CAPTAIN COOK AND THE PACIFIC ISLANDS

The Proceedings of
The Third Annual Pacific Islands Studies Conference

March 31 and April 1, 1978

(1978:3)
FOREWORD

The annual Pacific Islands Studies Conferences are projects of the Outreach Program of the Pacific Islands Studies Center, an NDEA Title VI Language and Area Studies Center for Pacific Islands Studies at the University of Hawaii. This series of conferences was initiated to encourage greater cooperation among the faculties of the various campuses of the University of Hawaii, with the objective of expanding Pacific-related academic endeavors throughout the statewide university system.

With the publication of these proceedings of the Third Annual Pacific Islands Studies Conference comes the opportunity to extend our outreach effort to our colleagues at other universities in the Pacific, to readers in libraries in other Pacific islands, and to libraries and universities on the United States mainland.

Organized by Ms. Jane N. Hurd, Outreach Coordinator of the Pacific Islands Studies Center, the Third Annual Pacific Islands Studies Conference marked a major University contribution to the bicentennial celebration of the arrival of Captain Cook in the Pacific islands.

Carl J. Daeufer
Director, PISC
Honolulu, Hawaii
Summer 1978
CAPTAIN COOK AND THE PACIFIC ISLANDS

The Proceedings of
The Third Annual Pacific Islands Studies Conference
University of Hawaii

March 31 and April 1, 1978

Sponsored by the Pacific Islands Studies Center
in cooperation with the Pacific and Asian Affairs Council
and the Pacific Islands Studies Program, University of Hawaii

Jane N. Hurd and Michiko Kodama, editors

(1978:3)
Editors' Introduction

The papers that appear in this volume were presented at "Captain Cook and the Pacific Islands," the third annual Pacific Islands Studies Conference, University of Hawaii, March 31 and April 1, 1978. Also included in these proceedings are the opening remarks by the Director of the Pacific Islands Studies Center, Dr. Carl J. Daeufer, an introduction by the Center's Outreach Coordinator, Ms. Jane N. Hurd and a summation of the conference by Dr. James McCutcheon, Professor of American Studies.

Recognition of the invaluable assistance rendered by the many people throughout the State of Hawaii who made the conference a success is detailed in the text of the discussions by Dr. Daeufer, Ms. Hurd and Dr. McCutcheon. The editors wish to add here an important word of thanks to Ms. Jan Hiranaka of the Pacific Islands Studies Center for her consistent, patient effort in organizing and typing this manuscript.

In preparation for these proceedings, the conference speakers provided us with copies of their papers which were retyped for inclusion here. No factual changes have been made. The editors have included only a synopsis of the presentation by Dr. Sanborn, as he left soon after the conference for an extended European visit.

For information on the conference participants, their current research interests, and other on-going Pacific-related research efforts throughout the statewide university system, please consult the Pacific Islands Studies Center's Annual Report for 1978.

Jane N. Hurd and Michiko Kodama
Honolulu, Hawaii
August, 1978
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Opening Remarks
by
Dr. Carl J. Daeufer
Director, Pacific Islands Studies Center
Professor, College of Education
University of Hawaii at Manoa

Tonight marks the third in a series of annual conferences initiated by the Pacific Islands Studies Center. The first conference occurred in 1976. These Pacific Islands University of Hawaii systemwide conferences have had as one of their purposes the bringing together of faculty and students from all campuses of the university system. More recently the conferences have encouraged participation of Pacific Islands interested community persons as well as students and teachers from our state public and private secondary schools. Perhaps, there are some of our secondary school friends in the audience tonight. We especially welcome you.

Our first conference in 1976 was an afternoon-early evening affair designed to identify those faculty resources throughout the University of Hawaii system and historical societies who share the Pacific area as a scholarly and teaching interest. While a strong scholarly community has long existed on the Manoa campus, the identification and bringing together of systemwide university faculty, as well as persons representing various historical societies and professional associations concerned with Pacific Islands studies had not been done. That conference was a first-stage attempt at creating a coordinated statewide appraisal of Pacific scholar efforts. That conference expressed a number of desires
--one of which was to have annual conferences of systemwide Pacific Islands interested faculty.

The Pacific Islands Studies Center accepted leadership responsibility for this expressed desire for annual conferences. Following extensive planning and involving of people, the center, in April, 1977, initiated a second conference-workshop. Its theme, Development in the Pacific, focusing on political, economic, social and demographic developments, attracted over eighty faculty members and students. The assembled group at that second conference-workshop set out to determine how to understand the issues of development in the Pacific Islands region in order to apply these to teaching and/or research design and to explore what pattern(s) of development might be best for setting priorities in developmental planning activities in island countries. This second conference continued to share, in an afternoon session, information, future plans and descriptions of on-going programs in and outside the university of value to Pacific Islands interested faculty and students.

Tonight and tomorrow we continue the sharing of resource information and have scheduled topics and speakers that should prove to be interesting.

You might ask at this juncture, why the chronological presentation highlighting the past conferences? My response revolves around our continuing interest in seeking your suggestions and direct help in planning and sponsoring future conferences and in my concern that perhaps we need to establish a Pacific Islands Association, non-profit in nature, made up of interested faculty, students and community leaders whose goals and purposes are central to the fostering of understanding and knowledge
regarding the peoples and cultures of the Pacific Islands region. Obviously this idea is not particularly original but perhaps the time has come to move it from the back burner to the front. If you have an interest in involving yourself in the establishment of such an association please let us know either by contacting us directly or by writing about such an interest somewhere on the evaluation forms that will be distributed tomorrow.

Based on the requests from last year's conference participants, our conference, this year is longer. Following an interesting evening tonight three sessions are scheduled tomorrow all appropriately centering around the theme: Captain Cook and the Pacific Islands.

Since January 6, 1978, when Governor Ariyoshi in formal ceremonies at the State Capitol proclaimed 1978 as the Captain Cook Hawaii Bicentennial Year, we have considered this conference to be one among the many Bicentennial activities to be held during the 13-month celebration period -- January 18, 1978 through February 14, 1979. For that fact we are most humbly proud.

Now I must sincerely welcome each of you, thank you personally for coming and wish you a most interesting and rewarding conference experience. Mahalo.

Tonight I have the distinct privilege and pleasure of introducing to you two scholars who will share information and activities of importance to persons interested in the Pacific Islands region.

The first individual is known to many of us. He has long demonstrated an effective teaching and scholarly record associated with the Pacific Islands. I am, of course, referring to Professor William J.
Bonk, Chairman of the Anthropology Department, University of Hawaii, Hilo Campus. Dr. Bonk has consistently attended and contributed to our annual Pacific Islands Conference and has once again offered to share with us some important happenings. Dr. Bonk's remarks will center around the "Hawaii Foundation for History and the Humanities Program for the Cook Bicentennial."

It is my pleasure to welcome and present to you, Dr. William J. Bonk, Professor and Chairman, Department of Anthropology, University of Hawaii at Hilo. Ladies and Gentlemen, Dr. Bonk.

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Those of us interested in the Pacific of 200 years ago invariably become involved with Captain Cook's voyages, eager for every word and shared knowledge about Pacific peoples. And 200 years later, Cook still has that effect of bringing the Pacific together for people -- especially for Pacific Islanders themselves who re-discovered the unity of Polynesia through the Tahitian, Omai whom Cook took with him to New Zealand and Tonga -- sending a wave of excitement through island societies. Thereafter, Pacific Islanders never lost the chance to re-explore the Pacific for themselves and they have been joined by generations of writers, academicians and escapists, all in one way or another taken with the South Seas and its history, as each of us must be to spend a Friday evening at this conference.

On occasion, at conferences like this a feeling emerges that we have these unequalled Pacific Islands resources -- things and people -- here in Hawaii, but we fail to bring them all together. It is particularly appropriate that we are able to welcome the new director of our most valuable Bishop Museum and research center. I think all of us look
to the Bishop Museum for leadership with feelings of pride mingled with feelings of anticipation that so far we have not been able to win for the museum the kind of public support that will make scholarly cooperation, support services, and extension activities a more regular part of a visible Pacific Islands oriented community focused on the museum together with the Pacific activities of a rejuvenated Pacific Islands Program at the University of Hawaii, the Pacific Islands Studies Center, the Pacific and Asian Affairs Council as well as other Pacific Islands interested organizations.

We have already heard, Dr. Creutz, of your enthusiasm for your difficult new position. We view your acceptance of our invitation to speak here tonight as symbolic of your reported eagerness to involve Pacific Islands interested people in the life of the museum. We sense your wish to strike out in new directions, we want to encourage you and wish you well, and we are eager to hear now whatever you have come to relate on "The Role of the Museum in the Pacific."

Ladies and Gentlemen, it gives me great pleasure to introduce to you, Dr. Edward C. Creutz, Director, Bishop Museum.
The Hawaii Foundation for History and the Humanities is deeply involved in the Cook Bicentennial as part of its ongoing concern and interest in Hawaii's past, present and future. As you are most likely well aware of the background of the Foundation, I will concentrate on our present and immediate future plans and activities -- especially those of the present year of celebration.

The Foundation was originally organized and developed through legislative action almost a decade ago. It is a unique body being both State and privately supported. As a State organization the law says that it is to develop and maintain historic preservation as well as cultural activities for the citizens of Hawaii.

Later in 1971, the Historic Places Review Board was added to the Foundation and entrusted with the review of all sites, historic and prehistoric, and to make recommendations for local, State and National registry.

In 1972, the Multi-Cultural Center was established to carry out programs in ethnic studies.

Through these and other Foundation activities, we have been involved with the identification and preservation of archaeological sites and their contents and the oral history and documentation of Hawaii's ethnic past.
In addition, we aid and assist museums and local groups that carry out historic and cultural research and preservation. Lastly, we are involved with symposia, conferences, publications, and other media that transmit knowledge and information of these activities.

In January of this year, the Governor of Hawaii proclaimed 1978 as a year of celebration. A year marking the 200th anniversary of a point in time -- a point marking a cultural continuum starting with the arrival of the first Polynesian immigrants to Hawaii, continuing with later arrivals from other islands of Polynesia, added to by immigrants from Europe, Asia, the Western Pacific and the United States.

Although the Foundation interprets the scope of history and the humanities with a broad view to ethnic and cultural phenomena, it nevertheless is emphasizing during this bicentennial year the history and cultural heritage of its people of Hawaiian-Polynesian ancestry.

Consequently, a much larger number of events scheduled for this year is concerned with activities interpreted as Hawaiian in cultural background. I will not even attempt to mention all of even a portion of the items on our calendar. I did, however, bring with me an up-to-date listing of events for anyone interested. For those of us here I would think you might be especially concerned with the following activities: the restoration and preservation of Fort Elizabeth, Kauai; the coming to Hawaii of Dr. Churchill, a well-known botanist, who will give a series of lectures at the University of Hawaii in late April or early May; and the still in the planning stages, possibility of a conference concerned with Hawaiian archaeology.

One of the most important projects, however, is what we have called, "Nana I Ke Kumu" - "Look to the Source." It will be the Foundation's
Bicentennial Conference and Examination of Hawaiian Values. This search for the Hawaiian system of values is long overdue. Scholars, starting with Cook, have long been intrigued with the culture of the inhabitants of these islands and we have come a long way in the recording and analysis of this cultural heritage.

Non-material culture is not as readily recordable as that which is viewed through one's senses. The time, however, is long overdue for an examination of the glue that held together the more readily known aspects of Hawaiian culture. The recognition of values pertaining to land, through such traditions as "kapu" and "'ohana" (guardianship through controls and family), is available to us and may serve as a working approach to broaden knowledge and insight into this study.

In the examination of values, the Bicentennial Conference will attempt to explore four sequential themes: the religion, oral traditions, and belief system of the Hawaiians; how these influenced and molded their interpersonal relations; the ethical rules including the "kapu" system; and the concept of land and its use.

This project will involve the full use of media techniques. We have already videotaped many sessions with knowledgeable informants on all of the islands. Bibliographies are being prepared on the theme and "overview" papers will be available for circulation to all the panel members prior to the conference sessions. These sessions will be filmed and edited. They will be shown throughout the State. Input will be solicited and these reactions in turn will be reviewed by the panelists.

Finally, a second round of televised sessions will be held with panelists interacting with researchers and perhaps outside advocates. This product will be edited for presentation at summary sessions to be
held in September or October.

If all goes well, this project alone will go a long way toward an understanding of Hawaiian values. It, like our other ongoing and ad hoc projects and activities, will aid in carrying out the stated goals of the Hawaii Foundation for History and the Humanities.
The Role of the Bishop Museum in the Pacific

by

Dr. Edward C. Creutz

Director, Bernice Pauahi Bishop Museum

A museum is a cultural institution, and its objectives should be judged by cultural standards. Museums do not all have the same objectives, obviously. Goals must be established on the basis of original intent, historical background, community needs, potentials, and a recognition of responsibilities relative to all of these factors.

The Bishop Museum, one of the four* most important multidisciplinary museums in the nation, is a memorial to Bernice Pauahi Bishop. We must maintain the highest standards of integrity for the sake of this memorial trust. Just as the Kamehameha Schools, her own gift to the community, are providing a unique and purposeful education to young people, this memorial, for whose preservation we are responsible, must continue to enjoy an elevated international and community reputation. One of our accepted responsibilities is to serve as a depository for uniquely valuable family heirlooms relevant to our islands’ history. Descendants of these donors often come to view these objects whether or not they are on general exhibition. These descendants now form our own principal constituency -- they are the voters, the taxpayers, the businessmen, the labor union members, the substance of our civic life.

four*. . . the other three are the Smithsonian Institution, the American Museum of Natural History, and the Field Museum of Natural History.
The local reputation of our museum for its role in preserving the Hawaiian and immigrant heritage is one of our great strengths and, of course, must be a basis for seeking local support. There is a parallel value in the cultural and natural history collections which attract support from the national agencies. This represents a substantial part of our funding. Thus, the Federal grants for research in our scientific departments have totaled $471,000 in 1976 and $519,000 in 1977.

... the staff and the Trustees have a joint and awesome responsibility to set and achieve goals consistent with the Deed of Trust of Charles R. Bishop, not conflicting with the general definition of a museum which our contemporary, competing, and evaluating institutions have set; to preserve the trust of our community, both those of Polynesian ancestry and those who followed to achieve the blending of culture characteristic of our state today; and to participate in the national program of scientific research in ways uniquely fitted to our collections and our staff capabilities.

The Bishop Museum has five major research departments: Anthropology, including Archaeology and Ethnology; Botany, including the Herbarium; Entomology, including Acarology; History, including the Falls of Clyde; and Zoology, including Ichthyology, Malacology, and Vertebrate and Invertebrate Zoology. There are ancillary scientific functions, including the Library and the Pacific Science Information Center; community service functions, including Education, the Planetarium and Science Center; operational functions; and cooperative functions, including the Pacific Science Association, University of Hawaii, Polynesian Voyaging Society and others.

The mandate of the Department of Anthropology stems from the original
Deed of Trust which stated that the museum should be developed "as a scientific institution for collecting, preserving, storing and exhibiting specimens of Polynesian and kindred antiquities, ethnology and natural history . . . and the publication . . . of the results of such investigation and study." In his founding of Bishop Museum in 1889 as Hale Hōike'i Ke o Kamehameha (The Treasure House of the Kamehamehas), the intention of Charles R. Bishop was to honor the Hawaiian heritage of his wife, Princess Pauahi, and to encourage Hawaiians to take pride in their Polynesian heritage. He also intended that Bishop Museum would "rank with the museums of the world."

In the 87 years of Bishop Museum's history, the anthropological collections have grown from a nucleus of the personal collection of Princess Pauahi and her relatives to a vast collection of more than 100,000 ethnological and historical specimens, of which half are Hawaiian. Many of these objects were obtained by scientific expeditions to many islands of the Pacific in which the objects were studied in relation to their social and cultural context. Others were obtained in Europe and America by staff members and friends of the museum searching for objects that were taken from their homelands to other nations during 200 years of trade. Still other objects were given to Bishop Museum by Hawaiians themselves to ensure the preservation of these objects for future generations. In addition, the archaeological specimens number in the thousands. They have been excavated from archaeological sites in Hawaii and throughout the Pacific. Only a small number of objects in these collections are on exhibition. The balance are in storage where temperature and humidity are controlled. These objects form a world-famous research collection that is studied by scholars from Hawaii and throughout the world.
In this research department, scientific studies on the cultural history of Hawaii and other Pacific Islands have been conducted from shortly after the museum's founding through the present. This basic research has focused on ethnology, archaeology, linguistics, traditional history, music and dance particularly in Hawaii, the Society, Marquesas, Tuamotu and Cook Islands, Kapingamarangi, Futuna, Uvea, Samoa, and Tonga. Research has also been carried out in Micronesia, and particularly Melanesia, where teams have recently investigated the archaeology and ethnobotany of the Solomon Islands. Studies on contemporary society in Hawaii have also been carried out, as well as historical research on the Monarchy period.

The department publishes Pacific Anthropological Records and the Departmental Report Series which emphasize data-rich reports of current research. Research of the anthropology staff is also published as monographs and articles by Bishop Museum Press and in scholarly journals throughout the world.

The natural history collections (Departments of Botany, Entomology, and Zoology) of more than 18,000,000 specimens of animals and plants, and the library, files, and staff form a reference base regularly used by state and Federal agencies, individual scientists the world over, and students. The collections of Hawaiian flora and fauna are the largest existing, but research is by no means restricted to Hawaii. Natural sciences at the museum cover the entire Pacific Basin, and many of the collections extend beyond this area. The programs in biological sciences have been recognized by numerous research, curatorial, and facilities grants from Federal agencies. Biological museum collections are now recognized as natural resources, since all other biological fields, including agriculture, health, and conservation, must have identifications based on them.
The three departments are staffed by 14 research/curatorial scientists and about an equal number of technicians, clerical personnel, scientific illustrators, and others. This averages one curator and one assistant per one million plus specimens. In addition, there are more than 45 scientists with honorary appointments, some in residence and regularly working with the collections.

The botany collections, designated the Herbarium Pacificum, contain more than 420,000 prepared plants. This is the largest source for Pacific botanical material and the only major reference for Hawaii. Well over 500 research papers have been published on the collections. Materials are available and basic work has been done for floras (botanical monographs) of Hawaii, Fiji, Micronesia, Tahiti, Samoa, and Tonga. Material is accumulating for an alpine flora of New Guinea.

Entomology is the largest natural history department, matching the fact that the kinds of insects and relatives (mites, spiders, etc.) far outnumber the kinds of all other animals and plants. There are over 11,000,000 specimens mounted on pins or microscope slides or stored in alcohol. Early material goes back to a large part of that from the Fauna Hawaiiensis survey (published 1899-1913) and earlier, as well as major Bishop Museum expeditions to Wake (1923), Fiji and central Pacific atolls (1924), Marquesas and Society Islands (1929-1932), Micronesia (1936), Samoa (1940), and many others. Growth of the collections accelerated with the survey of insects of Micronesia (1953-present), published in 19 volumes and with parts still being added. Special studies in recent years include Antarctic entomology, insect carriers of disease, research on Hawaiian ecosystems (International Biological Program), and the 'ohi'a decline endangering Hawaiian forests. A field station in New Guinea was established in 1961 for insect studies,
and these continue at the station which is now an ecological institute affiliated with the museum. Entomology maintains its own publishing program: the staff edits the internationally recognized *Journal of Medical Entomology*, *Pacific Insects*, *Pacific Insects Monographs*, and others.

The fish collections cover the tropical Indo-Pacific region, the largest aquatic province in the world. The 20,000 lots of fishes now catalogued represent a four-fold increase during the past ten years, and these now may be the largest representation of species from the Indo-Pacific area. The photographic file of tropical marine fishes is unexcelled. Grant-supported expeditions—most recently to the Red Sea—contribute to collection growth. The recently acquired collections of the National Marine Fisheries Laboratory more than double the Museum's collections.

The mollusk collections (snails, bivalves, etc.) comprise 6,000,000 specimens, of which 2,000,000 are marine shells with primary representation for Hawaii, many central and south Pacific islands, and Japan. The unmatched Pacific land snail collections of 4,000,000 specimens from every island group of the inner Pacific Basin represent what is itself a "living museum" tracing the evolution of the oldest land shell families. In addition to the shells of these snails, specimens with their soft parts are preserved intact for at least two-thirds of the species, greatly increasing research value. A monograph has been published on two of the Pacific families, and anatomical research is proceeding on a third and fourth.

The invertebrate zoology division encompasses all invertebrates except entomology and malacology. There is a strong emphasis on marine invertebrates. The Edmondson materials (1920-1960), more than 20,000 specimens, form a nucleus for the collections. Some groups with major
representation are crustaceans (crabs and relatives), echinoderms (starfish and relatives), marine worms, and corals. Geographic representation includes the Antarctic, Caribbean, and Indian Oceans, but mainly the Pacific. The division has been particularly active in studies needed for environmental impact statements, both in Hawaii and in the south and central Pacific. A revision of the Reef and Shore Fauna is being supervised, and the first volume has just been published.

The vertebrate zoology division includes mammals, birds, reptiles, and amphibians. Among the 20,000 bird specimens, there is a large pre-1910 collection of Hawaiian birds, one of perhaps three in the world, with nearly all extinct as well as living native species. Holdings of New Guinea-Solomon Island birds are among the few significant avian collections from these areas. Approximately 15,000 mammal specimens are on deposit. Representation for New Guinea and the Solomon Islands is matched at only one other institution. The Yoshimoto collection of mounted big game animals is an important holding. The major collections of reptiles and amphibians are from the New Guinea region and the Malayan Peninsula, in addition to Hawaii and other isolated Pacific islands. Research is concentrated on New Guinea mammals, and a field guide to these is in preparation.

Although a Department of History was not formally authorized until 1928, some of the earliest specimens in Bishop Museum were historic objects and memorabilia associated with the Hawaiian monarchs. In recent years collections and research in history have also focused on immigrant groups that have made Hawaii their home. In addition, railroad locomotives, sailing ships, and industrial equipment of Hawaii's past show the impact of Western technology on Hawaiian life.

The museum has engaged in the restoration of the world's only surviving
full-rigged, square-masted ship, the Falls of Clyde. Work is still in progress on the ship, but it is near enough to completion to serve as a fascinating attraction that tells the story of a very important historical epoch in Hawaiian history.

The divisions included in the museum's ancillary scientific functions aid the scientists in carrying out its mandate. The Library has grown to become perhaps the world's best known reference collection on the subjects which fall within the museum's major sphere of interest. It is one of the three great Pacific libraries (the other two in Australia and New Zealand). Both the Library and the Photo Collection are open for public research.

The Pacific Science Information Center features maps of the Pacific area, including the thousands of islands that are found there, and can provide contemporary as well as historic information about them. It is also a clearinghouse for reference data regarding the oceanic Pacific area.

The recently established Pacific Regional Conservation Center, housed at the museum, helps to preserve and restore museum artifacts, books, and objects of art, using modern techniques for careful restoration of damaged articles. The Center has now grown to 52 members.

The end product of scientific research is the publication of its results. Since the beginning of this century, Bishop Museum Press has been publishing the results of the investigation and study of Polynesian and kindred artifacts, ethnology, and natural history.

Bishop Museum regards its services to the public, to residents and nonresidents alike, as among its major obligations. A large portion of museum space is given to exhibits and other public service facilities.
Over the years of its existence, the museum's exhibits have been largely concentrated upon Hawaii's history, ethnology, and anthropology. Secondary emphasis has been upon similar aspects of other areas of the Pacific ocean and islands. A recent exhibit gives much space and ample coverage to the natural history of Hawaii. This exhibit displays and explains features of native Hawaiian plants and animals, many of which are unique in the world.

Classes from the schools of Hawaii regularly come to the museum, each year 30,000 students visit the exhibits. Arrangements are sometimes made for tours of the research departments, and some secondary school students work on special projects under the supervision of scientists.

In 1961 the museum extended its area of science education by building a Planetarium and astronomical observatory. This facility has been well received and has attracted ever-growing numbers of interested visitors. Present attendance exceeds 65,000 per year. Special Planetarium programs are arranged for school classes, with a choice of several subjects available to the teachers. The Planetarium lends itself to use as a classroom. Annually two or more courses in each of two subjects, Elementary Astronomy for the Layman, and Celestial Navigation, are available and well patronized. On occasion, classes are offered at the museum in anthropology, archaeology, and the natural history of Hawaii.

A flourishing educational activity of the museum is its Arts and Crafts School, which offers a large number of classes in both fine arts and more practical arts and crafts. Associated with this operation is the "Yarn Shop" where materials of many kinds are available for work in the crafts.

In 1972 a branch of the Bishop Museum known as Heritage Theater was opened in Waikiki in the King's Alley complex. A number of exhibits are on
display there pertaining to the monarchy period of the history of Hawaii. A small intimate theater presents programs on a wide variety of ethnic cultural arts. The museum operates several London double-deck buses to transport visitors to and from the three facilities: the museum and Planetarium, the Falls of Clyde, and the Heritage Theater in Waikiki.

The activities of the museum's staff devoted to other than scientific or scientific-supportive duties are essentially involved with the day-to-day operations of the museum in terms of visitors, physical equipment, buildings, and grounds. Key departments or sections include: Reception, Gift and Book Shops, Engineering and Maintenance, Public Relations (pertaining to the visitor industry), Promotion, Advertising, Sales, and certain personnel duties. While the prime goal of Operations is to provide the mechanics of serving the public, another principal concern is to generate income for the institution. Such monies support various of the museum's research and educational projects by contributing to the general fund. While many in Operations are of part-time status, the department averages about 60 employees.

As any public service organization, the museum must limit its activities to fit roughly defined boundaries. These boundaries will originate, partly from historic behavior which has resulted in unique or near unique collections, and significantly from our geographic location. Here geographic must be used with a broad interpretation based not on political or necessarily convenient definitions, but in a way that logically suits the historic or scientific content of the phenomena to be exhibited and studied.

For example, the diffusion of ancestral Polynesians throughout a large part of the Pacific Basin makes it meaningless scientifically to concentrate on just one island group, for it is only through the comparative studies
of diversified but related cultures that a total picture of the response of human activity to these environments can be generated. As is often true in research, the differences in characteristics of similar classes often provide the best clue to understanding the similarities of the classes.

The Bishop Museum is thus a strong leader in research, education, and exhibition for the entire Pacific Basin.
Saturday, April 1, 1978
Introductory Remarks

by

Jane N. Hurd

Outreach Coordinator

Pacific Islands Studies Center

Good morning.

I would like to welcome all of you to this, the second day of the third annual Pacific Islands Studies Conference. Although several of you have suggested that, convened here barely after dawn on a Saturday morning, we are nothing but a crowd of April fools, I choose, rather, to underscore the fact that our conference began last month, last evening, on March 31, and continues today into the month of April. I think we are to be commended for our tenacity in the quest of knowledge about Captain Cook. I wonder if Dr. Daeufer realized any of this last evening when, in his opening remarks, he pointed out that these annual conferences have become progressively longer.

That they are becoming longer is, I think, an indication of the increasing awareness among Pacific-interested members of our faculty and community that, although we come from disparate disciplines with interests in particular island groups, we have a great deal to say to one another.

In recognizing that our general purpose is to provide a forum for Pacific-interested faculty members to communicate their specialized research interests to one another and to the community, we point to the fact that a multitude of disciplinary interests -- from the arts, the sciences and the humanities -- can find fruitful application in the Pacific.
The history of these research interests, and of those who pursued them, is now over two hundred years old. Meeting here, we honor Captain James Cook of the Royal Navy. We marvel at the depth and the breadth of his general knowledge and curiosity, his scrupulous attention to the condition of his ships and men, so crucial to the fulfillment of the several scientific purposes of his voyages; and we are humbled by his willingness to address the issue of his impact and that of his ships, his crews and his intentions, on the people with whom he came into contact.

In his carefully detailed journals Cook described himself as "one employed as a discoverer." We stand in awe of the steadfastness of purpose reflected in the hundreds and hundreds of entries detailing so many years at sea.

One need only read how many April firsts Cook passed as commander of the voyages to gain a sense of his commitment and of his contribution to posterity. On April 1, 1768, the Royal Society of London received notification from the Admiralty that Britain's participation in the observation of the transit of Venus across the sun in an effort to measure the distance from earth to the sun, was assured. A commander had been chosen and a ship, to be called Endeavor, would set out for a South Pacific observation site.

On April 1, 1769, Cook was within three days and 350 miles of Tahiti. He wrote of his concern over the accuracy of his sightings. On April 1, 1770, highly concerned with the condition of Endeavor and of her men, Cook set a westward, southern course home from New Zealand after nearly three years at sea. A year later they had progressed only as far as Capetown, having mapped the eastern coast of Australia.

In 1772, Cook was preparing for the second voyage. In April of 1773,
he was once again in New Zealand. In 1774, he was in the eastern reaches of Polynesia near the Marquesas, and in 1775, he had returned to Capetown. April of 1776 found Cook preparing for the third voyage which, by April of 1777, was underway, with Endeavor in the Cook Islands. Two hundred years ago today, having found Hawaii, Cook was anchored on the coast of Vancouver Island at Nootka Sound, attending to the needs of the ship.

And finally by April 1, 1779, Captain Clerke had days before abandoned a westward discovery track and was heading north to make one final attempt to discover — in honor of his fallen captain — a northwest passage linking Britain with the Pacific.

The years were long, the distances immense, and the consequences of these voyages long-lasting and resounding for the entire Pacific region.

The contributions in our program today are diverse. All fit within the sphere of Cook's many interests. Although reference to Captain Cook in today's presentations may at times be only tangential, no discipline represented here was far outside the province of Cook himself.

In my role as outreach coordinator of the Language and Area Studies Center for Pacific Islands Studies, I would like to thank Professor Carl J. Daeufer, the Center's director, for supporting this conference. I would especially like to thank Professors Norman Meller, Floyd Tilton, and Donald Johnson of the Pacific Islands Studies Program's affiliate faculty for their role in the germination of the Cook idea, and as a member of the staff of the Pacific and Asian Affairs Council, I would like to thank PAAC's executive director, Brenda Lei Foster, and her staff for giving the organization of this conference top priority when so many other things needed to be done.

A month ago, when I was off introducing myself to East Asia, Michiko
Kodama, a graduate student in Pacific History, resolutely and competently identified and then accomplished scores of conference-related tasks. I must thank her most of all. We would like to thank the Honolulu Advertiser, the East-West Communication Institute and the University Press of Hawaii for providing materials for displays.


Finally, we wish to acknowledge Mr. William P. Johnson, Dr. Donald D. Johnson, and Dr. James McCutcheon who have generously consented to call upon their skills in organization and extemporization in their roles as conveners during today's sessions.

Now, it gives me tremendous pleasure to introduce to you, Mr. William
Johnson, a Hawaiian scholar and assistant coordinator of the Hawaiian Studies Project at the University of Hawaii (Manoa Campus) who will convene the first session and introduce this morning's speakers.
The Yorkshire Haunts of Captain Cook

by

John Charles

Professional Intern

East-West Culture Learning Institute

When Jane asked me to contribute something to this conference, I was flattered and excited. Then the initial euphoria wore off and was replaced by the dull misery of trying to think of WHAT to talk about. I soon realized that the task so blithely assented to was no easy one. How could I get up before a group of philosophers and scholars and hope to say anything which didn't smack of the rankest of presumption? Cook's voyages, the geographical discoveries, botany, navigation, nutrition, even microbiology... all these have been dissected and fought over and the pitiful remains again contended for; all have come under the withering scrutiny of experts with whom I have good reason to fear comparison. Therefore, in eventually deciding to give you my thoughts, such as they are, on the Yorkshire haunts of Capt. Cook, I'm hoping to merely chisel out a modest nook in which my academic shortcomings will not be quite so uncomfortably apparent. If the pressure gets too hot I can always plead temporary insanity and lapse into that most recondite of dialects, Broad Yorkshire. The fact that my mother is in the audience today, though, means that I have to watch my p's and q's even in that direction! I wrote a few disconnected remarks for a newspaper article and fondly imagined until recently that all I should have to do would be to pick up the sheet, adjust my spectacles, give one of those coughs that means a lot and says nothing, fix the house with my glittering eye and bring it to heel with one of those looks that
says a lot and means nothing, and begin. Well, it hasn't worked out that way. Partly because I don't want to affect the sales of the newspaper article (which is on sale in the lobby at 50 cents) by giving away its contents free, and partly because even I had qualms about putting old wine in new bottles and watering it withal, this show is all new, as they say on the stage. I hope you like it.

"Often I made my way by narrow mountain tracks at astonishing heights, seeing a few small cottages nestling deep down in the dale beneath. The grey stone walls that bounded the fields gave the whole district a wild aspect. . . ." (Carl Philip Moritz, "Journeys of a German in England," 1782.)

"... through Yorkshire Dales
Among the rocks and winding scars
Where deep and low the hamlets lie,
Beneath their little patch of sky
And little lot of stars. . . ."  (Wordsworth)

Apart from the "astonishing" heights, which should certainly have no reason to amaze a German familiar with the more modest mountains of his own country, these descriptions are as true of parts of Yorkshire as when Cook was alive. It is still a wild and rather remote upland region where little has changed, flanked and in some places invaded by the blight of industrialization and the scourge of ill-considered modernity. For sensitive lovers of country life, of folklore and place-names, it is peerless. Every beck and bank, every road and rigg, all conjure up a twilight world of occult mystery. Just listen to the magnificent euphony of some of these ancient names:

Waterfalls—Nentforce, Ashgillforce, Highforce, Cauldron Snout, Catarakeforce, Kisdonforce, Cautley’s Pout, and Hardowforce.
Caves—Doukybottom, Calfhole Cave, Stump Cross, Jinglepot, Hurtlepot, and Gaping Gill Hole.
Rock Features—Stauwerd Peel, The Sneep, High Cup Nick, Falcon Clints, Cronkley Scar, Stenkith Gorge, Kisdon Gorge, Gordale

There are others more mysterious yet, whose origins are lost in the past, that commemorate deeds and people long forgotten: Jenny Brewster's Spring, Fanny's Folly, the Stone Lad, Solomon's Temple, the White Way (the prehistoric route of salt-traders), Devil's Arrows. . . What mystic power permeates the names of Boggle Hole, Saltburn, Monk Bretton, Murk Mire Moor, Nab End, Winter Gill, Noodle Hill! Other names hint at a darker side: What ancient tragedy lies enshrined in Sorrows Beck? Bad Lane leads into Thief Street, where the notorious highwayman Dick Turpin, with whom people of Cook's parents' generation were all too uncomfortably familiar, used to lie in wait for travellers. We are in a land of magic.

Perhaps the most important thing to realize about the Yorkshire of Cook's day is the turbulence of its history, testified to by its rich tapestry of place-names. . . Norse, Celtic, Roman, Angle, Scottish, Saxon, Norman, Danish. . . It was a frontier province, barely subdued after great and bloody uprisings, kept down by force. . . a constant thorn in the side of the government in London. It had many of the overtones of the American wild West. In order to bring this across, I shall have to go into the history of the period just a bit. But now I want to bring in an unashamed aside, first to bring a little comfort to those of you who came in the insane hope of finding something interesting going on, and second to show the astonishing continuity and broad, sweeping cadences of folk culture and tradition over vast periods of time.

Some years ago I used to go round with a tape-recorder collecting the reminiscences of old people. Now, I believe, this has a much more portentous title. . . oral history. We never troubled to think of titles
then; (we called it "collecting the reminiscences of old people") but it was the same thing. I did most of my interviewing in pubs. There were two reasons for this, one obvious, one not so obvious. The less obvious was that in familiar yet "neutral" surroundings the subjects were much less "uptight" as they say in America and the huge amount of alcohol in English beer soon made them loquacious, garrulous even. (This occasionally caused problems if one only had a limited supply of tape.)

By the bye, for oral history fans, I found it a useful idea to set up our recording in a pub because the landlord could usually be bribed to let us conceal a microphone beforehand, a technique that works wonders in removing self-consciousness from the subject. I used a cordless mic mounted in a beer bottle, while an assistant across the room operated the recorder. It worked as long as the subject could be restrained from pouring the microphone into his glass. Anyway, there I was with an old gentleman of eighty years, whose ancestors had farmed this region down from the drifting mists of time, or as the Common Law of England so elegantly puts it, "when the remembrance of men runneth not to the contrary." The conversation got round to a great black and mysterious forest nearby, said by the countryfolk to be the home of goblins, sprites and elves. It had not always been a forest insisted the old man. Many years ago, long before the time of his great-grandfather, it had been prosperous farmland scattered with villages. His grandfather had told him that all this had been destroyed in a single week. "Who caused the destruction?" I asked. The old man looked confidential, peered elaborately around to be sure we were not overheard, and in an urgent undertone said: "Willy Norman burned it all." It was an amazing cultural throwback, a triumphant testament to the tenacity of folk memory. The old farmer was repeating stories told
in his family for generations. He neither knew nor cared who "Willy Norman" was, but here, in this ancient legend, kept burning like a flickering light down the years, was an account of the pitiless harrying of Northern England by William, Duke of Normandy, in the late eleventh century.

That was neither the first nor the last bitter period of turmoil and violence Yorkshire had to face. The Romans sent a huge force to attack the great citadel of the Celtic Brigantes near the modern market town of Stanwick. Increasing turbulence made it necessary to construct a mighty wall across Northumberland during the early third century A.D. to keep out the wild tribes beyond. The wall still stands. To those who might ever be in Europe, let me recommend it as one of the most magnificent experiences in the continent. I have hiked mile after mile along worn Roman roads that thrust their way arrow-straight through the silent hills. Occasionally one meets a lone shepherd, but generally old stone crosses marking the way (and usually bearing a weathered sixteenth or seventeenth century inscription) and the black-faced sheep and the insoluble desolation of the moaning wind are one's only companions. Then you come to a tiny sprawling hamlet, beetle-browed houses of moorland stone cluttered promiscuously around some road-junction or beck, just as the mist creeps along the ground and the darkness becomes palpable. The lights are just going up in the pub, usually one of those wonderful, ancient, low-beamed places with blackened walls and alluring names . . . . "The Flask," "The Fox and Hounds," "The Foxgloves," "The Ings," and "Hob O' the Hill."

It is a precious moment. But I digress.

After Roman Britain went down in noise and violence and blood, there was a confused period during which several Germanic tribes fought among
themselves for supremacy. Then it was the turn of the Danes, whose influence permeates everything... place-names, folklore, and all else. No sooner had the Danes been absorbed -- they were too powerful to conquer -- and some semblance of unity had been built up between the warring states, when another group of Scandinavian extraction invaded from France in defense of the claim to the throne of their leader, known endearingly to his contemporaries as William the Bastard. From the eleventh century to the time of Cook, the North bore the brunt of repeated invasions and rebellions. The whole of Yorkshire is punctuated with battlegrounds... Towton, Stamford Bridge, Marston Moor, Winwaed... and mighty frowning castles to keep the populace in terrified subjection. Uprisings were savagely put down again and again. In 1715, 13 years before Cook was born, and again in 1745, when he was seventeen, the Scots invaded and laid waste the North. The second time it was so serious that the government in London had packed its bags and was preparing for craven flight. This is a tombstone inscription from Whitby Parish Church:

"To the memory of Peregrin Lasells of His Majesty's Forces, who served his country from the year 1706. In the reign of Queen Anne, he served in Spain and performed the duty of a brave and gallant officer. In the rebellion of the year 1715, he served in Scotland and in that of 1745, after a fruitless exertion of his spirit and ability, at the disgraceful rout, Prestonpans, he remained forsaken on the field."

Prestonpans was one of the greatest embarrassments to English arms in the entire eighteenth century. Sir John Cope, incompetent, corrupt, fainthearted, was sent with three regiments of foot and two of horse to deal with the rebels. He spent most of his time trying to avoid meeting them, and with appalling roads his luck held until this disastrous encounter. The Duke of Cumberland eventually put down the rising with ferocious brutality, and then the English government grudgingly disbursed money for the
building of military roads. I have a couple of awesome statistics for you.

1600 years after the Romans had left Britain, General Wade took three days to march from Hexham to Newcastle. On the Roman roads it would have taken a Roman legion eight hours. As late as the 1770's, announcements for the Edinburgh to London mail coach were hopefully anticipating arrival in the capital in eight days "if God wills it." It was not uncommon for advertisements to be posted requesting information on the whereabouts of travellers who had set out and never arrived. Your chances of getting from York, say, to London, without your coach being involved in some kind of encounter with the "gentlemen of the road" weren't too high. Even the name that society bestowed on these brigands smacks of sneaking envy and approval ... perhaps jealousy that someone else had the sang froid to escape from a drab and wearisome lot by means that most shied away from.

Dick Turpin had a good deal of the picaresque about him; dozens of old inns vie with each other in claiming to have been his hideout; when he was executed at York in 1739 he immediately became something of a folk-hero.

In the days before an organized police force, the government, driven to the defensive by waves of violent crime, responded with insensate barbarism whenever a criminal was apprehended. Interesting to the social psychologist is the flood of mournful tracts and apologia supposedly written by the criminal, confessing to his crime and warning other potential wrongdoers of the terrible fate in store for them. These amazing products of popular culture, always describing the crimes in lurid detail, always harping on the good nature of the wrongdoer before he was seduced by evil company, always brimming with didactic morality and mawkish sentiment, enjoyed a huge circulation until the abolition of public hangings. Another
curious and unsavory product of public fascination was the series of cheap pottery figures depicting famous murderers that poured from the Staffordshire factories to an eager and indiscriminating market.

I am told that in talks like this, one must always have "points." So, if my first "point" was the turbulent history, remoteness and political instability of Northern England in the eighteenth century, my second, I guess, is the vast change that lay waiting over the horizon. Let us not, for goodness' sake, be misty-eyed about this area in this period of history. It was a time and a place of hardship and squalor and privation. Put out of your mind the Christmas card scenes of jolly, chubby-cheeked clay pipe smoking squires telling yarns in the chimney corners of thatch-roofed country inns. The primordial throb of ancient England, with its ghosts, elves and demons, dark rituals and gaunt, threatening megaliths ran cheek-by-jowl with the impending sunburst that would change England more in a century than in the previous two thousand years. What we now call (not entirely accurately) the Industrial Revolution would rush into these quiet valleys and fill them with violent pulsating throbbing noise, pounding, flailing machinery and black chimneys rolling out smoke. The Industrial Revolution was basically a northern phenomenon, based upon coal, china clay, iron ore, and the deep water ports of Yorkshire and Lancashire. The lifetimes of Capt. Cook and his wife span almost this entire age. When Cook was born in 1728, it was not altogether unusual for a whole mail coach to disappear into holes in the road. By the time Mrs. Cook died in 1835, huge viaducts were snaking across the countryside. England was moving irrevocably onwards into a mechanistic world.

The population, at the time of Cook's birth, was estimated at around
five million; by the 1830's it was 13 million. In the old order, dating from the Middle Ages, working folk were taught to admire their betters; it was a habit that Cook never quite got out of. As the pressure of the new industrialization and the new bursting population growth brought problems that the time honored formulae of the village squire and the local parson and the parish beadle's lockup failed to cope with, the government was baffled. What had been lost was the neat interlocking of social elements into a traditionally ordained pattern. Public utilities hardly existed; it was all private enterprise and private goodwill. Suddenly, with catastrophic rapidity, all this was to change. Medieval England, accustomed to centuries of comfortable somnolence, was precipitated out of bed and made to stand on its head. The massed-up impetus of the Italian Renaissance, of the seventeenth century's discoveries in the field of science, of the vast geographical discoveries of the sixteenth and seventeenth centuries and of recent dramatic inventions, had been slowly oozing through and suddenly burst the dam to hit rural England in the mid-eighteenth century. It was a resounding shock.

If Cook stands at the meeting place of two worlds, the European and the Polynesian, he also stands at the brink of two time frames. One is medieval England with its self-sufficient household economies, its rigid social orders and intense conservatism, and the other is a modern age of breathtaking promise. The fact that this promise has not brought us any more happiness in real terms than was probably possessed by the simple country folk of Cook's day should not make us forget how blinding the vision was. Along with Cook, to symbolize this change, one of the most fundamental changes in all human affairs, I should pick the name of John Harrison, Yorkshire carpenter, indomitable pioneer, doughty and petulant eccentric.
I haven't time to talk about Harrison now; in fact, I haven't even time to talk about the Yorkshire haunts of Captain Cook, which is what I came to talk about, but I would like to squeeze him in, although I'm sure that in these days of digital read-outs for $12.95, you won't be impressed.

Without guidance, without experience, Harrison set himself the task of building the world's first chronometer, the first clock to tell accurate time at sea. One or two of these slides show Harrison's clocks. When he started to work, he was in his twenties. When he finished, he was in his eighties and almost blind. Harrison's lifetime, even more than Cook's, spans the old world and the new. Once navigators had the chronometer, ocean voyaging became comparatively simple. ... I say, comparatively. There were still terrifying problems. But we have lost the scale, grandeur, and sheer pigheaded audacious courage of the early voyagers. It is inconceivable to us, as we look out of the window of a 747, that the pilot could be in any doubt as to where he is. And yet the whole of modern navigation that we take so much for granted is based firmly on the work of Harrison as first put into effect by Cook.

So, friends, let us now praise famous men and our fathers who begat us. I'm pleased that those who didn't fall asleep crept out quietly so as not to disturb those who did. What of all this, would Cook remember today? Not much, and that is why, I suppose, I took refuge in conveying atmosphere to eke out an otherwise bald and unconvincing narrative.

Certainly, there are hundreds of places ... castles, abbeys, churches, houses -- which were standing when Cook was born and are standing now. It's much more than likely that he knew many of them, that he knew York Minster intimately, that he was familiar with the building that now houses the York Museum (because he would have had to go there to get his seaman's inden-
tures), that he visited Sheriff Hutton Castle (only a mile or two away),
that he worshipped in St. Mary's Church in Whitby. In Scarborough there's
a magnificent ruined castle and a quite amazing old house close to the
harbor. It used to be a tavern and is said to have been slept in by King
Richard the Third. Certainly by Cook's day, it was already over four
hundred years old. The probability is overwhelming that Cook knew it. It's
possible, perhaps even very likely, that he visited the romantic monuments
of Yorkshire, the somber ruined castles and roofless abbeys and barbaric
pagan monuments, but the trouble is we have not one shred of evidence for it.
If we are seeking the Yorkshire haunts of Captain Cook in their strictest
definition, then the record is meager indeed.

There is the sea, of course. Everything begins and ends on the storm-
lashed or mist-shrouded coast that trained so many generations of hardy and
resolute seafarers. We know that Cook was in the coal trade as a young
man; we know the name of the ship (the *Freelove*), its owners (John and Henry
Walker of Whitby), and sundry other details, but of Cook's personal itiner-
ary we know next to nothing. It's a bitter pill to swallow that we know
little about Cook's early life and are likely to discover very little more.
Beaglehole's biography is 750 pages long but our hero has reached 17 years
of age by page five. Of the country seats of the gentry to whom Cook doubt-
less touched his cap, we have all we could wish. We can trace the minor
domestic perambulations of my lord X or my lady Y with almost embarassing
completeness, and yet apart from the logs, journals, charts and documents
which Mrs. Cook regarded as public property, we have next to nothing of
James Cook himself. It is almost too much to take.

So briefly then, to have done. We can assume that Cook visited York,
Borough Bridge, Richmond and the other market towns for the area, that he
drank in taverns that still stand, looked at historic buildings that still exist, much as a modern tourist might do. As far as documentary proof goes though, that is a different matter. The cottage he was born in was torn down shortly afterward. The monument marking its site is a much later erection. At Great Lyton where Cook went to school, there is a partial survival. The old school, built in 1704 from the bequest of Michael Postgate remains as a pitiful shell, insensitively modernized. The little stone house of Cook's father was transported in the 1930's to Australia and now stands, apparently forlorn and neglected in the center of a Melbourne public park. Cook undoubtedly used the ancient "Beggar's Bridge" over the River Esk, traditionally built in fulfillment of a vow by a frustrated lover who could not get across the river to see his sweetheart at a critical moment. It is a lovely spot and worth a moment's contemplation.

When we move to Staithes, there is a little more hope. Here Cook was apprenticed to a linen draper. Don't let "Capt. Cook's Shop" fool you; package tours brought that about — the real McCoy is somewhere under the North Sea. Part of the old "Cod and Lobster" Inn where Cook's employer used to drink is still preserved.

In Whitby we are close to the spirit, if not to the manifest remains, of the era that Cook knew. There are fragments here and there; the old house of his employers in Grape Lane, the funny old church that he certainly visited, the abbey... but none of these are documented. It is an English characteristic that prophets receive even less honor in their country than elsewhere. The only contemporary monument to Cook, erected by his friend Sir Hugh Palliser, is at present standing forgotten in some dusty storehouse of the National Coal Board. I didn't want to quote from it anyway, because
it's rather pretentious. Instead, I want to end with the real Cook; the sea, the ships, the Yorkshire coast. On the monument at Whitby is the inscription:

"For the lasting memory of a great Yorkshire seaman this bronze has been cast, and is left in the keeping of Whitby, the birthplace of those good ships that bore him on his enterprises, brought him to glory, and left him at rest."

I would be hard put to think of a tribute more simple, touching, or profound.
Some Historical Materials that Relate to the Pre-Captain Cook Pacific in Continental European Institutions

by

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The libraries and museums of continental Europe contain surprisingly large amounts of historical materials dealing with Pacific explorations. Future researchers who wish to understand the indigenous Pacific peoples as well as the routes of pre-Captain Cook explorers should not overlook the institutions of such diverse countries as the Netherlands, Czechoslovakia and Poland.

Because the early navigators were often from Spain or England and because those countries spoke languages easily understood by researchers from Hawaii, there may be a tendency to neglect the materials collected in other countries. During the summer of 1977 I visited Europe and was intrigued by such collections as sixteenth century globes in Polish palaces, beautiful south Pacific sailing canoe models in a Prague, Czechoslovakia museum, and the extensive map collections and journals in Dutch libraries.

Specific institutions which may prove worthwhile visiting:

A) The BETLEMŠKÉ NÁMAŠTEI NAPRSTKOVO Museum in central Prague, Czechoslovakia. It contained a very extensive collection of model ships from the whole Pacific basin. Most of the models were from the islands of Micronesia and Polynesia and many were over a hundred years old. The collection curator was DR. JOSEPH KANDERT.
B) The libraries and geography departments of various Dutch universities (especially those in Utrecht and in Leiden). The Dutch not only did their own exploring in the Pacific but also had good access to the information brought back by Iberian navigators. The maps of the sixteenth and seventeenth century Dutch cartographers are available and made easily accessible by the catalogs (in book form) of Prof. C. Koemans who still teaches at the University of Utrecht (a most modern and beautiful facility).

C) The public records offices in the Hague, the Netherlands. The logs of ships and many maps are reportedly deposited here, but I was unable to visit them.

D) The Maritime Museum in Amsterdam. This museum was being completely renovated and was closed during 1977. Based on previous visits, the museum has a wonderful collection of materials dealing with the whole history of navigation and exploration.

My own studies last summer were too brief to arrive at any conclusions as to the overall importance of the European materials in changing our understandings of early Pacific history. However, the quality of the materials, the thoroughness with which they are catalogued, and the friendliness of the archivists and museum curators (most of whom speak excellent English and German) permit me to recommend that others consider getting off the well-worn tourist path and doing some exploring of their own.
I'm going to discuss the voyages after Captain Cook, and before 1820 beginning with 1786. My interest is plants introduced to Hawaii during this period. I came to the interest in early introduced plants primarily from students' questions. In classes students kept asking, "Where did this plant come from?" "When?" "Who brought it in?" Many sources of information on this sort of thing which are widely available are quite fragmentary. Don Marin's journal is a good example (Gast, 1973). Other sources contain only portions of logs kept while a vessel was in Hawaiian waters, the Hawaiian Historical Society Reprint on John Meares Voyages for example (Meares, 1971). Still other sources did not survive or were either secreted by the authors or were never written down. The sealers, for example, kept a lot of their information secret to avoid competition (Cameron, [n.d.]). From the isolated perspective of Maui, one tends to think that answers are in Hawaii somewhere and all one has to do is to get from Maui over to Oahu and spend some time looking into it and the answer will be found. It has turned out consistently that that is not as true as I thought it was. There are a number of answers here, but more and more I came to believe that most of the answers were not here. But, I was still unwilling to believe that the answers were unavailable.
So last year I took a sabbatical and my wife and I went to London to research some of the British sources of information that might give us some clues. Unfortunately we were not successful in our botanical endeavors, but we did gather a lot of historical information. So what I would like to do is to present some of the historic information, some of the sources, and how to go about using them.

We need to start by realizing that the period from Cook onward was very important from a historical plant introduction perspective. This was the end of the age of exploration, more or less. Some explorations were still going on--Cook and Vancouver among the British ones. But it was a period when the trading era was beginning. It was very important for these traders to have sources of materials for trading and sources of food for restocking their ships as they traded from one place to another. Most of you are aware, for example, that the first vessels after Captain Cook came in 1786, and that from then on trade increased rapidly in Hawaii. Until the late 1800's Hawaii was an extremely important place in terms of restocking sailing vessels.

In addition to traders, sealers first came through Hawaii in 1798 and whalers in 1819 (Judd and Lind, 1974). Don Marin, who gets the blame and praise for so many plant introductions, arrived in 1791 (Gast, 1973). The period saw Kamehameha I unite the islands and it witnessed the overthrow of the kapu system at his death in 1819.

As I attempted to find the names of ships, I started out with the standard source, "Voyages to Hawaii before 1860" (Judd and Lind, 1974). This is the single most important source, published by the Hawaiian Mission Children's Society. It lists just under a hundred ships' names for the period before 1820. I figured at the outset that this book would probably
give me enough information to do my research. Then I began to look at other sources and discovered that there were more than a hundred ships in Hawaii during the period before 1820 (Gast, 1973; Meares, 1971; Howay, 1930-1934). By the time we were ready to go to England, I wound up with a list of 180 ships, 48 of which were British, and I concluded at that time that the 180 do not represent anywhere near the number of ships which were in Hawaii before 1820. I had the feeling that if you kept looking in more sources, you'd find references to many more ships. So the impression that few ships were in Hawaii before 1820 is probably not too accurate.

I spent some time trying to figure out why it was that ship captains would want to introduce plants from one place to another. There are a number of reasons for this. For one thing, at that time, it was the thing to do (Lemmon, 1968). People were hauling things from one place to another all over the world, especially all over the tropics, until it got to the point where one place in the tropics was botanically much like another. To a greater extent than we like to admit, it still is the "thing" to do. If you were a European ship, especially a British one, it was also the "thing" to take materials back to the Chelsea Physic Garden, Kew Garden or some similar place (Elton, 1958).

Transporting plants and animals was so important that many captains' orders said specifically that they were supposed to introduce things from one place to another. The Hawaiian Historical Society reprints on John Meares' trip (Meares, 1971) say specifically that he should take poultry, hogs, goats and sheep to the Sandwich Islands and establish the Sandwich Islands as the world's foremost trading place for resupplying ships. This was an important consideration. Two of the ship logs we read that dealt
with the War of 1812 show this especially well (Tucker, 1812-1815; Black, 1812-1815).

The *Cherub* and the *Raccoon*, with which some of you might be familiar, set out from London in 1813 to capture American shipping. They operated primarily in the Atlantic but came to the Pacific also. They captured two vessels off Maui by sort of a dirty pool exercise. When they sighted a sail, they hoisted the "Free Trade" flag to find out if it was an American ship. If that ship hoisted the American flag, they dropped the "Free Trade" flag, hoisted the Union Jack and captured the other ship as a prize. When we told our British friends that this was "dirty pool," they said it was "common intelligence."

Back to the topic. This pair of ships reprovisioned in Rio de Janeiro before they came over to Hawaii. They spent about three weeks there, and during that three week period they took on between 700 and 800 oranges per day for a total of 15,000 oranges, give or take a few, and about 10,000 lbs. of bread. It is clear from these figures alone that if you thought that you were going to cross the Pacific before you had a chance to get anything new that reprovisioning would be a prime consideration. It would be to your advantage to introduce things to places like Hawaii so that such things as oranges and wheat for bread would be available.

Because introducing organisms was so important, I thought that if we looked into ships' logs we ought to be able to find all sorts of information about plant introduction. I was wrong. We did not. However, we had a glorious time reading these logs and uncovering useful historical information.

I decided to concentrate on British sources of shipping information for a number of reasons. The greatest number of ships in my period of interest was British. After 1810, British ships began to lose out to
American traders, partially as a result of an early triumph of bureaucracy over free trade. British traders had to register with the East India Company; American ships had to answer to none (Howay and Scholefield, 1914). In spite of the decline, however, British influence remained strong in Hawaii. I felt I would have the best luck with British sources. An additional reason is that the British are meticulous record keepers. Much of the British information has been kept centrally. Information in the United States is widely scattered.

Probably the single largest source of information is the Public Record Office in London. Here are deposited most of the major British documents from the Domesday Book of 1086 onward. Major documents of public interest are displayed in a very small museum which is probably the ultimate in historical record museums.

The Public Record Office is available to most people who can demonstrate a legitimate research. It is not easy to get in. It is necessary to pre-arrange a reader's card and there are the usual rules related to archives. You cannot take in a brief case, you must use pencil and paper only, and so on. But it is possible to use it, and it is possible to get a lot more information than we obtained. We were in London three months. In that time we didn't really have time to research the purely historical material; we were after the botanical information. But for those interested in history, a lot of untouched information is undoubtedly there. The Public Record contains primarily captains' and masters' logs. Generally it does not contain logs of lower officers except in the case of explorations. For example, all of Vancouver's material is there. Cook's of course, is not. It has been transferred to the British Museum.
A second source of British information is the National Maritime Museum in Greenwich. The Maritime Museum for those of you who have been there is another fantastic place. The library is beautiful. It's not nearly as complete a depository of ships records, however, as the Public Record Office. The procedures for getting in are roughly the same as for the Public Record Office but they are not nearly so stringent. For example, when we went to the Public Record Office, I had a reader's card, but we had not prearranged for my wife to get one. She had to go down to the embassy with my card and her passport to get certified. Finally after considerable hassle, she was able to get her own Public Record Office reader's card. The National Maritime Museum is a much friendlier set up. We could both gain admission on my card. Both the guards who ushered us in and the librarians were very interested in helping us, unlike the typical bureaucratic set up at other government agencies. Unfortunately, the Maritime Museum doesn't have large amounts of historical information which would be useful for a project of this nature. The museum keeps the logs of lieutenants and lower ranking officers. As a result there was nothing we could track down that was useful for us. There was one thing that might be interesting to the Cook buffs, however. For some obscure reason they have the log of William Griffin who was the cooper on the Resolution (Griffin, 1776-1780). That log for some reason is not with the other Cook materials.

We looked into the possibility of researching material in the British Museum but it develops that except for things of high public interest such as the materials on the Cook expedition, almost all records are contained in the Public Record Office. That's one of the reasons we went to Britain. I thought about going to the east coast of the United States first and attempting to find east coast sources. I discovered that these sources of
information are so widely scattered that it would be impractical to research them in the time I had available. The British, being the meticulous record keepers that they are, have everything in one place.

There were some problems even then, however. The period before 1820 was not yet a time when the British were keeping records in a systematic, centralized fashion. From 1660 onward they did require that all British ships be registered with collectors of customs in the ports where they were built. They did not require, however, that these records be kept centrally. And it was only from 1786 onward that registration was required with a central source. That central source was called the Registry General of Ships and Shipping at the London customs house. A fire destroyed the custom house and all its records in 1814. As a result most of the records that are available are from 1814 onward (Registrar General of Ships and Shipping, [n.d.]. Hereafter, the Registrar General of Ships and Shipping shall be cited as RGSS. RGSS, 1786-1814; RGSS, 1814-onward).

Even if the records had not been destroyed, there would still be some problems with the time period. Registration was required from 1786, but only admiralty ships were required to turn in any logs prior to 1854. For the most part, admiralty ships were military, so in essence this limits the information that one is likely to get, either to military ships or to explorations such as those of Cook and Vancouver.

We tried to follow up another lead. I was told before I left that Lloyd's of London insured shipping from something like 1600 onward. That may easily be true, but records are not available. There is one Lloyd's registry from 1764 (Lloyd's Registry of Ships, 1764) that is too early for our period. The next one is not available until 1840, which is too
late for us (Lloyd's Registry of Ships, 1840). The later record of shipping registries though does contain a number of registrations that go back to 1785 and it is an international registry. For people interested in history and not pursuing the logs, this might be an interesting source of information if it was dug into in depth.

Several problems cropped up once we found some relevant logs to research. There is the usual problem in the Public Record Office, as everywhere, that logs are fragmented. The King George log of 1786, for example, as some of you are aware, begins off the coast of South America on the way to Hawaii (Portlock, 1786). The rest of it is not there; one must get information from other sources such as John Nichols' book (Grant, 1937). A second problem about logs is that you'd better be prepared to have your vision disappear if you intend to read them for long periods of time. John Charles showed a number of photographs of logs and other documents. If you attempted to read them from the back of the room, or even from the front, in very much detail, you could forget it. Logs were relatively easy to read when they were written by captains in sea ports. But as soon as they got to sea it was another story. In the case of the two logs that I mentioned earlier, for example, from 1813 and 1814 (Tucker, 1812-1815; Black, 1812-1815), as long as the ships were at anchor in Rio the logs were quite legible. When the ships left Rio, though, and headed south, it was obvious that the wave action was getting worse and worse. As they went around the Horn, the writing became almost indecipherable. We would read along a page and there would be a splash of ink which would obliterate half a word and we couldn't tell what the word was. It was easy to imagine what the captain was saying to himself while attempting to write his log. The last problem in terms of these logs is that from a botanical viewpoint apparently the sorts of
things that we were seeking were not the sorts of things that the captains were interested in putting down. A captain would keep a daily record of the water supply; the number of rum casks opened and the number of gallons in each cask; the number of lashes given to a seaman and occasionally the reasons for the punishment; and the names of those who were buried at sea, often as a result of having been flogged too much a week earlier. In general, the information we sought was not available. Information of a general historical nature is available though and is worth pursuing.

The last thing that I want to discuss is about ships' registries and not about logs. For those interested in pursuing shipping information for the period previous to 1820, or any early period, it is probably possible to find the registries for most of the British ships that came to Hawaii during that period. They were all registered. The only problem is that the registry contains 19 pieces of information for each ship (RGSS, [n.d.]; RGSS, 1786-1814; RGSS, 1814-onward). That wouldn't be so bad, except that there seems to have been a gross lack of imagination as to what name should be given to a ship. There were as many as six or seven ships of the same name in the same time period in the same registry book. When we found the name of a ship we wanted to know about, we'd have to go through the information and look at the various dimensions of the ship, then look back at our records, see what we had about it, and see if it fit our description. After a few sessions of this, we began to go slowly mad and gave it up as a bad job. One could spend days trying to establish that one ship was the ship in question. Probably, though, there is a gold mine of historical information there if one were able to take the time to dig it out. We found a reference to the Prince of Wales, for example, which indicates that it was a transport ship which took the prisoners from England to Australia (Historical
Records of New South Wales, 1790). The time period is correct for the 1788 visit of the ship by this name. No other historical information, though, shows that this was the same ship.

By way of summary, I would say that we did not exhaust the possible sources of information in Britain. We certainly intend to go back and do further work - especially with ships' manifests if we can find them. The sources we used to date would be quite useful to historians in cases where they have not already been tapped for historical purposes. I highly recommend the Public Record Office to anyone interested in British influence during this period.
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Saturday, April 1, 1978

Second Session
The Scientific Significance of Cook's Third Voyage

by

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In order to limit this paper to reasonable length, it will be confined to a discussion of the scientific significance of the Hawaiian portion of Cook's third voyage, and the topic will be narrowed still further to emphasize only that segment of science called natural history.

Cook's first two Pacific voyages produced significant advances in scientific knowledge. In addition to observations on geography, ethnography, and astronomy, major collections of plants and animals were obtained by trained scientists and collectors. On return to Europe the collections were described and many of the results were published in the scientific literature. On the third voyage a combination of the lack of trained naturalists and the perhaps inevitable confusion accompanying the deaths of the chief naturalist as well as Captian Cook and Captain Clerke resulted in very little publication of scientific results.

Why the lack of trained naturalists on the third voyage? Unlike the American space exploration program which sent a "real" scientist only on a later trip to the moon, the 18th and 19th century European voyages of exploration generally provided for the inclusion of competent scientists and collectors.

On Cook's first voyage the chief naturalist was the 25-year old Joseph Banks, already a prominent botanist, elected a Fellow of the Royal Society at 23, later President of the Royal Society for 42 years (Cameron, 1952). Banks used his own personal funds to support a total party of 10, including
Dr. Daniel Carl Solander, the Swedish botanist who was the favorite pupil of Linnaeus, a draftsman, three artists, the most prominent of whom was Sydney Parkinson, and four servants (Beaglehole, 1955). After the voyage the plants were described mostly by Solander and plates were prepared, but the work was never published. Parkinson died on the way home, a month after the *Endeavour* left Batavia (Beaglehole, 1962). His illustrated journal (Parkinson, 1773) was published by his brother, after extended arguments with Banks (Beaglehole, 1962; Merrill, 1954). There were several plants mentioned, some of which were formally, if not conventionally, described and named.

As Cook's second voyage approached, Banks proposed going along with 16 others in his party, Dr. Solander, a painter, 3 draftsmen, 2 secretaries, and 9 "servants acquainted with modes of preserving animals and plants". Cook protested the proposed size of the party and space required, Banks objected to Cook's choice of ships, and the comptroller of the Navy put many obstacles in Banks' way. Eventually he withdrew and went on an expedition to Iceland (Cameron, 1952; Merrill, 1954).

The naturalists appointed to make the voyage, with Banks' encouragement, were a father and son team, Johann Reinhold Forster and Georg Forster. The artist was William Hodges (Beaglehole, 1961). The Forsters were excellent naturalists, who worked competently with both animals and plants. The father, according to the accounts of nearly all who have written about him, seems to have been a rather prickly, extremely intelligent, somewhat paranoid character (Cameron, 1952; Merrill, 1954; Beaglehole, 1961; Ewan, 1974; Hoare, 1976). As was standard practice, members of the expedition were required to sign documents stating that they would not publish their own journals of the voyage until after the official journal has appeared. The father signed such
a document, the son was only 17 and it was not thought necessary for him to do so. A few weeks before the official journal appeared the son Georg Forster published the Forsters' journal under his own name (Forster, 1777). Leaving moral and ethical considerations aside (as many non-scientists think most scientists are wont to do) the Forsters did a lot of fine scientific work and got it published.

As a result of this flap, it seems likely that Cook was not anxious to burden his ships with temperamental scientists for the third voyage. The naturalists who made the trip seem to have been solid citizens if not distinguished scientists. They were mainly selected by Cook himself.

The chief naturalist was William Anderson, surgeon on the Resolution. John Webber was the artist. William Ellis, surgeon's mate on the Discovery made a number of paintings and drawings. David Nelson, a gardener by training, was recommended to Banks who had him sent on behalf of Kew Gardens as botanist (St. John 1976a). William Bayley was the astronomer; William Bligh, the hydrographer.

Anderson, the senior naturalist, fell ill before the voyage reached these islands, although he went ashore with Cook on Kaua'i and the journal of the voyage gives a brief account of their walk through taro patches at Wai-mea. He died off Alaska before the ships returned to Hawai'i later that year (Beaglehole, 1967). He and Ellis collected a few animal specimens including bird skins (Kay, 1972).

Ellis' major contribution to natural history was twelve watercolor paintings of birds, and some of fish, many of which have never been published.

Webber's illustrations of scenery and people are better known, but not all of his seven bird paintings have been published (Wilson, 1977) despite the fact that Ellis (1782) published a 2-volume illustrated journal of
the voyage, and a book of colored illustrations based on Webber's drawings (Webber, 1808) was published posthumously.

Nelson, the gardener-botanist, apparently got on shore only for brief periods while the ships were at Ke-ala-ke-kua, Hawai'i. Among other activities, he made one four-day trip up the slopes of Mauna Loa during which he collected a number of plants (St. John, 1976a). However, he lacked the training to describe the new species and publish the botanical results of the voyage himself; Cook was dead; without his influence and drive and in the absence of a qualified scientist there was no one to organize the writing up of the scientific results of the voyage.

Nelson's 130 or so plant collections were turned over to Sir Joseph Banks and placed in the British Museum. Banks was too busy to study them. He gave to to Solander who died shortly thereafter. They were passed on to Robert Brown who was busy with the Australian flora. The collections remained in the British Museum and were never studied as a group until Professor Harold St. John did so a few years ago (St. John, 1976a).

During the voyage Nelson also gave Captain Clerke a list of 34 plants he had observed in Hawai'i, mostly cultivated species or common weeds. Clerke died before returning to England. His journal with Nelson's list of plants remained unpublished until 1967 (Ewan, 1974).

There were not many other natural history specimens from Hawai'i. We know of one fish specimen, a few shells, and a few bird skins (Kay, 1972)—hardly a creditable collection from an area as biologically rich and scientifically fascinating as Hawai'i.

Most of our information about Hawaiian natural history in 1778-9 thus has to be deduced from reading the journals and perusing the illustrations prepared on the voyage.
William Bligh's charts and drawings of coastlines were the standard for the next hundred years. Some of the oceanographic comments are equally valid today:

The currents seemed very uncertain; sometimes setting to windward; and, at other times, to leeward, without any regularity. They did not appear to be governed by the winds, nor any other cause that I can assign: they frequently set to windward against a fresh breeze. (Cook and King, 1784, Vol. 3, p. 117)

Cook's journals included very brief descriptions of the vegetation around Wai-mea, Kaua'i and on Ni'ihau. Wai'mea had extensive taro plantations, sweet potatoes which weighed 12 to 14 pounds, at least 6 kinds of bananas as well as a plantain, sugar cane, and paper mulberry or waukee. Trees were not common in the lowland here, but several kou trees were noted, coconuts grew very poorly, and only one breadfruit tree was seen. Ni'ihau was described merely as having some fragrant shrubs and plants (Beaglehole, 1967).

The best description of the vegetation on Hawai'i was given in the journal of John Ledyard (Munford, 1963), the American adventurer who was a corporal of the marines in Cook's crew. Ledyard organized the 4-day trek up Mauna Loa on which Nelson obtained many of his plants. The lowlands around Ke-ala-ke-kua Bay contained many fields of sweet potato, a few patches of sugarcane, and some bananas. About three miles inland, on steeper slopes, were extensive groves of breadfruit trees, above which the land was thickly covered with ferns. At about four to five miles from the shore the rain forest began. Ledyard mentions spending two nights under a fallen tree which was 32 feet in circumference and lay four feet above the ground (Munford, 1963). The tree was most probably either a koa or an 'Ohi'a-lehua tree, both
of which still occur in these forests. Curiously, no specimens of koa collected by Nelson have been found (St. John, personal communication), but we know he did collect 'ōhi'a--lehua. On the other hand, the journals refer to finding drinking water "left by rain in the bottom of an unfinished canoe; which though of the colour of red wine, was to them no unwelcome discovery." (Cook and King, 1784, Vol. 3, p. 111). This mention of a canoe probably refers to koa; also the heartwood could well stain water the color of red wine—but then so could 'ōhi'a- lehua wood. Professor St. John has a paper which will soon appear in the journal Pacific Science listing Nelson's collections and giving interpretations of the vegetation as revealed by both the collections and the notes of Ledyard and others.

An analysis of the birds observed and collected in the islands was published by Erika Wilson in the August 1977 issue of *Elepaio*, the journal of the Hawaii Audobon Society. She consulted a number of original manuscripts and the paintings of Ellis and Webber in the British Museum, and found records of at least 22 species of land and water birds. Among those noted were 'alae-'ula, 'ō'o, 'apapane, and 'i'iwi. Ledyard reported the collection of "a number of fine birds of the liveliest and most variegated (sic) plumage that any of us had ever met with" (Munford, 1963, p. 122). Others described the trapping of birds for feathers by Hawaiians who used the sticky sap of a small tree as a bird lime. Captain King's journal reported that the Hawaiians had tame nēnē, and that ravens (the Hawaiian crow or 'alalā) were kept around the houses (Wilson, 1977).

Ledyard mentioned catching "several curious insects" (Munford, 1963, p. 122) but there is no further record of the specimens.

While some of the areas pictured 200 years ago look very similar today, others have changed greatly, and not just as a consequence of
artistic license. Cook and his men were important agents of such change. Cook left behind in Hawai‘i some English plants and animals. There is a general human tendency to be somewhat uncomfortable in new and different surroundings, and people often set out to make them less different, to make them more like home, to "improve" them. In keeping with this tendency, and probably in an effort to assure a more varied food supply for future explorers, Cook left on Ni‘ihau a male and two female goats, a pair of pigs "of the English breed", and the seeds of melons, pumpkins, and onions (Beaglehole, 1967). These were the first of an ever increasing influx of plants and animals which, as much as the ever increasing influx of humans, has caused changes in Hawaiian ecosystems leading to the disappearance of many of the plants and animals Cook’s men found here.

In this connection one must consider George Vancouver. As a young midshipman on the Discovery with Cook, he was a member of the Ledyard-Nelson expedition to Mauna Loa, and was thus one of the first party of Europeans to see a pristine Hawaiian rainforest. Fifteen years later, as Captain Vancouver of another ship named Discovery, he left in Hawai‘i the five cattle from which developed the immense herds of wild cattle that proved so destructive to these same forests.

One example will indicate the amount of environmental change. Of about 130 kinds of plants collected by Nelson 15 lay unstudied in the herbarium for almost 200 years until they were described by Harold St. John in 1976. Thirteen of the 15 have never been collected again, the other two were subsequently collected only by Menzies, the naturalist on Vancouver’s voyages. All are probably extinct today (St. John, 1976b).

It is presumptuous to attempt to evaluate the scientific significance of Cook’s third voyage, or even that small part of it which I took as my
The amount of information gathered on Hawaiian plants and animals was reasonably good considering the lack of scientific training of the naturalists and the misfortunes that occurred during the voyage; it was disappointingly small in terms of what was published at the end of the voyage and what could have been discovered in Hawai'i, some of which undoubtedly disappeared forever before representative specimens made their ways to the cabinets and collections of that part of the world which placed value on such objects. Although it does not become a scientist to indulge in baseless speculation, I must confess I sometimes wonder what David Nelson missed.
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The Consequences of Cook's Hawaiian Contacts on the Local Population

by

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The arrival of Captain Cook in Hawaiian waters in 1778 initiated a
new and, for the Hawaiians, a calamitous phase in their demographic his-
tory: this is beyond dispute. From an insecurely estimated population
of c.250,000 Hawaiians in 1778, the population, even of some Hawaiian
ancestry, fell to c.84,000 by 1850 and to its nadir of c.37,500 in 1900.

How much of the blame for this tragic episode can be assigned directly
to the effect of Cook's contacts with the Hawaiians in 1778-9 and how much
was inevitable given the subsequent explosion of interest and contact in
the Pacific which Cook's discovery detonated, is a matter about which
some controversy may persist. But several writers, including the Hawaiian
historian Kamakau, have held Cook culpable (Kamakau, 1961, Ch. VIII,
pp. 92-104). As a consequence, Cook's name is held by some in Hawaii in
a disrepute not encountered elsewhere in the Pacific region which he
explored.

The journals and other writings which resulted from the two Cook
visits refer to the problem of venereal diseases among the crews, to the
possibility of their transmission from the newcomers to the Hawaiian
population and to the possibility of their previous presence.

The aim of this paper will be to test the accuracy and probabilities in-
volved in Cook's perception of his expedition's role in this process, but
in the light of modern hindsight.
Unfortunately, the Cook accounts follow the custom of the time in being very vague in most cases about which of the two major venereal diseases is being referred to. Cook wrote in a scientific climate in which, although there was great alarm about the prevalence and destructiveness of the venereal diseases, there was still great ignorance about them. Twenty years before Cook landed in Hawaii, Hunter, an influential medical researcher "proved", at least to his own satisfaction, that syphilis and gonorrhea were one and the same. Syphilis and gonorrhea were not scientifically "separated" again until 1837, sixty years after Cook was writing. Scientific acceptance of the "germ theory" was still ahead in time an even further distance. Nevertheless those most exposed to such diseases, and we must include here the sort of people Cook is likely to have recruited as a crew, had a vernacular appreciation of the two, and their terms, "clap" for gonorrhea, and "pox" for syphilis separate them quite efficiently.

It is often, but not always, possible from the incidental descriptions of the symptoms, to decide which is being discussed. To make the distinction between the two is extremely important from a demographic point of view because their effects are very different. Of the two, gonorrhea probably is the more destructive because of its capacity to cause sterility, particularly in females but also in males. Its effect on mortality is negligible. There have been documented some modern cases of widespread gonorrhea associated with low fertility, being carefully observed in the Pacific Islands (Scragg 1954 and Pirie 1972). In the literature, because of its apparently milder and shorter effect upon the individual, gonorrhea is often taken quite lightly.
Syphilis by contrast is, in its later stages, an obvious and "loathsome" disease and is described in suitably horror-struck terms by most writers who observe it, including those documenting Cook's voyages. Its demographic effect is much less however; while it does shorten life, the slow deterioration involved may take two or three decades and, given the mortality characteristic of the time, many other causes of death could supervene. It also causes spontaneous abortion and reduces the survival of children from congenital causes but has little direct effect upon fertility as such.

There is one complication about the introduction and dispersal of syphilis into the Pacific which is too little appreciated and which has particular importance to its effect in the Hawaiian group. This is its association with yaws (treponema pertenue) as one of the group of four diseases known as treponematoses. There is no need here to become involved in the Hudson controversy over whether these diseases are actually caused by an identical organism, and whether the differences among them are better explained by environmental variation than by organic differences (Hudson, 1965). It must be observed however that (a) the prevalence of yaws, especially among the very young, will render a population largely immune from infection by venereal syphilis and (b) that the distribution of yaws is related to a specific climate, the humid tropical forest type, and that lower temperatures and increasing aridity will limit its occurrence. A well distributed annual rainfall, of less than 1650 mm (65"), and one or more mean monthly temperatures falling below 18°C (65°F) seem to set the lower limits of a yaws-specific environment. In the Köppen climate classification the occurrence of yaws is generally coterminous with the Af climates or the tropical rainforest type (Fig. 1). The Hawaiian chain lies outside this regional climatic type in the Pacific, but the effect of
Figure 1 The Optimum Zone for Yaws in the Pacific Islands

- Rainfall limit (1650 mm annual rainfall isohyet)
- Temperature limit (minimum winter month mean temperature 18°C)
- Elevation limit (above 500 meters within optimum zone)
orographic rainfall, mainly associated with the tradewinds and the prevalence of mountainous interiors brings a high rainfall tropical forest climate to much of the archipelago and Af climates are recorded in many locations.

The presence of yaws in Hawaii is still a matter of some dispute. The probability is high that it would have been introduced by the earliest Polynesian settlers from the Marquesas and the Society Islands, where its prevalence has been well established, in a process of oceanic diffusion which had its beginnings in Southeast Asia. On the windward coasts of the Hawaiian chain, the climates are certainly hot and humid enough for yaws to thrive. The leeward coasts, because of low and erratic rainfall, would provide less than optimum conditions. The exception to this generalization occurs on the Kona Coast where, because of a prevalence of convectional rainfall, induced by on-shore breezes developing in the lee of Mauna Loa, particularly in the afternoon hours, this "leeward" coast has a high rainfall and a distinctly humid tropical climate which would be very hospitable to yaws. Most of the lowland areas on the island of Hawaii, traditionally cited as the first island to be inhabited, would have provided conditions which would have allowed yaws, once introduced, to become endemic.

There is a possibility that, by chance, none of the canoe crews carried yaws and that the Hawaiian Islands escaped this tropical scourge. But there are several references, listed in Van der Sluis (1969), to symptoms observed among Hawaiians in the late 18th and early 19th centuries which indicate the presence of yaws, although often confused at the time with venereal syphilis, and the name "pupu" is associated with this condition.1

1 Recorded as pupu in various spelling variants, by these observers, the word in Hawaiian is pu'upu'u -- to break out in lumps or blisters. (Andrews, 1865).
Scott, a surgeon on the "Talbot" visiting Hawaii in 1844-5 notes, "The most common and obstinate [disease] termed pupu in their language, is a vesicular and prurient eruption, which is a species of eczema, and appears analogous to the tonā of the Society Isles, it is often aggravated by constitutional causes, and is sometimes followed by ulcers difficult to heal. The inhabitants do not consider it contagious" (quoted Van der Sluis, 1969, p.119).

George Bennett (1832) another doctor writing on the practice of medicine among several Polynesian groups identifies pupu in Hawaii and also identifies it with the tonā of Tongatabu (Van der Sluis, 1969, p. 118). F.D. Bennett (1840) observes, "Diseases of the skin are rather prevalent amongst them; especially one form, named pupu by the natives, and considered a variety of the itch by Europeans -- its contagious character however, may be very fairly questioned. It occurs as a vesicular and very prurient eruption; and in its worst form, is followed by ulcers which are very difficult to heal. It is analogous to the Tona of the Society and other Polynesian islands."

The Wilkes Expedition records also note "a somewhat similar disease to that which we have observed in other Polynesian islands, exists here [in Hawaii] under the name of poupou; but it is by no means so violent nor did we see any cases of so disgusting a character as those heretofore described: it is very much confined to the young" (Wilkes, 1838-42, Vol. IV, p. 305).

\[tōnā\] is the term still in use in Polynesia for yaws, e.g. in Tongan, Samoan, and Tahitian. Another word, oovi (Tahitian) or kovi (Marquesan) is sometimes used for yaws in its later carious stage. The word seems to have been applied later to leprosy when it was introduced in the middle of the 19th century. (Van der Sluis, 1969, pp. 80-83).
The descriptions generally point to yaws, and the precise identification of "pupu" with tona by observers familiar with both in the Pacific islands is convincing indication that yaws was present in Hawaii before Cook's arrival, and that it persisted well into the 19th century. That it was sometimes confused with venereal syphilis is suggested by the following account which, although ostensibly of syphilis, is more likely, given the location, the non-venereal acquisition and the youth of some of the patients, to be endemic yaws.

"At Karakakooa [Kealakekua] we visited several most wretched objects; the bones of the palate, orbit, or extremities were in a state of extensive carious disease and we were requested by three individuals to perform amputations thinking it might lessen their sufferings. The venereal poison is frequently absorbed and carried into the system without any abrasion or sore appearing on the genitals! In many instances it must have been hereditary, judging from the advanced state of the disease compared to the youth of the individuals suffering." (Gunn, 1841-2).

If yaws was in fact endemic in the climatically suitable areas of the Hawaiian chain, the young people growing up in a yaws-infested environment would have acquired substantial immunity to venereal infection from syphilis. Conversely, those whose childhoods were spent in climates inhospitable to yaws, such as the semi-arid areas of the leeward coasts, would have been vulnerable to syphilitic infections derived from visiting seafarers.

Cook's first landfall in the Hawaiian group on the 18th January 1778 was Kauai; contact in the area was confined to the Waimea area on the leeward coast of Kauai and to Niihau. Climatically this is a semi-arid area, with a rainfall averaging less than 30" for the most part, and, in Köppen terms, a BS climate, (Figure 2). It is consequently a very hostile
Figure 2 Cook's Third Voyage in Hawaiian Waters
environment for yaws; as could be expected, none was observed. Presumably, the local population was open to infection from venereal syphilis.

Although certainly ignorant of these environmental complications, Cook was sensitive to the need to prevent the members of his crew who were infected with venereal disease from passing their complaint on to the Hawaiian population. The controversy over the introduction of venereal diseases in Tahiti, by Wallis or by Bougainville, and his previous experiences on the First and Second Voyages had alerted him to the awful possibilities. In his journal, he makes the following entry on the second day in Hawaiian waters:

"As there were some venereal complaints on board both the ships in order to prevent its being communicated to the people, I gave orders that no women on any account whatever were to be admitted on board the ships, I also forbid all manner of connection with them, and ordered that none who had the venereal upon them should go out of the ships. But whether these regulations had the desired effect or no time can only discover. It is no more than what I did when I first visited the Friendly Islands yet I afterwards found it did not succeed... (Beaglehole, 1967, I, pp. 265-6).

In spite of Cook's precautions however, it is certain that venereal disease was passed on to the Hawaiian population during this visit. Because of high surf, a party of 20 men and an officer had to be left on Niihau for two days.

"thus the very thing happened that I had above all others wished to prevent" (January 30, 1778). (Beaglehole, 1967, I, p. 276).

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3 Cook's regret over the introduction of "the venereal" to Tonga may also be misplaced as the same problems of confusion with yaws occurred there.
King wrote

"the captain was very uneasy at their staying on shore, being apprehensive, that his endeavours in hiding any connections with the women would now be frustrated..." (Beaglehole, 1967, I, p. 276).

Samwell a ship's surgeon observed after this incident

"whether they were free of [venereal disease] on our coming among them is more than we know, certain it is that we saw no signs of it, nor did any of the people of either ship contact it here, tho it was known that some of those who were on shore had intercourse with the women." (Beaglehole, 1967, I, p. 1083).

On February 2nd, 1779, after 15 days in the waters around Kauai and Niihau, Cook's expedition sailed away.

After nearly 10 months in the far North Pacific, Cook returned to Hawaii, after a 25-day run from Unalaska Island where, incidentally, some of his crew had acquired a fresh dose of "clap".

"As some few of our People had got the clap by their Commerce with the women [of Unalaska] the Captain had the ship's Company examined by the Surgeon. In order to prevent it's fatal [sic] influence at Sandwich Isles." (Gilbert, 1776-9).

On November 26th 1778, Cook sighted Maui. He promptly reissued the orders forbidding women to come aboard but observed

"the evil I meant to prevent by this I found had already got amongst them. They were of the same Nation as those of the leeward islands, and if did not mistake them they knew of our being there [at Kauai]. Indeed it appeared rather too evident as these people had got amongst [them] the venereal distemper, and I as yet knew of no other way they could come by it." (Beaglehole, 1967, I, p. 473).
To be so evident however, (Cook did not land, but traded with Hawaiians in canoes) the disease can scarcely have been gonorrhea, but would have to be syphilis at least at the secondary stage or, much more likely, given the windward location, yaws.

There is very strong evidence that gonorrhea was also present in the Maui population by this time as King records three Hawaiians as being in

"great distress: they had a clap, their Penis was much swell'd, and inflamed. The manner in which these innocent people complained to us seem'd to me to show that they considered us as the original authors." (Beaglehole, 1967, I, p. 498).

This clinical description is undoubtedly of gonorrhea observed two days after arrival, and must be admitted as strong evidence of the rapid transmission of gonorrhea from Kauai to Maui.

Cook records women visiting his ship just past South Point

"It was not possible to keep [the women] out of the ship and no women I ever met with were more ready to bestow their favours, indeed it appeared to me that they came with no other view." (Beaglehole, 1967, I, p. 486).

On January 17th 1779, Cook finally came to anchor at Kealakekua where he decided to stay some time to rest the crew and refit his ships. While one might now have expected Cook to give up his fight to stop his men from venereally infecting the Hawaiians, on the theory that the damage had already been done, there is some evidence that he persisted; a William Bradley is recorded as receiving two dozen lashes for "disobeying orders and having connections with women knowing himself to have the Venereal Disorder on him." (Beaglehole, 1967, I, p. 511). This note is the earliest specific account of a venereally infected crew member having intercourse with
Hawaiians. The difficulties Cook faced at Kauai and Niihau, must have been overwhelming in Kealakekua and there can be little doubt that many of the crew enjoyed the sexual favours of their hosts.

Since the Kona district has a high-rainfall tropical-forest type climate, there must be real doubt that Cook's crews could have infected the locally-born Hawaiians there with venereal syphilis. Samwell, a surgeon with the expedition, makes the point:

"During our stay in Keragegooh [Kealakekua] Bay, where we had constant opportunities of directing our enquiries to the most intelligent of the natives, I met with none who could give me any information on the subject, [of venereal syphilis] nor could I learn that they had the least idea of our having left it at Atowai [Kauai], or that it is a new thing amongst them."

and,

"it is hardly possible, that the disease should have spread so far, and so universally, as we found it at Ouwhee [Hawaii] in the short space of time which intervened between our first and second visit to the Sandwich Islands... The priests ... seemed to have an established mode of treatment, which by no means implied, that it was a recent complaint among them, much less that it was introduced only a few months before." (Samwell, 1786, pp. 38-40).

After the loss of Cook at Kealakekua, the expedition moved west through the archipelago back to Waimea, Kauai, where the following observation was made by Captain Clerke.

"Here are many of these good Folks, both Men and Women about the ship miserably afflicted with the Venereal disease, which they accuse us of introducing among them during our last visit, they say it does not go away, that they have no antidote for it, but that they grow worse and worse, explaining the different symptoms in the progress of the disorder till it totally destroys them. Captain Cook did take such preventative methods
as I'd hope'd and flattered myself would prove effective, but our Seamen are in these matters so infernal and disso-
lute a crew that for the gratification of the present passion that affects them they would entail universal destruction upon the whole of the Human Species." (Beagle-

This is scarcely gonorrhea but would seem to be a description of rather violent cases of venereal syphilis, which, because of its applying to a population living along the arid southwest coast of Kauai, implies that the disease was recently introduced to a previously yaws-free and therefore non-immune population.

To conclude, can we make some sense out of these superficially conflicting accounts? Cook's crews may have introduced venereal syphilis to Kauai and Niihau; Clerke's account suggests they did. But it is not likely to have been possible at their other points of contact, particularly at Kealakekua. It is possible that the syphilis introduced at Kauai could have been disseminated to the Kona Coast within the year between Cook's two visits, but the relative slowness of syphilis as a contagious disease, certainly compared with gonorrhea, which apparently was not yet common in either Maui or Kona, as well as the alarming nature of the observed symptoms, make it much more probable that it was yaws that the Cook expedition observed so frequently. Their guilt at having caused the introduction of venereal syphilis at Kauai was therefore probably misplaced as far as Kealakekua was concerned. Samwell's doubts about Cook being responsible for the state of health of the stricken Hawaiians there were probably justified. But not for long.

Although endemic in some parts of the archipelago, yaws must have existed under some stress. The adoption of cotton clothing and the addition of soap (an effective germicide as far as the yaws treponeme is concerned)
to the Hawaiian practice of frequent washing, gradually reduced the incidence of childhood yaws, and the contraction of venereal syphilis became more likely at later age. Along with New Zealand, the Societies and the Marquesas, Hawaii became by the late 19th Century included among the few places in the Pacific Islands where venereal syphilis was a hazard to visiting seamen, not to mention the local population. References which could apply to yaws pass out of the literature.

With gonorrhea, however, the situation must have been different. Cook's crews could have introduced it to Hawaii from both the Society Islands and from the Aleutians, and, from the description of the cases observed off Maui, probably did. Nothing except continence could have prevented its spread to the Hawaiians; from several accounts one is forced to conclude that, Captain Cook himself excepted, there just was not much continence around, on either side. The consequence was that widespread infertility among Hawaiian women became a matter of intense concern by the 1840s and 50s. (Schmitt, 1968, pp. 32-38).

Can we continue to blame Captain Cook for these introductions or should we perhaps recognize that, as the most humane of the Pacific explorers, and by the lights of his times, he was exceptionally energetic and concerned in preventing the transmission of venereal diseases? He failed, but at least he tried. Perhaps if he and his fellow chroniclers had not written so voluminously about their efforts, and their concern that they seemed to have failed, little now would be known or told about it. After all, the man who introduced tuberculosis, also terribly damaging to the Hawaiians, seems to have escaped the literature, his good name intact.
Agricultural Pattern and Nutritional Status of People in the South Pacific Countries*

by

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Abstract Captain James Cook, in his prolonged voyages conquering the Pacific, successfully protected his crew from scurvy through a balanced diet and hygiene. However, his nutrition approach did not give much impact to the food habits and agricultural patterns of South Pacific countries. Food production and consumption and the nutritional status of people in Fiji, Western Samoa, and Papua New Guinea are reviewed. Also, some measures are suggested for the improvement through agriculture of the nutritional status of these people.

1. Introduction

1.1 Captain Cook, a great nutritionist

Scurvy was the most serious illness and cause of death among seamen in the old time long voyages because of the prolonged deficiency of vitamin C which is found only in fresh vegetables and fruits. Although a naval doctor, James Lind, discovered in 1754 that lemon juice, regularly served, could both prevent scurvy and cure the disease, Captain James Cook, who might have been unaware of this discovery, managed to bring back his crew, voyage after voyage, sailing thousands of miles without a single

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casualty to scurvy. He used two revolutionary measures that in fact went against then naval tradition: fresh food and hygiene.

Of course, without present day cold storage facilities, fresh vegetables and fruits could hardly be kept long in ships, especially if the voyage lasted over a year or two. Among the foods Captain Cook selected to fight against the number one curse to seamen were: "portable" soup, concentrated slabs of thick, brown vegetable soup and broth; sauerkraut, finely cut cabbage fermented in brine; concentrated orange and lemon juice - possibly in extra heavy syrup; and as many fresh greens as were obtainable during the voyages.

A kind of green, called Scurvy grass (Cochlearia groenlandia) rich in vitamin C, which Cook found on the shorelines of the higher latitude, became a regular ingredient in the soup of his crew despite their objections.

After his second voyage (1772-75), Captain Cook presented a paper describing his experience in combating scurvy to members of the Royal Society in London. Because of his most valuable contribution to the health of all seamen, he was awarded in 1776 the Copley Gold Medal, Britain's highest honor for intellectual achievement. Never before or since has this medal been awarded to an achievement in the field of nutrition. Thus, in many respects, Captain Cook is rightfully considered the greatest nutritionist in history.

Unfortunately, Captain Cook's death at Kealakekua, Hawaii, on February 14, 1779, abruptly stopped his pioneer efforts in nutrition.

Throughout the three voyages, Captain Cook sailed from Arctic to Antarctic and added Alaska, the Hawaiian Islands, Tahiti, New Caledonia, Australia, New Zealand, and many other islands and atolls to the maps of the known Pacific.
Has Captain Cook's nutrition emphasis and practice had any impact on food consumption and the agricultural patterns of people in the South Pacific? The answer unfortunately is negative. While we are gathered here to commemorate his great discovery, it is only natural that Captain Cook's nutrition emphasis and practice should be adopted in agricultural development and food policy for long range nutritional effects for the people of the Pacific Island countries.

1.2 The South Pacific

South Pacific Island jurisdiction can be divided into three ethnic groups:

Melanesia - Fiji, Papua New Guinea, New Caledonia, the New Hebrides and the Solomon Islands;

Polynesia - American Samoa, Western Samoa, Cook Islands, Niue, French Polynesia, Tokelau, Tuvalu and Tonga; and

Micronesia - Trust Territory of the Pacific Islands, the Gilbert Islands and Nauru.

The total land area is estimated at 378,029 square miles, with 4,575,900 people (1977 estimate). (See Attachment 1: Some Information on South Pacific Island Countries.)

Melanesia is by far the largest of these areas with 98.9 percent of the land area and 86.5 percent of the population of the whole region. Micronesia, the smallest, takes up less than 0.3 percent land area and 4 percent of the population. The people of this region speak different languages and dialects and enjoy varying forms of government, from independence to protectorate status.

The three major countries included in this presentation, Fiji, Western Samoa, and Papua New Guinea are all independent countries, occupying 93.7
percent of land area and 80.3 percent of population of the South Pacific total.

2. Agricultural Patterns

2.1 Export Crops

Beginning in the early years of colonization, major attention was placed on export and cash crops, namely, sugarcane, coconuts, oil palm, and cocoa and, depending on the country, some minor crops such as coffee, ginger, citrus fruits, and vanilla. Oftentimes, the best land, government resource allocations, including research, extension, and other inputs, are reserved for these crops.

There is no argument on the importance of these crops. For instance, sugar has often been called the backbone of Fiji's economy, providing employment and much needed foreign exchange. Copra, the cocoa bean, and bananas have been Western Samoa's principal exports for decades, with copra maintaining a dominant position. However, it seems that food crops for domestic consumption have not received appropriate attention.

2.2 Food Crops for domestic consumption

Root crops such as taro, cassava, kumala, and yam are traditionally grown as subsistence crops for home consumption and the urban market. They are the staple foods in the South Pacific. Vegetables and fruits, including breadfruit and bananas, mainly from backyard gardens, are most valuable to people's diet. However, the area used for such crops is small and gardens are usually not well managed. Available statistical information indicates that the total production of these crops appears to have increased in some countries. Their yields, however, have remained the same, or have been decreasing.

Attachment 2 shows the production of selected crops in some Pacific Island countries.
2.3 **Import-substitute crops**

Considerable effort has been expended in recent years by some governments to develop cereal and legume crops such as rice, corn, beans, and soybeans as substitutes for imports. Because of the change in dietary habits and increased feed requirements due to increased livestock development, the consumption of legumes and cereals has increased considerably.

2.4 **Livestock production**

Cattle for beef and for milk production, pigs and chickens are, by far, the most popular livestock in the South Pacific Countries. The rapid development of commercial farms in some countries, particularly Fiji and Papua New Guinea, increased the availability of protein from animal origins, though such foods are consumed mostly by high and middle-income groups.

Attachment 3 shows livestock numbers, by different years, in some Pacific Island countries.

2.5 **Fish production**

Traditionally, fish has been a protein source in the diet of South Pacific peoples. However, its catch has failed to expand in proportion to the population growth. It has been estimated that Western Samoa has an annual catch of some 1,000 tons, and Fiji, 1,800 tons, not including fish caught in coastal waters by foreign vessels.

2.6 **The decline of per capita food production**

In spite of the voluminous out-migration to New Zealand, Australia, Canada, and the United States, population in this region has increased in the past 11 years from 3,404,600 in 1965 to 4,466,900 in 1976 or an increase of 31.2 percent. (See Attachment 4: Population estimates for the South Pacific Region, 1964-77, a compilation based on information
released by the South Pacific Commission.

The Food Production Indices compiled by the Food and Agriculture Organization of the United Nations (FAO), showing aggregated output of all food crops, indicates that the total food production in past years was increased only moderately in most countries. Using 1961-65 as the base year, in the past 11 years, Fiji has increased 11 percent, Western Samoa, 16 percent, and Papua New Guinea has had the best performance, with a 33 percent increase.

Thus, if calculated at per capita food production, Papua New Guinea can barely keep pace with her population, while Fiji, declining 18 percent and Western Samoa, 19 percent, cannot. The latter had the quickest population growth among the three countries under study. Food production must be increased at least at 3-4 percent a year in order to support the population.

Details of food production indices, both total and per capita, in different years are shown in Attachment 5.

3. **Food Supply and dietary practice**

3.1 **Calories, protein, and fat supply**

Based on published statistical information, FAO has compiled food balance sheets for different countries, showing daily per capita supply of calories, protein, and fat of their people. Of course, these figures represent the amount of food available at a national level. Actual intake might be considerably different. Furthermore, a national average often conceals both these differences, and the real problems which may exist in different socio-economic, geographic, and age groups and in different seasons of a year. Nevertheless, a food balance sheet is valuable, and, in fact, is the only available instrument to assess food
adequacy, including the gap of food supply, at a national level.

Regarding calorie supply, in the past decade, Fiji increased 4.9 percent, from 2,527 calories in 1961-65 to 2,652 calories in 1974, while in the corresponding period, Western Samoa dropped 9.5 percent, from 2,340 to 2,217 calories, and Papua New Guinea increased 10.5 percent, from 2,019 to 2,232 calories.

Fiji's protein supply, from 1961-65 to 1974 increased 8.1 percent, from 53.3 to 57.6 grams daily per capita, while Western Samoa dropped 7.9 percent, from 55.7 to 51.3 grams. Papua New Guinea increased 18.3 percent, from 40.4 to 47.8 grams daily per capita. Even then, her protein supply was still far below the requirement.

Fat supply followed a similar pattern.

Details of daily per capita food supply in different countries are shown in Attachment 6.

3.2 Dependency on imported foods

Food imports to the South Pacific have increased year by year to fill the gap between local food production and the steady demand for food that has been created by population growth and, to a lesser degree, the increase in people's purchasing power.

The daily per capita food intake calculated by the Fiji Government\(^1\) for the year 1973-74 showed 2,275 calories and 62 grams of protein, of which 14 grams were from food of animal origin. Attention may be drawn to the source of food supply. From the total calorie supply, almost half (47.7 percent) came from imported food. Almost three quarters (73.2 percent) of the protein consumed in Fiji was imported. This pattern

of import-dependency in food supply was similar, of course, with varied degrees, in other countries in the region and the trend was upward. Much precious foreign exchange was drained off which could be otherwise used for development programs.

3.3 Dietary pattern

The dietary pattern of people differed considerably between urban and rural and between different socio-economic and ethnic groups. For instance, roots and tubers are staple food for Fijians, while Indians in the same country use these and cereals as staple food.

Although the high-income urban people were gradually adapting to European food patterns, the majority of rural people, as reported by the South Pacific Health Service, have the following meal combination:

| Morning meal               | Cassava or bread  |
|                          | Tea and sugar     |
| Mid-day meal             | Cassava or rice   |
|                          | Green leaves      |
|                          | Fish or meat (occasionally) |
| Evening meal             | Cassava/taro or bread |
|                          | Tea and sugar     |

Few had fish, meat, or eggs. Very few people had any milk. Fruits like papaya or pineapple were not common in villagers' gardens which were the major source of family food supply. The food eaten contained very little protein and health-giving vitamins and minerals.

Food intake depends much on purchasing power of the household and the food availability on market. If purchasing power is limited, the only resort is to produce more food from home gardens and fields.

4. Nutritional status of people

Many food consumption and nutritional surveys have been conducted in the region, including three recent studies: one conducted in 1973 in
the Trust Territory of the Pacific Islands by the Trust Territory Health Council; one in 1975 in Aitutaki, Cook Islands; and one in 1976 in Vila, New Hebrides, by the South Pacific Commission.

Protein-calorie malnutrition among infants and toddlers in rural areas was frequently reported. Iron-deficiency anaemia among children and women of child-bearing age was also a public health problem. Vitamin A deficiency was occasionally reported. On the other hand, obesity of adults, particularly women of high income groups, with associated diabetes mellitus and cardiovascular disorders became increasingly noticed.

The nutritional status of people in Fiji was described in Fiji's Seventh Development Plan as follows:

"Increasing numbers of malnutrition cases have been reported at health centers and hospitals in recent years.... Low birth-weight is a growing problem amongst infants. Malnutrition amongst children and cases of maternal anaemia are becoming more common. Such developments indicate that the food consumed does not contain sufficient nutrients to maintain good health and growth of the body. More alarmingly, protein malnutrition at an early age may permanently impair mental development."

Incidentally, the low birth-weight of infants is an indicator of the nutritional status of pregnant women.

The Nutrition Section of the Department of Health, Papua New Guinea reported,² "malnutrition constitutes a serious problem in Papua New Guinea .... The main underlying cause is considered to be the unavailability of

²Quoted from "Food and Nutrition in Papua New Guinea", a mimeographed report by Dr. Rolf Korte, Specialist Medical Officer, Nutrition Section, Department of Public Health, Papua New Guinea.
sufficient high quality food.... Increased food production would not only alleviate nutritional problems but also create useful employment for a growing population."

5. **Fighting against malnutrition**

5.1 **Government actions**

Among the three countries under study, Papua New Guinea suffered most from malnutrition. The problem in Western Samoa could become increasingly serious because of agricultural performance and rapid population growth. On the other hand, the Government of Papua New Guinea has demonstrated its determination to improve food and the nutritional status of people. The increase, in recent years, of food production and supply, as aforementioned, was in concrete evidence. The Department of Health has a Nutrition Section, with a professional staff to introduce nutrition activities through health channels, including the assessment of nutritional status of people and the strengthening of training and education in nutrition.

With the cooperation of the Foundation for the Peoples of South Pacific, a Nutrition Planning Conference was held in 1976 at Port Moresby. Fiji, Cook Islands, New Hebrides, and New Caledonia also sent their delegates to participate in the event. The approach of intersectoral planning, among others, was introduced.

The Government of Fiji may be among only a few countries in the world with nutrition goals built in its economic development plan. A Food and Nutrition Advisory Committee was created in 1977, bringing together expertise of all related disciplines including agriculture, education, health and social welfare, and economic planning to advise the government on policies necessary to achieve nutrition objectives of the
country. The Committee, under the leadership of the Ministry of Health, held meetings periodically.

Public awareness of nutrition problems of people appeared not fully developed in Western Samoa. However, some voluntary agencies, particularly the women's groups, were active in promoting home gardens to increase the supply of nutritious vegetables and fruits and in educating housewives in the best use of available food resources.

5.2 Interested organizations and agencies

The South Pacific Commission has made much effort, in past years, to assess the nutritional status of people and to initiate training and education in nutrition for the benefit of its member countries. Although a health approach was its major emphasis, its agricultural arm, through a regional horticulturist, has started to introduce nutritional dimensions in crop production.

Food and nutrition training has occupied a dominant position in the Home Economics Course offered annually in Suva by the Community Education Training Center of the South Pacific Commission.

Among the United Nations family, the World Health Organization has been far more active in the South Pacific. In addition to the regular visit of a Nutrition Adviser from its Western Pacific Regional Office, there is a full time nutrition consultant assigned in this region. The United Nations Children Fund, through its Manila office, is keeping a watchful eye on the need of this region for the nutritional improvement of children and mothers. FAO, through its senior agricultural adviser stationed in the South Pacific Regional Office of the United Nations Development Program in Suva, has paid much attention to food production, which has direct bearing on meeting nutritional need of people.
The Asian Development Bank recently extended a loan to support Papua New Guinea in an agricultural development project with community nutrition improvement as a major objective.

Australia and New Zealand are among the Commonwealth countries with traditional linkage and support to the South Pacific. Many nutrition-related programs have been implemented with their assistance and cooperation.

The United States Agency for International Development has also showed increasing interest in nutrition programs of this region. In fact, the Nutrition Planning Conference held in Papua New Guinea was financed by that agency.

As the South Pacific is within the region of East-West Center (EWC), the countries have participated in EWC activities of mutual interest. Fiji, Western Samoa, and Papua New Guinea all sent their senior professionals to attend a planning Seminar on Agriculture for Nutritional Improvement and an International Workshop on Improving Nutrition and Nutrition Education through School Food Service, both held in 1976 in EWC, Honolulu. The latter activity was financed by USAID through the American School Food Service Association. There is a possible further involvement in a joint study on food need and resource allocation, a planned activity of Food Systems Project of EW Resource Systems Institute.

Governments concerned are now paying increased attention to food and to the nutritional problems of people and the resources required from our environment. It is the time to formulate policy and implement programs to fight against malnutrition.

6. Some recommendations for action

6.1 Awareness of Nutrition problems

At this moment, only a small group of conscientious health people
are aware of the seriousness of people's nutrition problems. Other
government officials including those with agriculture and education
responsibilities do not, sometimes intentionally, recognize the existence
of such problems. It is essential that an atmosphere be created, through
an organized education campaign for the public -- from policy-makers
down to housewives -- to understand the magnitude of the nutrition problem
and its effect on people and the economy. This should be done through
both mass media and through different channels reaching individual house­
holds, with special emphasis on the village chiefs, as they have far-reaching
influence in people's food production and consumption.

6.2 Assessing food needs and resource allocation

While nutrition intervention programs such as food distribution to
malnourished children have their merits to meet special and/or urgent needs,
the solution of a country's nutrition problems would depend on the avail­
ability of food in quantity and quality at the household level and the
efficient management of food resources. This means food production, pur­
chasing power, and nutrition education.

It would be most desirable for each country to assess systematically
food needs of the people, to determine their gap, and to review the policy
and programs in resource allocation that affect, directly or indirectly,
the nutritional status of people. Two approaches must be undertaken simul­
taneously: the creation of demand and increase of supply. The former
approach means employment and income generation and equitable distribution.
The latter refers to domestic food production and preservation, if necessary,
supplemented with food imports.

A surveillance system should gradually be developed so that the policy
and measures on the allocation of resources could be adjusted to meet the
changing need and major disasters could be predicted and avoided.

6.3 Promotion of home garden

Because the staple foods and vegetables consumed by rural people are from their home gardens, the improvement and expansion of such gardens should be a priority measure to increase food resources to improve the nutritional status of people. Selection of crops high in nutritional value, maximum use of locally available inputs, and better garden management including crop rotation, soil conservation, and improved culture practice should be introduced and encouraged. The simple preservation of garden produce also should be demonstrated so that seasonal surplus could be used off-season. Through organized effort, home gardening could also be practiced in urban areas. Many community gardens are now in Honolulu and other big cities of the United States.

Governments might make baseline surveys and provide necessary input and incentives to promote the cultivating of home gardens.

6.4 Nutrition-oriented agricultural planning and food policy

The emphasis on export/cash crops in agriculture of the South Pacific may provide income and employment generation if the market demands for such crops is high and stable. Unfortunately, this is not always the case. For the security as well as nutritional need of people, crop diversification is imperative. Crops deserving special considerations are orange-flesh sweet potatoes, beans and peas (peanuts, soybeans, wing beans, and pigeon peas), dark greens (amaranth, water convolvulus, edible hibiscus, and horseradish), cereals (corn, sorghum, and rice) and traditional root crops. When planning for agriculture and food policy, government leaders should give due consideration to food needs and the nutritional requirement of people. Food balance sheet and household food consumption could
provide general direction for policy-decision. Food importation should have nutrition justification. The cost of nutrients from such imports should be considered and consumers should neither be taxed nor the production of local foods discouraged.

6.5 Fisheries development and small animal raising

In addition to the development of a marine fisheries industry with catch mainly for domestic consumption, the feasibility of inland fish raising, particularly grass and silver carp and tilapia, should be studied, because, aside from its nutritional contribution, it is linked closely in the production cycle with home garden and small animal raising.

Raising small animals, particularly milk goats, chicken, and pigs, if well managed, could provide a valuable contribution to protein supply. Otherwise, the small animals would damage vegetable garden and pose the problem of environmental sanitation.

Adequate research, field trial, and demonstration should be undertaken before any large scale extension is implemented.

6.6 Training, education and community participation

People generally think of food just to fill up their stomachs. The notion of nutritional requirements is remote to them. Adequate nutrition training should be given to all related professionals. Human nutrition should be a required course for all agriculture students. Of course, the curriculum should be designed for relevance to both their careers and their everyday lives.

Nutrition education should be simple, relevant, and practical, with target groups and objectives well-defined. Preferably such education programs would be linked with other local action programs such as home gardening.
Community participation in the identification of problems and in the planning and evaluation of programs is most essential to the success of any community-focused activity. The role of women in food production and family nutritional improvement should be strengthened and appreciated. The existing and potential resources of the community should be maximally developed and utilized.

6.7 Coordination at all levels

Nutritional improvement of people is a multi-disciplinary endeavor. Professionals in nutrition-related fields must work together for effective programs. For instance, without a sanitary environment, calories and nutrients consumed will be substantially lost in diarrhea and parasite infestation. When people's purchasing power is extremely limited, food crops that are produced cannot find adequate markets. Hence their further production will be discouraged.

A food and nutrition program aimed at improving the nutritional status of a people must have the cooperation and coordination of all concerned ministries and agencies so that all available resources can be efficiently utilized to meet the goal of attaining improved health standards through nutrition. Such effort requires coordination at all levels from national to grassroots.

At the current stage of development in the South Pacific, the agricultural sector has the major responsibility for improving the nutritional status of people, for producing food in quantity and quality and for ensuring that the food produced is properly conserved, marketed, and consumed. A concommitant goal is the generation of income and rural employment.
Necessary inputs -- land, water, technology, capital, and human resource -- are now available. While we are now in a much better position to fight scurvy successfully than was Captain Cook 200 years ago, it is important to note that he succeeded.

I wish to conclude this presentation with a Samoan proverb "Fa le Taeao e le Afiafi," meaning "He who sits at home in the morning will not have food in the evening."

Acknowledgements: The author wishes to gratefully acknowledge the assistance in data collection by Ms. Renée Heyum, Pacific Curator, Pacific Collection, Hamilton Library, University of Hawaii, and by Ms. Rita Hong, Resource Materials Specialist, Resource Systems Institute, East-West Center.
References


## Some Information on South Pacific Island Countries

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**Sources of Information:**
- A Descriptive Atlas of the Pacific Islands, 1968
- South Pacific Commission
### ATTACHMENT 2: PRODUCTION OF SELECTED CROPS IN SOME PACIFIC ISLAND COUNTRIES

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**SOURCE OF INFORMATION:** 1976 FAO PRODUCTION YEARBOOK
### ATTACHMENT 3: LIVESTOCK NUMBERS IN SOME PACIFIC ISLAND COUNTRIES

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**SOURCE OF INFORMATION:** 1976 FAO PRODUCTION YEARBOOK
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**NOTES:**

1. Preliminary figures which have not been reconciled with official estimates prepared by individual countries.

2. Estimates for this and earlier years have not been adjusted in the light of Census results.

**SOURCE OF INFORMATION:** SOUTH PACIFIC COMMISSION
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SOURCE OF INFORMATION: 1976 FAO PRODUCTION YEAR BOOK
Saturday, April 1, 1978

Third Session
The mixed feelings people in Hawaii have shown about celebrating the major anniversaries of Captain Cook's arrival in 1778 remind us rather forcibly that Pacific Islanders have good cause to both detest and honor the memory of James Cook. For the non-Pacific world the grim events at Kealakekua Bay on February 14, 1779 propelled an already famous explorer into "the lofty realms where only saints and martyrs and heroes dwell."\(^1\) Secure though Cook's place in history will always be, the human dimensions of Cook's encounters with Hawaiians and other Pacific Islanders continue to trouble their descendants.\(^2\) Our consciousness of the mistakes made at Kealakekua Bay by an aging, exasperated and irascible man in his eighth year of Pacific voyaging prompts the question: How well did Cook live all those years by the lofty standards he promulgated to his men when they arrived in Matavai Bay on his first voyage?—"To endeavour by every fair means to cultivate a friendship with the Natives and to treat them with all imaginable humanity."\(^3\)

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\(^1\) Bernard Smith, "Cook's Posthumous Reputation", draft manuscript for paper delivered at Captain James Cook and His Times Conference, Simon Fraser University, Burnaby B.C., Canada, 1978. Typescript courtesy of author.

\(^2\) See the Maui-based Valley Isle, January 18-31, 1978, for readers' perceptions of Cook's character. "Captain Cook was a mahu," said one. Maui had no bicentennial celebrations.

The test of this policy did not come in Tahiti where the people had already learned the dangers of resistance from the guns of their first European visitor, Captain Wallis, and had prudently decided on a strategy of hospitality and friendship. The first real test occurred on the New Zealand landfall at Poverty Bay where the Maoris made no secret of the pleasure they would derive from braining their visitors and sampling their salty flesh. Cook, not being of a mind to accept that kind of dinner invitation, acted to protect himself and his men not only resolutely but - it must be said - with far more force than was needed. Wanting to take hostages whom he could convince of his friendly intentions, Cook intercepted a canoe of five or six people coming in from fishing. When they unexpectedly resisted with everything they could wield or throw, Cook ordered his men to fire into the canoe killing "either two or three." The others dived overboard and three teenage youths were captured and taken up into the ship. That evening the unhappy captain and Joseph Banks reflected on what the latter called "the most disagreeable day My Life has yet seen." The Englishmen were determined to make some amends by giving the three survivors a happy time: "they were clothed and treated with all imaginal kindness and to the surprise of everybody became at once cheerful and as merry as if they had been with their own friends."

The contrast here between two or three bloody corpses in the canoes and three genial teenagers carousing on deck dramatises the tension that

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4 *Journals*, I, 170.
5 *Journals*, I, 171, n. 2.
6 *Journals*, I, 171.
to some extent is present in all of Cook's encounters with Pacific Islanders. Cook himself had much to say on this subject. In 1774, with several years experience of the Pacific now behind him, he expanded on his thesis that ethical business was good business—writing of the Tahitians:

Three things made them our fast friends. Their own good Natured and benevolent disposition, gentle treatment on our part, and the dread of our fire Arms; by our ceaseing to observe the Second—the first would have wore of Course, and the too frequent use of the latter would have excited a spirit of revenge and perhaps have taught them that fire Arms were not such terrible things as they had imagined, they are very sensible of the superiority they have over us in the numbers and no one knows what an enraged multitude might do.\(^7\)

When one thinks forward to Kealakekua there is dramatic irony in these last words which reveal Cook's keen sense of the fragile balance he had to maintain between intimidation and friendliness, between relaxation and the vigilance needed to make sure neither his men or their hosts would get out of hand. Cook was a man with a mission to roll back the dense fog of obscurity over the lands and seas and peoples of the Pacific—in that order. The safety of his men and the success of his expeditions set the professional limits, so to speak, for his interaction with islanders. Within those limits, though, he strove to be fair and decent—not just because it was (as he often noted) more profitable, but chiefly because James Cook was that kind of man anyway.

At times Cook did break his rules; Polynesian thieving often had him at his wit's end to keep safe the merchandise, boats, and vital navigational equipment on which the safety of his crew and the success of his expedition depended. It is no joke to lose a quadrant or a chronometer 10,000 miles

\(^7\)Journals, II, 398. See also I, 282.
from another one. He flogged the culprits—he had the ears cropped of one, and crosses slashed in the arms of some Tongans. In one of the worst incidents the theft of a young goat on Moorea put him into a cold rage that sent him across the island with an armed party burning houses and war-canoes. His officers were upset; so is his biographer Beaglehole—who in a rare awkward moment warns the reader that he is "regretful and baffled, as at some odd unintelligible phenomenon." Yet we need these sins of Cook before us to get the true measure of the man; we need the red slashes and the black stains to contrast the background of white. To sift 4,000 pages of journals for the dirt on Cook is like letting loose two or three of those disgusting carp fish to pollute a mountain stream and make it unfit for all the varieties of life that were there before.

There is a wonderful variety of human encounters in Cook's journals—let me return to New Zealand, to the remote and magnificent wilderness anchorage called Dusky Sound. There, after four months of Antarctic sailing out of Cape Town on the second voyage, the crew feasted on seal, fish, oysters and wood hens. The people were few and extremely apprehensive, and it was twelve days before Cook made effective contact with them. Cook was coming back to his ship towards evening in his boat after a day exploring a bay with the artist Hodges and the two Forsters. Standing on a rocky point he saw a Maori and two women who stood there while the boat came close. Cook himself went to the bow of the boat, called to the man in a friendly way and threw him his white handkerchief, which the man would not touch. Leaving his musket in the boat Cook then took some white sheets

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of paper in his hand, landed on the rock, and held them out. The man
was trembling, but took the paper and Cook grasped his hand and embraced
him nose to nose—in the Maori-style he had learnt on his first voyage.

We were joined by the two Women, the Gentlemen that
were with me and some of the Seamen, and we spent
about half an hour in chitchat which was little
understood on either side in which the youngest of
the two women bore by far the greatest share (which
occasion'd one of the seamen to say that women did
not want tongue in no part of the world.).

As the sun went down, one of these women performed a graceful dance of
farewell. The following day Cook visited them again, met the whole family
of seven, and spent a leisurely hour or two in their lean-to huts while
Hodges drew their portraits. He promised the man that he would have a
red coat made up for him, and he kept his word. About a week later the
man and one of the women visited the ship to exchange valuable gifts.

Cook's attention to small acts of courtesy and generosity is striking
proof of his sensitivity to Pacific Islanders and the genuine quality of
many of his friendships.

On his return to Matavai Bay in 1773 he was met by a "venerable old
lady" of rank whose son Toutaha had been of great service to Cook on his
first visit: "She seized me by both hands and burst into a flood of tears
saying Toutaha Tiyo no Toute matte (Toutaha the friend of Cook is dead).

I was so much affected at her behavior that it would not have been possible
for me to refrain mingling my tears with hers had not Otoo come and snatched
me as it were from her, I afterward desired to see her again in order to
make her a present ..." Whether Cook was consciously adhering to
Polynesian etiquette here, or whether he was just following his own warm sense of what was appropriate, it is this side of Cook that secured him feelings and testimonials of real friendship from Pacific Islanders.

His return to Huahine brought tears again, tears which "trinkled plentifully" down the cheeks of Cook's old friend Ori and "sufficiently spoke the feelings of his heart." Now Cook was hardly a sentimental man. These are striking instances of the high regard Cook had for individual islanders and they for him. One could question the fairness of some of Cook's trading exchanges, especially towards the end of his voyages when his stock of stores was low, but God help the man caught pillaging island gardens or defrauding the people of their agreed price. When Cook touched the coast of New Guinea after his troublesome adventures along the eastern coast of Australia, some of his men wanted to cut down the coconut trees they could not climb. Cook indignantly refused what he called "a thing that I think no man living could have justified." On the contrary, we know most men entering the Pacific at that time would not have thought anything of sacrificing a few coconut trees, or a few islanders for that matter, especially if they were Melanesian.

On the whole it does not seem too much to claim for Cook that for all his calm confidence in his own culture, for all of Yorkshire that haunted him, for all his professional single-mindedness and, yes, for all his bloody mistakes, his essential humaneness found its echo in those who embodied the Pacific's own humanistic traditions. Pacific Islanders who celebrated Cook's

11 Journals, II, 217. Ori "received me more like a son he had not seen these four years than a friend." Of the people Cook wrote (p. 236): "they are the most obliging and benevolent people I ever met with."

12 Journals, I, 410.
arrivals and returns with festivities of dance, song, drama and feasting, read him correctly, I feel; and their descendants would celebrate the anniversaries of those arrivals a little more warmly—if only they read him.
In his presentation Dr. Sanborn described how Captain Cook's coming to Hawaii caused the discovery of two major groups of people that had never before existed—the Hawaiians and the haoles. Dr. Sanborn suggested that the Hawaiians had previously not been set apart from anyone, had not been described in contrast to any other groups, and only with Captain Cook's visits and the unification of the islands by Kamehameha did the people begin to see themselves as Hawaiians.

Dr. Sanborn pointed out that Cook was, likewise, set apart as the first haole, described in contrast to the indigenous group, as the first outsider. If Captain Cook had been a Japanese admiral, or if he had been the French explorer Bougainville, the characterization of Hawaiians resulting from contact would have been different. The characterization would have changed according to the identity and cultural traits of those observing those being described.

Dr. Sanborn analyzed the effect of the "help" that missionaries and people in the helping professions have brought to Hawaii. He cited that the process has demeaned the islanders and pointed out that the possible solutions have, instead, become part of the cause of social ills. Labels, he stated, reinforce stereotypes.

Dr. Sanborn described some benefits of modernization: an increase in standard of living, a wider world view, a decrease in fatalistic attitudes and access to a money economy. He went on to illustrate how family breakdown,
alcoholism, juvenile delinquency and suicide as major problems that have resulted from contact with the Western world from which Captain Cook had come.

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Interests and Dependencies: The Pacific After Cook

by

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University of Hawaii at Hilo

When Cook entered the Pacific, he entered into transactions or exchanges which established "interest" relationships between himself and individual political figures in what were generally, at the time, autonomous Pacific cultures. These exchanges included material items and genetic and other kinds of information, and they led not only to wider knowledge of the Pacific by the metropolitan powers but to a wider knowledge of outsiders and of each other by the islanders themselves. Yet it seems to have been a lack of knowledge of each other's real and potential power that led to the final misunderstanding at Kealakekua.

My paper concerns not Cook, but the complexity of the contemporary political economy of the Pacific and what appears to me to be a lack of knowledge and understanding of the relative amount of real and potential power held on the one hand by emerging island political groupings and on the other by the metropolitan powers with Pacific interests. The paper is thus a call for a rethinking of the relationships of metropolitan and Pacific cultures and the ways in which changing "interests" and "dependencies" may influence a Pacific future.

In the last two decades moves of political independence in the context of economic dependence have been made. The next two decades will see shifting interests and dependencies. It is obvious that Pacific

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Islanders themselves will take a much more outspoken and active role in planning programs of local and national social and economic development while seeking an elusive "Pacific Way." It is probable that Pacific Islanders may also adopt third world political symbols and make increasing efforts to actually or symbolically avoid the dependencies of perceived neocolonialism.

The worldwide regularities that followed the economic expansion of industrial Europe (Bodley, 1975) and its derivative nation states (Anzus and Japan) as well as the peculiarities of the penetration of private and public interests into the Pacific need no enumeration here.

Spoehr's (1966) call for studies of the Pacific as a whole or region continues to have relevance. If we as observers are to offer any understanding of future directions in the region, we must develop analytical approaches that facilitate an understanding of continuing metropolitan interests, of developing local and regional interests and of the networks and acts of decision by which complementary and conflicting interests are articulated.

The social sciences, and in particular my own discipline, anthropology, have just begun the task of trying to understand the integration and interdependence of all the seemingly autonomous cultural systems that have occurred since Cook. Worldwide systems of communication and trade are only part of this integration for it includes quite varied "interest" and "dependency" relationships.

The island Pacific may be considered both as a region and as an interest area. I choose the term "interest area" to emphasize continuing metropolitan interests, interests of the islanders in the metropoles, and a growing recognition of "common interests" between island
and cultural groups. I believe that we need more adequate analytical models of interest relationships and power relationships before we can hope to truly understand how dependency and interdependency affect the contemporary Pacific scene. Competing theories or approaches to economic and social development exist and many of the basic terms and concepts (including those in this paper) remain poorly defined and difficult to operationalize. Though caution is advised, we should not let caution prevent us from making a few preliminary definitional attempts, even if they cannot be easily empirically grounded.

"Interests" develop from contacts and interchange of information about the potential use of resources controlled by the respective parties to the interest relationship. Parties to interest relationships may be individuals, cultural and social groups, territories, regional organizations or nation states.

From exchange theory we note that the simplest or basic interest relationships are two party relationships. Exchanges between the parties forge a linkage or network of potentially continuing interchange, and such networks may serve as mechanisms of distribution not only of resources and information but of power. The "interests" of each party may be latent or manifest. The particular interests of a single party may complement and/or contradict each other, as may the particular interests of any two or three parties.

Interests may also vary from time to time and situation to situation in the relative importance of political, economic, strategic and even nationally or culturally symbolic identity needs. "Interest" relationships are by their very nature relationships of power in which one party to the relationship has come to consider the other as being
within its domain of influence, yet power relationships are reciprocal and never completely one-sided. The dependent or subordinate party always has partial control over some physical, social and/or symbolic resources which are of interest to the dominant party. For our purpose, power in social relations may be defined after Adams (1970) as the relative amount of tactical control that one party holds over the environment of another party. It may also be conceived of as the level of potential cost that party A may choose to induce for party B given B's dependence on A for resources. It is important to make a distinction between direct power which comes from having direct control over resources (land, labor, technology) and derived power which comes from an ability to gain tactical access to power sources at higher levels of articulation in the system. The term level of articulation is chosen to emphasize the increased number of units that can affect power transfers within a complex network of interdependency ties.

Ties that transfer power may be sources of integration as well as conflict for the parties in the network. Social anthropology has tended to emphasize the functionally integrative nature of such exchanges. Yet cultural evolutionary approaches have begun to emphasize the potential for competition and conflict over power sources. As different levels of articulation are considered the networks become rapidly more complex and the relative amounts of power and interest of the different parties are much more difficult to observe and measure.

Logically, two or more subordinate power units may find themselves within the power domain of a single supraordinate unit and rather than pooling their direct power may compete for derived power from the supraordinate. Subordinate units may also pool both direct and derived power
in order to increase the flow of derived power to themselves as a new intermediate unit. By pooling direct power, intermediate units may buffer the effects of supraordinate power centers and may also be able to manipulate subordinate units by permitting downward derived power flows.

Subordinate units may also attempt to enter into new exchanges with other power centers in order to derive new power buffers or to raise themselves to a higher position or an intermediate level of articulation. This may give the units more power over subordinate constituents. Yet, since intermediate power units are subordinate themselves, they may generally only do this successfully when the action does not manifestly conflict with the interests of the dominant power upon which they are dependent. And it may be a simple matter, of course, for a supraordinate unit to alternate its release of power to subordinates in order to keep them in competition and thus in balance.

Current actors within the contemporary Pacific political scene, if we use this kind of modeling, may be understood as brokers who attempt to gather more power from both supraordinate and subordinate power units in order to control and influence, if not expand their own domains. Studies of brokerage may improve our understanding of the management of conflict and cooperation at intermediate levels of articulation yet we need to develop models which can assess the relative amounts of power at upper and lower levels.

We need to recognize that both conflict and cooperation characterize interdependency and that observers must specify their nature in each series of transactions rather than assuming that interests of dominant parties are either uniform or must necessarily conflict with those of
subordinates. Certainly, France's interests are not uniform for her different Pacific territories nor do they parallel the interests of other dominant power units in the Pacific, such as New Zealand or the United States.

In observing power and interest relationships we must also examine in detail the varying linkages between the parties and the nature and "interests" of the power units themselves. It is only by a most careful analysis of the network of connections and the relative amounts of real power controlled by parties to interest relationships in the Pacific that we will be able to gain real understanding of the possibilities for economic and social development.

Brookfield (1975) has suggested that we may be entering a conceptual revolution, or if you will, a paradigm shift or rethinking of how development and underdevelopment come about. Let us hope so, because our present ideas about development seem underdeveloped, if not simply ideological. A simplistic contrast may be made between the orthodox approaches to modernization which assume that the export of aid (capital, technology and managerial expertise) will allow the lesser developed units (which are generally subordinates in interest relationships) to catch up to the developed ones. The alternative and less orthodox approach assumes automatically that it is the dependency of the subordinate units in an interest relationship that keeps them underdeveloped. It does appear that after two decades of development under United Nations auspices the smaller, less developed, island territories seem even farther behind.

Is there then a linkage between development in the metropolitan industrial power units and dependency and underdevelopment in the subordinate units? If so, we have yet to completely understand its nature.
Dependency models or approaches imply such a direct linkage so that development in metropoles (the dominant parties in interest and power relationships) generates underdevelopment in satellites. This view is commonly associated with native Latin American scholars looking northward (Furtado, Frank) though a logically similar view was originally expressed by Gunnar Myrdal in the 1950's. Such a view could be readily adopted by many Pacific Islanders today. It is a view with ideological and political significance yet it may be no less objective in a scientific sense than the more orthodox view.

Metropole-satellite models are often applied to dependency relationships and they are as logically simple as the model of power and interest relations stated above. Following such a model, it was only after the downward flow of derived power and a decline in the manifested "interests" of the Spanish, German and English metropoles that their former satellites (the Anzus nations) could become new metropoles with their own satellites. Fiji and Papua New Guinea may well, through secondary development (Adams, 1967), soon emerge as important intermediate metropoles for the region.

Yet it may simply be too simplistic to characterize the ties between metropolitan interests and Pacific cultures as ones of simple dependency and continuing underdevelopment. It might indeed be argued that since Cook, the world has in an evolutionary sense reached a new level of integration, complexity and interdependence which we have yet to understand completely.

Cardoso (Kahl, 1976) has recently criticized the use of metropole satellite models by referring to "crude dependency theory." He argues that simplistic use of dependency models implies that real power and decision-making are concentrated in the dominant metropoles. If particular
cases are examined in detail, individual political figures of particular dependent areas appear to exhibit a range of optionality and independent choice in their decision-making. The range of such choices may be narrow or broad depending on the particulars of the situation and the manifested power of the dominant unit.

Political spokesmen in the emerging island states find themselves able to utilize varying mixtures of direct and derived power in confrontations with the supraordinate units. As Adam has noted "strength without purpose invites low level political maneuvering." It is not only variety but inconsistency in the manifested interest of the dominant metropolitan powers which allows such flexibility.

Perhaps we can better understand such recent political events as Somare's visit to China, Nakayama's visit to Japan, and Tongan negotiations with the Soviets as being the results of attempts to gain new sources of derived power.

These individuals are power brokers who are articulate, politically effective spokesmen for the constituent interest units within their own power domains. The flow of power to them will allow them to control more effectively (or at least appease) lesser power units beneath them.

The emerging regional centers, while politically independent, remain economically and militarily dependent on supraordinate power centers. We must therefore ask to what degree choices may be made that come into manifest conflict with the latent "interests" of the more powerful metropoles. Such choices or decisions imply a rationally conscious assessment of the power units. This will require developing models that can include, therefore, each actor's definition of the situation -- which implies a rational recognition of his relative power.
Power relationships in the Pacific can no longer be simply conceived as two-way exchanges between satellites and metropoles. Regional power units are emerging to buffer metropolitan "interests" and to coordinate and unify domains by extending derived power to satellite units. Regional organizations such as S.P.E.C. and the University of the South Pacific may well lead to more economic cooperation and less competition, yet even these organizations depend to a degree on derived power from interested metropolitan parties.

Recent moves by the Soviets and Chinese within a worldwide context of détente may substantially modify the post World War II "structuring" of power relationships in the Pacific. They have the potential of becoming new sources of derived power for the emerging Pacific states. The size and resources of Pacific island groupings remain small in comparison to the developed metropolitan power centers with continuing "interests" in the region. Even though new resources presently in the control of Pacific groups may become important in the future, they will generally require technology and capital from the metropoles for their exploitation. Perhaps it is in recognition of continuing economic dependency that there has been so much recent political emphasis on social development and "The Pacific Way."

While "crude dependency theory" may become ideologically attractive, it seems inadequate as a tool for understanding. Only by a refined development of models and analytical understanding of the real limits and real options of power brokers at different levels of articulation can we hope for real understanding (rather than misunderstanding) in the Pacific in the third century after Cook.
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Summation and Closing Remarks

by

Dr. James McCutcheon

Professor, American Studies

University of Hawaii at Manoa

In a short time it is difficult to sum up last night and today's session. But it has been an enjoyable experience and I shall give it a try. Let me say briefly I think we owe a great debt to Jane Hurd and her staff, the Pacific planning group and PAAC for having the conference, particularly for having the courage to put it on.

I was in Vancouver last summer, and I heard about the Simon Fraser conference that is scheduled for later this month; and I came back to Hawaii and began to ask, "What is the University at Manoa doing to commemorate two hundred years of Captain Cook?" I talked to various groups around town and found out that, at least as far as the Manoa campus was concerned, we were doing very little. And, indeed, there seemed to be a great deal of enthusiasm, as I think Tim Macnaught pointed out, for shoving Cook under the rug and not paying any attention to him at all. And perhaps to serve him up next year for dinner, or something of that sort. And we weren't picketed today by outraged groups who are celebrating elements other than the Cook arrival in these islands.

So I feel we can at least say that over one hundred people were willing to give up part of a weekend to attend a conference for Captain Cook. Those who are going to the Simon Fraser conference can say that in Hawaii we had a conference which was well attended and take some pride in that.

What I would like to do in my concluding remarks is not try to sum up
a wide variety of papers which we have heard and talked about, but simply put out some of the elements dealing with Captain Cook that I think were important. I realize that some of the papers were not primarily concerned with Cook, but we do commemorate Cook today, and I'd like to speak to this. We have heard that a good deal of work remains to be done on the Cook period of discovery and on the Pacific Islands in the 18th and early 19th centuries. There are enormous resources still untapped for the study of the many various and fascinating Cook interests, which range across many disciplines.

In last evening's opening session Dr. Creutz very well described the assets of the Bishop Museum. We were also told that the Hawaii Foundation for History and the Humanities is interested in the pre-Cook period. A study of the Hawaiian culture pre-Cook is important not only as the Foundation's president, Kenny Brown, likes to say "to get the record straight" as to what Hawaiian culture was like prior to the arrival of Cook, but also to put the arrival in perspective so that we can get perhaps some sort of balanced judgment on Cook and the impact of the West. Today we also had a presentation on research that can be done in London and in Holland and, of course, many other places on the Continent.

I was impressed by the number of Cook's contributions. This morning Dr. Lamoureux pointed out Cook's influence on European botanical knowledge. Dr. Yang pointed to the impact of Cook on nutrition and in particular the eradication of scurvy.

The story, however, was not all positive. Dr. Pirie examined the introduction of disease that was an important part of the story. There are other contributions which are not perhaps so easily categorized in terms of positive or negative contributions. For example, the ones that Dr. Sanborn was talking about this afternoon. The idea of creating unity
out of diversity — of people in a sense helping the Hawaiians to begin
to think of themselves as a collective group — has significance down to
the present.

Increasingly today we have to deal with cross-cultural relations and
the interaction of people in various parts of the Pacific. So that one
thing that perhaps, we can learn from Cook is that we have to recognize
and learn to tolerate diversity, to establish a sense of willingness to
share identity with other people, to establish a sense of region which
Dr. Severance has pointed out, but at the same time to recognize that
different parts of the region are independent and have their own concerns.
These concerns have to be respected in terms of the larger problem of
modernization in the 20th century.

What is not clear to me from the conference or from the literature
on Cook, is Cook, the individual. What is he really like? Apparently
we know little about him. In an excellent, very informative and a very
witty presentation this morning John Charles tried to recapture for us
the mood of the times when Cook lived in the Yorkshire area of England.
That was one way Cook came a little bit more alive for us today rather
than through the detailed but not very personal entries in his journals.
And Charles also brought up the important point that work needs to be
done in relating Cook to the tremendous and tumultuous time in English
history in which he lived. Further, Dr. Macnaght, in his remarks, pointed
out that we need to look at Cook as an individual of humane qualities.
Cook was concerned with maintaining the fragile balance he encountered
in his Pacific travels, and operating within limited parameters, he was
a fair and tolerant man. We need to look again at the journals and at:
the times not only to see Captain James Cook, as a great navigator and explorer in the Pacific, but also as a human being who was engaged in this momentous activity.

I should like to end, therefore, on a positive note. This conference two hundred years later is to commemorate the very significant and important work of James Cook. I believe that the papers have lived up to the standard Cook set in the 18th century which is still important to us today. So I thank those who organized the conference and the panelists who participated. And I particularly want to thank all of you who have been so patient for a day and a half now. I hope that we all have learned something that will remain with us in the future. Thank you for coming, and good day.
Since 1973 the Pacific Islands Studies Program has engaged in duplicating inexpensively various work papers whose contents appear to justify a wider dissemination than that of classroom contact or intra-University circulation. Most of these works consist of student papers submitted in academic courses, and which to some limited extent represent a contribution to existing knowledge of the Pacific Islands. Several works have centered on the preparation of bibliographies; heretofore not published but judged to be of important value to students and scholars engaged in Pacific Islands Studies.

The title, author and date of each publication in the series is listed below. A publication may be presently out-of-print; however in the event there are sufficient requests, the PISP may consider a reprint. It should be noted that copies have and/or are made available only to institutions and scholars interested and engaged in Pacific Islands Studies.

Carl J. Daeufer, Pacific Islands Studies

1973:1 Considerations on the Rights of Spain Over the Caroline Islands
Translation and Introduction by Patricia Bieber

1974:1 Bibliography of Hawaiian Language Materials at the University of Hawaii, Manoa Campus - Compiled by Nancy Jane Morris, Verna H.F. Young, Kehau Kahapea, Velda Yamanaka

1974:2 Chapters on Hawaii and the Marianas in V.M. Golovnin's Voyage Around the World - Translated by Ella Wiswell

1974:3 Pacific-related Audiovisual Materials for Secondary Schools
Phyllis Turnbull

1974:4 Pacific Islands Workshop for College Librarians in Hawaii, April 8-9, 1974

1974:5 Russian Writings on the South Pacific (A preliminary edition)
Patricia Polansky


1975:1 The Bougainville Taro Blight - Jerry C. Packard

1975:2 Bibliographies of the Kermadec Islands, Niue, Swains Island and the Tokelau Islands - William G. Coppell

1976:1 Micronesian and Polynesian Voyaging - Three Readings
Lesley Bruce, Patricia Schattenburg, Patricia Price Beggerly
<table>
<thead>
<tr>
<th>Year</th>
<th>Title</th>
<th>Author</th>
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<tr>
<td>1977:1</td>
<td>A World Catalogue of Theses and Dissertations Concerning the Education of the Peoples of the Pacific Islands (Including the New Zealand Maori)</td>
<td>William G. Coppell</td>
</tr>
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<td>1977:2</td>
<td>The Samoan Archives. An annotated list of the archival material of the various governments of Western Samoa from the middle of the Nineteenth Century to the first quarter of the Twentieth Century</td>
<td>Ashby J. Fristoe</td>
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<td>1978:1</td>
<td>The Use of Nearshore Marine Life as a Food Resource by American Samoans</td>
<td>Harry Burnette Hill</td>
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<td>Captain Cook and the Pacific Islands, The Proceedings of the Third Annual Pacific Islands Studies Conference, March 31 and April 1, 1978</td>
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Participant Evaluation

Captain Cook and the Pacific Islands
Third Annual Conference--April, 1978

Pacific Islands Studies Center

Compiled by:

Dr. Carl J. Daeufer
Director

June, 1978
<table>
<thead>
<tr>
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<tbody>
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</tr>
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<td>Degree To Which Objectives Were Achieved</td>
<td>2</td>
</tr>
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<td>2</td>
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<td>Primary Objective(s) For Attending</td>
<td>2</td>
</tr>
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<td>Liked Most About Organization-Procedures Of Conference</td>
<td>4</td>
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<tr>
<td>Suggested Change-Improvement In Organization-Procedures.</td>
<td>6</td>
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<td>17</td>
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Introduction

Since 1976 the Pacific Islands Studies Center has sponsored an annual conference aimed at bringing together University of Hawaii systemwide faculty and students interested in teaching, studying and researching associated with Pacific Islands of Melanesia, Micronesia and Polynesia.

Each conference has been evaluated by those who attend. The data compiled on the pages which follow reports the evaluative responses from fifty (50) of the total eighty-eight (88) registrants of the Third Annual Conference - Captain Cook and the Pacific Islands.

These compiled evaluative responses are used as guides to plan future conferences as well as in consideration of ways to improve the manner in which the conference operates.

We thank each participant-registrant for offering a small portion of time to provide us with important feedback information regarding our successes and limitations in sponsoring this annual Pacific Islands conference.

C.J. Daeufer, Director
Pacific Islands Studies Center
Captain Cook and the Pacific Islands
Third Annual Conference--April, 1978
Pacific Islands Studies Center

Participant Evaluation

1. Attendance:

<table>
<thead>
<tr>
<th>Conference Session</th>
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<tr>
<td>Friday evening</td>
<td>40</td>
</tr>
<tr>
<td>Saturday, 1st session</td>
<td>50</td>
</tr>
<tr>
<td>Saturday, 2nd session</td>
<td>50</td>
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<tr>
<td>Saturday, 3rd session</td>
<td>47</td>
</tr>
<tr>
<td>All sessions</td>
<td>38</td>
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</table>

Evaluations Received N=50

<table>
<thead>
<tr>
<th>Friday Evening (By Count)</th>
<th>74</th>
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<tbody>
<tr>
<td>Saturday (By Count)</td>
<td>76</td>
</tr>
<tr>
<td>Total Registered</td>
<td>88</td>
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</table>

2. Degree to which objectives of the Conference were achieved: (N=50)

<table>
<thead>
<tr>
<th>Quality</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well achieved</td>
<td>16</td>
<td>32%</td>
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<tr>
<td>Mostly achieved</td>
<td>21</td>
<td>42%</td>
</tr>
<tr>
<td>Moderately achieved</td>
<td>11</td>
<td>22%</td>
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<tr>
<td>Not achieved</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td><strong>50</strong></td>
<td></td>
<td>100%</td>
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</table>

3. General rating of the Conference was: (N=50)

<table>
<thead>
<tr>
<th>Quality</th>
<th>N</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>14</td>
<td>28% 94%</td>
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<tr>
<td>Good</td>
<td>33</td>
<td>66%</td>
</tr>
<tr>
<td>Fair</td>
<td>3</td>
<td>6%</td>
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<tr>
<td>Poor</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>50</strong></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Specific response from participants regarding their aims, likes, suggestions for improvement, and future conference planning are recorded below.

Please state your primary objectives in attending this Conference:

a. To better understand the extent of the impact of Cook's arrival in the Pacific.

b. Interest in James Cook.

c. To learn more about Captain Cook, et.al.

d. As a Yorkshire woman, I am extremely interested in the life and history of Captain James Cook and have thoroughly enjoyed listening to every knowledgeable speaker. Thank you!

e. Interest in Captain Cook and early Hawaii.

f. To become better informed about Cook.
g. Come away with new ideas about Cook.

h. To hear of new discoveries or insights relating to Cook's contributions, etc.

i. Just an historical interest in Captain Cook.

j. Getting new perspectives on the Cook expeditions.

k. More knowledge of positive and negative reactions of Cook's arrival in Hawaii.

l. To learn more about Cook's trips and effect on history, people, medicine, etc.

m. To hear a thorough evaluation of Cook's activities.

n. Learn more about Captain Cook and his voyages.

o. Interest in Captain Cook.

p. Information on the chosen theme.

q. More detailed information in interest of Captain Cook; interested by various disciplines approached.

r. Gain more knowledge about Captain Cook's voyages.

s. To learn more about the Pacific and Captain Cook's voyage.

t. Exposure to some aspects of Cook's voyages and their impact on the Pacific which I haven't studied on my own.

u. Interested in Pacific islands and islanders. (Hawaiian Studies instructor at Kamehameha.)

v. To learn new ways of looking at problems related to the Pacific islands.

w. Further information about the Pacific.

x. Gain knowledge on Pacific.

y. (Member of PIP faculty.) To observe and to learn more about the Pacific islands.

z. Interested in hearing from different specialties related to Pacific.

aa. From my own interest in history of the Pacific Basin.

bb. Working interest in Pacific geography.

cc. I'm a person whose major interest is the Pacific.

dd. To learn more about the Pacific.

ee. Learning more about the Pacific.

ff. Meet other persons interested in the Pacific.
gg. To meet scholars involved in the Pacific.

hh. To keep in touch with Pacific colleagues.

ii. Get acquainted with people with similar interests in the Pacific.

jj. Meet researchers from other UH campuses, hear their presentations and get acquainted with their interests.

kk. Contact with those interested in Pacific.

ll. To meet and learn from other scholars doing research on Polynesia.

mm. To obtain better knowledge and contacts with other persons in this field.

nn. Make contact with selected party.

oo. Meet other Pacific scholars.

pp. Meet Pacific colleagues.

qq. Interest in anything "Hawaiian" especially Hawaiian natural history.

rr. Interest in Hawaiiana.

ss. General interest in speakers.

tt. Education.

uu. Information.

vv. To learn - to gain some small measure of knowledge from these noted scholars.

ww. Learning experience as a student.

xx. To learn about what has been done, to hear of new ideas, and to clear up some ideas.

yy. Hear talks prepared.

zz. Just curious.

5. What I liked most about the organization and procedure of the Conference was:

   a. It's good organization and pleasant atmosphere. Good and efficient notices and publicity.

   b. Efficiently run.

   c. Informality yet efficiency of operation (apparently). The work that went into setting this up was so well done it did not obtrude upon the participants and audience.

   d. Audio-visual uses - excellent audio - well organized! Kept to time.
e. I was impressed with the effective level of visual aids at this conference.
f. Well-run, nice exhibits, well-coordinated, introductory speakers were very
good, registration smooth.
g. Advance notification and planning.
h. Well-organized and well-paced - no "dead" periods.
i. Organized well and primarily kept on time - phenomena usually exploited.
j. The pace, informality.
k. Organization smooth and well-achieved.
l. Adherence to schedule. Good publicity prior to conference.
m. Well-scheduled, kept on track.
n. Relatively rapid pace of schedule.
o. The breaks (coffee and lunch) allowed for questioning and communicating with
speakers and others.
p. The division into discrete sessions and having conveners for each.
q. Timing and introductions - speakers within limits of time.
r. Time spans good.
s. Adherence to schedule.
t. Kept to timetable.
u. On time. Short sessions for each speaker.
v. Schedule kept without feeling much pressure. Excellent location and facilities.
Very well-run.
w. Good variety of topics and speakers.
x. Variety of topics.
y. Wide variety of topics.
z. Variety.
aa. Range of topics.
bb. Short papers, but specific and to the point.
c. Short lectures on a variety of topics - the 20-minute format was great, giving
one a taste but not a surfeit on any given topic.
dd. Choice of speakers.
ee. Good, clear speakers.

ff. Convener vs. panel members.

gg. Quality of material and speakers.

hh. Pleasant lecture hall for concentration; adjacent break facilities, good slide-lecture facilities.

ii. The comfort and facilities of the auditorium. Jane Hurd.

jj. Preferred this year's meetings (plenary) to panel groupings of last year.

kk. A "theme" developed conference.

ll. Fine in all respects.

6. A suggested change or improvement in organization or procedure would be:
   a. No need for summation!
   b. None.
   c. Balance of quality of presentation.
   d. Tell speakers who audience will be so they don't cover old ground or speak as to novices.
   e. Can we get more extensive publicity through community media to draw in a larger, wider audience?
   f. Closer relation of lectures to theme of conference. More interaction between speaker and audience.
   g. Select topics along common theme - i.e., have speakers talk on Cook.
   h. A short time for questions, discussion.
   i. Involve more Polynesiens.
   j. Better focus.
   k. Perhaps a closer look at proposed subject content could be made with short abstract before the talk to be made available.
   l. One day conference is sufficient.
   m. Some speakers, primarily professors, "lecture" to the audience - they should "talk" - more opportunity for audience questions!!!
   n. Need more time for lunch. Save some "light" topics and presentations for after lunch session. The last paper was heavily theoretical and hard to follow in thought.
   o. Offer hand-outs from speakers on their subject areas. Offer sales of books.
p. Announcement in two Honolulu dailies were too small. I found the event in *The Maui News*, 3/29, despite the fact that I reside in Honolulu.

q. Include audience interchange - we should have chance for input.

r. More attention to lunch arrangements.

s. Make more of an effort to involve Islanders - assume the general interest of folks (avoid too much professional jargon).

t. We were not always within the "theme".

u. I'm admittedly myopic when it comes to historical topics. While the multidiscipline approach sounds ideal, I personally found it of little value. Perhaps separation of Cook topics and general Pacific topics.

v. Better mechanical organization and warmer Aloha at beginning. Registration 1st session, Friday night.

w. None.

x. More time for discussion and questions between speeches. Probably better to limit it to one day.

y. Stick more to theme.

z. More publicity please. Almost didn't find out about it. More people would have come. More teachers in public schools or State and Federal workers informed?

7. What areas or topics would you like to have considered for future Conference planning?

a. Conferences whereby we could hear Pacific islanders themselves share their thoughts and feelings relative to the kind of society they would like.

b. Healing methods - Beliefs in guardian spirits? - "Kahunas" in various island cultures.

c. The question of "foreign" involvement in the Pacific.

d. Comparative changes, over time, in different political and/or cultural areas of the Pacific.

e. Symposium on Pacific prehistory.

f. Focus on other Polynesian island groups.

g. More on history and natural history of Hawaii and other Pacific islands. Also, ancient culture of Hawaiians and other island cultures.

h. Modern writers in the Pacific.

i. Native accounts of Cook; native assessment of his character - historical influences.
j. Literature of the Pacific, music and dances - mores.

k. Dilemmas of modernization.

l. Scientific knowledge of the Polynesians or continuing Severance's idea of the unity of Polynesian people.

m. Would like to have some attention given to sources/materials available outside of Hawaii. Would it be possible to invite more speakers from other parts of the Pacific?

n. Social development.

o. Question and answer period under each convener and panel members.


q. How about "Contemporary Problems"?

r. Islander-expatriate relations in modern, changing political climate.

s. Present research or status of research for history, geography, anthropology, etc. Perhaps have separate conferences for history, sociology, anthropology, etc. - unless talks are written for cross disciplines.

t. "Change" could be an orientation of a conference - eg. cultural change, population change, ecological change, etc.

u. More controversial topics instead of academic reports. Perhaps in more of an interactive nature by getting greater group participation. For example: "How can the best of Pacific culture be preserved?"


w. Impact of various early voyages on Hawaii; early voyages and scientific contributions.

x. Economic development and political autonomy in Pacific nations; attacking neo-colonialism via economic and political change in Melanesia.

y. Get archaeologists to discuss their work in the Pacific.

z. Environmental impact statements - significance - discussion of endangered species of plants. Impact of grass-roots movements throughout Hawaiian history. Situations of native groups in Pacific such as Australian aborigines, Maoris NZ, Tahitians - how they cope with impact of Western culture. More on food in the Pacific - esp. Micronesia. Depending on imports when locally produced food is better and cheaper. Or a specific informative talk on how taro and other Araceae members are prepared and grown. One of them, Xanthosonda, was introduced by Westerners from America and perhaps suggest methods to increase their use today. Status of native crafts in Pacific, Tahiti, NZ, Tonga, Samoa, etc. Quality, etc. Past and present. Include Hawaii. Tapa, lauhala, carving, etc. Conference on music of native peoples of the Pacific with demonstrations.
<table>
<thead>
<tr>
<th></th>
<th>Name</th>
<th>Address</th>
<th>Title</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Marquerite K. Ashford</td>
<td>45-628 Halekou Place, Kaneohe, Hawaii 96744</td>
<td>Reference Librarian, Bishop Museum</td>
</tr>
<tr>
<td>2.</td>
<td>Eleanor C. Au</td>
<td>Hamilton Library 504</td>
<td>Head, Special Collection, UH Library</td>
</tr>
<tr>
<td>3.</td>
<td>Kenneth W. Baldridge</td>
<td>BYU-Hawaii, Laie, Hawaii 96762</td>
<td>Associate Professor, History</td>
</tr>
<tr>
<td>4.</td>
<td>Gary D. Best</td>
<td>Hilo College, Hilo, Hawaii 96720</td>
<td>Assistant Professor, History</td>
</tr>
<tr>
<td>5.</td>
<td>Ruth Binz</td>
<td>419 Keoniana St. #1201, Honolulu, Hawaii 96815</td>
<td>MSLS</td>
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<tr>
<td>6.</td>
<td>William J. Bonk</td>
<td>University of Hawaii, Hilo, Box 1357, Hilo, Hawaii 96720</td>
<td>Professor, Anthropology</td>
</tr>
<tr>
<td>7.</td>
<td>Sandi Brinkmann</td>
<td>2212 Metcalf St., Honolulu, Hawaii 96822</td>
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<tr>
<td>8.</td>
<td>Jeanne Bunyan</td>
<td>Kauai Community College, RRL, Box 216, Lihue, Kauai 96766</td>
<td>Instructor, Humanities</td>
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<tr>
<td>9.</td>
<td>Sam Burris</td>
<td>2013 Fern St., Honolulu, Hawaii 96826</td>
<td>Instructor, UHM</td>
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<tr>
<td>10.</td>
<td>John Charles</td>
<td>P.O. Box 1395, East-West Center</td>
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<tr>
<td>11.</td>
<td>Patricia Charles</td>
<td>75 Wakefield Road Garforth, Leeds, Yorkshire, England</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Curley W. Chittenden</td>
<td>603-2167 Bellevue Avenue, West Vancouver, B.C. V7V1C2</td>
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</tbody>
</table>
13. Richard W. Coller  
Kauai Community College  
RRL, Box 216  
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Sociologist

14. David Cox  
3080 Puhala Rise  
Honolulu, Hawaii 96822

15. Robert Craig  
Box 44  
BYU-HC  
Laie, Hawaii 96762

16. Carl J. Daeufer  
WA 2-225  
Director, Pacific Islands Studies Center;  
Professor, Education

17. Joyce A. Davis  
261 Huali St. #5  
Honolulu, Hawaii 96813

18. Frances M. Dohme  
5366 Oio Dr.  
Honolulu, Hawaii 96821

19. Vern Earureker  
413 Keoniana  
Honolulu, Hawaii 96815

20. John Edgerly  
170 Hawaii Loa St.  
Honolulu, Hawaii 96821

21. Yoshimi Endo  
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Honolulu, Hawaii 96822

22. Josh Epstein  
2811 Winam Avenue  
Honolulu, Hawaii 96816

23. Barry Fankhauser  
Dept. of Chemistry  
2545 The Mall  
University of Hawaii  
Honolulu, Hawaii 96822

24. Peggy Ferris  
1547 Ala Wai, Apt. 318  
Honolulu, Hawaii 96815

Student/Travel Researcher

Advertising Manager, Shirokiya Inc.
25. Eleanor Frierson  
Chaminade University  
3149 Waialae Avenue  
Honolulu, Hawaii 96816

Chairman, Communications Division

26. Lynette Furuhashi  
Pacific Collection  
Hamilton Library

Assistant to the Pacific Curator,  
Hamilton Library

27. Rhoda E.A. Hackler  
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Honolulu, Hawaii 96816

28. Agnes Hardy  
2238 Seaview Avenue  
Honolulu, Hawaii 96822

29. D. Elmo Hardy  
2238 Seaview Avenue  
Honolulu, Hawaii 96822

30. Emily Hawkins  
Indo-Pacific Languages  
Webster 311

Assistant Professor, Hawaiian Language

31. Renée Heyum  
Pacific Collection  
Hamilton Library

Pacific Curator

32. Bill Johnson  
2141 Atherton Rd.  
Honolulu, Hawaii 96822

33. Donald D. Johnson  
Dept. of History  
UH Manoa

Professor, History

34. Lenore Johnson  
672 Lawelawe St.  
Honolulu, Hawaii 96821

35. Yasuto Kaihara  
Special Collection  
Hamilton Library

Research Librarian

36. Robert W. Kelly  
512 Panui St.  
Honolulu, Hawaii 96817

Graduate student, Pacific History

37. Charles Kenn  
1434 Punahou St.  
Honolulu, Hawaii 96822

Consultant, Hawaiian Studies  
Kamehameha School
<table>
<thead>
<tr>
<th></th>
<th>Name</th>
<th>Title and Affiliation</th>
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<tr>
<td>38.</td>
<td>Ed Kennedy</td>
<td>Honolulu Advertiser</td>
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<tr>
<td>39.</td>
<td>Bacil F. Kirtley</td>
<td>Professor, English</td>
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<td>English Dept.</td>
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<td></td>
<td>Kuykendall 412</td>
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<td>40.</td>
<td>Diane Kon</td>
<td></td>
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<td>1977 Paula Dr.</td>
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<td></td>
<td>Honolulu, Hawaii 96816</td>
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<tr>
<td>41.</td>
<td>Beatrice H. Krauss</td>
<td>Research Affiliate</td>
</tr>
<tr>
<td></td>
<td>Lyon Arboretum</td>
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<td></td>
<td>3860 Manoa Rd.</td>
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<td></td>
<td>Honolulu, Hawaii 96822</td>
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<tr>
<td>42.</td>
<td>C.H. Lamoureux</td>
<td>Professor, Botany</td>
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<td></td>
<td>Dept. of Botany</td>
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<td>UH Manoa</td>
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<tr>
<td>43.</td>
<td>Maka Larsen-Basse</td>
<td>Instructor, Anthropology</td>
</tr>
<tr>
<td></td>
<td>2322 Sonoma St.</td>
<td>Honolulu Community College</td>
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<td></td>
<td>Honolulu, Hawaii 96822</td>
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<tr>
<td>44.</td>
<td>Harlan Y.M. Lee</td>
<td>Foreign Service Officer</td>
</tr>
<tr>
<td></td>
<td>1505 Alexander St. #1104</td>
<td></td>
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<td></td>
<td>Honolulu, Hawaii 96822</td>
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<tr>
<td>45.</td>
<td>Sam Lindley</td>
<td>Assistant Librarian, Honolulu Community College</td>
</tr>
<tr>
<td></td>
<td>2115 Armstrong St.</td>
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<td>Honolulu, Hawaii 96822</td>
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<tr>
<td>46.</td>
<td>Jerry K. Loveland</td>
<td>Professor</td>
</tr>
<tr>
<td></td>
<td>BYU-Hawaii Campus</td>
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<td></td>
<td>Laie, Hawaii 96762</td>
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<tr>
<td>47.</td>
<td>James Mack</td>
<td>Visiting Research Associate</td>
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<tr>
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<td>EW-CLI</td>
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<td></td>
<td>1777 East West Road</td>
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<tr>
<td>48.</td>
<td>Tim Macnaught</td>
<td>Assistant Professor, History</td>
</tr>
<tr>
<td></td>
<td>History Dept.</td>
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<td>UH Manoa</td>
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<tr>
<td>49.</td>
<td>Debbie Manning</td>
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<tr>
<td></td>
<td>EWC Box 1747</td>
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<tr>
<td>50.</td>
<td>Grant B. Manning</td>
<td>Doctoral student</td>
</tr>
<tr>
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<td></td>
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</table>
51. Jeff Marck  
   Dept. of Linguistics  
   Moore 558

52. Leonard Mason  
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Participant Reporting of Pacific Islands-Related Research and/or Activities

One planned outcome of the Third Annual Conference is to share and exchange information among Pacific Islands-interested faculty and students as that information relates to Pacific Islands studies, research and activities. Thus, on the registration form each participant was asked to describe briefly any current or up-coming Pacific Islands-related research or activities in which he or she was involved. The compiled results are reported below.

Please describe briefly any current or up-coming Pacific-related research or activities in which you are involved:

Kenneth W. Baldridge
Records of the Hawaiian colony of Iosepa, Utah, 1889-1917. Relations between the Hawaiian monarchy and the Mormon Church.

William J. Bonk
1. Ongoing archaeological excavation and survey - Hawaii.
2. Will attempt to develop an archaeological conference for Fall, 1978.
3. Will be writing up two papers resulting from research on my recent sabbatical leave. (Pottery villages in New Guinea.)

Curley W. Chittenden
Captain Cook's trip to B.C., etc. Just interested in Pacific Islands and here.

Robert Craig
Book on Marquesas (Robert Thomson's journal - 1841) History of Tahiti.

Joyce A. Davis
Hawaiian plants, endangered species.

Barry Fankhauser

Rhoda E.A. Hackler
Dissertation - History - UH. Cook conference, Simon Fraser University.

Reneé Heyum
Whatever the PIP is doing.

Donald D. Johnson
Yasuto Kaihara  

Robert W. Kelly  
Doing a thesis relating to German commercial firms in the Pacific. Also very interested in indigenous responses to such activities re. similar scale, i.e., the Samoan co-op, etc. At present am abstracting articles from German colonial newspapers, 1860-1914 for the PISC.

Harlan Y.M. Lee  
Working as consultant to the Hawaii State government on Pacific island activities.

Sam Lindley  
Polynesian philosophy.

Jerry K. Loveland  
I direct the newly formed Institute for Polynesian Studies, which is endowed by the Polynesian Cultural Center. We are currently beginning or sponsoring or publishing research in a number of Pacific islands items. We also are sponsoring the development of instructional materials.

James Mack  
Conserving cultural values. Conference for Arts & Humanities administrators, educators, and disseminators, April 5-26.

Grant B. Manning  
Influence of European contact on the health status of Fiji Islanders.

Anneliese W. Moore  
Hawaiian-German cultural/historical relations during the 19th century.

P. Neves  
Ph.D. thesis on early culture contact in Hawaii.

Carmen E. Oliveira  

Douglas Oliver  
Writing.

Bruce Palmer  
Plant introductions to Hawaii before 1820.

Peter Pirie  
1980 round of censuses in the U.S. Pacific Territories.

Leilani Pyle  
Very much concerned with Pacific Islands. Hawaiian delegate to "Pacifique '77" held in Solomon Islands, August-September.

Am currently working on a cultural history of Waimanalo and helping to inventory all historic sites in the town and its environs.

Study of Micronesians for Intercultural Training Workshops.

Hawaiian genealogical research.

Attend BYU Pacific Resources Indexing Seminar, April 8, 1978.

Oceanographic research in the Pacific; especially equatorial oceanography and atoll/lagoon circulation.

"Artificial Curiosities" exhibition, Bishop Museum.

A study on assessment of food and nutritional needs of people and government policy and measures affecting nutritional status of people, particularly the rural people, will be conducted in a few selected South Pacific countries.

Working on Cook bibliography under project leader Cynthia Timberlake of Bishop Museum Library. The bibliography is to contain the Cook holdings of all the libraries in Hawaii.
CAPTAIN COOK AND THE PACIFIC ISLANDS
Third Annual Conference
Pacific Islands Studies Center
March 31 and April 1, 1978

EVALUATION

Your candid reactions to the Conference will help us plan future meetings. Your comments need not be signed, but PLEASE return the completed questionnaire by placing it in one of the evaluation boxes located at the rear of the meeting room.

CHECK SESSIONS ATTENDED: Friday Evening _____
Saturday: First _____ Second _____ Third _____ All _____

1. Please state your primary objectives in attending this Conference: ____________________________
____________________________________________________________________________________
____________________________________________________________________________________

2. Was this objective largely achieved through your attendance at the Conference?
   _____ Well Achieved _____ Mostly Achieved _____ Moderately Achieved _____ Not Achieved

3. The topics which were MOST INTERESTING or most valuable for my purposes were:
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

4. The topics which were LEAST INTERESTING or least valuable for my purposes were:
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

5. What I liked most about the organization and procedure of the Conference was:
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

6. A suggested change or improvement in organization or procedure would be:
____________________________________________________________________________________
____________________________________________________________________________________

7. What areas or topics would you like to have considered for future Conference planning?
   __________________________________________________________________________________

8. What changes would you recommend in the physical facilities, meals, schedules,
   length of Conference, etc? __________________________________________________________________________________

9. In general, how do you rate this Conference?
   _____ Excellent _____ Good _____ Fair _____ Poor

   (Use back of page for other comments.)

THANK YOU FOR YOUR PARTICIPATION AND SUPPORT

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REGISTRATION
CAPTAIN COOK & THE PACIFIC ISLANDS
THE THIRD ANNUAL
PACIFIC ISLANDS STUDIES CONFERENCE
MARCH 31 AND APRIL 1, 1978
BIO-MED B103
UNIVERSITY OF HAWAII/ MANOA

NAME

TITLE

ADDRESS AT WHICH YOU WISH TO RECEIVE CONFERENCE PROCEEDINGS

IF YOU DO NOT CURRENTLY RECEIVE THE PACIFIC ISLANDS NEWSLETTER AND WOULD LIKE YOUR NAME ON THE MAILING LIST, OR IF THERE IS A CORRECTION IN THE ADDRESS AT WHICH YOU RECEIVE IT, PLEASE INDICATE BELOW:

NAME

TITLE

ADDRESS

PLEASE DESCRIBE BRIEFLY ANY CURRENT OR UP-COMING PACIFIC-RELATED RESEARCH OR ACTIVITIES IN WHICH YOU ARE INVOLVED:

PLEASE LIST ANY NEW PUBLICATIONS OF YOUR OWN OR THAT YOU WOULD RECOMMEND THAT WE PUBLICIZE: