl puffer (*Arothron meleagris*), cornetfish (*Fistularia commersonii*), and insular half beak (*Hyporhamphus affinis*). Juvenile trevally (*Carangoides* spp.) was the most abundant form of bycatch resulting from purse seine deployment, comprising 33% of the bycatch biomass. Juvenile (<25 cm) rainbow runner (*Elagatis bipinnulata*) accounted for 25% of the purse seine bycatch (Fig. 4).

A mean BTE of 1.013kg (i.e. on average 0.013kg of bycatch being produced with every kg of target species landed) was recorded for the pole and line gear. The BTE of the purse seines had a slightly greater mean value of 1.016kg. There was a significant difference in the BTE of the pole and line gear and the purse seine gear, (one way ANOVA, p=0.034). The BpUE of the two gears showed a strong significant statistical variation (one way ANOVA, p=0.004). The pole and line gear supported a mean BpUE of 0.017kg/man hour, compared to 0.042 kg/man hour for purse seines.

Every item of bycatch produced by the purse seine fishery was treated as incidental catch and was either sold or utilized by the fishers. All of the pelagic species caught by the pole and

line fishers were utilized by the fishers or sold. The only discards occurred when the pole and line fishers caught their own bait. During bait fishing, after setting the nets in less than 1m of water, three or four fishers snorkeled within the nets removing all visible, sessile, non-target species, such as echinoderms, molluscs, and crustaceans (Table 2). All other bycatch were removed when the net had been landed before the bait fish was transferred to the hull of the boat and stored as live bait. Everything that was deemed non-edible by the fishers, for example toxic guineafowl puffer (*A. meleagris*) and small reef fish, was returned to the sea (Table 2). Certain species were graded according to size, such as insular halfbeak (*H. affinis*) and cornetfish (*F. commersonii*). Larger individuals were retained as incidental catch to be utilized by the fishers as food, while smaller individuals were returned to the sea. Cephalopods were retained as welcomed incidental catch. Twenty six percent of the pole and line bait fishing bycatch was discarded; only 0.48% of the whole catch was discarded as a result of using this gear.

Discussion

As expected, purse seine fishing generated more bycatch (0.61% of the total catch) due to the less selective nature of the fishing gear. Before the net was deployed, the "fish eyes" informed the fishers on the boat when they believed the highest number of target species had aggregated under the FAD. However, as soon as the gear was deployed, the fishers had no influence on the species moving into the path of the net. Indeed, the capture of many species that coexisted with the target species was unavoidable. The pole and line gear produced less bycatch (0.38%) due to the fishers exploiting the feeding characteristics of the tuna, therefore creating a very target specific fishing method. It is evident from the calculated BTE's that pole and line gear was significantly more selective than purse seine. When fishing effort was considered, BpUE

for the purse seine gear was also significantly greater than that for the pole and line gear.

It is worth noting that total bycatch for the pole and line gear would be slightly greater than results suggest due to the fishers removing some of the larger sessile animals from the fishing gear. This was undertaken while the gear was still in the water and happened on the few occasions that the bait fish were caught by the fishers. Discussions with the fishers revealed that they only employed bait fishing on approximately 5% of the fishing trips. Despite larger animals such as *Tridacna* sp. making up most of the bycatch removed by hand, the infrequency of the bait fishing activity suggests that this missed bycatch would add little to the total biomass of the bycatch produced by this gear.

Both fisheries generated very little bycatch in comparison to commercial tuna fishing efforts. Garcia and Hall (1996) stated that the tuna purse seine fishery of the Eastern Pacific recorded bycatch levels of other fish, marine reptiles, and invertebrates of up to 24.2% of the catch. Frances *et al.*, (2001) found that blue sharks (*Prionace glauca*) alone contributed to 32% of the catch from the New Zealand tuna long line fishery (Fig. 5). It is very difficult to compare BTE and BpUE as varying methods to describe effort are used throughout the literature, but the use of "fish eyes" by the purse seiners in this study could be one reason why the percentage bycatch is so low compared to the commercial purse seine efforts described by Garcia and Hall (1996).

Marine resource utilization in small-scale fishing communities is high (McGoodwin, 1990). In this study this was highlighted by the fact that 100% of the bycatch produced by the purse seine vessels was treated as incidental catch (Table 2) and utilized by the fishers. Some incidental catch, such as barracuda (*Sphyraena barracuda*) and (*S. genie*), had a marketable value and was sold. Because discarded fish was considered a waste of edible protein and effort by the fishers, nothing was wasted. In comparison, Garcia and Hall (1996)

report that 15-20% of the fish caught by the commercial purse seine tuna fishery of the Eastern Pacific was discarded.

The pole and line vessels generated some bycatch from its tuna fishing operation and occasionally from bait fishing. Pelagic species captured during tuna fishing were treated as incidental catch, with *C. hippurus* and *E. bipinnulata* being sold and all other retained species utilized by the fishers themselves. Stress and mortality among discarded species was low, due to careful handling by the fishers and limited time out of the water (pers. obs).

All fishing methods have ecological costs such as bycatch that need to be compared in order to assess their relative merits. It is evident that the more traditional pole and line gear was a more selective form of fishing. With bycatch of <1% of the total catch for both gears, compared to industrial tuna fishing efforts, the artisanal tuna fishers of the Park have a negligible effect on the non-target marine species of one of the most biodiverse regions of the world. The Indonesian government needs to encourage the use of the more environmentally sound traditional tuna fishing practices. The use of "fish eyes" on FADs, and chumming with pole and line gear to reduce the levels of bycatch need to be considered and recommended by decision makers. The increasing level of regulated and non-regulated fishing efforts by larger foreign vessels, using less selective long lining techniques within the Indonesian Exclusive Economic Zone, should also be given due consideration by national fishery authorities.

Acknowledgment

Thanks to Dr. Nicholas Polunin of the University of Newcastle for advice, and Dr. Lida Pet-Soede, Fisheries Program Manager for the WWF Indonesia Wallacea Bioregion Program, for help and support in the field. Research Assistants included Edwin Van Helmond and Sophie Rabeay of Wageningen University, The Netherlands; "Yadi" Halim of the University of Manado; Wendy Aims of the University of

Oregon, USA; and Seran Davis and Marianne Scott of the University of Newcastle, UK. Most importantly, thanks to the tuna fishermen of Bunaken National Park for their patience and generous assistance in this study. Suggested improvements to this manuscript were made by Dr. Simon Harding and an anonymous referee. Funding and support was gratefully received from The University of Newcastle Expedition Council, The Natural Environment research Council (NERC), The Rutland Trust, University of Newcastle Department of Marine Sciences and Coastal Management, and the WWF Indonesia Wallacea Bioregion Program.

In memory of my mother

Carolyn Clare Walker, 1948-2000

who grew up by the sea.

Literature Cited

Alverson, D.L. (1999). Some observations on the science of bycatch. *Marine Technology Science Journal., 33,* 6-12.

Alverson, D.L., Freeburg, M.H., Pope, J.G., & Murawski, S.A. (1994). A global assessment of fisheries bycatch and discards. FAO Fisheries Technical Paper 339, Rome FAO.

Balazs, G.H., & Pooley, S.G. (1994). Research plan to assess marine turtle hooking mortality. In *Results of an Expert Workshop held in Honolulu, Hawaii, 16-18 November 1993* (p.166). NOAA Technical Memorandum NOAA-TM-NMFS-SWFSC-201.

Brothers, N. (1991). Albatross mortality and associated bait loss in the Japanese longline fishery in the Southern Ocean. *Biological Conservation, 55,* 255-268.

Brothers, N., Gales, R., & Reid, T. (1999). The influence of environmental variables and mitigation measures on seabird bycatch rates in the Japanese tuna fishery within the Australian fishing Zone, 1991-1995. *Biological Conservation, 88,* 85-101.

F.A.O. (1994). Overview of world elasmobranch fisheries. F.A.O. Fisheries Technical Paper. 341. Rome FAO.

F.A.O. (1997). Report on the Indonesia/FAO/DANIDA workshop on the assessment of the potential of marine fishery resources of Indonesia. FAO Technical Report. Rome FAO.

Fonteneau A., Aris, J., Gaertner, D., Nordstrom, V.,& Pallares, P. (2000). Observations in the species composition of tuna schools in the Gulf of Guinea between 1981 and 1999, in relation with fish aggregating device fishery. *Aquatic Living Resources, 13,* 253-257.

Francis, M.P., Griggs, L.H., & Baird, S.J. (2001). Pelagic shark bycatch in the New Zealand tuna longline fishery. *Marine and Freshwater Research, 52,* 165-178.

Gales, R., Brothers, N., & Reid, T. (1998). Seabird mortality in the Japanese tuna long line fishery around Australia, 1988-1995. *Biological Conservation, 86,* 37-56.

Garcia, M.A., & Hall, A.M. (1996). Spatial and seasonal distribution of bycatch in the purses seine tuna fishery in the Eastern Pacific Ocean. In *Fisheries Bycatch: Consequence and Management.* Alaska Sea Grant College Program Report No. 97-02, University of Alaska, Fairbanks.

Hall, M.A. (1996). Dolphins and other bycatch in the Eastern Pacific Ocean tuna purse seine fishery. In *Fisheries Bycatch: Consequence and Management.* Alaska Sea Grant College Program Report No. 97-02, University of Alaska, Fairbanks.

Hall, M.A., Alverson, D.L., & Metuzals, K.I. (2000). Bycatch: Problems and solutions. *Marine Pollution Bulletin,41,* 204-219.

Hall, S.J. (1999). The effect of fishing on marine ecosystems and communities. London: Blackwell.

Kahn, B.,& Fauz, A. (Eds.). (2001). Fisheries in the Sulu-Sulawesi Seas. Indonesian Country Report. WWF Wallacea Program.

McCaughran, D.A. (1992). Standardized nomenclature and methods of defining bycatch levels and implications. In: Proceedings of the National Industry Bycatch Workshop, February 4-6, 1992, Newport, Oregon. Schoning, RW, R.W. Jacobson, D.L. Alverson,, T.G. Gentle, and J. Auyong (Eds.) Natural Resources Consultants, Inc., Seattle Washington. 200 p.

McGoodwin, J.R. (1990). *Crisis in the world's fisheries.* USA: Stanford University Press.

Shomura, R.S., Majkowski, J., & Harman, R.F. (Eds.) (1996). Status of Interactions of Pacific tuna fisheries in 1995. Proceedings of the second FAO Expert Consultation of Pacific Tuna Fisheries. Shimizi, Japan, 23-31 January 1995. FAO Fisheries Technical Paper. No. 365. Rome, FAO. 612 p.

Williams, P.G. (1999). Sharks and related species catch in tuna fisheries of the tropical western and central Pacific Ocean. F.A.O. Technical Paper. 378. 860-880 pp.

APPENDIX

Figure 1. Bunaken National Park, North Sulawesi, with the fishing zone indicated within the northern region of the park (this page). North Sulawesi in relation to the rest of the Indonesian Archipelago (next page).


PHILIPPINES
NORTH PACIFIC OCEAN
Philippine Sea
PAPUA NEW GUINEA
New Guinea
IRIAN JAYA
Puncak Jaya
Biak
Ambon
MOLUCCAS
Banda Sea
EAST TIMOR
Timor Sea
Arafura Sea
AUSTRALIA
Kupang
Denpasar
Surabaya
Java
Semarang
Madura
JAKARTA
Cirebon
Cilacap
Java Sea
Makassar
Sulawesi (Celebes)
Celebes Sea
Pulau Ligitan
Pulau Sipadan
Borneo
Equator
Kalimantan
BRUNEI
MALAYSIA
South China Sea
VIETNAM
SINGAPORE
Sumatra
Palembang
Pekanbaru
Medan
Strait of Malacca
Gulf of Thailand
THAILAND
Andaman Sea
INDIAN OCEAN
0 200 400 km
0 200 400 mi

Figure 2. Artisanal pole and line fishers using sprinklers and bait fish to attract tuna.

Figure 3. Bycatch composition of the pole and line gear

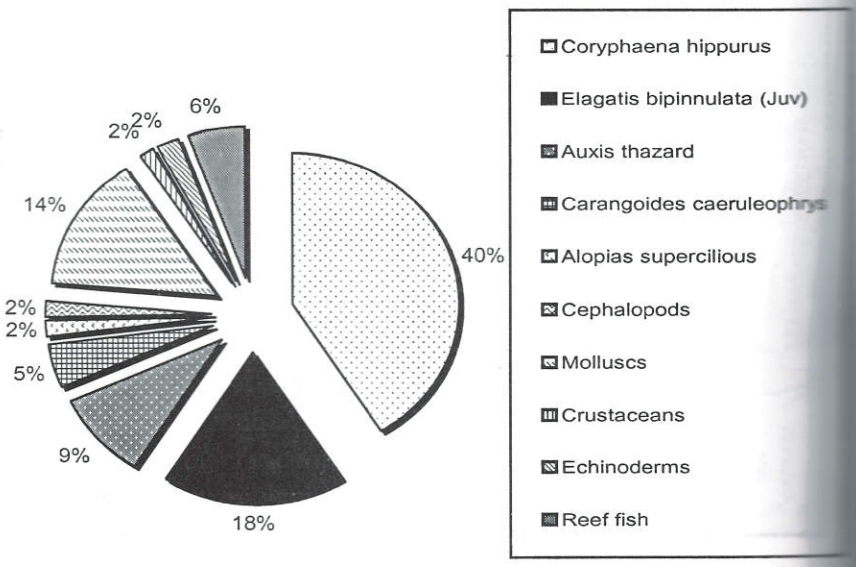

Figure 4. Bycatch composition of the purse seine gear

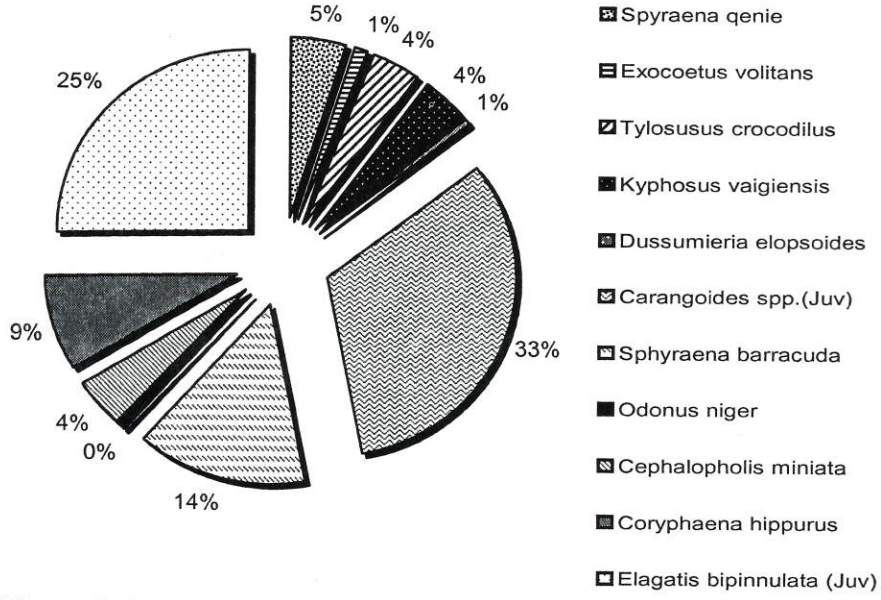

Figure 5. A comparison of data from this study vs the Eastern Pacific purse seine fishery (Garcia & Hall, 1996) and the New Zealand long line fishery (Frances *et al.*, 2001) * = data solely for blue shark *Prionace glauca* bycatch.

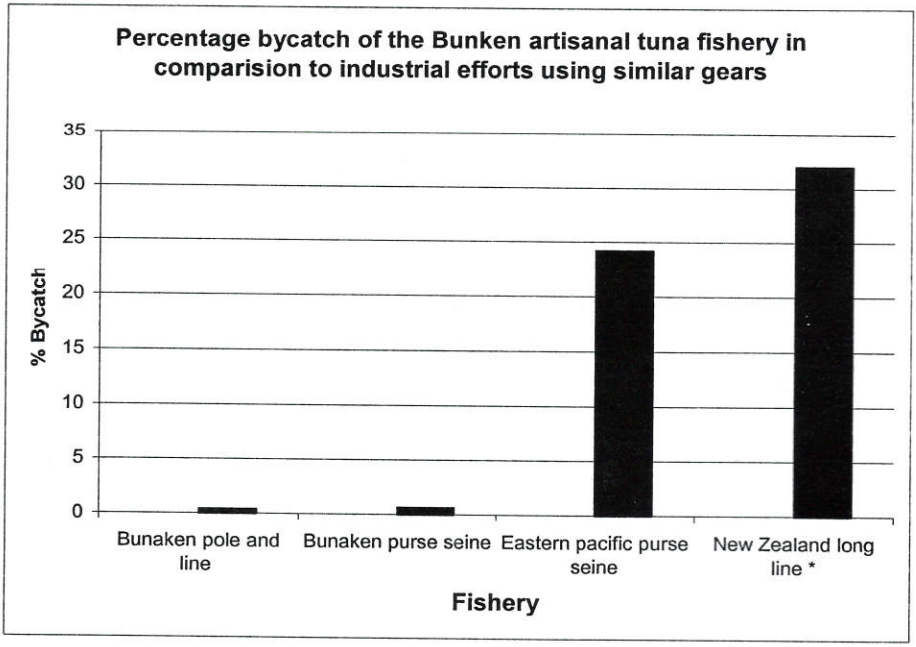

Table 1. Background information on the pole and line and purse seine tuna fishery, BNP.

	Pole & Line	Purse Seine
• Vessel length / weight	12m / 5-15 gross tonnes	15m / 10-15 gross tonnes
• Mean crew size	12	29
• Outboard engine size	3 x 40 horse power	3 x 40 horse power
• Navigation methods	Stars & visible land marks	Stars & visible land marks
• Operational distance from shore	20-40 km	3-15 km
• Daily fishing effort	15-18 hours	3-7.5 hours
• No. of days fished per week	6	6
• Target species	skipjack tuna *K. pelamis* yellowfin tuna *T. albacares*	skipjack tuna *K. pelamis* yellowfin tuna *T. albacares* bonito tuna *S. sarda* big eyed scad *S. crumenophthalmus* mackerel scad *Decapterus* spp. rainbow runner *Elagatis bipinnulata*
• Peak fishing months	April-July	December-January

Table 2. Bycatch species produced by each gear, and its out come (discarded or retained as incidental catch).

Non target species	Gear		Bycatch	
	Pole and line	Purse seine	Incidental catch	Discarded catch
Pelagic fish species				
Rainbow runner (>25cm)*Elagatis bipinnulata*	X		X	
Rainbow runner (<25cm) *Elagatis bipinnulata*	X	X	X	
Mahi Mahi *Coryphaena hippurus*	X	X	X	
Blue trevally *Carangoides caeruleophrys*	X		X	
Frigate mackerel *Auxis thazard*	X		X	
Big eyed thresher *Alopias superciliosus*	X		X	
Flying fish *Exocoetus volitans*		X	X	
Black fin barracuda *Spyraena qenie*		X	X	
Crocodile longtom *Tylosurus crocodiles*		X	X	
Low finned drummer *Kyphosus vaigiensis*		X	X	
Slender rainbow sardine *Dussumieria elopsoides*		X	X	
Trevally (Juv) *Carangoides spp.*		X	X	
Great barracuda *Sphyraena barracuda*		X	X	
Red toothed triggerfish *Odonus niger*		X	X	
Coral hind *Cephalopholis miniata*		X	X	
Reef fish				
Cornetfish (>55cm) *Fistularia commersonii*	X		X	
Cornetfish (<55cm) *Fistularia commersonii*	X			X
Insular half beak (>30cm) *Hyporhamphus affinis*	X		X	
Insular half beak (<30cm) *Hyporhamphus affinis*	X			X
Fan bellied filefish *Monacanthus chinensis*	X			X
Guineafowl puffer *Arothron meleagris*	X			X
Black blotched porcupinefish *Diodon liturosus*	X			X
Dash and dot goatfish *Parupeneus barberinus*	X			X
Black saddled toby *Canthigaster valentini*	X			X
Crescent wrasse *Thalassoma lunare*	X			X
Sculptured pipefish *Choeroichthys sculptus*	X			X
Reef needlefish *Strongylura incisa*	X			X
Orbicular batfish (Juv) *Platax orbicularis*	X			X

Molluscs				
Egg cowrie *Ovula ovum*	X			X
Giant clam *Tridacna sp.*	X			X
Hippopus clam *Hippopus hippopus*	X			X
Cephalopods				
Reef octopus *Octopus cyanea*	X		X	
Bigfin reef squid *Sepioteuthis lessoniana*	X		X	
Crustaceans				
Hermit crab *Dardanus spp.*	X			X
Echinoderms				
Sea urchin *Tripneustes gratilla*	X			X
Sea star *Linkia lavaegata*	X			X
Sea star *Protoreaster nodus*	X			X

MARITIME HISTORIOGRAPHY OF THE VISAYAS: A PROLOGUE TO THE HISTORY OF THE ISLANDS IN THE SEAS

Earl Jude Paul L. Cleope

ABSTRACT

This paper is a modest attempt to offer a new framework for the writing of a "total" national history, one that underscores the role of the sea as a factor in the historical development of a region. Following the trend in modern historiography inspired by Fernand Braudel, the discussion in this paper uses the maritime perspective as analytical framework for the reconstruction of the history of the Visayas. Thus, as a starting point for the construction of a historical discourse, this work explores the role of the bodies of water surrounding the Visayas Islands in the development of the region. Intended as an introductory essay of an ambitious project on the history of the Visayas, this study also examines the folklore and etymologies about the Visayan Islands.

Everything must be recaptured and relocated in the general framework of history, so that despite the difficulties, the fundamental paradoxes and contradictions, we may respect the unity of history, which is also the unity of life.

Fernand Braudel

Introduction

This paper intends to provide the introductory background for the development of a total history of the region.[1] Proceeding from the view that regional history is an aspect of national, and indeed, of world history, this paper will attempt to synthesize the history of the Visayas towards the ultimate goal of crafting a National History. The direct aim of this endeavor is to set a paradigm for the writing of the history of a whole geographic region that will contribute to the writing of a total national history. The author argues that prior to the writing of a National History, regional

history must first be developed. In pursuing this endeavor, the New Historicist framework, in particular its multi/interdisciplinary approach, provides the theoretical groundwork for the examination of the history of the Visayas.

Fernand Braudel's incredible reconstruction of history in his monumental work, *The Mediterranean and the Mediterranean World in the Age of Philippe II* provides the analytical underpinnings for this endeavor, in particular his proposal for a global vision of history and his call for "historians who are ambitious."[2] For Braudel, this new breed of historians, receptive to and challenged by his method of converging and drawing on all disciplines, will tell of a history that not only calls on witness accounts and psychology but also on geography, political economics, and sociology.[3] New history, as championed by the Annales School and evident in Braudel's approach, has its philosophical roots in the idea that reality is socially or culturally constituted. Central in its philosophy is the widely popular, if radical, notion that the historical world was created out of perceptions, not out of events, and the whole of history was a construct of human impressions. The sharing of this idea or assumption by many social historians and social anthropologists may explain the recent convergence between these two disciplines and other allied disciplines and the expanding dialogue among them. According to Burke, this relativism also undermines the traditional distinction between what is central in history and what is peripheral.[4]

But of more significance, in particular, for the purposes of this paper, is Braudel's view that Mediterranean history is an aspect of world history. In developing this theme, Braudel saw human history as basically a record of technology and exchange. To him, the core of human history is the history of technological mastery and the development of the skills basic to ancient civilization, namely: fire and water technology, pottery, weaving, metalworking, seafaring, and finally, writing. In emphasizing the physical realities of early civilizations, Braudel has enabled generations of readers and scholars to have a glimpse of the actual quality of life with such vividness that few other studies have done. Corollary to this theme, Braudel also explored the importance of exchange, particularly long-distance exchange. According to him, "Our sea

intercourse continues to link the peoples of the islands starting long before the Hispanic time. Geographically, the Visayas is a group of islands located near the center of the Philippine archipelago. It includes the larger islands already mentioned above, as well as the smaller islands of Biliran, Guimaras, and Siquijor and the numerous adjacent islets.[6]

The Visayas is classified as one of the major geographic regions of the Philippines due to its considerable homogeneity by virtue of location, proximity to each other, climate, ethnolinguistic characteristics, geology, history, and cultural affinity. Lying between the two largest Philippine islands, the Visayan Islands are separated from the other major islands of the Philippines by the relatively broad and deep water bodies of the Sulu and Mindanao Seas in the islands of Mindanao, and the Visayan Sea from Luzon islands. The Pacific Ocean forms the eastern boundaries and all approaches to the region from the Pacific pass through the straits of San Bernardino and Surigao. Separating the islands from each other are the Samar Sea, Camotes Sea, Leyte Gulf, Panay Sea, Tañon Strait, Guimaras Strait, San Juanico Strait, Bohol Strait, Ilo-Ilo Strait, and Pana-on Strait.[7] The Visayan Sea connects to the Sibuyan Sea to the northwest, the Samar Sea to the Northeast, the Camotes Sea to the southeast, the Bohol Sea to the southwest via the Tañon Strait, and the Panay Gulf to the southwest via the Guimaras Strait.[8]

Visayas Islands

Tracing the etymology of the term "Visayas" is fundamental in the study of the region's history. This may seem easy since this region is all too well known, and voluminous publications have already been done about the area. [9]

However, charting the origin of the term "Visayas" may pose a challenge. For instance, a two-volume dictionary compiled by John U. Wolf of Cornell University's Southeast Asia Program entitled *A Dictionary of Cebuano Visayan* includes neither the term Visayas nor an entry of any word starting with letter "V". On the other hand, a widely circulating, and all too familiar, version is that the word Visayas originated from Sri Vijaya in reference to the Sri Vijaya Empire, the once dominant maritime power in

theast Asia. How this came to be, however, still requires a vincing explanation. If indeed it came from the term Vijaya,[10] e it was believed that the empire's hegemony reached this of the archipelago at its peak,[11] then why is it that of all the nds and regions that must have been surely reached by this ire, only this particular area got labeled as such?

Scholars have likewise found tracing the etymologies of es and terms used especially during the Pre-Hispanic period specially problematic endeavor because of the varying scope contexts in which these terms occurred as well as the differing rpretations attributed to them. For example, the term *indio* l by Columbus in the Americas had been translated as lians" by Anglo Saxon scholars. In the Philippines, *indio* rred to a native of the place and was the common name applied l indigenous inhabitants of this region. Historical accounts show when the Spaniards discovered the cultural differences among slanders, they began to use other descriptive terms based on ain visible physical attributes or practices, such as tattoos, to ribe specific groups. Hence the term *Pintados* came to be ied to the Visayans, who were heavily tattooed. Yet still, the *Pintados* became unpopular and was ultimately changed Visayas. It should also be noted that at one point the *Pintados* also referred to as *viseys*.[12] It is obvious in this context that roblem lies in the use of autonyms and exonyms. The former ames individual groups use to describe themselves, i.e. *Bisaya,* e the latter are descriptive designations externally imposed by iders, such as the Spaniards.[13]

Another interesting development supporting the link of rigin of the word Visayas to the Sri-Vijayan Empire is the ing study of the Laguna Copper Plate Inscription which avors to find evidence supporting the trade contacts between hilippines and the Sri-Vijayan empire.[14] Findings from this y show that Tondo, Manila, and Bulacan were part of the e trading network of the empire. If that indeed was the case, come these places were not labeled as Visayas? The continuing h for answers to these questions is leading studies back to rlier period when Chinese connection is believed to have eded the Sri Vijayan connection.

P'i-sho-ye or *Pi-shioh-ya*, an earlier term associated with Visayas appeared in Chao Ju Kua's *Chu Fan Chin*.[15] Another term, *Pi-sho-ya*, was mentioned in Wang Da Yuan's book and defined as "a nook to the east of the sea." It is difficult to ascertain the origin or meaning of the term but its syllables suggest some close connection to the term Visayas. But as to which term came first remains problematic. In addition, the practice of replacing Chinese words with their Philippine counterpart had led to many misinterpretations and in the end caused more problems than it had solved.[16]

An interesting comment from these sources depicts the inhabitants as having tattooed bodies, fierce, and given to robbing and pillaging.[17]

On another note, the various theories about the peopling of the Philippines offer another angle regarding the origin of the word Visayas. The original form of the term seems to have been *bisaya* and a closer examination of the various meanings associated with it may offer new explanations. In one of the more recent definitions of the word, the term *bisaya* refers to "*a smaller, ordinary mongrel variety of things especially domestic animals or cultivated plants.*"[18] Among natives of this region, *bisaya* is always associated with something common, short in stature, primitive, native, ordinary, among others. This is best demonstrated in the expression, "*Baling Bisaya-a Bay.*"[19] This definition is based on an accepted fact existing within a particular cultural milieu. Taking this cue, one may infer that this might have been originally an autonym that became an exonym.

Another angle from which the origin of the word may be viewed is the trading patterns of Southeast Asia. This point of view offers new ways of understanding Philippine pre-Hispanic history and the complex migration processes and modes of exchange. In this context, the word *bisaya* may have evolved as a result of the migratory processes. Whether one believes in Beyer's theory of migration or E. A. Manuel's Philippineasian theory,[20] it is important to underscore that a group of people known as *Bisaya* have been living in the island of Borneo. To be specific, these tribes are classified as part of the Bumiputera[21] groups in Malaysia. Known as *Bisayah* in Sarawak and *Bisaya* in western Sabah,

y inhabit the stretches along the Limbang River, which flow o Brunei Bay. Because of this, they are often called "people of middle" or "people of the river."[22]

It may also be conjectured that this ethnic group from ah or Sarawak started the autonym *Bisaya* when they crossed seas in search of a better life. As they arrived in these parts, y introduced plants and animals which eventually became native he region. Furthermore, the practice of body tattooing was lespread not only among the early Visayans but also among natives of the nearby islands of Makasar and Ternate thus ssing the close relationship between the inhabitants of these ces and the Visayans.[23]

Among the varying versions, one description of *bisaya* ears plausible, thus:

> ...a generic term applying not only to the Cebuano but to the other ethnic language groups in the Visayas. Though it is uncertain, it is probably linked either to the word meaning "slaves" or to the word meaning "beautiful" which was how a Bornean Sultan described the islands, according to a popular tale.[24]

eworthy too is the version that says that it originated from the Indian Sanskrit word *Vaisayas,* which refers to the social strata ere the merchants and the landowners belonged.[25]

Although these descriptions may provide some explanation he origins of the term Visayas in the Philippines, much research ains to be done to ascertain them. Meanwhile, the glaring gaps Philippine ethnography and historiography require more rough study.[26]

ayan Folklore

As mentioned earlier, ascertaining the etymology of the term ayas is indeed difficult since little about its origins is mentioned ither the early Chinese, Spanish, or European accounts. But ther way by which our indigenous culture may be understood

and appreciated, and thereby inspire pride among our people, is the study of our myths and legends.[28] As prose narratives, myths and legends offer a different way of looking at the world and explaining events or origins of things.[29] In striving to develop a framework towards the writing of a national history, a discussion about folk literature, in particular about the creation of the islands of the Visayas, and its links to history is appropriate.

Visayan stories about creation variously depict the struggle of the sky and sea or the earth versus the sky with the bird, *Manaul*, as the witness. Variations of these stories narrate that the islands were formed and the first man and woman emerged from the nodes of a piece of bamboo that was opened by the bird's constant pecking.[30] According to a *balitao*[31] version, the islands were formed when a boat loaded with two giants and other passengers sank during a typhoon. On the spot where the boat sank islands rose and their names, among others, Babuyan, El Fraile, Marikaban, Tablas, Carabao, Zapatos, Gigantes, Tiera del Fuego, and Panay, were supposed to represent the passengers of this boat and their belongings.[32]

Another version relates the quarrel of two brothers, *Dagu-ob* (thunder) and *Kilat* (lightning), for the affection of *Kabugwason* (morning star), the daughter of *Langit* (sky). In order to choose the most suitable suitor, *Langit* instituted a contest in which both *Dagu-ob* and *Kilat* were to display their artistic skill in raft making. *Kilat* won the contest and married *Kabugwason*. In despair, *Dagu-ob* killed himself but his spirit came back and smashed *Kilat's* raft to pieces. The pieces of the splintered raft formed islands and came to be known as the Visayan Islands.[33]

However, a closer examination of our folk tales shows that the sea is always depicted as a void. Moreover, not one of the many existing tales deals with the creation of the seas or how such bodies of water got their names. Except for those bearing the name of the islands near them, there is little in the texts that could account for the origin of these bodies of water or indicate the existence of old terms associated with them.

In tracing folk history, folk traditions, like a culture's myths and legends, may also help provide explanation for the origins of things and in this paper how the major islands in the region got

heir names. According to one version, the islands of Samar and eyte were formed from the vessels of two warring giants, *Amihan* Ruler of the Northeast) and *Habagat* (Ruler of the Southwest).[34] n the ensuing battle, both their vessels were destroyed but being o huge, these vessels were not completely submerged nderwater. Years later, the hulls of the ships began to form into slands which became Samar and Leyte.[35]

Both Leyte and Samar appeared in an old text known as *andaya* or *Tendaya*. However, the same text cited that *Tubabao*, hich later became *Cibabao* was eventually applied to the whole astern coast of Samar by the early colonists.[36] A similar account lso noted that *Ibabao* or *Ybabao* referred to both the eastern nd western coasts of Samar.[37] Likewise, Zamal was also referred o as an old name of Samar in the primary account of Pigafetta.[38] bbuyo, on the other hand, is the old name of Leyte.[39] nterestingly, Leyte was the first island to be called "Felipinas" in 543.[40] In another account, the term *Leite* originated from the arly European visitors who gave the islands this name after meeting ome natives along the river called *Yraete* that drained near Pogot oint.[41] It is also possible that Leyte was a corruption of the word *ti*, which literally connotes a combination of thunder and lightning n a thunderstorm, a common weather occurrence during the *abagat* (rainy) season, but which in folk tales is associated with he quarrel between *Kilat* and *Dagu-ob.*

Subsequently, the narrow strait separating Samar and eyte was named San Juanico although there are no accounts xplaining how it came to be known as such. It is possible that it ay have been derived from the name of the ship, the San Juanillo, he first Spanish vessel to pass through this water on its way to the slands from New Spain.[42] The natives, however, called it *angpuetan* after the village near it but which also means in the ernacular as the arrival point. Another important body of water hat separates Samar from Luzon is the San Bernardino Strait, amed after Bernardo de La Torre, the Captain of the San Juanillo. n the early chronicles, the San Bernardino Strait is also referred o as the *Embocadero* (the channel), or the Paso de Acapulco, ut a local term attached to it is *lalauiton*, which literally means ntangled or puzzled.[43]

Meanwhile, the origin of Bohol has been traced to a folk tale according to which the island emerged from a few grains of sand that were spread on the back of a big turtle. As the story goes, the land was formed as a place of habitation for a woman who fell from heaven.[44] The land came to be called Bool, which was the old name of Tagbilaran. According to Combes, however, Bool is derived from *boo*, which means abaca (Manila) hemp, suggesting that the term *Boolanon* might mean farmer.[45]

Cebu, on the other hand has been variously known as *Subu*, *Szubu*, *Subuth*, *Sugbu*, or *Cabo*.[46] According to one account, the island of Cebu got its name from the local practice of greasing the hulls of boats with animal grease, locally known as *sebo*, to make them slippery and allow the vessels to cut through the waters with great speed. An anecdote goes that as three Spanish soldiers were walking along the beach, they saw some natives rubbing the hull of the boat they were building with animal grease. Purportedly, the Spaniards asked for the name of the place, but the natives, thinking that they were being asked about what they were using, answered "*sebo*," which came to be known in the Spanish accounts as Zebu.[47] An older version narrates that it comes from the verb *sugbo* meaning to "walk in the water." This refers to the shallow areas of the port where the passengers from the boats had to wade in the water to get to dry land.[48] Cebu is separated from Negros by the Tañon Strait, a name most likely derived from Tanai or Tanjay, the large settlement on the eastern side of Negros Island directly facing Cebu.[49]

As for Negros and Panay, the legend surrounding their creation goes back to the story of *Dumalapdap*, one of the giant triplet sons of the mistress of the western seas. According to the legend, *Dumalapdap*, in order to win the hand of the goddess of the evening breeze, fought the monster guarding the narrow ridge leading to the palace where the goddess was staying. In the ensuing fight, the monster was slain but in the aftermath, a big earthquake shook the land and split the ridge into two, becoming the islands of Panay and Negros. As the story goes, the three brothers divided Panay among themselves and ruled.[50]

The term *Panay* originated from various versions. Among the most common is that it started from the Aeta word *aninipay*,

a plant that grew abundantly on the island. In another version, it appears as *Sinugbuhan* and *Siuaraya* and referred to the places where the original Malays landed. As the Malays settled, they called their settlement *Madia-as*, which is also the name of the highest mountain peak on the island.[51] Still another account traces the origin of Panay to *pan–ay,* which is a Visayan term for 'mouth of the river.' A recent version is attributed to Miguel Lopez de Legazpi's utterance, "*Pan hay en esta isla.*"[52] However, the island is also referred to at times as Oton.[53]

As an exonym, the term Negros exemplifies the ethnocentric attitude of the colonizers. The term Negros can be traced to the Atlas drawn in 1545 by Spanish Cartographer Alonso de Santa Cruz which bears the legend "Y de Negros," a term derived from reports describing a place inhabited by black people. As a result, the subsequent Spanish expeditions to these regions already referred to Negros as the name of the island.[54]

On the one hand, the old name of Negros is *Buglas*, which in Hiligaynon means to "turn from or cut from." The Ilongo historian Modesto Sao-noy theorized that this meaning could be traced to the cutting off of Negros from the rest of the islands by geological upheavals.[55] On the other hand, from the Oriental side, *buglas* is a Cebuano term for a cogon-like grass that abounds in the area.[56] Suffice to say that although the term *buglas* is recognized on both sides of the island as the native name, no move has ever been made to replace the more ethnocentric term, Negros.

Following the tradition of new historicism, it is also imperative to look at the smaller island provinces that comprise the region. Biliran, an island off the northern coast of Leyte, was originally called *Panamao*, which refers to a fishing net used to catch a fish called *amaw*.[57] But used in the derogatory sense, it means stupid or naïve.[58] The change to Biliran, which is a species of grass, seemed to have taken place sometime between 1668 to 1712, when a volcanic eruption precipitated the growth of this grass species on the lahar devastated area.[59] Another original meaning of the word *biliran* also refers to the boat's hull that produces furrows on the water when in motion.

The island of Siquijor, on the other hand, traces its own origins to the legendary accounts describing its rise from the sea

as a result of a big explosion of fire, thunder, and lightning. A popular joke in the vernacular puts it: "*Lato lang ang gahawid sa Siquijor*."[60] However, the old name of the island used to be *Katugasan*, a native term for the molave trees (*tugas*) that used to abound in the area. When the Spaniards came, they called the island *Isla del Fuego* or "Island of Fire" from the swarms of fireflies that colonizers saw on their way to Cebu. The origin of the word Siquijor, can be traced to two versions. The first version points to the name of a legendary chieftain known as Kihod; the other from the ebbing of the tide, which in the local language, was *quiphod* or *quihod*. Subsequently, it became Siquijor with the change of the letter "d" to "r" in the Spanish euphony.[61]

In the past, all the island provinces were part of the bigger islands in their political administration. Of the three, Guimaras is the newest province having been proclaimed independent in 1992. *Himal-us*, a Kinaray-a term that literally means "island at the center of the sea," was the old name of Guimaras. This term alludes to the geographic location of the island between two big islands, which made it a safe haven for inhabitants during a storm. The term Guimaras has its roots in the legend about two lovers named *Guima* and *Aras*. On account of his slave status, *Aras* was forbidden from marrying *Guima*. The lovers decided to elope instead but as the story goes, their boat sank in the storm. On the site of the tragedy, according to the legend, an island rose which now bears their names.[62]

Ethno Linguistic Groups

Despite the proximity of the islands to each other, there remains the issue of difference in languages leading anthropologists to classify them as ethno-linguistic entities. Although the people of this region are generally called *Bisaya*, linguistically, they speak different languages: the Ilongos of western Visayas region speak *Hiligaynon*; the central Visayas speak *Cebuano* or *Sugbuhanon*, also called *Binisaya*; while people in the eastern region speak *Waray*.

Waray refers to the inhabitants of Samar, Leyte, Biliran, and other islets and their language. As an ethno-linguistic group, they identify themselves according to their place of origin as

Samareños (Samar) and Leyteños (Leyte).[63] Aside from the coastal communities, most of the Warays in Samar live in the lowland areas around Catarman on the north and Calbayog on the west. In Leyte, most of the Warays inhabit the northeastern-most portion where one can find Tacloban nestled at the top of the Leyte Gulf and the southern end of the San Juanico Strait.[64]

On the other hand, the inhabitants of the western section of Leyte from the central cordillera down to the valley drained by the Pagsangahan River to the Ormoc Bay, including the southwestern part from Baybay to Maasin, speak Cebuano. This is due to their proximity to and continuous communication with the Cebuanos in Cebu and Bohol rather than with the Warays who live on the other side of the same island.[65]

Cebuano chiefly defines the Philippine ethnic group with the same name. The homeland of the Cebuano-speaking people is Cebu. But this term also refers to speakers of the language who come from the nearby islands of Bohol,[66] Siquijor, eastern Negros, western Leyte, southwestern Masbate, Camotes Island, and many parts of the coastal provinces of northern and southeastern Mindanao where the cultural reach of the Cebuano has extended.

Hiligaynon is the more formal and literary language used by the Ilongos of Panay,[67] Guimaras, western Negros, and other parts of southern Mindanao island. The Ilongos are traditionally believed to be the first descendants of early migrants who came from Borneo and peopled other areas of the Philippines. Though the account is in question,[68] it serves as cultural illustration of the relationship of the lowlanders and highlanders in exchange and trading mode patterns.

The Visayan waters: Connecting People and Culture

Various texts and subtexts of the folk tales, as well as the literature written at the time of the Spanish contact, show the Visayas as the preferred living sites of early Filipinos. This is because the Visayan Islands are located near sheltered bays and places protected by off-shore islands, or along streams and rivers. Within the narrow straits and seas, dominant ethno-linguistic groups have populated all parts of the region carrying with them their language, traditions, and socio-economic activities. In the past,

the people living along the coasts traveled less by land for watercraft provided the most common and effective means of transportation. Thus, transportation by the seas has spurred the development of close cultural relationship throughout the region.[69] An examination of the cultural ethos of the various islands at Spanish contact also point to the seas as one fundamental base of culture. The geographical location of the people in separate yet adjacent islands contributed immensely to the formation of "cultural niches."[70]

History provides ample evidence indicating the vital role of the seas as the loci for the development of societies and transmission of trade and culture. For this reason, maritime trading occupied a central place in the economic life of coastal communities around the Visayas. Through this exchange, cultural relationships between and among inhabitants of the coastal communities have been fostered and enhanced. Moreover, the seas have also provided the stimulus for the movement of people from island to island impelled as they have been, and still are, by the effects of the two monsoon systems. Because of the changing monsoon patterns, for instance, fishermen move from one fishing ground to another in search of good fishing grounds.

Summary and Conclusion

As mentioned at the outset, this paper focuses on the role of the bodies of water in the etymology, folk tales, cultural affinities, and cultural consciousness of the region as basis for the development of a historiography of national history. It is evident that the seas provide the common backdrop for the region's folk tales as well as the basis for explaining the etymologies of native seed words and the origin of the names of islands. Although the Visayan seas may seem to the ordinary observer as mere bodies of water that divide the islands, they serve more purposes than just dividing. Folklore and early accounts provide glimpses into the role of the sea as shaper and purveyor of culture, source of food, and most of all, the link that connects people and culture.

As a preparation for the writing of a national history that encompasses the history of the various regions, this prologue draws inspiration from Braudel's studies on the Mediterranean world. Following Braudel's model, this paper uses the maritime

erspective for examining the role of the seas in the development f trade and exchange, seasonal variations and their effects on griculture and the economy, spread of ideas, development of orts, among other things. Specifically, the maritime perspective at this paper is espousing takes an anthropological view of the a as an ecological maritime resource. This argument is based n the belief that the sea serves as the basis for subsistence as ell as for social and cultural intercourse.[71] The seas have carried dventurers and traders across continents in search of products d markets—in short, a better life. As in the past, the seas continue disseminate new ideas, values, and attitudes across continents hile enriching cultures.[72]

This paper underscores the view that the maritime parts of e Visayas are central to the region's identity and cultural heritage.[73] argues that the concept of using the maritime perspective can lp in understanding the view that regional ethno–nationalism and hnicity is a product of colonization.[74] In developing a framework wards the writing of a national history, the seas can be an cellent link to the study of the historical discourse of a nation cause they provide the link to all. Throughout the history of mankind, the seas have played a vital role in the development civilization and culture through the exchange of knowledge, ods, and ideas. Thus, it is imperative that to be able to develop otal national history, a collective and collaborative effort is eded to unify all the texts transcending regional and cultural es.

The maritime perspective also shows that the Visayans derstood and continue to appreciate the immense importance the seas around them as vehicles of contact with and influence er neighboring peoples in a larger Asian setting. These waters ve brought foreign influence into our shores, which in turn ntributed to the enrichment of Filipino culture and opened up e archipelago to the larger ambit of trade and exchange. As storical records show, the early colonizers understood and ploited our knowledge of the seas and administered and lonized the islands by establishing trading posts and missionary tposts. On the pretext of a seaward expansion and security, the mericans, during their turn to colonize this country, used our as to overpower the inhabitants and assimilate the natives.

However, they were more concerned with the opening up of the islands' "non-Christianized" tribes rather than developing the sea-based and sea-related industries, overlooking the fact that the Philippines is a country which the sea unites what the land divides. In effect, the value of the sea in connecting the divided islands had been largely diminished. Nevertheless, that the sea is in the blood of every Filipino, that we continue the legacy of being masters of the sea, is attested by the presence of at least one Filipino in every ship that sails the seas around the world.

Notes

[1] According to Fernand Braudel's Mediterranean, the cutting edge masterpiece of history of our time, the history of events (*histoire & egravev & egravenementielle*) is "no more than the foam on the waves of the sea of history". In Braudel's view, "economic and social changes over the long term (*la longue duree & egravee*) and geo-historical changes over the very long term are what really matters." Cited in Peter Burke, (Ed.), *New Perspectives on Historical Writing* (University Park, PA: The Pennsylvania State University Press, 1992), http://xroads.virginia.edu/~DRBR/burkenh.html See also Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*, tr. S. Reynolds, 2nd ed., 2 vols. (London 1972), 3.

[2] For an example of the use of Braudel's methodology of total history as applied in Southeast Asia, see Anthony Reid, *Southeast Asia in the Age of Commerce 1450 – 1680* vol. 1, *The Lands Below the Winds* (New Haven: Yale University Press).

[3] This paper is aware of the challenge of Alfred McCoy for the need to work on inter-regional studies. See *Philippine Social History: Global Trade and Local Transformations.* Alfred A. McCoy and Ed. C. De Jesus. eds. (Quezon City: Ateneo de Manila University Press, 1982), 11.

[4] Peter Burke. (ed.). *Overture: the New History, its Past and its Future, New Perspectives on Historical Writing.* (University Park, PA: The Pennsylvania State University Press, 1992), 3.

[5] Warren D. Smith, *Geology and Mineral Resources of the Philippine Islands* (Manila: Bureau of Printing, 1924), 1531.

[6] Frederick L. Wernstedt and S.E. Spencer, *The Philippine Island World: A Physical, Cultural and Regional Geography* (Berkeley: University of California Press, 1967), 444. In this study Masbate, Romblon, Tablas, Sibuyan, Ticao, and Burias are not included because of their new political classification.

[7] Wernstedt, *The Philippine Islands*, 444 – 500.

[8] http://www.das-inselparadies.del/english/maps/Visayas html. P.1 using www.yahoo.com

[9] Yet the term is not even listed in the cultural dictionary. See *Cultural Dictionary for Filipinos* Thelma B. Kintanar and Associates (Quezon City: UP Press & Anvil 1996)

[10] In Sanskrit it means great victory. The notion that the term *Visayas* came from Vijaya is common. For example, Msgr. Guillermo Gaston during the 12th Regional Seminar Workshop on Oral and Local History in Bago City mentioned this in his paper presentation. See Bernardita R. Churchill, ed. *History from the People*. (NHI and PNHS, 1998), vol. 12:27.

[11] Although a study by Lourdes G. Gomez disproves this. See "Sri Vijaya and Majapahit," Philippine Studies, vol. 15, no. 1 (January 1967): 78, cited in Eufemio P. Patanñe, *The Philippines in the 6th to 16th Centuries* (Manila: LSA Press Inc., 1996), 253.

[12] Document of 1571 – 72 in Philippine Islands, 1493 – 1898. Emma Blair and James Alexander Robertson, eds. Mandaluyong: Cachos Hermanos Inc., 1973), vol 3: 147.

[13] Eric S. Casiño, "The Filipino Nation,"*The Philippines: Lands and Peoples, A Cultural Geography*. (Grolier International, 1982). 28.

[14] The ongoing debate in deciphering the true text is interesting. Patanñe explains this in detail on pp.92 – 96.

[15] This was the assertion of the Chinese scholar Liu te Chen as cited in Patanñe, 62 – 71.

[16] In Rizal's annotation of Morga's *Sucesos,* Leyte is also called Pai-Pu-Yen and Bohol is Pu-li-lu.

[17] This is due to the raid that they allegedly did in southern China (Guanzhou) in 1172. This book came out in 1349 entitled *Tao-I-Chi-Lioh* (*Summary Notices of the Barbarians of the Isles*). See Patanñe, p. 75 and in William H. Scott, Barangay. (Quezon City: Ateneo de Manila University Press, 1995). In Scott is an excellent discussion on the Visayan 16th Century Culture and Society.

[18] *A Dictionary of Cebuano Visayan.* vol. 1: 142.

[19] Rough translation means, "You are so ordinary." However, a recent movement alludes to "**Bisdak**" or **bisayang dako** (lit. big bisayan) to correct this prejudiced concept. The co-convenor of this 23rd PNHS National Conference, Dr. Madrileña de la Cerna, is an avid advocate.

[20] It would have been easier if he included in his discussion the seed words of the Visayan areas, but his inquiry offers fresh discourse about the ancestry of the Filipino people. See E. Arsenio Manuel. *Documenting Philippineasian.* (Quezon City: New Luna Press, 1994).

[21] Groups with cultural connections to the region and with one another, who are generally related to the Malays. see http://www.almanac.com.my/mal-info/background/e-pop01.html

[22] http://www.bethany.com/profiles/p_code6/873. Html using www.google.com

[23] Francisco Colin, S.J. "Native Races and Their Customs," Madrid 1663 as quoted in Labor Evangelica (Madrid, 1663) in Emma Blair and James Alexander Robertson, eds. *Philippine Islands, 1493 – 1898.* (Mandaluyong: Cachos Hermanos Inc., 1973), vol 40: 44. The same view is shared by Juan Francisco de San Antonio in his "Cronicas" (Manila, 1738 – 44) in Blair and Robertson, vol. 20 pp. 309 – 312.

[24] Resil Mojares and M.P, Consing, "Peoples of the Philippines." *CCP Encyclopedia of Philippine Art."*vol. 1 (Manila: Cultural Center of the Philippines, 1994), 206.

[25] This seems to be a corruption of the term "vaishyas." This source even declared that "Bisayans referred to merchants, an allusion that fitted well with the natives of Western Islands" although there was no proper acknowledgment of the source. See Lina Quimat, *Glimpses in History of Early Cebu*. (Cebu, 1980), 6.

[26] It is interesting to note that a sample of the "Lord's Prayer" in Bisaya (Sarawak) is very similar to the Cebuano version. One big question remains: Are these the same people coming from the Visayas in the Philippines or are they the direct ancestors of the Visayas as depicted in the early accounts from Panay?

[28] Francisco R. Demetrio, S.J. *Myths and Symbols, Philippines*. Revised ed. Metro Manila: National Bookstore, Inc. 1990, 6. as cited in *Philippine Folk Literature Series: The Myths*. Vol. 2. Damiana L. Eugenio ed. Quezon City: UP Press, 1996 xlvii

[29] William Bascom, "The Forms of Folklore: The Prose Narrative." *Journal of American Folklore, 78* (307) 1: 3–20 in Phil. Folk Literature, 20.

[30] See introduction in Philippine Folk Literature Series: The Myths. Vol. 2, Damiana L. Eugenio Ed.

[31] It is a love debate in song and dance by a man and a woman. The ancient term is **ayayi**. See Maria Colina Gutierrez, "The Cebuano Balitao and How It Mirrors Visayan Culture and Folklife," n.d., p. 3 as cited in Galang and Osias, *Encyclopedia of the Philippines*. Vol. 1 (Manila: P. Vera and Sons Co., 1935), 34.

[32] Felix B. Regalado and Quintin Franco. *History of Panay*. (Jaro: Central Philippine University, 1973), 2.

[33] Quintin B. Franco, "Source Materials in the Study of the History of the Island of Panay." (Unpublished Master's Thesis, CPU, 1956), 188.

[34] This pertains to the two dominant monsoon wind systems that influence the climate of the region.

[35]*CCP Encyclopedia of Philippine Art.* Vol. 2, p. 454. For the complete tale refer to *Philippine Folk Literature: The Myths*, 210.

[36] Legaspi's "Narrative of His Voyage," dated 27 May 1665 doc. 1565w from manuscript in Madrid, formerly MBU 170-20-3a, cajan 22; copy in Chicago Ayer ms. 1391; vol. Xx11, doc – 6. As quoted in *History of Micronesia: A Collection of Source Documents* vol. 2 compiled and edited by Rodrigue Levesque (Quebec: Levesque Publications, 1992), 135. This citation was made possible through the generosity of August de Viana of the National Historical Institute who provided the author a copy of the document as culled from his research in Guam.

[37] Leyte–Samar Studies. "Alzina's Historia de las Islas e Indios de Bisayas...1668. A translation of the Lenox Text by Cantius J. Kobak, O.F.M vol. IV no. 1 (Tacloban: Divine World University, 1970) p. 22 – 28.

[38] From the Italian Manuscript L 103 sup. In the Biblioteca Ambrosiana in Milan and trans. By Pinkerton as quoted in Levesque vol. 1, 209.

[39] From Pigafetta's Italian manuscript as well as in Combes, Francisco, S.J. "Historia de Mindanao y Jolo." (Madrid, 1667, col. 747)

[40] Montero Y Vidal. *Historia General de Felipinas*. 27.

[41] Combes, 747 in Kobak, 28.

[42] Kobak, 22.

[43] Literally means "Passage to Acapulco" *CCP Encyclopedia of Philippine Art.* Dr. Rolly Borinaga provided additional information during a discussion on November 21, 2002 at UP Cebu City.

[44]*Philippine Folk Literature*, 1. The whole text is found on p. 207 but the *CPP Encyclopedia* has a better version in vol. 1, 151 by G.E.P. Cheny with R. Javellana, S. Pilar, and E.A. Manuel.

[45] Combes, col, 764 as cited in Kobak, 28.

[46] Fernand O. Oliviera, Viagem De Ferñao Magalhaes "The Voyage of Ferdinand Magellan." From the original Portuguese manuscript in the University Library of Leiden (The Netherlands) by Piere Valiere, trans. By Peter Schreurs (NHI, 2002).

[47] "Socio-Economic Profile of Cebu City, 1980." From the Historical Data Bank of the National Historical Institute.

[48] *CCP Encyclopedia of Philippine Art.*, vol. 2:206.

[49] My research about the etymology of this term has yielded nothing and at present this is just a theory until a better one can be found.

[50] Teofilo del Castillo Y Tuazon and Buenaventura S. Medina Jr., *Philippine Literature: From Ancient times to Present.* (Manila: Bureau of Printing, 1964), 30–32.

[51] Regalado and Franco, 2.

[52] "There is bread on this land." See *CCP Encyclopedia*, vol. 1 p. 56 by R.C. Lucero with E. A. Manuel.

[53] Juan Fernandez, "Historical Annotations on the Island of Panay." (1967, p. 10) from a typed manuscript as quoted in Regalado, 2.

[54] Valentino Sitoy " The Making of Negros: A Brief History" In *Kabilin.* Merlie M. Alunan and Bobby F. Villasis, eds. (Negros Oriental: Negros Oriental Centennial Foundation, Inc., 1993), 2 as cited in Carlos Quirino, *Philippine Cartography*, 2nd ed. (Amsterdam: N. Israel, 1963), 31.

[55] Modesto P. Saonoy, *A History of Negros Occidental* (Bacolod: Today Printers and Publishers, 1992), 2-3.

[56] See Lapyahan (Dumaguete City: Diocese of Dumaguete, 1980)

[57] Mateo Sanchez, *Vocabulario de la Lengua Bisaya*, 1617.

[58] Literally means stupid or naïve. See the interesting article of Rolando O. Borrinaga "Lost Meanings in Biliran." in the Inquirer Visayas Section of the *Philippine Daily Inquirer*, October 5, 2002 as posted in http://www.geocities.com/bilirannews/whatname.html using www.yahoo.com

[59] Rolando O. Borrinaga "How Biliran Got its Name." Inquirer Visayas Section of the *Philippine Daily Inquirer*, November 25, 1999.

[60] Trans: "Only the seaweeds are keeping Siquijor from drifting elsewhere."

[61] http://www.wowphilippines.com using www.google.com

[62] Anna Eva Villanueva, Executive Director of the Guimaras People's Economic Foundation; interview with the author, Jaro Museum, Archbishop's Residence, Jaro, Iloilo. Oct. 25, 2002.

[63] *CCP Encyclopedia of Philippine Art.* Vol. 2, 440.

[64] Casiño, 176.

[65] Casiño, 179.

[66] The Boholano language is classified as a dialect of Cebuano with some phonetic peculiarity.

[67] The province of Aklan has a distinct dialect known as Kinaray-a.

[68] See William Henry Scott, *Pre-Hispanic Sources Philippine History.* 2nd ed. (Quezon City) which dismissed the manuscript as a historical hoax and of a more recent origin.

[69] Wernstedt, 470.

[71] See anthropological case studies in *Binisaya nga Kinabuhi (Visayan Life),* Iwao Ushijima and Cynthia Neri Zayas, eds. Visayas Maritime Anthropological Studies II, 1993 – 1995 (Quezon City, CSSP Publications, UP, 1996), 3.

[72] The Philippines in Pre–Historic Times: A Handbook for the First National Exhibition of Filipino Pre–History and Culture. (Manila: UNESCO, 1959), 25.

[73] Donald K. Emmerson, "The Case for a Maritime Perspective on Southeast Asia," Journal of Southeast Asian Studies, vol. XI, no. 1 (March 1980): 139. With special appreciation to Dr. Bernardita R. Churchill for sharing the manuscript with the author.

[74] Arnold M. Azurin, "Regional Ethno-Nationalism and Self-Determination Leading to National Consciousness." in *The Making of the Filipino Nation and Republic*, Jose V. Abueva, ed. (Quezon City: UP Press, 1998), 720.

NOTES ON CONTRIBUTORS

Alexander Volker Altenbach, Ph.D., is a lecturer at the Department of Earth and Environmental Science and a member of the GeoBio-Center for interdisciplinary research at the Ludwig-Maximilians-University in Munich, Germany. His research work includes more than 4 years of expeditions offshore and onshore in the Arctic regions as well as in Europe, Africa, Asia, and Australia. His professional experience includes a fellowship stint at the Australian National University in Canberra, chief scientist on research vessels, Dean of the Faculty of Geosciences at LMU Munich, and co-founder of the SciLab Ltd. for software and consulting in Hamburg. Mainly dealing with deep-sea research, marine food webs, and global biogeochemical cycles, Dr. Altenbach's studies follow the processes and prospects involved in environmental change.

Gina Fontejon-Bonior's professional life currently straddles the College of Education and the Department of English and Literature at Silliman University, both departments benefiting from her expertise and commitment to excellent education. Gina's graduate work in Second Language Studies at the University of Hawaii in Manoa as Fulbright Fellow has not only put her in touch with current theoretical paradigms and analytical tools, but has, in an even more meaningful way, sharpened her awareness of the existing asymmetries in society. Underlying her teaching practice is the exploration of the connection between literacy and power and the cultural, historical, and political context in which this connection is played out in order to stress the liberatory possibilities of education.

Earl Jude Paul L. Cleope, Ph.D. was the former Chair of the Department of History and Political Science at Silliman University. Currently, he heads the Office of Instruction at Silliman University. It is hoped that in this new position, his keen interest in critical pedagogy and his passion for historical research and folklore scholarship will not only imbue teaching and learning at Silliman with renewed

vitality, but situate them in relevant cultural and cultural context with the clear aim of using education as a means for seeking justice and democracy in society. He is an active member of the Historical Research Committee of the National Council for Culture and the Arts.

Arnold Demegillo is an agricultural technologist by training and works for the Department of Agriculture in Pandan, Province of Antique, Philippines. At the same time, he coordinates the education section of Wildlife Conservation Educators of the Philippine Endemic Species Conservation Program as well as the BIOPAT-Mabitang Project.

Douglas Fenner received his Ph.D. from the University of Pennsylvania, Philadelphia in 1976. In addition to studying reefs in the Caribbean, Hawaii, and several other locations in the Indo-Pacific, he has studied coral reefs in 11 different areas of the Philippines with a variety of conservation agencies. Much of his work has centered on coral species and diversity. In 1995, he joined a Coral Cay Conservation (CCC) expedition at Danjugan Island, Negros Occidental, Philippines as Science Officer, and began learning Philippine corals. He then spent a year working for the Center for the Establishment of Marine Reserves (CEMRINO), a European Union-funded project based in Dumaguete City, Negros Oriental. In early 1998 he accepted a position at the Australian Institute of Marine Science in Townsville, Queensland and worked with the eminent Dr. J. E. N. "Charlie" Veron, author of the 3-volume book "Corals of the World" (2000). Dr. Fenner is currently Chief Biologist at the Department of Marine & Wildlife Resources, American Samoa.

Maren Gaulke, Ph.D., is an authority on the biology of the Philippine water monitor lizard and is responsible for introducing to the scientific world for the first time in 2001 the existence of the rare arboreal lizard known as *Varanus mabitang*. When she is not tramping the hills and mountains

in the Philippines as project herpetologist for the Philippine Endemic Species Conservation Project in Panay Island, Dr. Gaulke divides her time as herpetologist for the Forschungsinstitut and Naturmuseum Seckenberg in Frankfurt and the Zoologische Staatssammlung in Munich. Dr. Gaulke's passion for biodiversity conservation of Philippine forests and wildlife is matched only by her expertise in herpetology and keen understanding of complex cross-cultural issues underlying the overall conservation of natural resource base.

Enrique G. Oracion is an Associate Professor at the Department of Sociology and Anthropology at Silliman University. Presently on doctoral study leave, he is on the last stages of dissertation writing. One of the most active and regular contributors to Silliman Journal, he finds the time, in the midst of this doctoral work, to pursue his research and scholarly interests and publish their results. His research work covers a multiplicity of areas ranging from integrated coastal management, women and gender issues, child labor, service learning, among others, making him one of Silliman's most experienced field workers.

Efren N. Padilla, Ph.D., was recently honored by his Alma Mater, Silliman University, as Outstanding Sillimanian in the field of Urban Studies. He is concurrently Associate Professor of Sociology and Social Services, Director of Urban Studies Program, and Adviser and Secretary, Minor in Filipino-American Studies at the California State University at Hayward. Author of *The American Urban and Regional Experience* (1996), and *Perspectives on Urban Society: Preindustrial to Postindustrial* (2005), Dr. Padilla finished his undergraduate and graduate studies in Sociology from Silliman University. A Fulbright Fellow, he completed his doctoral studies in the Urban and Regional Planning Program of the Michigan State University in 1987.

Peter E. Patacsil, Ph.D., passed away on March 31, 2005

as a result of an inoperable spinal tumor. A former naval officer, Dr. Patacsil was, during his lifetime, a very capable and popular mathematics professor. Although raised and educated in Guam and Hawaii, Dr. Patacsil remained to the end of his short but fruitful life in touch with his own Filipino and Chamorro roots, a background that enabled him to bring a passion and understanding to the subject of his paper included in this issue. Although his students and colleagues at the University of Guam will surely miss his presence at the mathematics department, they will also remember his keen and wide-ranging interest in history.

Peter Raines was, not too long ago, awarded UK's MBE for his work in biodiversity conservation. As founder and Managing Director of the UK-based Coral Cay Conservation, he has helped establish a number of long-term community-oriented coral reef and tropical forest conservation projects in countries including Belize, Honduras, Indonesia, Malaysia, Mexico, Fiji, and the Bahamas. For the past nine years, he has been working closely with the PRRCFI on numerous projects throughout the Philippines.

Ulrich Struck, Ph.D., is the scientific secretary of the GeoBio-Center at Ludwig-Maximilians-University in Munich, Germany. A specialist in environmental research related to stable isotope geochemistry, Dr. Struck is also the head of the Stable Isotope Laboratory of the Bavarian State Collection of Paleontology and Geology in Munich. His research fields include investigations of paleoclimate, eutrophication in coastal and lake environment, and associated processes. Most of his research has been carried out on ship-based scientific expeditions mainly in the Atlantic Ocean, Mediterranean, and the Baltic Sea.

Ryan Walker graduated from Kingston University in London in 1998 with a BSc (Hons) in Environmental Science. During his time at Kingston he became involved

with the UK based NGO Coral Cay Conservation, and so developed his passion for tropical marine conservation. After a couple of years working in the United States on a fisheries project, and a year spent in the dive industry as a divemaster, Ryan returned to the University of Newcastle to study for an MSc in Tropical Coastal Management. Since graduating in 2001 Ryan has been involved in fisheries and tropical marine natural resource management projects for a number of NGOs and consultancies in Indonesia, Philippines, Honduras, Madagascar, Fiji, and Mexico.

Call for Papers/Submissions to the *Silliman Journal*

Volume No. 47 Issue No. 1 2006

Silliman Journal is now accepting submission of papers to be published in volume 47 number 1 2006. The forthcoming issue will focus on the life and body of work of National Artist for Literature Edith Lopez Tiempo.

The deadline for submission is **30 January 2006**.

Please submit either three (3) word-processed, double-spaced hard copies on good quality paper to

Mr. Ian Rosales Casocot
Department of English and Literature
College of Arts and Sciences
1/F Katipunan Hall
Silliman University
6200 Dumaguete City
Negros Oriental, Philippines

A diskette copy of the paper, formatted in MS Word 6.0 should accompany the submitted hard copy. Or you can email the manuscript as an MS Word (.doc) or Rich Text Format (.rtf) attachment to **icasocot@gmail.com**

The submitted paper should also contain an **Abstract**. A cover letter, with an attached **bionote** of one paragraph, will be appreciated.

The manuscript submitted for publication should not have been previously published, nor currently being considered

for publication elsewhere. At the time of submission, the contributor should indicate if a modified version of the manuscript is being considered for publication elsewhere. *Silliman Journal* and the individual authors hold the copyright to the published articles.

Silliman Journal generally welcomes contributions in all fields from both Philippine and foreign scholars, but papers should preferably have some relevance to the Philippines, Asia, or the Pacific. **For this issue, however, all papers should tackle the life and body of work of National Artist for Literature Edith Lopez Tiempo.**

All submissions are refereed. Articles should be products of research, taken in its broadest sense. Authors are advised to keep in mind that the *Silliman Journal* has a general and international readership, and to structure their papers accordingly.

Silliman Journal also welcomes the submission of "Notes," which generally are briefer and more tentative than full-length articles. Reports on work in progress, queries, updates, reports of impressions rather than research, responses to the works of others, even reminiscences are appropriate here. Book reviews and review articles will also be considered for publication.

Manuscripts should conform to the conventions of format and style exemplified in a typical issue of *Silliman Journal.* Whenever possible, citations should appear in the body of the paper, holding footnotes to a minimum. Documentation of sources should be discipline-based. Pictures or illustrations will be accepted only when absolutely necessary.

All articles must be accompanied by an abstract and must use gender-fair language.

Call for Papers/Submissions to the *Silliman Journal*

Volume No. 47 Issue No. 2, 2006

Silliman Journal is now accepting submission of papers to be published in volume 47 number 2 2006. **The forthcoming issue will focus on the impact of the Electronic Age on the humanities and sciences.**

The issue aims to define the responses and accommodations of the disciplines to the unavoidable impact of the Internet and related technology. Papers may dwell on various issues such as Constructing Identity in the Computer Age (cybersexuality, cyberpsychology, cultural identity in cyberspace), Building Community in the Electronic Age (cellphone culture, virtual community, electronic democracy, the Global Village, e-business), and Seeking and Creating Knowledge in the Information Age (hypertext literature, cyberspace in literature, the electronic classroom, the Internet's impact on research and research skills, information overload, owning and sharing knowledge, robotics).

The deadline for submission is **28 February 2006**.

Please submit either three (3) word-processed, double-spaced hard copies on good quality paper to

Mr. Ian Rosales Casocot
Department of English and Literature
College of Arts and Sciences
1/F Katipunan Hall
Silliman University
6200 Dumaguete City
Negros Oriental, Philippines

A diskette copy of the paper, formatted in MS Word 6.0 should accompany the submitted hard copy. Or you can email the manuscript as an MS Word (.doc) or Rich Text Format (.rtf) attachment to **icasocot@gmail.com**

The submitted paper should also contain an **Abstract**. A cover letter, with an attached **bionote** of one paragraph, will be appreciated.

The manuscript submitted for publication should not have been previously published, nor currently being considered for publication elsewhere. At the time of submission, the contributor should indicate if a modified version of the manuscript is being considered for publication elsewhere. *Silliman Journal* and the individual authors hold the copyright to the published articles.

Silliman Journal generally welcomes contributions in all fields from both Philippine and foreign scholars, but papers should preferably have some relevance to the Philippines, Asia, or the Pacific.

All submissions are refereed. Articles should be products of research, taken in its broadest sense. Authors are advised to keep in mind that the *Silliman Journal* has a general and international readership, and to structure their papers accordingly.

Silliman Journal also welcomes the submission of "Notes," which generally are briefer and more tentative than full-length articles. Reports on work in progress, queries, updates, reports of impressions rather than research, responses to the works of others, even reminiscences are appropriate here. Book reviews and review articles will also be considered for publication.

Manuscripts should conform to the conventions of format and style exemplified in a typical issue of *Silliman Journal*.

Whenever possible, citations should appear in the body of the paper, holding footnotes to a minimum. Documentation of sources should be discipline-based. Pictures or illustrations will be accepted only when absolutely necessary.

All articles must be accompanied by an abstract and must use gender-fair language.