

METHOD AND HISTORY OF A MULTIDISCIPLINARY FIELD PROJECT : POPULATION AND RESOURCES OF SOUTH GUADALCANAL, 1971-75

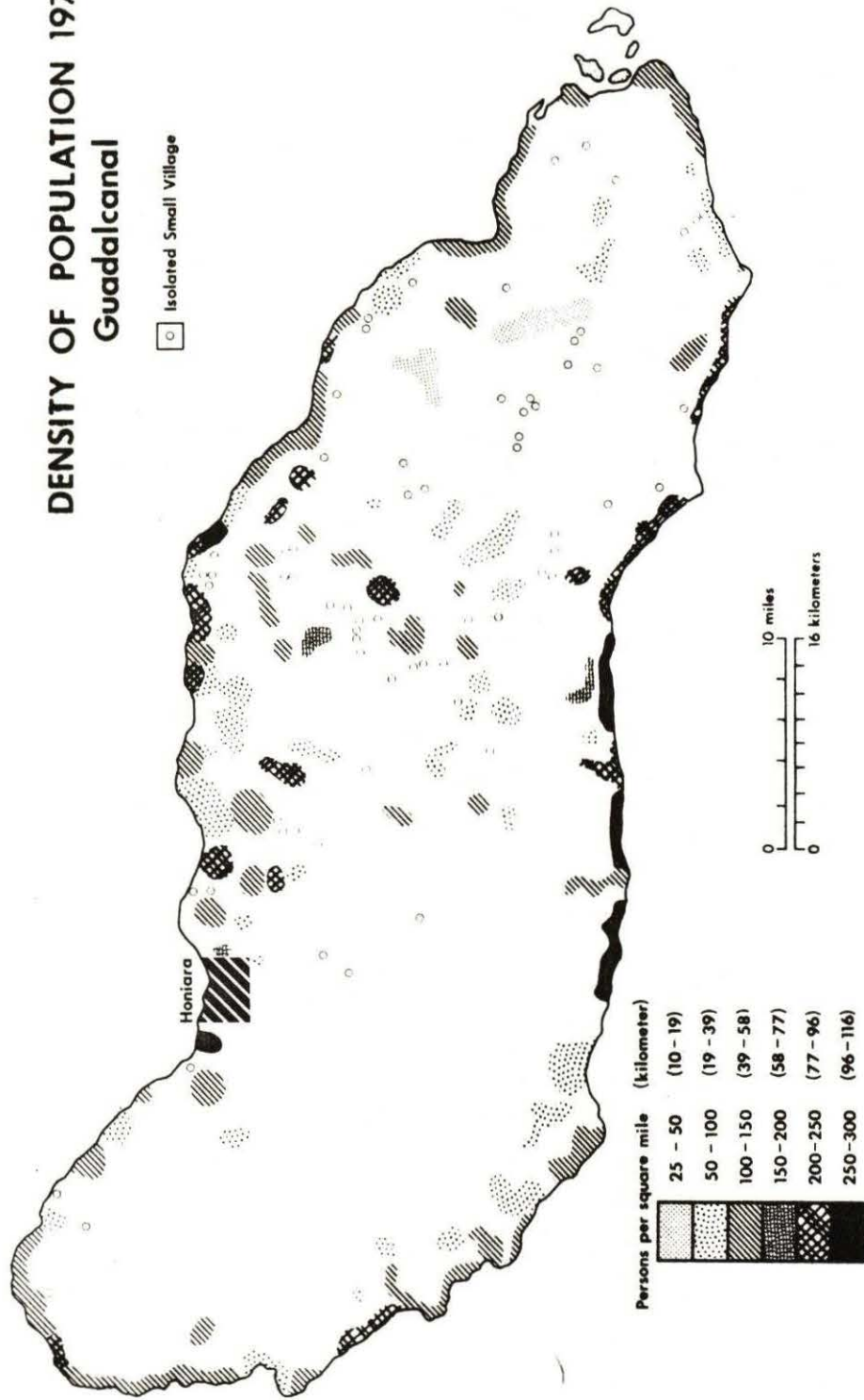
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The south coast of Guadalcanal, in the Solomon Islands, consists of a narrow strip isolated from the north coast by a mountain backbone that reaches its crest at Mounts Makarakoburu and Popomanaseu (2,330 metres). Exposed to strong prevailing winds for nine months out of twelve, drenched by daily showers, and made impassable after a day's rain by swiftly rising rivers, this locality is aptly known as the Weather Coast (Fig.1). To the people, the seas of the north coast appear 'dead' (tasi mate); at home on the south coast they become 'live' and devilish (tasi mauri).

This seemingly inhospitable environment accounts for one quarter of Guadalcanal's area yet within it live about 35 percent of the island's total population. District administration head counts in 1965 placed the number usually resident at 5,993. Most of the population are in coastal villages but about a third live inland up to twelve kilometres from the sea, a walk of as much as a day and a half. Despite the construction of some motorized cutters and three local airstrips (Fig.1), the Weather Coast is still relatively isolated from the economic and political power of north Guadalcanal. This, compounded by the independent spirit of the people, has led to their substantial sympathy with Moro of Makaruka, the leader of a social movement which aims at socio-political identity and economic advancement for not only the Weather Coast but also the whole island (Davenport and Coker 1967).

In 1968, a national survey of agricultural potential concluded that land resources on the Weather Coast were 'scarce relative to population, particularly compared with the areas of moderate and gentle terrain on the northern side of the range. Use of land was said to be relatively intensive, including the use of very steep unstable hill slopes. These are more or less scree slopes with continuous downward sliding of the gravelly soil material' (Leach 1969). Population densities in 1970 (Fig.2) were higher on the south than on the north coast and greatest in central and west Talise. The administrative officer most familiar with land use surveys in the Solomons commented: 'It appears likely that there is or will be a land shortage in the area, but at present we have very little data on

DENSITY OF POPULATION 1970 Guadalcanal



Data Source: Malaria Eradication Program (September 1970)
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Figure 2

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land and population and so only the vaguest idea of the problem'.

Brief discussion in late 1969 between personnel in the Department of Agriculture and the University of Hawaii led to the field survey that became known as the Guadalcanal Weather Coast Project. It was conducted under the auspices of the East-West Population Institute, Honolulu, between September 1972 and January 1973. The project aimed to investigate the population-resource systems of south Guadalcanal and to assess the extent to which they were susceptible to change. In this paper, one of the staff supervisors will detail the project design and a student team member will assess its execution. Since our purpose is to derive collaborative conclusions, divergent reactions have been deliberately retained. We completely agree, however, about the lessons to be learned from this multidisciplinary experience.

Project Design and History

As conceived in 1970, the Guadalcanal Weather Coast Project attempted to combine the practical concern of the Solomons administration about a people and its resources, with the academic interests of both the East-West Centre and the University of Hawaii. Over and above 9 preliminary reports on the land use and agricultural potential of Guadalcanal (Hansell and Wall 1970), basic data recently had become available from the first complete census in February 1970 of the country's population (Groenewegen 1972), from geological and soil surveys, aerial-photography, and partial coverage from topographic maps at a scale of 1:50,000. The difficulty for government was to relate such general or provisional information to a specific locality, such as the Weather Coast, and to the likelihood of population pressure. What was needed was regional data on demographic structure and dominant patterns of land use, which in turn would provide the context for detailed village surveys of subsistence agriculture, cash cropping, monetization, communications, education, and the allocation and use of time.

From the standpoint of training graduate students, this situation permitted an in depth exposure to field research while focussing in a rigorous way upon a locally defined problem - under somewhat arduous conditions. Again, the complexity of links between a people and their environmental resources demanded the perspectives from several academic disciplines, but for field control to be achieved on the spot by close supervision and the overlapping responsibilities of team membership.

The strategy which evolved was to locate student fieldworkers for up to four months at selected locations on south Guadalcanal. Most of these team members were to

have an interest in population pursued within the context of a social science, to follow a similar research programme at their particular site, and to collect data according to a sequence broadly determined during pre-field training. It was possible for other graduate students with different backgrounds, as in soils, vegetation, communications, and politics, to participate in the project, in which case they were to concentrate upon a specialist topic for a sizeable part of the Weather Coast, such as a language area, if not for the whole region. Two faculty members with joint appointments in the East-West Center and the University of Hawaii were to act as directors and be mainly concerned with in-field supervision of student participants, training in investigatory techniques, checking the field data for comparability and completeness, and with the project's overall co-ordination.

To ensure that academic needs would not override practical considerations, both the Solomons administration and the East-West Population Institute agreed to a set of formal arrangements. All costs were to be borne by the institute, on the grounds that the finance involved was beyond the country's budget and that sensitive investigations would be hampered if local communities were to view team members as government agents. Academically, furthermore, the project was helping the intensive training of graduate students in field methods and research techniques appropriate to the study of village populations. Logistic support, where necessary, was to be provided by the Solomons administration as well as access guaranteed to centralised and district-level records, and to manuscript materials then housed in Suva, Fiji, at the Archives of the Western Pacific High Commission. The Population Institute, for its part, assumed responsibility for the professional conduct of fieldworkers, restricted to the co-directors any public statements to the news media, and guaranteed the confidentiality of materials to which team members had been given special access by administrative sources.

Both parties to this agreement, well aware that co-operation between Pacific island governments and academic institutions is often more apparent than real, insisted that a draft report of survey results be submitted in advance of academic papers. Three months after this draft had been received, the Population Institute was granted the right to reproduce copies for a wider professional audience. It was anticipated that chapters prepared by student participants would help meet degree requirements. In the end, field data on south Guadalcanal was the basis for two masters' theses (Bennett 1974, Witt 1974), a graduate research paper (Freeman 1973), and a study of customary medicine (J. Foye 1976). All these were subsequently deposited in the national library of the Solomon Islands.

Project History

Two and half years elapsed, from December 1969 until June 1972, between the formal approval of a multidisciplinary team project by the Solomons administration and its initial approach to the University of Hawaii and the East-West Center. In between, the likely scope and content of research inquiries were twice discussed in Honiara with government officials: in November 1970 and again in May 1971. From these consultations there emerged a field programme concerned with five different systems: demographic, agricultural, money, communications, and socioeconomic activities.

The demographic system was to be identified through a population census and fertility survey. Census enumerators were to be Weather Coast people trained and supervised by team members, thus enabling more complex questions than had been attempted in the 1970 national census. In addition to the usual inquiries about age and number of children ever born, villagers were to be asked about the number of languages read and spoken, crops planted for cash, nature of their vocational training, moves made over short and long distances, and whether they were a person of the 'bush' or 'saltwater'.

Both the subsistence and cash-crop components of the agricultural system were to be investigated from the perspective of the region and of selected communities. For the former, a map of land-use and cropping patterns was to be prepared, mainly on the basis of a new air-photo survey, and then related to results obtained in 1968 by the land resource team from the British Ministry of Overseas Development. Community studies, on the other hand, were to be made by fieldworkers observing agricultural activities for three to four months and then reconstructing by systematic interviews the usual pattern of activities for other months of the year. Apart from the variety of physical environments thus covered, it was hoped that such specific inquiries would yield information on leadership, land availability, workforce, and marketing.

By the early seventies, money had only been in regular and widespread use on the Weather Coast for about a decade, as opportunities for wage employment had increased and the availability of transport improved. Nonetheless, monetization was elementary and cash incomes distributed very unequally among households. Recognising the sensitivity of this topic, it was planned to restrict questions on the use of money to the end of the project and to ask them only at sites where the relationship between fieldwork and village residents suggested they would not offend.

It was important to collect data on the kinds, quality, and effects of communication links throughout the Weather Coast, since isolation and indifferent communications had been commonly identified as a major drawback. Apart from details of various modes of transport (shipping, local canoes, aircraft, bicycles, on foot) and of receiving information (transistor radios, letters, official newsletters, language), team members were to examine barriers to communication and the part that accessibility played in the location of schools, churches, and trade stores.

Until the turn of this century, subsistence and warfare were the two activities absorbing the most time and interest of Weather Coast communities. Since then, the ways and priorities of allocating time had changed greatly but the exact details were unknown. To this end, it was proposed that fieldworkers maintain work diaries and activity logs for selected villagers so as to catalogue the time spent in not only subsistence gardening and cash cropping but also food preparation, wage labour, travel, the creation and maintenance of capital goods (houses, boats, tools), political and social gatherings, and leisure. From this it was hoped, somewhat optimistically, to estimate the labour potential of the Weather Coast population.

To implement this rather ambitious format, students from a range of disciplinary backgrounds were sought among those holding graduate scholarships at the East-West Centre. When detailed interviews were completed in May 1972, two masters' candidates had been selected from each of economics, political science, and public health, and one each from agricultural economics and oral history. Willingness to participate in the project demanded a three-semester commitment, which began in summer 1972 with a seminar in pre-field training, followed by research on the Weather Coast supervised by the two directors (September-December 1972) and a post-field seminar devoted to the processing, analysis, and preliminary drafting of project results (January-May 1973).

Determination of village sites was critical, given the plan of locality-intensive research to augment the general information available to government. Conceptually they were to encompass a range in population pressure from virtually none to very considerable, and in practice to indicate the variety of lifestyles, society, economy, and politics found throughout south Guadalcanal. In January 1972, the co-directors selected six of eight possible villages during a twenty-five mile walk that was not aided by the intervention of Cyclone Carlotta.

At Wanderer Bay, the western end of the region (Fig.1), Sughu ('the harbour place') was chosen for its relatively high density of population along and near the shoreline, for its role as an anchorage point and sub-district centre, and for an above average cash income derived from the sale of copra and root crops (kumara, yams). The second site, the inland village of Ghauvalisi ('the place of the special bamboo with the variegated leaves'), was located in the Tina River valley. Settlement in this valley, the only part of the Weather Coast with relatively gentle topography and riverine soils, dates mainly from the Second World War. The Koloula River valley, in which the Utah Mining Company were then prospecting for copper, was an equally obvious choice, given that there was also some apparent population pressure. The community chosen, Aona ('the far away place'), was one of those established in 1965 following massive flooding and landslides. Malagheti, centre upon Vatumanivo ('place of the hornet rock'), was reputedly an area of great population density. It was also selected for the frequent movement of people between nearby coastal villages, its important and traditional role as a source of wage labour for north Guadalcanal, and some recent attempts at the cash cropping of cacao.

At the time of field inspection Makaruka, the headquarters of the Moro Movement, had between 750 and 1,000 persons in residence - many more than the de facto population of 434 enumerated in the 1970 census (Groenewegen 1972:160-1). The movement's leaders felt this marked concentration was leading to shortages of land for food gardens and was only partially offset by cooperative attempts at socio-economic development (production of tobacco, copra, pigs, and a local trade store). The sixth field site, Hatara, was located near Marau Sound at the eastern end of the Weather Coast. A community of immigrants from nearby Malaita, it exported considerable tonnages of copra through an all-weather anchorage and had easy access by road or canoe to the nearby facilities of the government station at Manikaraku and the Roman Catholic mission of Makina (Fig. 1). While the combined population of these six field sites was unknown at the time of selection, a subsequent print-out from the 1970 census tape suggested they accounted for fifteen percent of the Weather Coast total.

On 26 September 1972, following three weeks of orientation, training, and finalisation of field plans in Honiara, the team left in two ships for some isolated living on the Weather Coast. Both students and directors resided in leaf houses in their respective village communities, which ranged in size from 30 persons to more than 270. During the previous three months, contact had been made with local leaders and talks in Pidgin

about the project heard on the Solomon Islands Broadcasting Service. In addition, a statement in simple English had been translated into Birao and Gari, the two major languages of the Weather Coast, and distributed to all villages, schools, missions, and plantations.

In-field supervision of the western sites (Sughu, Ghauvalisi, Aona, Vatumanivo) was achieved from Duidui (Fig. 1), of which people one director had extensive knowledge, and of the eastern sites (Makaruka, Hautahe) from Haimarao, where proximity to an airstrip permitted easy access to Honiara. A radio transceiver was allocated each site to facilitate regular contact between team members, supervisors, and the main town. A fibreglass canoe, twenty-four feet long and powered by an outboard engine, was available for emergencies and to enable quick transport between coastal sites during periods of calmer weather. Each team member was supplied with a medical kit, including a booklet updated by the Medical Department on the diagnosis and treatment in the field of common complaints.

In addition to supervising a regional census, all participants collected site information on fertility behaviour, population movement, economic activities, health, education, and communications. More detailed and more consistent data on each of these topics were acquired from several communities by dividing the team into small working groups, better to reflect personal interests and graduate specialties. The working group on agricultural and economic activities (Robert Freeman, David McLure, Elizabeth Muhr Kaminaka, Eric Witt) took inventories of household possessions, mapped food gardens, and investigated the nature and effectiveness of agricultural extension services. Most difficult of all, daily production and consumption figures were collected for several households in and around their village sites during different weekly periods (Witt 1974).

Jane Tanner Terashima and Thomas Foye were responsible for two fertility surveys: one of the Birao, the largest language area of Guadalcanal, and the other of Ko'o, a small, tightly-enclosed valley east of Duidui (Fig. 1), whose inhabitants are staunch supporters of the Moro Movement. In these surveys, 142 married persons were asked about their children, their attitudes toward having larger or smaller families, and their knowledge of customary and introduced means of spacing or limiting children. For the Birao survey, Foye collaborated with Martin Avasi, a Weather Coast man from Balo, near Makaruka, who had sixteen years' experience as a medical assistant in rural health clinics.

Judith Bennett, who was responsible for demographic history and settlement change, walked the entire length of south Guadalcanal to identify elderly persons who might

recall previous distributions and socioeconomic characteristics of the population. Each of her 106 interviews was tape recorded and techniques of oral history were used to reconstruct shifts in population patterns since 1870, as well as the relocation throughout this century of communities from the ridgelines to valley floors and coastal perimeter (Bennett 1974).

Four wives accompanying the team also contributed materially to the collection of field data. Keri Freeman, a master's student in education, focused upon the Tina River valley as an example of the village end of the system. She interviewed parents, teachers, and pupils in elementary schools and tested classroom materials being developed by the curriculum unit of what was in 1972 the Department of Education (Freeman 1973). Wanda McLure and Judith Foye, respectively physiotherapist and trained nurse, investigated the relationship between customary and introduced medical systems (McLure 1973, J. Foye 1976), while Linley Chapman, who had lived on the Weather Coast for thirteen months during 1965-67, did extensive questioning on fertility behaviour, child rearing, and nutrition.

The last team members left south Guadalcanal early in January 1973. Before departing the Solomons, as previously agreed, the provisional results of the regional census taken on 27 November 1972 were released through the Department of Information and Broadcasting (Chapman and Pirie 1973). Upon return to Hawaii a brief, illustrated article written in simple English (Chapman and Pirie 1974b) was distributed to all headmasters of Weather Coast schools, through the good offices of the Department of Education. In an attempt to communicate with local leaders and villagers who neither read nor spoke English, the hope was expressed in a cover letter that each headmaster would 'put this story in your classroom, so that all your pupils see it, since their parents helped us very much and we would like them to know that we do not forget them. Perhaps what our story says could be told in language to the younger pupils, some of whom played with our children'.

Although the preparation of field results took far longer than planned, the draft report, Tasi Mauri (Chapman and Pirie 1974a), reached the Solomons in December 1974, slightly less than two years after the team's departure. Because this draft was essentially a compilation of field and documentary evidence, the project history, the various research instruments, and the basis of their utilisation were deliberately omitted. Similarly, no policy implications were drawn, but instead were presented at a public meeting in Honiara, at a seminar with permanent heads and advisors of all government departments, and by private briefings to the then Chief Minister, Solomon Mamaloni, and several of

his ministries (Health and Social Welfare, Agriculture and Rural Development, Education and Cultural Affairs).

This tactic of on-the-spot briefing was consciously adopted so that field results and their implications could be conveyed frankly to interested parties, without the project becoming involved in local controversies or offending political sensitivities. Thus, at the seminar organised in January 1975 by the Central Planning Office, the youthful structure and rapid growth-rate of the Weather Coast population was emphasized, as well as its bearing upon programmes of village-oriented development, family planning and health, a regional system of transportation, and forms of education more relevant to village hopes and aspirations.

FERTILITY SURVEY: SOCIAL REALITY
VERSUS PROJECT IDEALS

In any field inquiry, the confrontation with social reality means that academic objectives and research ideals rarely survive in undiluted form. Previous attempts by foreign investigators to obtain information from Pacific Island societies about attitudes toward the spacing and limitation of children range from the superficial to the notably unsuccessful. With these inauspicious precedents in mind, an attempt was made to elaborate the fertility data obtained in the project census (27 November 1972) by conducting a formal survey in two language areas and to complement this by indepth discussions with several communities in Bota Moli, including Makaruka (Fig. 1). This survey and related interviews about population attitudes permit a brief test of how far the project's ideals were sustained in practice.

The fertility study aimed to elicit information on contemporary knowledge, attitudes, and practices of selected men and women toward family planning: that is, a KAP survey. Unstructured interviews, by contrast, were to expand upon sensitive issues and to permit reconstruction of pre-contact behavior. Official concern in the Solomons about population attitudes dates from about 1969 and family planning has always been addressed within the context of maternal health. In February 1970, an overseas consultant had recommended that 'family planning facilities' be provided 'in the rural health services! The Department of Medical Services suggested that a regional survey of fertility be added to the project proposal, since lack of basic information meant that a restricted study, as of the Weather Coast, could help clarify the people's reaction to such personal inquiries.

The possibility of meeting this request occurred with the selection of two team members, who were pursuing masters degrees in public health and had previous experience in family planning. During the three months before departure to the Solomons these two students, Jane Tanner Terashima and Thomas Foye, drafted a questionnaire by comparing their experience in Micronesia and Vietnam with a model prepared by an expert group of the International Union for the Scientific Study of Population (Population Council 1970: Appendix). Soon after arrival in Honiara, their draft was evaluated by medical officials, including Solomon Islanders, and this continuing co-operation led to arrangements for a pre-test in a village near Visale, northwest Guadalcanal (Fig. 1).

On the day of the pre-test, the selected villagers were away in the food gardens and a random assortment of individuals working nearby were interviewed. Health aides from Honiara acted as intermediaries but all questioning was in Pidgin. For seasoned fieldworkers, the result was sobering. Questions, being often hypothetical, aroused bewilderment; answers as a result were vague; and explanations about the wording of a question became so detailed as to determine their eventual answer.

This experience would have been daunting had prior arrangements not been made for a Weather Coast man to be jointly responsible for the fertility survey. One positive result of being stranded by Cyclone Carlotta in January 1972 was to learn that Martin Avasi, Senior Medical Assistant at Avu Avu rural hospital (Fig. 1), had applied for a year's leave to spend more time with his family. Not only was Martin Avasi well liked by the people, but also his home was located within Birao, the major language area of South Guadalcanal. Over several years, he had received many unannounced visits from village women to inquire about introduced methods of birth control. The Department of Medical Services warmly endorsed the suggestion that Martin Avasi become an integral part of the fertility study and receive the same payment as the overseas participants.

Immediately upon arrival on the Weather Coast, Thomas Foye and Jane Tanner Terashima joined Martin Avasi to translate the draft questionnaire into Virao and Ko'o, the two language areas chosen to be surveyed. Of the two, the Ko'o is more isolated, with its population of 400 concentrated in inland settlements (including Aona: Fig. 1) around the Koloula Valley. The Virao is, by contrast, perhaps the most heterogeneous area on the Weather Coast, extending from Avu Avu in the west to Kopiu Bay on the coast and inland to the mountain crestline, with a sizeable bush and saltwater population of about 3,000.

Interviews were to be conducted by speakers of each language and questions asked by those of the same gender. Those hired were familiar with the area to be surveyed, able to read and write their own language, and acceptable to the village communities being studied. An intensive training programme and subsequent pre-test revealed serious problems of communication. In particular, interviewers misunderstood many questions; villagers were generally perplexed by the topic; and many people regarded some subjects as sensitive: as, for example, the traditional methods of abortion and preventing pregnancy (cf. J.Foye 1976). This result produced great dismay, given the care taken with training and the complementary fact that all interviewing was done in local languages and by persons well known in the two study areas.

The riddle was unlocked by the fortuitous presence at at Avu Avu mission of Father William van Duin, a fluent speaker of Birao and for twenty years resident at either Makina or Avu Avu (Fig. 1). His painstaking scrutiny of the English original and its Birao translation revealed the latter to be couched in formal terms, whereas idiomatic usage was necessary if ever communication was to occur between interviewers and village respondents. Drawing upon fertility studies conducted in Black Africa, Lucas and Ware (1977:233) report parallel difficulties with translation and retranslation. In Nigeria, for example, a literary translation of questions from English to Yoruba resulted in a lower response rate in poorer and less literate areas (Caldwell 1974:17).

With this salutary experience in mind, a second period of intensive training focussed upon the meaning of questions and the reasons for asking them. Much time was spent on those for which replies were structured in terms of a multiple choice, which were causing particular difficulty for most interviewers as well as for the local speakers who assisted in retraining. In the end, 103 men and women were questioned from the Birao and 39 from Ko'o. Although the formal survey was generally successful, it was found necessary to probe for detailed responses to unstructured questions and therefore likely that interviewers, in their enthusiasm, had suggested the appropriate answers to relatives, friends, and acquaintances. In this sense, even the final questionnaire was a pre-test which, as the Department of Medical Services originally envisaged, had helped clarify the kinds of questions able to be asked of village residents, the quality of information that might result, and whether different methods of inquiry might have been more appropriate.

Far more detailed and less doubtful information on attitudes toward population control was acquired through discussions with 23 men and 22 women resident in six communities centred upon Makaruka (Fig. 1). All these were people with whom two members of the team had established good rapport; discussions commonly lasted an hour or more and were informal and unstructured. Initially the dominant concern was with general topics, from which emerged specific questions and sensitive issues: such as the role of food shortages in pre-contact fertility.

Free-flowing discussions thus provided the most reliable information about traditional methods of and attitudes toward the spacing and limiting of children, and in particular about the existence of postpartum taboos, infanticide, abortion, polygamy, prostitution, and customary medicines for preventing or aiding conception (T. Foye and Tanner 1974:10-18). The formal survey, by contrast, yielded accurate details on the number of children ever born, the intervals between children, and the knowledge and use of introduced methods of birth control.

Although at times the fertility component of the Weather Coast study was threatened by embarrassing failure, ultimately it demonstrated best of all the project's goals and underlying philosophy. First suggested by a department of the Solomons administration, over four months this topic had involved a working partnership of team members with government officers and Guadalcanal politicians, Solomon Islanders in training, resident expatriate experts and Weather Coast leaders, local interviewers and the villagers themselves.

STUDENT CRITIQUE

My mandate to assess the Guadalcanal Weather Coast Project from the Viewpoint of a student member has increasingly drawn me into a dilemma. On the one hand, it is possible to examine the rewarding experience of my own participation, while on the other the project's relevance to other students, specifically Melanesian, can be closely questioned.

Personal considerations

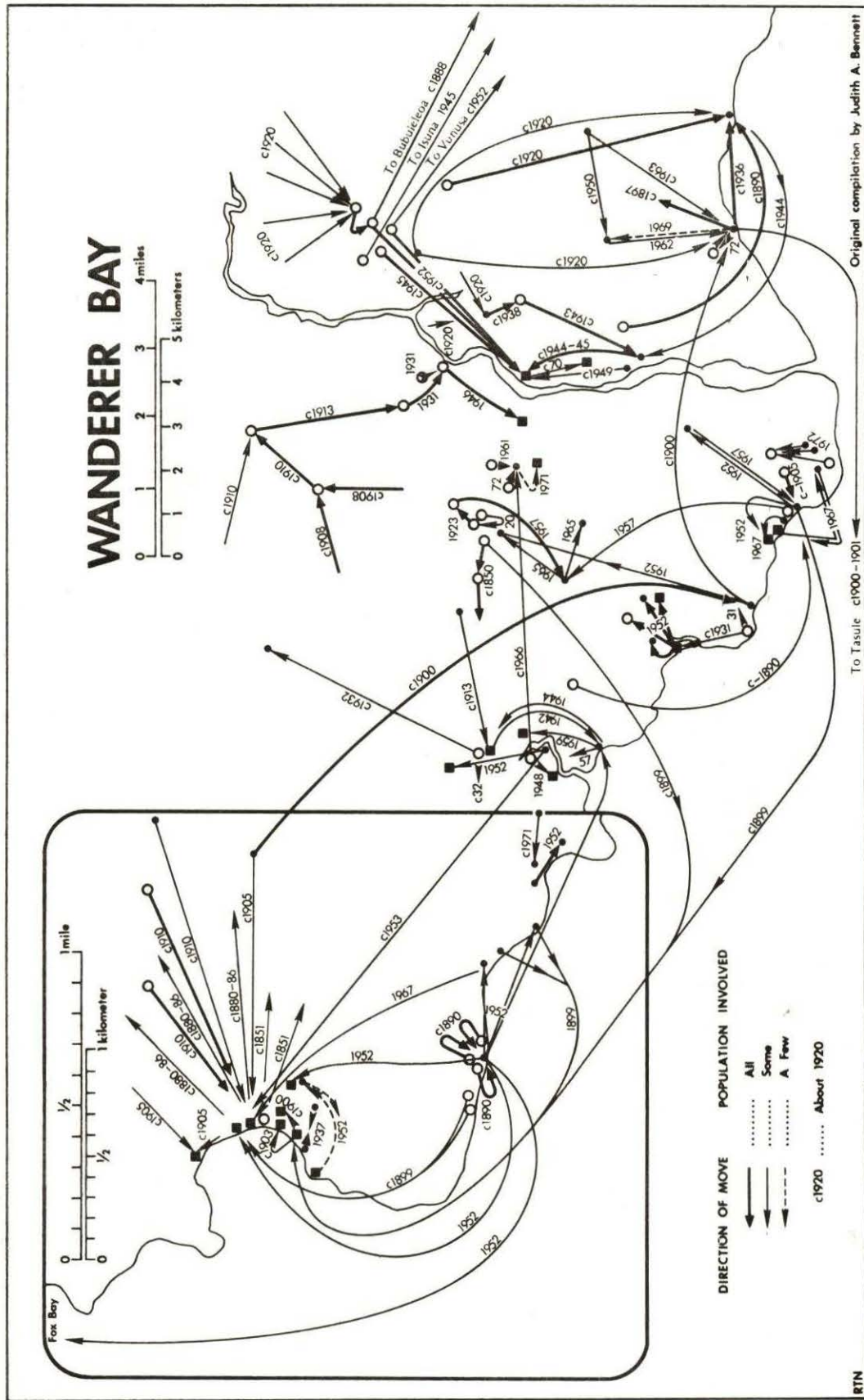
To me, as a student enrolled during 1972-74 for a master's degree in Pacific history at the University of Hawaii, this project was invaluable. Few master's students have the opportunity for training in field research outside their own country. As one who later undertook doctoral studies and further research within the Solomons (Bennett 1979), those four months in the field provided a strong dose of reality. This was also true for the other student members and, indeed, caused one to dismiss the idea of doctoral study.

Perhaps the best feature of such a project was its multi-disciplinary approach. My own discipline is history. The aim of the historian is to reconstruct the past and to explain the genesis of the present condition of humanity. This is a formidable, if not overwhelming task. The segment of humanity which was my concern was the people of the Weather Coast and the basic task to discover how and why villages had been resited since 1900 from the mountain crests to river valleys and the coast. In doing this I used the conventional documentary approach of the historian, but in addition collected oral history from the villagers themselves.

Here I found myself introduced to the historical calendar, a tool used by the project to estimate age and other demographic events among the predominantly non-literate population. This method 'essentially involves the linkage of recollected public events with personal activities or events which occur within a known and restricted age range' (Scott and Sabagh 1970:94). It was first employed as a field technique in 1865 by Oldenfield, working among the Australian aborigines, and it enabled me to date unrecorded events in the lives of people being interviewed (Bennett 1974:xii-xix);(cf. Bennett 1980). Thus began my debt to the demographer, and later to the geographers, economists, educationalist, political scientists, public health specialists, and the environmental analysts.

Back in Hawaii with the help of a patient geographer and a sensitive cartographer, I learned that a map can facilitate the description and analysis of field data about village relocation. In the absence of detailed maps for Weather Coast localities, the reconnaissance sheets updated in 1971 by the malaria eradication campaign were used as a base to plot the past and present locations of village communities. Information gleaned from villagers, archival documents, field observations, and secondary literature added historical depth to these contemporary field maps, but meant that the location of many former villages was approximate rather than precise (Fig. 3). Five composite maps were constructed in this way for the Weather Coast as a whole, on each of which was recorded the general direction since 1950-1900 of village-to-village movement, the estimated proportion of people involved for each transfer, and the likely dates at which these transfers occurred (Fig. 4). By concentrating upon spatial representation, the full implication of trends in population movement since 1870 became far clearer than by using conceptual and textual analysis alone. What had begun as an exercise in plotting field data emerged as an integral part of my analysis of population history (Bennett 1974:185-97).

Consequently at the beginning and the end of my research, I drew heavily on the expertise of my fellows in other disciplines. Working with them in the field also yielded an appreciation of techniques basic to their respective approaches. Along with this, and the obvious logistic and psychological benefits to the team members involved, the multidisciplinary approach gave the project a broader validity than would have been the case had it been staffed by, say, geographers alone. It is the exceptional geographer who is concerned with an historical perspective of eighty to a hundred years, and it is an exceptional geographer who examines the current process of formal education in the classroom of an isolated bush village. With a group of individuals from various disciplines looking collaboratively at the problems associated with population and resources, there is greater possibility



of examining the situation 'in the round'. There is also far greater potential for seeing the community concerned as human beings, rather than as things or instrumentalities involved in an abstraction labelled 'the demography' or 'the economy'.

Although the methodology of such an approach has many advantages for the overall analysis of population-resource questions and for the particular students involved, the institutional framework within which this field study was conducted imposed certain undesirable constraints. And herein lay the genesis of many of the project's weaknesses.

Student participants had only a limited time of six months (June-December 1972) sandwiched between one semester and another for pre-field training and actual field research. Had the University of Hawaii and other tertiary institutions more flexibility, then greater time could have been budgeted in the Solomon Islands for the compilation, pre-testing, and refinement of such field instruments as the agricultural surveys and the census. To be asked to comment upon a draft census schedule read out for the first time during regular radio contact among team members is certainly a novel approach but hardly very effective. Because of their lack of familiarity with the local environment, students were not always completely clear about the final form of their individual research projects. The difficulties of reconciling this fact with the certain need for subsequent revision, once confronted with the realities of the field, would have been resolved more effectively had more time been available, if not at the village site then at least within the Melanesian milieu of Honiara town.

In the follow-up at Honolulu the contingencies of other university studies, plus impending graduation, hindered the completion of data analysis and field summaries. Most student participants had left Hawaii and secured employment before the bulk of the report was in even crude manuscript. Had it not been for the sheer stamina of one project director, the patient editorial pen of Linley Chapman, and the continuing and staunch support of the Population Institute at the East-West Centre, it is clear that the draft report (Tasi Mauri) would never have been completed.

This raises a rather obvious point: that any field project of this magnitude needs committed, competent leadership, and directors familiar with the research location and people. Commitment is necessary because a director has to be prepared to spend many weeks in the pre-field training of team members involved. Developing reading courses, arranging lectures by experts in a particular speciality, organising language study, negotiating clearances for students with their university departments, showing films

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of the field site, and criticising individual surveys and topic outlines are as much the staple of the director's responsibility prior to departure as arranging entry permits, field equipment, and transportation. Once at the survey site, the calls for advice and help by students at the master's level multiply rather than diminish. And, as in our case, a director often has to be the persistent spirit to ensure a project's successful completion: doggedly collecting the overdue draft chapter, mulling over problems of graphic representation, producing interim statements for the reaction of government, local, and academic representatives The list is endless.

Implied in this is a high level of competency. In a multi-disciplinary project such as ours, the director needs not only to have considerable expertise in his own field but also sympathetic understanding of the other disciplines in which student members have been trained. For those few who have all these attributes, then it should be added that he should be a reasonably proficient swimmer, be able to run a motorized canoe without capsizing passengers and crew, and be capable of a two-hour sprint up a rocky river bed to explain in pidgin English to concerned village elders that team members are not about to steal the people's land. And above all, still maintain his equanimity.

These are the everyday occupational requirements of a director. They can only really be envisaged if one is familiar with the research locale and its people. We were fortunate that one of the co-directors had spent eighteen months on the Weather Coast during the mid-sixties when gathering data for his doctorate (Chapman 1970). The network of contacts established both at that time and through subsequent visits made it relatively easy to introduce eight graduate students and three spouses into this isolated area without causing undue concern. A knowledge of the locality not only helps to prepare the people for the students, but also the students for the people. Few master's candidates from a Western university have lived in a foreign country for an extended time without the cocoon of air-conditioned hotels, familiar food, and the support of family or a substantial expatriate community. Of those, only the odd one or two would have spent any time in Melanesia.

Perhaps we were an unusual group - but then the East-West Center is an unusual place. Excluding the co-directors, there were three Americans with grass roots experience in Samoa, Vietnam and Micronesia, one Papua New Guinean, two Americans who had travelled extensively, one Australian who had lived five years in Papua New Guinea, and four Americans without any significant overseas experience. Despite this background and all our training, there were quite discernible cases of culture shock. Many just sat around the village sites for the first few weeks coming to terms with the new environment; one of us, with the negative push of facing

village life alone for the first time in years and the positive pull of national politics in Papua New Guinea, attended a seminar on Bougainville and never returned. A few did not reduce their individual research topics to meaningful form until the last month of four, being still fixated conceptually by the rather grandiose scale of laboratory-like research conveyed in university classrooms instead of what actually exists in a south Guadalcanal village.

Culture shock is a very real problem in cross-cultural research and multidisciplinary projects. It can be minimized by careful preparation and wise administration in the field. But the only cure is time which, as mentioned earlier, was a very scarce commodity in the face of demands by university timetables, funding agencies, and the actualities of a rugged environment.

Unique Concept - Success, Failure, Possibilities

As previously mentioned, the Guadalcanal Weather Coast Project was born of local and, to some degree, national needs in the Solomons. In itself, this was a refreshing change. Too often in the past academics, particularly social scientists, have looked upon the scattered Pacific realm as a giant laboratory with the people as mere subjects. At best, a somewhat bewildered village supplied the raw materials for a doctorate or for perhaps a learned tome on garden magic; at worst, whole communities have been violently disturbed and even suffered physically, as in former West New Guinea during the making of the film 'Dead Birds' which involved the collaboration of an anthropologist.

It is perhaps unnecessary to state in the early eighties that island governments and communities are increasingly critical of such waste, arrogance, and exploitation. In Fiji, Papua New Guinea, and the Solomons, researchers must comply with quite stringent conditions. In today's Melanesia, the relevance of social research must be geared to local and/or national interests. In the Solomons, for example, an adhoc committee exists to review any requests for a research permit. 'It would be a great help', wrote one senior official, 'if people applying could be a little more precise in what they really want to do, and perhaps give a little more idea of how they see such a project helping the Solomons, or being relevant in some way to the aspirations of a developing country with very little money, members of which see vast sums being spent on some research projects which to them are totally irrelevant. Academic exercises are in themselves not acceptable'. But in 1970 when this project was first mooted it was, to the best of my knowledge, unique in both philosophy and methodology. It developed out of the needs of the Solomon Islands' government and some of its agricultural officers posed the questions that underpinned the field enquiries. Students in Hawaii who were interested became team members and partly adapted their individual research plans to fit the project's overall structure. Let us be realistic: topics for a master's degree are incredibly malleable,

particularly if there is the opportunity to combine academic training with work that is of practical utility to someone,

Integral to the philosophy and methodology of this team research was the involvement of local people, the Solomon Islanders themselves. While we received un-failing and generous help from Weather Coast villagers and other Solomon Islanders - not just as informants but as colleagues and critics - we failed with those who one day will be in the position of initiating and leading similar research: the country's university students. Being a graduate student at the time, this deficiency bothered me and continues to do so. It has led me perforce from the somewhat narrow consideration of project methodology to the perilous area of ideology. Earlier it was mentioned how the structuring of studies within the University of Hawaii limited the project's flexibility and, as a result, the final research product. It seems that much the same problem exists for the universities of Melanesia.

One of the project's aims was to involve Solomon Islanders engaged in degree work at the University of the South Pacific and the University of Papua New Guinea at Waigani. Although such students would only be available from four to six weeks after final examinations, it was felt they would gain some experience of research methods, be exposed to village communities different from their own, and earn money during their vacation period. In 1971-72, the co-directors attempted to see how many Solomon Islanders might be interested in active participation. Unfortunately the University of Papua New Guinea was in recess at the time of a preliminary visit and so little was achieved. The Solomons government warmly endorsed the suggestion that undergraduate students at the University of the South Pacific be released and given some course credit for supervised fieldwork. No students in residence at Suva followed up this idea, although some initially expressed interest at an informal meeting with one project director in December 1971.

The basic reason for this reaction was that the concept of a working partnership between expatriate and island students was in large measure ahead of its time. At the University of Papua New Guinea, it was only in 1972 that groups of social science students were involved in courses which included fieldwork in non-urban locations. The initial difficulties encountered with more mature students in these groups caused their organizer, John Powell (1974:222), to conclude that the university had 'done much by default to encourage the creation of an elite which threatens to become dangerously isolated from the mass of the people'. Powell was acutely aware of the perils of elitism, the initial growth of which was inevitable

in a colonial situation, as was the identification of some of the first undergraduates with their country's colonizers. In subsequent years, the performance of young undergraduates in the field did not support Powell's original assessment of student attitudes (Wilson 1975). There is still a long way to go before a coherent policy of tertiary education evolves whose philosophy derives from the needs of the Papua New Guinean community. But now, at least, university administrators heed the call for more grass-roots experience and university-village dialogue by both local educators and the student body itself.

Set within this context, the uncertain response in 1971 of Solomon Island students in Suva was not surprising; they were in no position to leave the university for field-work in their own country. As a prerequisite to undergraduate course work, the first intakes of students from the Solomons had to complete two preliminary years to reach matriculation standard. These were very full years, with no allowance being made by either preliminary year teachers or the home government to finance the students for extra travel and field experience. Initially, many of the first graduates had little idea of university life and were uncertain in their choice of courses and ultimate careers. All were on Public Service scholarships and were governed mainly by expatriate public servants in Honiara rather than by the administration of the University of the South Pacific. While education officers in the Solomons could approve the project offer of supervised training and field work, certainly the budget of the colonial treasury made no allowance for such luxuries.

In addition to the virtual impossibility of extricating students from such a tight system, there was the problem of overcoming the students' awe of the project. One former lecturer at the University of the South Pacific explained this lack of enthusiasm by saying: "Islanders really don't want to study or do research. After all, they have no academic tradition'. These words must seem very odd to anyone familiar with current developments and social science research in Melanesia. But in 1971-72 such an attitude was only one manifestation of the massive inferiority that islanders, particularly Melanesians, had been made to feel and to suffer over the years by their colonizers. It is difficult for young people to have self-confidence if for generations their culture and society have been ignored, viewed as irrelevant, and even denigrated. In the words of Francis Bugotu (1969:554), a most eloquent Solomon Islander: 'We had no means of recording, but does this mean we had no history of our own? Perhaps even before Mendana? No one asked us'.

There is yet another consideration that partly explains the hesitation of Solomon Island students to be involved in local studies.

This emanates not so much from the colonial heritage but from the nature of their traditional cultures. Although national leaders and local newspapers underplay the fact, most societies in Melanesia are small, fragmented, and organised around land-holding clans. On a day-to-day basis, this scale of social organisation is still the most significant to village people. Despite the fact that the colonial experience has created something of a national ethos, communities are frequently distrustful of their neighbours. Thus, in many cases, it is as difficult for a Solomon Island student from Malaita to conduct social research on Vella Lavella as it is for an American graduate from Nashville, Tennessee to work on the Guadalcanal Weather Coast. Inter-group suspicion is still strong and in a strange village the young Solomon Islander, whether undergraduate or graduate, may find a wall of opposition to making legitimate enquiries.

There is little doubt that Solomon Islanders, as other Melanesians, must be involved in social research in their home country. Such requirements are desirable in the later years of the bachelor's degree, as well as at the master's level, because young individuals have been progressively alienated from the village even before they reach university or vocational colleges. Until 1973, little attempt had been made at the high-school level to educate Solomon Islanders in their own culture. Three of the five secondary schools are located in or near Honiara. As late as 1976, the one on Malaita had no students enrolled from surrounding districts and, because of a long-standing land dispute, it was viewed by most local people as an enclave quite separate from their community. Here, as at the other secondary schools, most students are boarders, which they continue to be when attending tertiary institutions. As graduates they return, often from overseas, after three, four, or more years away from their village homes, and mostly to an urban centre and a government position. Given the current emphasis throughout the Solomons on localisation, the majority of graduates have been locked into an educational system that suddenly expects them to advise and act on policies affecting their people, the vast majority of whom live in villages and hamlets so very removed from their own recent experience.

Developments at the national centre of the University of the South Pacific, in Honiara, have initiated a much-needed exchange between the university and the Solomon Islands community. Experiments began in 1974 at teaching university-level courses by using library facilities at the Centre, a link by satellite with Suva, and visiting or correspondent lecturers and tutors. Some of the class assignments from one of these courses, on land tenure, have recently been published (Larmour 1979).

Such an experiment marks an important step toward incorporating credit for local fieldwork as part of a university degree.

This possibility was greatly advanced in 1978, with the establishment of a Land Research Project within the Lands Division of the Ministry of Agriculture and Lands. Financed by the Australian Development Assistance Bureau, this project aimed to 'review government policies towards the registration and recording of customary land rights and boundaries' (Larmour 1979:x). Field investigations were concentrated in the university vacation and undertaken by eighteen Solomon Islanders studying in the social sciences and law at the universities of the South Pacific and Papua New Guinea. Topics pursued were drawn from reports and research designs discussed at a previous conference on customary land tenure in Melanesia. Students were trained in field techniques before departing for their sites, discussions were held in Honiara midway through their inquiries, and report writing was supervised by lands officers. Consequently, in the space of about twelve weeks, undergraduate students had experienced field research, data analysis, report preparation, and policy review (Heath 1979: 1-3). Despite a number of historical inaccuracies in the published report, the success of this collaborative enterprise in the involvement of Solomon Islanders is heartening, when compared with the failure of the Guadalcanal Weather Coast Project to achieve parallel objectives.

The transitional phase from political dependence to independence is always difficult and demands much of individuals, particularly those in positions of leadership. The strain on such persons would be considerably lessened by a conscious policy of including field training and research amongst village and town communities as part of any tertiary course. For economy of personnel and finance, a permanent liaison office could be established within the region, whose function would be to coordinate compatible training and research activities among the universities and colleges of Melanesia, government departments in the island territories, and borderland universities sponsoring island research, as well as with inter-regional institutions like the South Pacific Commission and local agencies of the United Nations. The research design could follow that of the Guadalcanal Weather Coast Project, since a multidisciplinary approach is a realistic way to study most social phenomena. The time is much overdue for a more systematic approach toward the education of Solomon Islanders, as of other Melanesians, in terms of their own society and its changing needs.

Currently, there is momentum for such approaches and philosophies. Great hope lies, for instance, in the appointment of competent nationals to the administrative staff of the universities of Melanesia. But perhaps the strongest impetus for change derives from loud complaints now heard

from village people that the present university product is not helping them, and in the increasing number of critical graduates who perceive the inappropriateness of much of the educational system in which they have been inculcated.

DIAGNOSIS

Five or ten years ago, there was little discussion in the Melanesian literature about models of collaborative field enquiry, the working relationship between university researchers and their host communities, and the responsibility of foreign investigators to supply field results to local depositories, museums, and libraries. The rare indigenous voice, like Francis Bugotu's, was viewed as eloquent exception rather than harbinger of the future. Today, the literature of Melanesia has been transformed. Apart from expatriate statements of criteria to be followed in island research (Lea 1975), a range of indigenous reactions has been reported: of communities to anthropologist fieldworkers (Frazer 1975), of undergraduate students to their participation in field training (Powell and Wilson 1974), and of village informants to a nineteenth-century account of their history (Kuschel and Monberg 1977).

To participate in a multidisciplinary project like that of south Guadalcanal is, at one and the same time, exhilarating and deeply frustrating. Confronted by its preliminary results, disciplinary purists in home institutions quickly declare that they are 'not demography', 'not history', 'not geography' Somewhat coincidentally a funding agency, having once provided the finance for a field project in the Pacific, decides that too few human beings inhabit these many islands to warrant further budgetary commitment to population research. From the sidelines, some expatriate specialists in one regional university display hostility toward what they see as the latest example of academic imperialism; about the same time, at a public meeting in the main town of Honiara, the young indigenous elite ask pointed questions about the project's worth to village people, while at the same time declining to return to their parents' homes for Christmas or local ceremonies. At the research sites on south Guadalcanal the villagers are impressed, if somewhat overawed by so much attention, yet puzzled as to how their answers to so many questions can ever be transmitted to their political, religious, and commercial leaders.

Upon return to Hawaii from the field, student participants are faced with competing pressures of data analysis and report preparation, degree requirements, thesis drafting, even finding a job. Equally, their supervisors are overwhelmed with teaching, student advising, committee work, budget preparation - in fact, any legitimate academic task that prevents single-minded focus upon the trunkfuls of field information that surrounds team members and for whose

results an island administration anxiously waits. Gradually the months slip by, exasperation ebbs and flows, and the commitments of the faint-hearted slowly evaporate. In December 1974, two years after departure from south Guadalcanal, the draft report appears: 552 pages of text and five and a quarter pounds in weight, because it is crucial that the Solomons government receive those field results while still in the process of drafting the 1975-79 National Development Plan (Central Planning Office 1975). Set against this practical imperative, the need for a more elegant and abbreviated text to satisfy academic colleagues is unimportant.

At the end of this complicated sequence comes the relief of official acknowledgment of what the project's results mean for social planning in the Solomons. 'The participation and interest of the rural people themselves in their own development can only be attracted and retained by a flexible and down-to-earth approach. The over-riding impression from (the population-resources survey of south Guadalcanal) and the discussion which had taken place, was the need for government plans and activities to be (1) decentralised, to come under local influence; (2) coherent between areas and sectors, so that one set of activities did not undermine another; (3) consistent from year to year, so as not to confuse and dismay rural people, who bore the risks of innovation in a way which government servants did not. It would be important to write plans and conduct activities with these requirements in mind' (Central Planning Office File 774/3/9, 13 January 1975:4).

One facile reaction to this project history would be to avoid investigations outside one's home country as a means to achieve cross-cultural understanding about population. Louise Morauta (1979) has recently examined themes in the writing of indigenous anthropologists in Papua New Guinea, whose observations as insiders have been added to those previously and dominantly made by outsiders (foreign social scientists). As Morauta (1979:562) demonstrates, each of these perspectives in social inquiry can lead to worthwhile contributions but greatest understanding derives from their combination and from 'the possibility of intellectual discourse between foreigners and nationals'. Merton (1972:36) similarly argues, in an illuminating essay, that both outsiders and insiders have 'distinctive and interactive roles in the process of truth seeking' - and it is from such a philosophy that enduring advances will occur in the field study of population.

In the case of the Guadalcanal Weather Coast Project, the fertility survey indicates that meaningful cooperation can occur between island administrations, foreign social scientists, and trained indigenous workers. To greater or lesser degree, most of the other project

components emphasise that copious investments of time, money, energy, and institutional goodwill will not necessarily produce satisfactory results for either the insider or the outsider.

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