LAU FISH TAXONOMY

by

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ABSTRACT

This thesis is a preliminary attempt to consolidate materials pertaining to Lau fish taxonomy (North Malaita, Solomon Islands). Data utilized come from two sources: those collected by Maranda and Maranda (1966-1968) and those collected by the author during a two-month field period (October-December 1975).

Two approaches to the analysis of terminological systems are explored first. A general description of the Lau Taxonomic Universe follows in which the major components are indicated.

The focus then shifts to a more detailed discussion of Lau Fish taxonomy. Material presented here takes three forms:

(1) A comprehensive list of fish identified according to biological classifications.

(2) A summary of data obtained from informants' Memory Lists of fish names. The problems of taxonomic inclusion and equivalence are considered.

(3) A discussion of those data traditionally regarded as "Non-Taxonomic Terminology".

Distinctive Features are then considered and some examples given. Upper Level Taxa are discussed first. Following this, the Features and Criteria for the classification of Lower Level Taxa are outlined.

Suggestions for further inquiry and propositions concerning analytical avenues constitute the final portion of this presentation.

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This thesis was made possible by the help and encouragement of a number of people. Above all, acknowledgement is due to Drs. E. and P. Maranda whose inspiration goes back to years of undergraduate study and through whom, the final possibility of 'going to the field' became realized.

I am grateful to the Marandas and to fellow students in Anthropology and other disciplines, whose letters (those received and those still in transit) provided invaluable intellectual first aid during the months in the field.

The people of Lau Lagoon and the neighbouring Baelelea region are those to whom the greatest debt is owed. They accepted me, fed me, housed me and taught me a great deal about their language and culture. They gave me the gift of their open opinion and, by permitting me to participate in many daily activities, taught me the relativity of time and the importance of space.

In the writing of this thesis, I both acknowledge their kindness and ask the greatest task I have yet to demand: that they receive and review this material and that they continue to strive for their individuality and cultural identity as they have always done.

PREFACE

> No work of this kind is exhaustive however, being limited by the time spent in collecting the material, the number and competence of the informants, and finally the fieldworker's own competence, the extent of his knowledge and the variety of his preoccupations. (Levi-Strauss 1962: 153)

Data presented in this thesis were obtained in the course of approximately two months' fieldwork, October - December 1975, among the Lau-speaking people of North Malaita, Solomon Islands.

My interest in doing fieldwork in this area developed during the period that I was an undergraduate student of Dr. Elli Kongas-Maranda. Subsequently, I became a research assistant to Dr. Pierre Maranda. During this time I received instruction in the handling of ethnographic material from both descriptive and analytical angles. My interest in Oceania, and specifically in Malaita as a culture area of concentrated study, became firmly established.

This experience encouraged me to continue further directed studies in Melanesian Linguistics and Ethnography in the first year of my Masters Programme at the University of British Columbia.

Having thus chosen Malaita as an isolated area of investigation, I began to explore possibilities of doing fieldwork there. In April 1975 I was fortunate to be awarded the opportunity to work as a field assistant for Dr. E.K. Maranda during the following autumn months. Although I

had worked with materials collected by Drs. E. and P. Maranda (1967-68) for almost a year previously, I had no working knowledge of the language and no notion of a 'living enterprise' called anthropological fieldwork.

My tasks as a student and a research assistant were three. First, to acquire a functional knowledge of the Lau language and culture; second, to conduct a review of the first publication of a Lau dictionary compiled by C.E. Fox with an introduction by E.K. Maranda (1974); third, to pursue certain problems and queries concerning Lau marine taxonomy that I had encountered and that had aroused my particular interest.

While the presentation of material pertaining to the latter concern is the primary aim of this thesis, it, nevertheless, rests upon the results of the first two tasks and, as such, is a document of my entire field experience.

INTRODUCTION

The capacity, even the imperative of the human mind to order the events of the external world into some sort of intelligible system is widely recognized (cf. Tyler 1969: 3-9). The growth of cognitive anthropology, with its focus on the organizing principles underlying behaviour, its concern with typology and definition,is a manifestation of this recognition. The shift in anthropological emphasis that has accompanied this growth is evidenced by a new perspective and theoretical orientation. It is assumed that each people has a unique system for perceiving and organizing material phenomena -- things, events, behaviour, and emotions (Goodenough 1957). The object of study is not these material phenomena themselves, but the way they are organized in the minds of men. Cultures then are not material phenomena; they are cognitive organizations of material phenomena (Tyler 1969: 3).

As an integral part of this approach, interest in aboriginal taxonomic systems has grown rapidly over the last two decades,and numerous documented descriptions of native classification systems have appeared (see Turner 1974; Berlin, Breedlove and Laughlin, 1970; Berlin, Breedlove and Raven, 1966; Berlin, 1968; Metzger and Williams, 1962; Bulmer, 1967, 1970; Bulmer and Tyler, 1968; Conklin, 1954; Diamond, 1965; Bright and Bright, 1965; Frake, 1961; Goss, 1967; Price, 1967). To my knowledge, the only detailed study of native zoological taxonomies that exists has been done by Bulmer (1967, 1970) amongst the New Guinea Karam peoples. Interest

seems to have been primarily directed to the collection and analysis of ethnophytotaxonomic materials. Plants, it has been claimed, provide a concrete, discrete and virtually universal semantic domain and for this reason are exceptionally useful subjects for cognitive studies (Turner, 1974). Many other cognitive systems have also been explored, particularly kinship.[1] Further studies in the area of the classification of natural organisms are, in my opinion, needed to complete such a corpus for two reasons.

1. Such studies have been long neglected. Botanical classifications have been favoured, perhaps partly due to an ethnocentric bias concerning the stability, immobility and agricultural import of such organisms.
2. Animals (used here generally to describe all organisms that are neither humans nor plants) constitute a unique area of human cognition. Tyhurst (1974), Levi-Strauss (1963, 1966, 1967, 1969, 1971), and many others have elaborated this point.

The present thesis is an attempt to consolidate materials collected concerning Lau marine taxonomy,to offer some general observations arising from a preliminary study of the data and, in the context of two analytical approaches, to propose some areas and problems for further investigation and concentrated examination.

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1. Kinship has been the area most thoroughly examined (Wallace and Atkins, 1960; Conklin, 1964; Lounsbury, 1964; Romney and d'Andrade,1964; Atkins, 1960).

CHAPTER 1

THEORETICAL BACKGROUND AND METHODOLOGY

The approach adopted in this study has been influenced and directed by the methods and orientations of a number of researchers who have described other folk taxonomic systems or who have discussed at length the problems faced in the study of cognition.

In this chapter, two ethnoscientific approaches are presented briefly first. A discussion of certain notions of critical importance to this study follows. A definition of the terminology and a delineation of the methodology ultimately adopted conclude the section.

The problem of the discovery of folk classifications by relatively rigorous eliciting techniques and the underlying aim of achieving a better understanding of lexical/semantic fields have been questions of debate among authors for more than a decade. Many researchers in this field have stressed the inadequacy of past studies and have tried to outline more systematic procedures for the collection and analysis of ethnosemantic data.

The growing concern with typology and definition, with discovering how different peoples organize and use their cultures (Tyler 1969: 3), is a characteristic feature of this period in anthropology. A wealth of articles and indeed, full length volumes, have been written contrasting and discussing aspects of the nature and evolution of a "New Ethnography" (variously known as cognitive anthropology, ethnoscience, formal and componential analysis, ethnosemantics, sociolinguistics, and so on) in relation to

other theoretical orientations within anthropology. Hence, neither the epistemological nor the historical aspects of this approach will be discussed at this time.

The central aim of ethnoscience is to penetrate beyond mere material and verbal representations of a culture to the logical nexus of underlying concepts, to present accurate descriptions of particular cognitive systems, or of particular semantic domains within larger networks of meaning (cf. below).

The major assumption here is that each culture consists of a set of logical principles which order relevant phenomena. It is not the manifestations of material phenomena but the logical principles of ordering that should constitute the principal area of investigation for the anthropologist as "an adequate ethnographic description of the culture of a particular society presupposes a detailed analysis of the communication system and of the culturally defined situations in which all relevant distinctions in the system occur" (Goodenough, 1957). They can be derived "by an ethnographic technique which describes cultures from the inside out, rather than from the outside in. Categories of description are initially derived from relevant features in a culture rather than from the lexicon of anthropology" (Tyler, 1969: 20).

Part I - Representational Analysis[1]

Ethnoscientific procedures have been detailed as follows:

(1) An inventory is made of terminology within a given semantic domain;
(2) Information is assembled on each linguistic form as a semantic class of objects;
(3) When possible, the classificatory dimensions imposed upon the field by native linguistic usage are isolated;
(4) Through a series of culturally appropriate questions, semantic distinctions (components) are established which apportion the terms into sets and subsets, such that every item in the domain is distinguished from every other item by at least one component, and is at the same time related to every other item by inclusion at some level in a broader taxonomic category; and
(5) A classification is erected based on the successive inclusion and exclusion of each defined item within the domain (Lounsbury, 1963; Burling, 1964; Berlin, 1968).

> The procedures outlined are accomplished through interviews with preferably a large number of native speakers. In order that there be no cultural bias or misunderstandings on the part of the ethnographer, the interviews should be conducted entirely in the language of the native informant (Conklin, 1962; Werner, 1967), and care should be taken not to bias the informant's responses by allusions to other taxonomic systems familiar to the researcher. (Turner 1974: 13)

The most simple programme of elicitation is based on the conventional 'tree-like' association of successive or linked questions and responses. This, it is claimed, enables an interviewer to begin with any given item within a domain and to position it horizontally or vertically in a taxonomic scheme.

Ideally, this method involves a downward progression through the taxonomic hierarchy by (given X as the initial segregate within a culturally

1. I have chosen this term here for purposes of differentiating this approach to the description of taxonomic systems from componential analysis which will be discussed later.

defined domain) asking "what kinds of X are there?" Given answers, e.g., X',X",X'" each differentiated by at least one characteristic, one may proceed in the same fashion, asking successive questions about X', X" and X'", until the lower order taxa are established and explored. Then, in order to investigate the position of X within a larger, more inclusive taxon, one may ask "what is X a kind of?" and in order to investigate hypothetical congeners, "what other kinds of X are there?"

This questioning should, theoretically, generate a taxonomic hierarchy which can be "mapped" producing a representation similar to (though generally much more complex than the following (see Figure 1).

It is a uni-dimensional representation of postulated relations between the taxa (their labels, and implicitly, their underlying features) of a folk taxonomy. It describes pictorially a system of monolexemically labelled folk segregates related by hierarchic inclusion between levels and by exclusion and contrast at a single level (Conklin, 1957, 1962; Lawrence, 1951; Simpson, 1961; Frake, 1962).

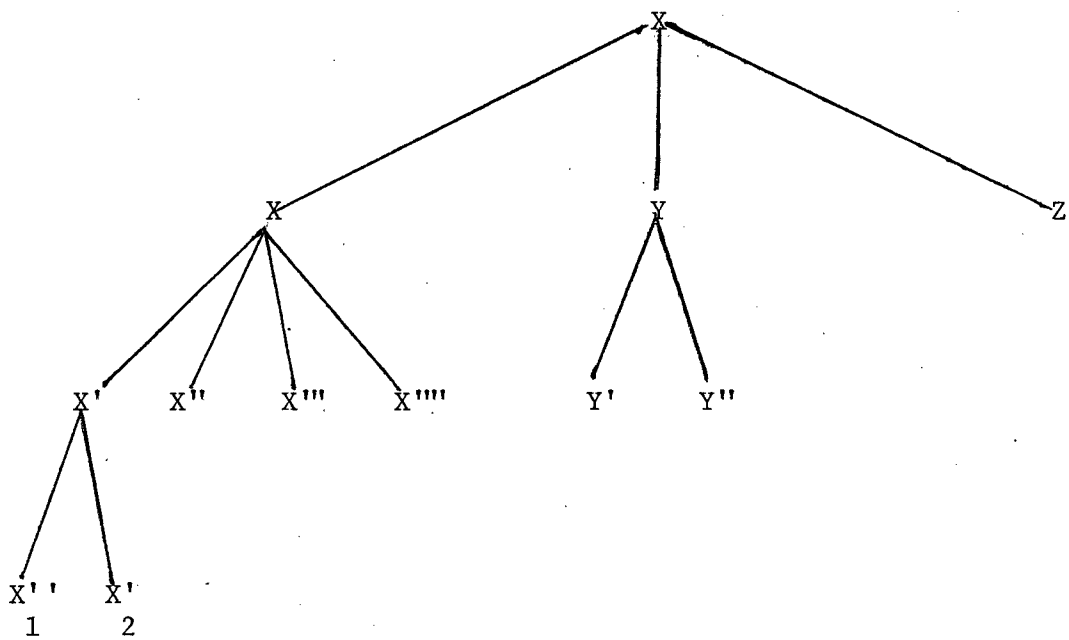
Some of the additional requirements of "model" or "regular" taxonomic systems (Woodger, 1952; Gregg, 1954; Simpson, 1961; Conklin, 1962) are:

(1) at the highest level, there is only one minimal (largest, unique) taxon which includes all other taxa in the system;

(2) the number of levels is finite and uniform throughout the system;

(3) there is no overlap (that is, taxa at the same level are always mutually exclusive).

Figure 1: Diagram Representing the Ordering of Labels in a Taxonomic Hierarchy by Inclusion and Contrast



The major assumption underlying this 'representational analysis' is that categories in a folk taxa are merely logically equivalent units differentiated only by their contrasting hierarchical status (Bulmer, 1967);, that folk taxonomies can be described by a similar hierarchy of taxonomic types of varying levels of specificity as can "our" scientific system of classification, although folk taxonomies seldom exhibit the systematic and more highly specific levels of diffentiation corresponding to "species" and "variety".

For those who adopt this model of simple structural similarity, the consequent neglect of the question of rules of classification and of the nature of the conceptual and perceptual processes involved in classifying natural organisms and their preoccupation with the question of the 1:1 correspondence between scientific species and terminal folk taxa is regrettable but comprehensible.

Berlin (1971) and Berlin, Breedlove and Raven (1971), according to this framework, have delineated six varying levels of specificity shown by folk phytotaxa into six major types of categories, which,they indicate can be found in the lexicons of all languages.

These, labelled in hierarchical sequence from most general to most specific are:

> UNIQUE BEGINNER: This is the highest level in a given domain, including all other categories. In the case of phytotaxonomies, this is the taxonomic category implied by the term "plant".

MAJOR LIFE-FORM: Only a few abstract general taxa, such as "tree", "vine", and "herb", are included at this level. They cover the majority of lesser ranked taxa in the system, although some important generics are not included in life-form taxa (see Bulmer, 1967).

INTERMEDIATE: Taxa at this level, called "covert categories" (Berlin, Breedlove, and Raven, 1968), are rather ephemeral and ambiguous in definition. They are more specific than life-form taxa and more general than generic taxa, but show varying degrees of specificity within this range. When they do exist, they are not usually labelled linguistically.

GENERIC: The greatest number of taxa are included at this level within any ethnobiotaxonomy, usually about 500 (Raven, Berlin, and Breedlove, 1971). They are linguistically recognized as the usual "names" of different kinds of plants. They correspond generally to our English folk taxonomic concepts of "oak", "columbine", "apple", and "squash".

SPECIFIC: This is a less common type of category than generic. Specific taxa characteristically exist as sets of a few members within a given generic (e.g., "red oak", "white oak").

VARIETAL: This level is recognized only occasionally in folk phytotaxonomies, usually for plant types of critical cultural importance, such as cultivated plants (e.g., peppers, beans, corn). (Berlin, Breedlove and Raven, 1971, cited in Turner, 1974)

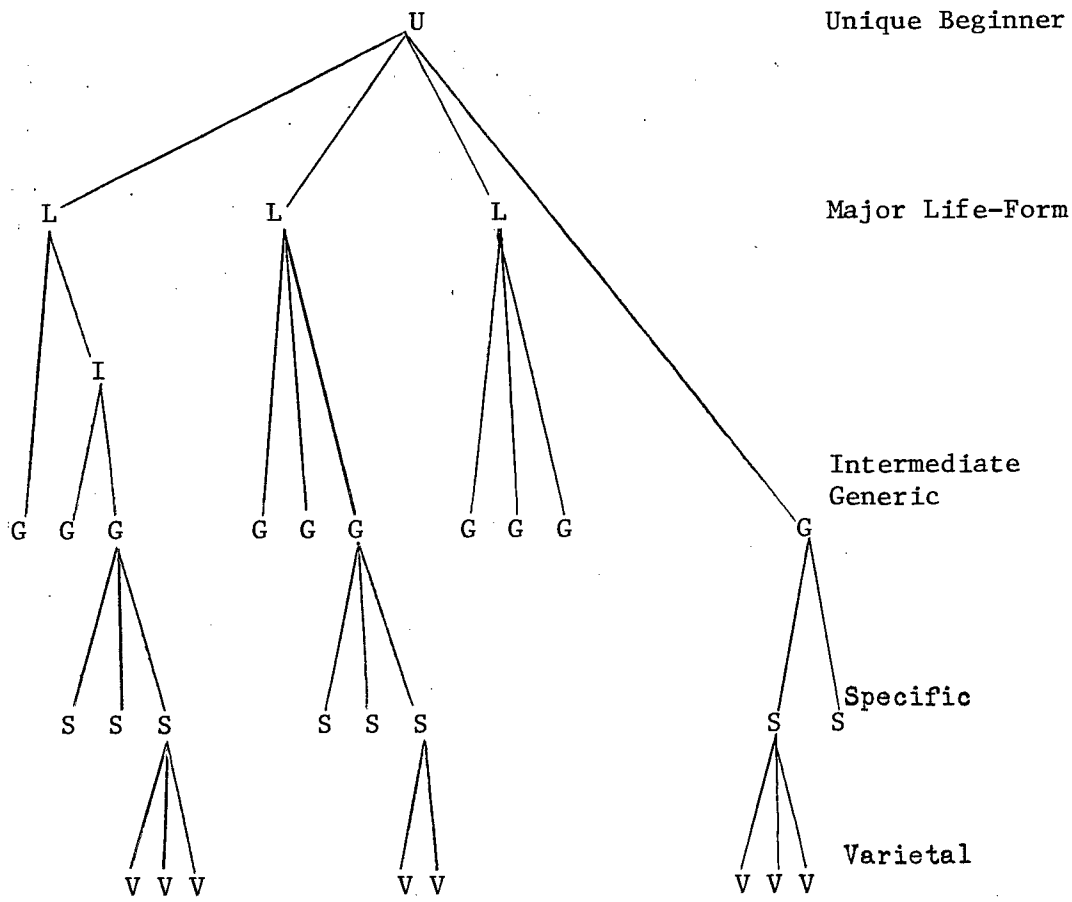
These can be represented diagrammatically as in Figure 2.

The notion of "life form", it should be noted, is a concept borrowed from botany.

It was first employed by C. Raunkiaer in a communication to the Danish Botanical Society December 1903. He delineates the three following criteria as a basis on which to construct a life-form classification.

1. The character must, in the first place, be essential....
2. It must be fairly easy to use so that we may easily see in nature to which life-form a plant belongs.
3. It must represent a single aspect of the plant.... (Raunkiaer, 1934)

Figure 2: A Diagrammatic Scheme of Universal Taxonomic Category Types Based on Conclusions of Berlin, Breedlove and Raven (1971).



The problems I envisage in applying this concept in the study of native taxonomic systems are two: first, according to Raunkiaer and other modern botanists, the determination of those "dominant" or "general" classes that can be included in the "life-forms" of a particular geographic area is, in a sense, arbitrary, depending on the discretion of the investigator. Secondly, how does one determine the native categories that belong to the life-form level of specificity if they are not articulated verbally, nor coded linguistically by the native population?

Part II - Componential Analysis

Another 'representation'[1] of taxonomic systems is based on the analysis of a lexical domain with primary reference to the components or features of meaning underlying it. In other words, the primary units of analysis are the semantic features of taxonomic units. The main objective of this approach is to discover the rules for determining the criterial attributes of taxonomic segregates, not merely the relationships between the segregates themselves.

The method by which the investigator:

1. searches for the dimensions of meaning underlying the chosen semantic domain and

2. maps the values on these dimensions (that is the features of meaning) onto the set of previously selected lexemes (Kay 1966)

is known as componential analysis.

This method, first described in relation to cognitive systems by Goodenough (1956), and subsequently expanded to the analysis of kinship and other terminological systems (Lounsbury, 1956; Conklin, 1962; Frake, 1962) has frequently been discussed in relation to the study of taxonomic systems (Sturtevant, 1964; Wallace, 1962; Spradley, 1972; Turner,

1. The term "representation" here is used to designate the formal description of a taxonomy. As taxonomies, paradigms and trees can be regarded as three different kinds of semantic structure, paradigms and trees can be used to refer to two different kinds of representations of a taxonomic system. Thus, the discussion here is confined to what have been described as tree structures and paradigmatic structures "with perfect taxonomy" (see Kay, 1966, for a full discussion of these differences).

1974). In the latter context, three stages or "phases of analysis" have been articulated by Psathas (1968):

(1) GENERATING the components of a certain domain within the taxonomic system by elicitation[1]. Native informants are presented with a "substitution frame" which they can complete with numerous possible responses. The names (or "terms" as they are called) used by the respondents to categorize various objects are recorded at the same time they are presented with a "stimulus-object" presumably belonging to that domain.[2]

(2) ORGANIZING the terms belonging to the domain in question into a taxonomy of sub-categories using the principles of inclusion of reference and inclusion by contrast. Important concepts at this stage of analysis are "segregate", "contrast set" and "lexeme".[3] A terminologically distinguished array of objects is a segregate (Conklin 1954, 1962; Lounsbury, 1956; Frake, 1962). A contrast set has been defined as a series of terminologically contrasted segregates which occur in the same environment (Frake, 1962) or culturally relevant domain (Sturtevant, 1964). Segregates in different contrast sets are related by inclusion in a taxonomy. Thus,

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1. The term domain is used here to refer to the total semantic range of a group of lexemes which, in a given culturally relevant context share at least one feature in common. A 'domain' is thus very plastic, if not arbitrary, in terms of semantic extension as, according to this definition, its boundaries are chosen by the investigator according to his own intended range of interest and inquiry (as implied by the unfortunate use of the verb "generating").
2. For example, given the domain of colour and the stimulus object a colour sample, the question frame might be: The colour of this is called _____.
3. A discussion of some of the problems associated with these concepts follows (see below).

these methodological notions of inclusion and contrast enable one to construct a taxonomic arrangement of terms which indicate the structure of a particular domain of cognitive choices.

(3) Componential analysis, however, seeks not merely to discern some structure in a domain of cognitive choices (that is, to compile a mere list of known members of a category), but to define the units (words) that contrast with one another in terms of a set of intersecting features, the dimensions of contrast.[1]

This final phase of componential analysis involves a determination of the components or rules that are instrumental in the application of a particular term to some object, in the placing of different stimuli within particular segregates or contrast sets (Burling, 1964). The paradigm is the characteristic representation or "mapping" of these defining attributes in terms of the lexemes their intersection describes (Tyler, 1969; Harris, 1971).

The problem that arises at this point concerns the presence of two contrasting (though infrequently differentiated) objectives of researchers applying this analytic framework.

On the one hand, the ethnographer assumedly searches for a set of rules which (on the basis of a stipulated set of contrastive semantic dimensions that are represented in the terminological system) would unambiguously

1. Hymes (1961) also makes the distinction between these two "phases" of analysis as he contrasts the "sorting" of terms with the "assignment" of semantic features to the units being sorted.

state the criteria by which a particular term could be applied to some object. In this case the 'test' for the utility of the analysis has been the accuracy with which it can 'predict' such naming. On the other hand, the analyst purports to augment an understanding of the criteria by which the native speakers themselves decide what term to use for a particular object.

Many epistemological criticisms concerning the stated 'objectivity' of the componential approach have been raised and debated. These debates concerning the contradictory nature of componential analysis[1] lead to a controversy in both theory and praxis particularly in the context of investigations of taxonomic systems.[2] It is beyond the scope of this thesis to comment in detail on points raised in the course of these discussions. I will, however, indicate briefly five issues of particular relevance to this study:

(1) The notion of "contrast sets" involving binary distinctions between defining features has long been regarded as a necessary property of taxonomic systems.[3]

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1. Which raises the question amongst others -- how is it possible to give an accurate emic description of a peoples' taxonomic system if the analytical framework presupposes such a high degree of pre-structuring and etic deduction?
2. See Turner, 1974, for a discussion of problems encountered in the application of componential analysis in a particular field situation.
3. For example the following table is given by Frake (1962) as the "Defining Attributes of the Contrast Set of Stem Habit in the Subanun Plant Taxonomy".

Contrast Set	Dimensions of Contrast	
	Woodiness	Rigidity
gayu 'woody plants'	W	R
sigbet 'herbaceous plants'	$\bar{W}$	R
belagen 'vines'		$\bar{R}$

This tendency to confine componential analysis to binary distinctions, while frequently ascribed to the 'aesthetic' quality of such an arrangement, (Burling, 1964), also, I believe, stems from two additional factors: first, from original and founding application of componential analysis to kinship systems in which this binary distinction between critical features has long been accepted as an operative principle;[1] second, from the two dimension limitation imposed on diagrammatic representations which has been embedded in the definition of the paradigm (see Sturtevant, 1964, in Spradley, 1972: 141-142).

(2) A definition of the term lexeme, as indicated previously is: a segregate whose meaning cannot be predicted from a knowledge of its morphological constituents.

The determination of the lexemic status of a term requires, however, a thorough analysis of the distinctive features of meaning of the term and its constituents (Goodenough, 1956; Frake, 1962). Such an analysis of the criteria for placing objects into distinct categories can come only after the term, together with those contrasting terms relevant to its use, has been isolated as a segregate label. The analysis of the criteria -- the components of meaning that determine category membership -- is however, regarded as the first objective in the final and most critical phase of

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1. For example, the following model is found in the componential definition of almost every kinship study applying this method of analysis:

Contrast Set	Dimensions of Contrast
Generation	+1 +2 0 -1 -2
Sex	M F
Lineality	Lineal Collateral

componential analysis. Thus, the possibility of the recursive or redundant nature of the semantic range of a folk segregate is defined out of the system. The focus is on isolating the segregates, determining contrast sets and inclusive relations. Then, presupposing the necessary existence of a lexeme, one proceeds to examine the nature of lexemes -- to delineate the rules of assigning criterial attributes to lexemes -- by examining their criterial attributes.

> If you presuppose lexemes exist, they can always be found.[1]

(3) A criticism frequently levied against componential analysis is that, even when properly conducted, it yields only one of several different and possible models of the semantic structure of a terminological system, each of which can accurately account for the lexical items within the system.

> There is a virtually infinite number of ways a lexical set can be componentially divided. (Colby, 1966; cf. Wallace and Atkins, 1960; Burling, 1964; Goodenough, 1965)

Componential analysis has become (contrary to the aspirations and directives outlined by some early theoreticians in the field) increasingly oriented towards the development of deterministic models based on the necessity of the determinacy of associations rather than becoming oriented towards the generation of probabalistic models based on the careful observation of non-verbal and contextual information as well as response eliciting devices applied in highly structured and restricted socio-linguistic situations.

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1. No one to my knowledge has ever explained why they should or if they do exist. Werner (1972) offers some interesting observations on the nature of lexemes and on the notion that recursivity and redundancy are, perhaps, properties of all languages.

Response variations, which could hypothetically, be incorporated into the construct of a probabilistic model presents an unsurmountable problem to the execution of componential analysis (Turner, 1974; Jones, 1971; Burling, 1964).

(4) An additional problem concerns the analytic 'range' of this method. "It is sometimes possible to analyze componentially a contrast set which forms one level of a folk taxonomy, but it is impossible to analyze in this way the whole taxonomy, even though the boundaries of the whole must define a domain: a single contrast set is limited to one taxonomic level" (Sturtevant, 1964; cf. Conklin, 1962■: 128, 1964; Frake, 1962). Almost all componential analyses of folk taxonomies have been limited to the study of upper-level segregates (e.g., Conklin, 1955; Frake, 1962; Werner, 1972; Sturtevant, 1968). The requirement of binary feature contrast has posed severe problems and raised numerous questions concerning the application of componential analysis to lower-level taxa which frequently demonstrate a multi-featured "n-ary" set of contrasting dimensions (Bulmer, 1967; Werner, 1972). Increasing specificity in a taxonomic system appears to involve an increasing complexity of the relationships between the attributes of the component taxa which componential analysis seems unable to handle.[1]

1. Other specific criticisms of componential analysis include the following. Componential analysis is said to inhibit comparisons between two or more cultures, since as soon as the semantic elements of a given culture are translated into terms of another culture, they lose their discrete and essential nature (Colby, 1966; Turner, 1974). Another criticism raised particularly by Berlin (1971), Berlin, Breedlove and Raven (1968) and their followers (e.g., Turner, 1974) is that componential analysis frequently does not account for unlabelled folk segregates or "covert" categories. As I have no direct experience of componential analysis in (continued . . . .)

The last point I wish to raise is a general one: the actual delineation of the semantic boundaries of taxa in terms of inclusiveness within a particular domain constitutes a problem common to both representational and componential analyses. This, however, is essentially a methodological problem relating to the nature of the eliciting frameworks adopted in each case and to the constitution of the population (informant) sample.

The existence of the "taxonomic equivalence" of coordinate terms is a consequent and an implicit assumption of both analytical approaches underlying the notion of inclusiveness as they define it, and as such, constitutes essentially an epistemiological problem. It is expressed in each case in a different manner:

(1) In a tree representation all lexical items occupying the same horizontal axis in the two-dimensional space are assumed to have equal taxonomic status. If this equivalence of taxonomic status is not articulated (either verbally or by linguistic coding) by the native informants, I believe that it is an artifact of this approach -- due to the ethnocentric nature of its basic comparative model: Modern Biological Taxonomy in which all organisms at a specific level of inclusion are rendered 'conceptually[1] equivalent by a superordinate and abstract concept.

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1. (Continued from previous page....) terms of these criticisms, I offer them merely on record, as acknowledgements of legitimate and lengthy debates concerning the shortcomings of this analytical method.

1. For example all organisms regarded as individual species may be regarded as distinct and unique entities, but they are first species; wrasses, rainbow-fishes, and cods may all be thought of as uniquely differentiated groups of individual organisms (or groups of classes of organisms), but they are all equivalently, biological families. If this kind of abstracted intellectual enterprise does not exist at the native level, I suggest (Continued . . . .)

(2) In componential analysis the delineation of the dimensions of contrast frequently results in the classification of lexical items into groups which may or may not be assigned in an arbitrary, intuitive manner on the part of the researcher.

Should balsam, hemlock and spruce be classed together as "short needled" trees (Christmas trees) as opposed to pines or should they all have equivalent taxonomic status? What is the essential "cognitive" difference between hemlock and spruce? Is it gross size, type of needle, form of bark, or what? These are the types of questions which must be answered before any single semantic analysis can claim to represent the cognitive organization of the people, or even claim to be much more than an exercise of the analyst's imagination.[1]

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1. (Continued from previous page....) that the 'equivalence' of taxonomic status postulated in representational analysis is not justified. In the context of this particular study, even classes of organisms that could be isolated as belonging to a similar level of inclusion, could not be regarded as 'equivalent' in these terms. The question made no sense to my informants, and little sense to me, at the time, and in retrospect.

1. I fully realize that this point requires further elaboration. To answer even the question -- to what degree are, for example, featherless bipeds an intuitive notion of the Western mind -- would I feel, require a full length paper. In this context I wish merely to add that although componential analysis is perhaps more explicit on this point, both methods engage in the same operation and even proponents of the componential approach seem unable to give a sufficient answer.

Part III - Terminology

I have had considerable difficulty in applying much of the descriptive terminology used by some researchers to refer collectively to the components of the various 'levels' of organization present in taxonomic systems to the data with which I am working.

Of particular problem was the scheme outlined by Berlin, Breedlove and Raven (1971).

The category 'Unique Beginner' is I feel burdened by the notion of an all-inclusive English term "plant" that delineates a general grouping of organisms that are differentiated from the rest of the taxonomic universe. This feature (the discrete differentiation of plants from other organisms) may constitute a universal characteristic of the lexicons of all languages but it does not necessarily constitute a formal cause (a structuring principle) for the division of the taxonomic universe into semantic domains cross-culturally (as is evidenced in this case). It is impossible, for example, to discuss the semantic dimensions of the Lau category ia without reference to the larger, more inclusive term asi and to the congeners of ia within the larger taxon (particularly the congener kiikii - see Chapter 3). It would only be possible to consider the category ia as a 'Unique Beginner' if an arbitrary and imposed framework was applied to the Lau taxonomic system.

The category 'Major Life-form' as defined by Berlin, Breedlove and Raven similarly appears to be a concept inapplicable to the Lau taxonomic system. There are no distinguishable "life-form markers" such as

those given by Turner (1974: 32). Those Lau categories corresponding to English 'glosses' that might be considered as 'Major Life-forms' (e.g., shellfish, sharks, dolphins, turtles, eels, rays, etc.) constitute different levels of inclusiveness in Lau taxonomy -- a characteristic which is not consistent with the original definition of the term.

Other terms frequently used to describe the vertical dimensions of generalization (or specification) of a folk taxonomy have a broader scope of meaning and are more loosely defined. These include the following:

"major" (or most inclusive groupings)	"primary taxa" "upper level taxa"
intermediate groupings	"secondary taxa" if they are immediate subdivisions of primary taxa "tertiary taxa" if they are immediate subdivisions of secondary taxa "quaternary taxa" if they are immediate subdivisions of tertiary taxa
units with no standardly named subdivisions regardless of their hierarchical status	terminal taxa or smallest units of discrimination

Due to the nature of these problems, I have defined the most important descriptive terms used in this paper as they are to be understood in the context of the following discussion:

Domain	The total semantic range of a group of segregates which are described by the most inclusive term possible, as indicated by the native informants.
Taxon	Any conceptually valid category within a taxonomy, or the name of such a category.
Category	Any classificatory division within the taxonomic system.

Class	A grouping of lower order entities into a category regarded as forming a group according to specific criteria.
Segregate	The name of any taxon in a folk taxonomy.
Upper Level Taxon (Taxa)	A domain and its major subdivisions.
Lower Level Taxon (Taxa)	The major subdivisions, classes and categories of upper level taxa.
Terminal Taxon	Taxonomic units with no standardly named subdivisions regardless of their hierarchical status.

Part IV - Method

The data collected during the two month period spent in the field were obtained in the following ways.

No formal eliciting procedures were followed. In fact, as my main objectives were language acquisition and the review of Fox's 'Lau Dictionary', work done in this area was, in comparison, somewhat incidental, although I conducted a regular schedule of inquiry.

Consultation with native informants took place in the following situations. During the course of daily sessions with my primary informants in which the dictionary revision and language drills took place a group of about 8-10 men and several children would gather on the steps of the leaf hut in which work was going on. These men, almost all of whom belonged to surrounding households in the fera (from time to time men from the neighbouring artificial island and others who came to offer or request goods would also join the group) frequently joined in the conversation, commenting on the material being discussed, offering their opinions, questioning or confirming those of my principal informants. Occasionally, the group would be joined by a man returning from a fishing expedition, bringing with him a fish to offer as a gift. In the early stages of my stay in the field, I would use this as an opportunity to initiate a discussion of fish classification with the help of my principal informants.

I would ask them to identify the specimen by name and to describe to me its relationships to other fish that I had come to recognize.

I would then ask the men to identify the fish (if it was possible to find a corresponding plate) in Marshall's Compendium (Marshall 1964). Whenever a "new" fish was brought to me I took a photograph as well.

Towards the middle of my period in Lau Lagoon I began to conduct prearranged meetings three times a week with five fishermen exclusively to discuss fish specimens caught during morning fishing expeditions.

Several difficulties arose. I had access only to fish intended for distribution to the households. Other fish remained in the men's area out of my range of scrutiny. The greatest number of fish brought into the village were caught on market days and required almost immediate preparation if they were to be offered cooked, as was most often the case. Fish taken raw to markets were usually delivered to the women just prior to their departure for the river mouths where the usia are located. In any case, as all fish caught were intended for consumption, in some form, relatively rapid preparation was necessary due to the speed of decay in tropical heat.

Due to these factors it was difficult to conduct a lengthy discussion about the fish identified with the specimens actually present.

Most of the information I collected about the particular characteristics of each named specimen, about the criteria for the grouping of individuals into named classes, and about the specific features of related groupings was thus obtained in the absence of any live specimens.

Understandably, due to the short duration of my stay, the seasonal availability of certain varieties of fish and my limited access to specimens, I had to rely on informants' memory lists of fish names, on discussion of the Maranda and Maranda 1967-1968 Fish File, on informant identification of illustrations from Marshall (1964) for purposes of eliciting additional fish names.

I also attempted, on several occasions, to question women about the naming and the classification of fish. The women expressed very little interest in the subject, frequently informing me that I should ask the men as they knew much more about it ("The men know well"). More productive interviews with the women, however, took place as they prepared fish for markets, sorting the fish into "lots" (bata) before cooking in the fire. I asked them to name the fish, to explain to me how they recognized them and why certain fish were sorted together. An interesting pattern emerged here which I shall discuss later.

From time to time, spontaneous evening sessions on the subject of fish classification would arise as individuals (in this case predominantly men and young boys) passed through the hut in which I was working and noticed Marshall's volume. In these instances, I did not initiate nor enter into the discussions. Rather, they began with a conversation between two or more men and several children concerning the identification of coloured illustrations. Frequently, there would be some disagreement about the precise classification of a certain fish and, in the ensuing debate, the critical features for the identification of the fish in question would

be invoked, discussed further and a judgement proclaimed. I tape-recorded eight such conversations which I regard to be of significant interest. At this point, however, I have only my handwritten notes as my tapes have not yet returned from the field.

It was following such encounters that I seized the opportunity to ask questions about other components of the Lau taxonomic universe.[1]

In addition to data concerning the classification of "fish", I also collected a significant amount of information about shellfish, which the Lau classify as a separate category (kiikii).

I have numerous specimens and a relatively detailed account of taxonomic terms and attributes still on their way from Malaita. Due to this I shall not present the data at this time. I feel, however, that several general observations are of significance to the material contained in this presentation.

The women in this case were my primary informants. The men responded to my questioning about shellfish in a manner similar to that of the women concerning fish. "The women know." Some interesting differences emerged, however, in the classifications offered by men and women that will also be mentioned later.

In summary, the cognitive data resulting from the elicitation procedures outlined above take two forms:

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1. Men seemed much more willing to discuss these subjects in this context in comparison to the structured daily sessions. It was also the only other such socially acceptable opportunity I had to explore the area with a group of male adults in an informal situation and to explore further the relationships between various types of named organisms, their seasonal variation, growth features, habitats and to acquire some information about fishing techniques, territories and practices.

1. A series of actual Lau names applied to different kinds of marine organisms.
2. Supplementary information in the form of unstructured statements and opinions about relationships between marine organisms and about distinctive features critical to the determination of their taxonomic position, derived from informal conversations.

CHAPTER 2

ETHNOGRAPHIC CONTEXT

The Lau-speaking people of North Malaita live on artifical islands they have built in a lagoon (approximately 20 miles long) on the north-east coast of the island. They are principally fishermen although they have small shore gardens situated on the mainland.

Fishing is done by men only and shellfish collecting solely by women. The tending of garden plots is done by both sexes. Taro, kumara and yams are the principal crops. Pigs, which can only be eaten by men at ceremonial occasions are kept in raised pens built by piles at the water's edge. Shellfish can be consumed only by women, while most fish can be eaten by everyone.[1] Certain fish, however, are taboo in certain circumstances.

There are two fundamental principles which penetrate every aspect of Lau life. The axis of natural space -- hill and sea -- and the axis of social space -- male and female -- are invoked in the definition and classification of most observable entities in the external world and in the cultural universe respectively.

> The self definition of the Lau is toa'i asi, 'sea people', as opposed to neighbouring toa'i tolo, 'inland dwellers'... Life in pagan islands is structured according to two determinants: women's biological rhythm and men's cultural rhythm, the former privately and the latter according to clans... The division of space into male-neutral-female found in the village design and in the design of the family house is repeated in the family canoe.... (E. Kongas Maranda 1974: pp. 178, 186, 185)

1. A discussion of taboo fish is not within the scope of this present work as it would involve a detailed examination of many different cultural domains including rites of passage, ritual states and myth.

There are five major conceptual zones in the division of natural space which are named as follows:

tolo	'hills,forest,inland'
hara	'shore, gardening zone on the shore; gardens'
asihara	'lagoon'
asi	'sea; divided fishing grounds'
matakwa	'deep ocean'

> The principal exploitation zones are hara and asi. Men and women (and grown children) garden in hara, men fish in asi....The middle zone, asihara consists of mai (areas exposed at low tide) where women gather shells, and fera (artifical island community village) where people live (Ibid.).

There are also a number of named regions within the zone asi. These are used primarily with reference to fishing -- in describing the location where a particular fish was caught or where it can characteristically be found:

matakwa hara	deep areas near the shore
matakwa liu	deep areas between taalu' -- shallow areas created by small reefs in the lagoon
fafoile	the area of deep water just outside the outer reef
alata	'owned' fishing territory

The regions "tolo", hill, and matakwa, sea, are regarded as two extreme poles, the delimiters of natural space.

> Tolo and matakwa...are thought to be dangerous because they are unknown and because they are inhabited by alien spirits (spirits of foreign clans and tribes in "tolo", the spirit of the ocean in matakwa) (Ibid., p. 181).

Lau settlements are divided into three parts similarly defined according to two extreme zones: the women's seclusion area, maanabisi, and

the men's seclusion area, maanabeu. The region between the two, the fera is sexually neutral. It contains the family houses and the village plaza and playground called the labata. The maanabeu is sacred and abu (taboo) to all women and female children. "It contains the altars, skull pits, and other very sacred relics of the clan which only a priest can be in touch, men's clubhouses named after lineages and men's lavatories or "men's path" (Ibid., p. 182). Nets, spears, lines and other fishing equipment are also kept there. The sight of a net is taboo to women. Men leave the maanabeu to fish and return there to deposit their equipment before coming back to one of the landing places in the fera to distribute the catch to their household. I was, under the circumstances, unable to conduct a study of fishing techniques. Men would talk openly to me about fishing methods, but I was not permitted to watch men fishing, nor to see or touch nets, spears, poles or fishing gear of any kind. The men maintained that it would "bring them bad luck" and "ruin their chances of a good catch" if I contacted or participated in any aspects of their fishing activities. It was also difficult to obtain information about "taboo" fish from the men. The information that I have was collected primarily from women speaking with me in the women's area.

Fish are abundant in the lagoon and in the adjacent waters (open sea). Catches of fish have four possible destinations:[1] to be consumed by the household of the fisherman; to be distributed (in cases of surplus) to

1. Exclusive of large orders of fish delivered to hill people for ceremonial purposes; cf. (P. Maranda 1969).

the households of less fortunate fishermen;[1] to be traded or sold for vegetables in one of the twenty-three market places scattered along the coast or to be given as gifts to hill friends or relatives at market time.

As the neutral or "common" village area, the fera stands in relation to the two divisions or "poles" in the sex dichotomization of Lau social space, the market place represents the zone of convergence of hill and sea in which fish are the principal items of exchange.

As indicated previously the Lau are predominantly a fishing people. There appears to be, on the face of it, an undeniably close relationship between the Lau people and the products and rhythm of the sea (E.K. Maranda 1974; Ross 1974). Information collected by P. Maranda (1969), however, introduces some doubt as to the central role and hence the cultural significance of fish in Lau life. This data, based on a survey of food preferences and a study of consumption rations indicates that the Lau prefer taro and yam to fish and that their diet consists of between 900 and 1,300 grams of vegetables and only 140 grams of fish per day.

Despite the apparent contradiction that the data immediately suggests -- that fish are not as culturally significant a collection of natural organisms to the Lau as one might expect -- information I obtained from the Lau indicates that this contradiction in fact (antithetically) reinforces the integral importance of fish in relation to people in Lau life and thought.

I also was informed that the Lau prefer taro and yam to fish. In addition, I was told that it was "hill" taro and yam (i tolo), marketed

1. Or to the households of men who have not gone fishing that day.

taro and yam (e usia) that they preferred. Taro and yam from their own gardens were regarded as inferior and only eaten "if no hill taro or yam were available" or "if they were served with fish". I was given numerous gifts of raw taro, yam and kumara -- all of which it was emphasized, were "good gifts because they came from the tolo", from the hills.

I was never given taro, yam or kumara grown in Lau gardens, unless it was cooked and served to me with cooked fish.

When I asked why hill taro, yam or kumara were regarded as superior to the Lau produce, I was always given the answer that they were bigger and they were bigger because they came from the hills.[1] No other quality of taro was ever mentioned in this context (that is, in the comparison of hill to Lau taro), although of the 28 different types of taro named by the Lau of which 18 are said to grow only in the hills, characteristics of taste, growing season and general morphology were invoked frequently as critical criteria for the classification of taro belonging to both of the contrasted categories. The same critical criteria are used for the classification of fish (see below).

I was informed, and I observed myself, that the hill women tend to trade taro, yam and kumara for fish and to sell other vegetables and fruits more frequently for money -- Australian Shillings.[2]

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1. Although I was consistently informed that hill taro are bigger, I could observe no systematic size difference between the produce bought at the markets and grown by the hill people, and that from Lau gardens.
2. During my stay I at no time observed the use of the traditional currency -- dolphin teeth -- for the purchase of fish or any other market item.

The Lau women also seem to prefer to obtain taro and kai through the exchange of fish. One woman, Sousou, informed me one day that she was short of taro and that she had therefore instructed her husband to go fishing that morning in order to have enough fish to obtain the 20 alo she needed. Upon further questioning, I discovered that she planned to take 50 Australian cents to market -- more than enough money to buy the desired number of taro had she wished to do so.

She told me that "Fish are better for taro and I can buy bananas and tobacco with money (seleni)." She returned from the market with 30 cents; ten cents were spent on Chinese cabbage, ten cents on tobacco, four fish were exchanged for twenty taro and two fish (one bata) for one hand of bananas.

It is my impression that there is an unquestionable conceptual difference between hill and Lau taro which is not linguistically coded.

The hill taro that the Lau obtain (unlike their own taro) have been, in all cases, socially mediated by the activity of their exchange for fish. Fish emerge as the principal social-cum-economic operators by which not just the transfer of goods is achieved, but their transformation also.

The question of the cognitive relationship between market fish and vegetables will be raised again later but, at this point, I just wish to stress that the question of the cultural importance of fish to the Lau

not only in an economic or social but in a symbolic sense should not be posed merely in terms of what goods they prefer to consume or do consume, but in terms of how they think about the products and the process of obtaining the goods of consumption.

CHAPTER 3

RESULTS

Part I - The Lau Taxonomic Universe

In terms of the collection of information pertinent to this thesis I was primarily concerned with the Lau taxonomy of marine organisms. I found, however, that it was first necessary to establish the position of these phenomena within a larger frame of reference since it was impossible to investigate the nature and the principles of their classification in complete isolation.[1]

The data that I managed to collect pertaining to taxonomic groupings other than those dealing with marine life (particularly fish) are very incomplete and were not systematically investigated. I merely wished, given the lack of sufficient time, my limited linguistic competence, and the number of other tasks I had to complete, to record the renditions and representations given to me by my informants concerning the general structure of the Lau taxonomic universe as they construe it. The Lau category *ia* was always used as a reference point in these encounters.

Thus, before discussing the nature of Lau ethno-ichthyology in detail, I shall describe briefly the structure of the Lau taxonomic uni-

1. This enterprise was necessary not only for my purpose of attempting to establish linguistic boundaries between groups of natural phenomena and for my conceptualization of relations between these component parts, but for the Lau also in their descriptions of how the domain *asi* was defined and constituted.

verse as I came to understand it, indicating its principal components as they were explained to me.

As mentioned previously, the contrast between hill and sea (tolo and asi) is a central principle in Lau self-definition. It also emerges as the dominant dichotomy in the classification of almost all living organisms. According to the Lau, fish and 'sea people' occupy the same domain, but are not true congeners as toa i asi also has a weak, but marked, conceptual link to the domain imola to which 'hill people' also belong.

> According to one of the two myths of origin of the artificial islands, these were built in order to meet the demand for fish by the mountain people. Several individual islands are said to have originated in the same way: reefs were given to newcomers from the sea by clan heads in the mountains opposite, under the provision that the islanders would trade their catches for vegetables in some specific market places, and, specially, that they would supply the clans of the interior with fish for ceremonial purposes (Maranda 1969).

I also was informed of the very close ancestral relationship between the Lau and the hill people (specifically the Baelelea). The Lau told me that they came originally from Maanoba, a 'real' island at the northern tip of Malaita and that they were originally land-dwellers until they fled to the Lagoon because of fear that they would become involved ("because they might be harmed") in warfare that erupted between various groups of Baelelea people. Even during renditions such as this, the Lau stress their individuality. They reacted with incredulity to my questions concerning how they knew that they "were Lau" before they migrated to the lagoon if, indeed, they were once inland dwellers and now acquire self-

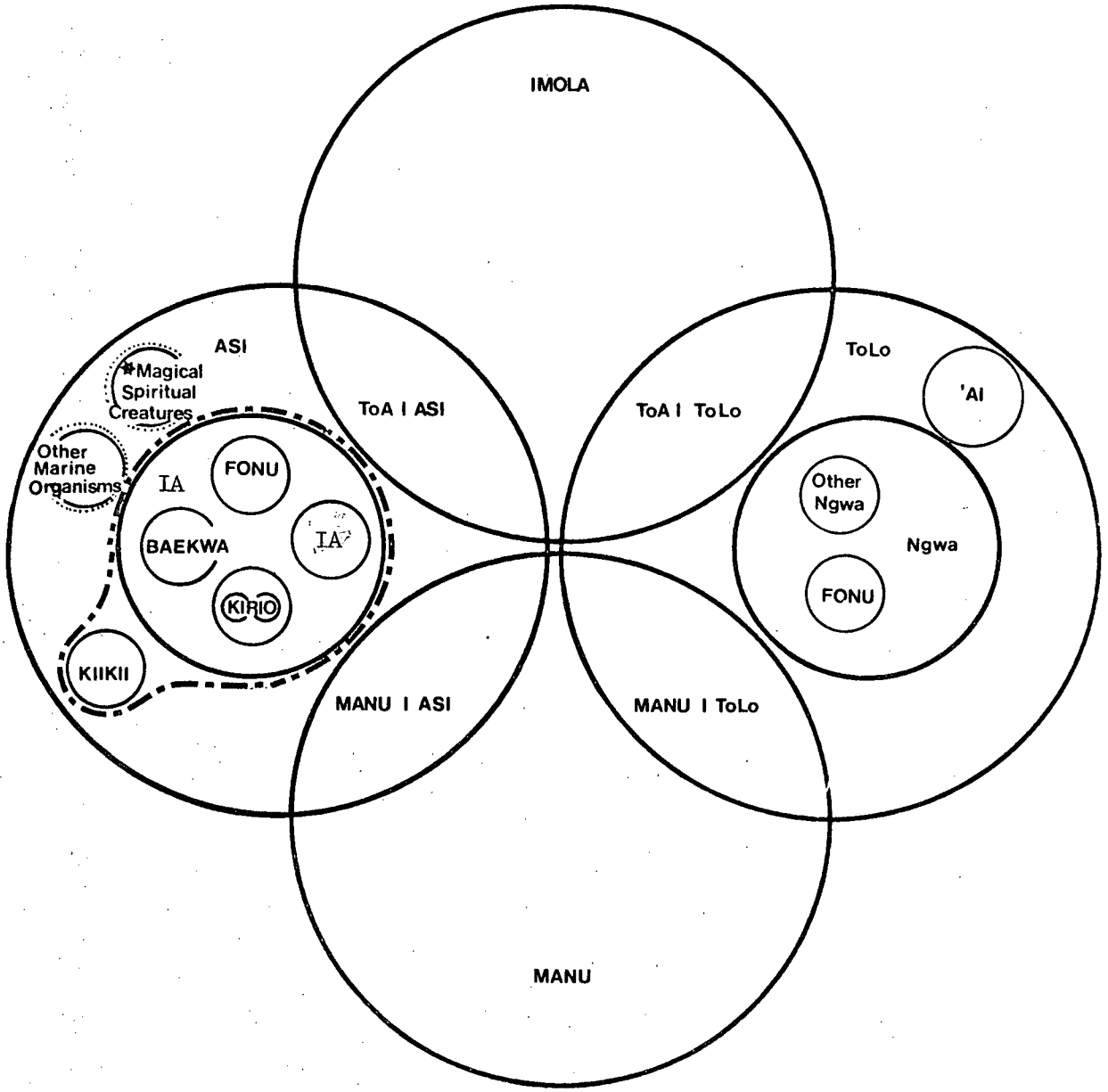
definition from their 'sea existence'. To the Lau, these queries were senseless.

The Lau themselves represented their universe graphically when explaining to me how the various domains are conceptualized. Figure 3 is my reproduction of these representations.[1] In Figure 4 the major domains and subdivisions of the Lau taxonomic universe are given with their appropriate descriptive 'glosses' in English.

I was unable to discover a segregate for domesticated plants that was lexically recognized although I was told that taro, yam and kumara are not really 'ai "because they are not kwasi,(wild)". I was also unable to establish the relationship between mokotoro,crocodiles; malo, snakes; akwa'akwa,mud hoppers,and any other taxon, although I was instructed that each of these lives at ("belongs to") river mouths between asi and tolo. I encountered similar problems with various marine organisms which I could not position taxonomically. Ramela, sea cucumbers; bebero, starfish; bibinu, sea urchins; ura, crayfish; karu, land crabs; ua, sea-crabs, are all names for naturally occurring organisms for which I could establish no consistently defined taxonomic status. According to the women, ramela, bebero, bibinu, ura, all belong to the category kiikii, shellfish, although they were regarded as conceptually distinct from other shellfish

1. These drawings were made informally by four men as a device for illustrating their remarks. As they talked, they would draw with their hands in the air, in the sand or on paper, the general four-component figure I have reproduced here. I have taken the liberty to modify their graphic representations somewhat by indicating some of the internal constituents of the major domains. The men acknowledged the relative positions of these internal categories in their verbal explanations, but did not illustrate them iconographically. They did not, however, object to my rendition. On the contrary they informed that I was learning quite well (nia haitamana asi'ana, "she knows").

Figure 3. A Diagrammatic Representation of the Major Domains and Subdivisions of the Lau Taxonomic Universe



..... Taxonomic status not determined.

— • — • — Conceptually valid taxon exists which is not named in Lau. See text.

* Agalo ni asi, a malevolent spirit in/of the sea and baekwa i asi, a name referring to the magic of sharks used to overcome the deleterious hill magic of baekwa i tolo , a magical hill snake, are regarded by the Lau as belonging to the domain asi as are all marine organisms. As the Lau state that both of these are distinct from "living" sea creatures their taxonomic status is in question and beyond the scope of this thesis.

Figure 4: Major Subdivisions of the Four Domains of the Lau Taxonomic Universe

Domain	English Gloss	Major Subdivisions	English Gloss	Additional Subdivisions	English Gloss	
Imola	'human being' 'person'	toa i tolo	'hill people'			
		toa i asi	'sea people'			
Asi	'sea'; 'sea water'	toa i asi	'sea people'			
		unnamed		kiikii	shellfish	Approx. 30 major subcategories-not discussed in this thesis
				'ia	fish	4 major subcategories: kirio - dolphins; baekwa - sharks; fonu - turtles; 'ia - fish
		unknown		unknown	Includes karu, ramela, bebebero, bibinu, ua, ura - see text	
		manu i asi	'sea birds'			
Tolo	'hill';'land'	toa i asi	'hill people'			
		ngwa	'creatures that crawl on land'		The subcategories of ngwa were not investigated in detail. The following kinds of organisms, however, were found to belong in this class: chickens, hill turtles, rats, pigs, dogs, cats.	
		'ai	'trees, plants, shrubs'			
		manu i tolo	'hill birds'			

Continued . . . .

Figure 4 (Continued . . . .)

Domain	English Gloss	Major Subdivisions	English Gloss	Additional Subdivisions	English Gloss
Manu	'creatures that fly'; 'birds'; 'flying insects'				
		manu i tolo	'hill birds',etc.		
		manu i asi	'sea birds',etc.		

that are (have) karongo, shells. According to the men, however, these four organisms were neither kiikii, karongo nor ia -- they were respectively ramela, bebero, bibinu and ura. The possibility of the existence of a "covert category" (Berlin, Breedlove and Raven 1968) or "covert categories" encompassing these organisms is quite possible, but much further investigation is necessary to establish their taxonomic status in relation to each other and to other forms of marine life.

Another point that emerged during this course of inquiry is, I feel, worth mentioning. It is my impression that kiikii and ia constitute a conceptually valid taxon that is not named. There are many words for "some" in Lau, many of which are organism-specific.[1] The word gwe or more often kwe, is limited to fish and to shellfish. This may also be a feature of Lau male and female semantics as I never heard a man use the word in reference to kiikii. He would, invariably, use the plural suffix -gi. I also have the impression, however, that there is a direct relationship between the use of the term "some" in specific contexts (that is, when it is used to refer to those organisms to which it is limited) and to the idea that the organism(s) named have been caught, gathered, picked, collected, etc., for a purpose (for example, eating, marketing, distributing and so on). If this impression is justified, men would never use the term gwe in relationship to shellfish in any case, as for men, shellfish are taboo.

1. I include here words that mean, literally, "ten" in English, but that can also be used, in Lau, to refer to "a number of" specific things.

As mentioned previously, much further investigation, based on a rigorously defined and systematically applied protocol is needed to give an accurate representation of the Lau taxonomic universe.[1] I have attempted here merely to provide a backdrop to the following comments that relate to a specific portion of this system.

1. Such a study would require information from many different cultural spheres including myth, economic and social transactions, modes of production and consumption in addition to verbal renditions and responses to questions specifically relating to taxonomy. A complementary study of 'hill' folk taxonomy would be an extremely valuable enterprise as would the resulting comparative analysis of the two systems.

Lau 'fish' taxonomy[1] at its greatest depth has six distinct levels of inclusion, five of which are lexically distinguished[2] (see Figure 5).

Biological identification at the species level (according to Marshall 1964) was made for 230 named Lau fish; 230 Lau names correspond to 275 biological species.

1008 Lau names for fish were isolated in all. A comprehensive list of these names (indicating the source of this information) is given in Appendix I (Maranda and Maranda 1967-1968) and Appendix 2 (Tyhurst 1975).

Table I contains a list of all fish named and organized into fifth-level sub-categoreis by the Lau that are also identifiable in Marshall (1964). Unidentified fish belonging to the same category are indicated. Table I indicates an aspect of Lau fish taxonomy that may be of interest to some researchers in this field, but that is outside the scope and the interest of this inquiry: in all cases but two[3] the boundaries of Lau sub-categories coincide with those of the Family level (or the Sub-Family level if such exists) delimiters of biological classification. All constituent units named by the Lau also correspond to such sub-units of biological identification. Whether or not this observed correspondence would be borne out in a more comprehensive study is not known at this time as there exists to date, no adequate inventory of Solomon Islands fish.

1. "Fish" here have been artificially isolated as a taxonomic domain and shall be treated as such for the purposes of clarity in the following discussion of lower level taxa. As mentioned previously, although shellfish constitute an extremely important and closely related cognitive category, they will not be discussed in detail at this time.
2. Provided the aforementioned impression that kiikii and ia constitute a conceptually valid, un-named taxon is justified.
3. These two cases are discussed in the following section.

Figure 5: Lau Fish Taxonomy - Levels of Inclusion

Domain				Asi			
1° taxon				Un-named			
2°taxa		'ia				kiikii	Other Marine Organisms (See Ch. 3, Part I)
3° taxa	fonu	baekwa	kirio		'ia		
4° taxa	fonu 'ia* bulonga* fonu akwa* fonu bala* fonu falata* fonu beo*	b. leleo* b. leto* b. ili* balenge hara* ani karongo*	kirio	gwaa	35 named classes (Tables II & III)		
5° taxa			robo* unubulu* usulung-walo* taife* robo walade* robo olo* gaia robo* goumudu*	gwaa-hasu* 'ia tekwa* gwaa*	200 named sub-categories (Tables I, II and III)		

* Terminal Taxon.

Part II - Memory Lists

As indicated previously, the collection of lists of fish names from memory was effected in response to two different kinds of questions. In the first, informants were asked simply to recall all the fish names they could at one sitting. These were recorded in the sequence they were remembered. In the second case, the question, which was posed after an interval of at least two weeks in all cases, requested that the informants group the fish names into "classes".[1]

At this point I was aware that some kind of "grouping" of fish names into higher level taxa existed as I was frequently informed that fish "had two names: a first name and a second name." This information was acquired when I noticed that the first name of a fish was frequently used for two fish that were regarded as distinct "types" and I asked how two different fish could have the same name. The answer given was that they did not have the same name although they were the same fish. After my confusion subsided, I decided to see if the clustering I expected to find did in fact exist, i.e., could I ask the men to arrange the fish into groups at all? If so, were the members of these groups unambiguously assigned by inclusion? Thirty-eight such "classes" were named by five out of nine informants (see Table II).

Some interesting features emerge upon comparison of the "two kinds" of fish lists and upon comparison of these names and their sequencing with those collected in similar circumstances by P. Maranda 1967-68.

1. The Maranda 'memory' lists, although recorded in sequence from the informants' recollections were also arranged, by request, according to habitat.

The clustering of entries in the 'unclassed' memory lists is extremely similar to that of the lists arranged by classes. An example might serve to clarify this observation.

According to the classed lists the category kirio contains, amongst others, the following:

robo	gwaa
unubulu	gwaahasu
usulungwalo	ia tekwa
taife	
goumudu	
raa	
susubora	
saraibina	

In all cases in the 'unclassed' lists, these entries are listed in the immediate environment of the word kirio, e.g.:

kirio	kirio	kirio	unubulu
unubulu	robo	unubulu	kirio
raa	unubulu	robo	robo
goumudu	raa	raa	raa
saraibina	usulungwalo	taife	goumudu
susubora	taife	susubora	gwaahasu
gwahaasu	gwaa		
	ia tekwa		

This pattern -- the clustering of fish in the 'unclassed' lists that are regarded as members of the same category in the classed lists -- exists for every major category named.

The names of the members of the same category seem to serve as key words in their mutual association. The consistency with which this pattern has emerged is, I believe, a firm indicator that such lower level categorization does indeed occur.

Another interesting aspect concerns the categories mamada and hanga, alinga and hau. These are the only four classes that do not correspond to unique "Family" level groupings in biological classification as do all other identified classes within the more inclusive taxon ia. Rather, they divide the organisms constituting one biological family into two Lau groups.

In the first case, I was informed that mamada and hanga are very similar but that all hanga tend to be thin and small and to have smooth dorsal fins whereas mamada are thick and have sharp spines on their dorsal fins. This conceptual proximity is borne out by the fact that in all the lists of fish names (both 'classed' and 'unclassed') collected from Lau informants, hanga and mamada directly precede or follow one another.

In the second case, I was told that hau and mamula were distinct groups which do bear resemblances to one another, but whose differences, particularly in size and markings outweigh the similarities: hau are large, alinga small; hau have two pointed dorsal fins and "long" (horizontal) markings, alinga have one pointed and one "flat" (blunt) dorsal fin and "short" (vertical) markings. Unlike hanga and mamada, alinga and hau seem to occur independently of one another in the memory lists.[1] (In one case, alinga was omitted altogether and, afterwards, the informant, when prompted, told me that he had "forgotten" to mention it.)

1. Further, more systematic inquiry would be needed to explore this adequately. The question of the kinds of research protocol that might be appropriate to obtain this information is discussed in the concluding Chapter of this exposition.

Following the same line of reasoning as above, perhaps the apparent conceptual independence indicated by the high variability in the order of recall of certain named categories is also a measure of their cognitive discreteness.

Part III - "Non-taxonomic" Terminology

> In addition to the terminology associated with various kinds of plants and groups of plants (i.e., specific, generic and life-form category names), each language has a substantial lexicon of botanical terms which, although perhaps restricted in their association to one or two types of plants, cannot be considered as having taxonomic status. (Turner 1974: p. 65)

This argument, that the naming of an organism according to stage of growth, state, sex, etc., does not constitute a taxonomic classification seems to me to be misdirected.

The model upon which this assumption is based is perhaps ethnocentric. In English, a single named category consisting of named, morphologically similar organisms may also be divided up according to differences common to all the constituent organisms. Hence, in English (and possibly in other, but not necessarily all lexicons), "A colt could not be said to be 'a kind of horse', in the same way that an Appaloosa is a kind of horse" (Turner 1974: p. 66).

The two principles of a taxonomic structure -- organization by inclusion of reference and the discrete nature of constituent categories -- (the latter being violated in the above example) both exist in the Lau classification of fish according to sex, size and stages of growth.

Whether a colt is a kind of horse in the same way that a Guernsey is a kind of cow is a problem characteristic of our method of 'dividing-up the universe' into taxonomically equivalent kinds of units,

not one necessarily common to the division of the external world into named taxonomic entities.

Distinctions made between constituents of major subdivisions of the category ia (according to life stage, size, sex, etc.) are discrete and unambiguous in the same way that distinctions are made according to "taxonomic" criteria in Turner's use of the term. The following example in which both kinds of distinctions are made may serve to illustrate this point. (This information was given in response to my questioning of how the various kinds of muu were distinguished.)

muu	class name
muu ni furai	black
muu sio	mainly white
alaga	mainly white and black over the whole body
kurumusi	small alaga but head short, looks like falata (head), bigger than kakarai
kakarai	muu when very small, young
babao	when muu ni furai is "too small" but bigger than kakarai

Kakarai are juvenile muu ni furai, muu sio and alaga. Kakarai, though small and seasonal are of significant market value as they are fleshy, virtually boneless and as they school in great numbers unlike the juveniles of many other fish. They are 'packed' in bamboo tubes and sold by the women in the markets. Kurumusi and babao are considered to be of little market value due to their size (4-6") unless they are cooked in 'bata' (lots) and sold or traded in that way. The prime referent of kakarai is muu, the "kinds" of kakarai are unimportant and seldom recognized: when asked what category kurumusi belonged to, I was always told "muu". A kurumusi is a small alaga, but the prime referent of kurumusi

is still muu. In the same way, a babao is a small muu ni furai, but it is first a muu.[1]

Other critical features are inseparable from size, growth stage, sex, etc. in the assignment of fish to specific categories. The subject of criterial attributes will be discussed later.

In the case of mamula, criteria for the classification of constituents were: stages of growth according to size, distinct colour changes, morphology and taste (according to the Lau informants). Information collected by E. Maranda on the basis of Marshall illustrations, identifies Fish #233, Plate #30 Cardux emburyi as mamula. I was told that the same fish (Plate #30, #233) was called modomu. Upon questioning the terminological difference, I was informed that modomu was indeed a mamula, but that the illustration was unquestionably of a modomu because of the distinct colouration and the head shape of the fish pictured. I was also informed that these features (colour and head shape) were "not characteristic of mamula at the modomu growth stage and size."

1. Table III gives additional examples of fish distinguished by sex, size, stages of growth.
2. The fish illustrated in Marshall has a reported length of 21 inches. Modomu, according to the Lau, is approximately 2-3 feet in length.

TABLE I: TABLE OF FISH CATEGORIES (MAJOR SUBDIVISION OF TAXON 'IA) AND CONSTITUENT UNITS IDENTIFIABLE IN MARSHALL

LAU NAME	FAMILY: BALISTIDAE		(458-463)*	Trigger fishes
Bubu	Marshall Plate Sequence	Genus	Species	Common Name
bubu idai	458**	Balistes	conopicillium	big spotted trigger fish
bubu babalu	459	Balistes	fuscus	yellow spotted trigger fish
bubu bubulu	461	Balistapus	undulatus	redlined trigger fish
bubu kekedea	462	Balistes	rotundatus	spotted trigger fish
Unidentified: Bubu kwao, Bubu koni				
bebe	FAMILY: CHAETODONTIDAE SUB-FAMILY: CHAETODONTINAE		(256-268)*	Butterfly fishes
bebefakatekwa	258	Forcipiger	longirostris	longbill butterfly fish
bebe tatafiriogou	260	Parachaetodon	ocellatus	six-spined butterfly fish
bebe adekwalao	261	Chaetodon	auriga	threadfin butterfly fish
bebe fakasusu	262	Chaetodon	vagabundus	criss-cross butterfly fish
bebe ifuraifonu	263	Chaetodon	lineolatus	lined butterfly fish
bebe gogoa	265	Chaetodon	aureofasciatus	golden-striped butterfly fish
bebe takwa	266	Chaetodon	trifacialis	right-angled butterfly fish
bebe sulukwakio	268	Heniochus	acuminatus	feather-fin bull-fish
suru	FAMILY: LUTJANIDAE SUB-FAMILY: LETHRININAE		(210-213)*	Emperor fishes
suru gou	210	Lethrinus	mahensa	yellow-tailed emperor
suru haolai	211	Lethrinus	nebulosus	spangled emperor
suru kekedea	212	Lethrinus	chrystostromus	sweet-lip emperor
suru fotobala	213	Lethrinus	fletus	red-finned emperor
Unidentified: suru akwaro, suru kekero, suru taabou, suru i matakwa, suru agalo, hatamela, goufu, ngwango				

TABLE I (Continued)

kalua	FAMILY; MUGILIDAE NO SUB-FAMILY		(386-398)*	Mullets
kalua goma nione	387	Mugil	georaii	fantail mullet
kalua"	389	Mugil	tade	tade mullet
kalua"	394	Mugil	crenilabis	warty-nosed mullet
kalua unu tada	395	Mugil	ramsayi	ramsay's mullet
kalua"	396	Mugil	diadema	basket mullet

Unidentified: kwaibia, eluelu

gogouru	FAMILY: ANTENNARIIDAE NO SUB-FAMILY		(493-497)"	Angler fishes
gogouru abakoa	494	Histiophryne	bougainvillii	smooth angler
gogouru	495	Antennarius	striatus	striped angler
abakoa moulu	496	Antennarius	moluccensis	black angler
gogouru gwiagwia	497	Tathicarpus	muscosus	harlequin angler

Unidentified: gogouru nofu

gwiagwia	FAMILY: SCORPAENIDAE		(404-427)	Subdivision of mail-cheeked fishes
gwiagwia gwegwe"	404	Ruboralga	cardinalis	red scorpion cod
gwiagwia ngwangwaeso"	407	Scorpaenodes	gnamensis	guam scorpion cod
gwiagwia gogouru	406	Sebastapistos	bynoeusis	marbled coral cod
gwiagwia inadi	410	Pterois	volitans	red fire fish
gwiagwia"	411	Brachirus	zebra	zebra fire fish
gwiagwia"	416	Synanceja	horrida	stone fish
gwiagwia nofu"	424	Adventor	elongatus	sandpaper fish

TABLE I (Continued)

hau	FAMILY: SCOMBRIDAE NO SUB-FAMILY		(339-348)	Tunas and mackarels
hau roomaa	339	Rasrelliger	kanagurta	long-jawed mackarel
hau gwarafeta	342	Gymnosarda	nuda	scaleless tuna
hau"•	343	Luthynnus	pilamis	bonito
hau gela	344	euthynnus	deletteratus	little tuna
hau"•	345	Cybiosarda	elegans	Watson's bonito
hau faramela	346	Neothunnus	macropterus	Pacific yellow-finned tuna

Unidentified: hau inito, hau malifu, hau kakale, hau mela, filufilu, sangata

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alinga	FAMILY: SCOMBRIDAE NO SUB-FAMILY		(349-354)	Tunas and makerels
alinga bulu"	349	Scomberomorus	commerson	narrow-banded makerel
alinga"•	350	Scomberomorus	queenslandicus	Queensland school makerel
alinga bokofu"	352	Scomberomorus	semifasciatus	broad-banded makerel

Unidentified: alinga faalu

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mara	FAMILY: CALLYONTIDAE NO SUB-FAMILY		(317-319)	Parrot fishes
maelafu"	317	Leptoscarus	vaigensis	marbled parrot fish
mona	318	Cryptotomus	spinidens	half-toothed parrot fish
babali	319	Callyodon	fasciatus	surf parrot fish
koso+	319	Callyodon	fasciatus	surf parrot fish

Unidentified: mona tada, sisile mara, foefoe, magali a ala

TABLE I (Continued)

hanga	FAMILY: LABRIDAE NO SUB-FAMILY		(300-314)	Wrasses, rainbow fishes, pig fishes
hanga bualafa	303	Hemigymnus	melapterus	black-eyed thicklip
hanga 'ia hahafa"	310	Cheilie	inermis	sharp-nosed wrasse
hanga bubulua"	311	Anampses	geographicus	scribbled wrasse
hanga ni one"	312	Novaculichthys	taeniourus	bar-cheeked wrasse
hanga i malau	313	Chelinus	fasciatus	scarlet breasted wrasse
hanga gwaila"	314	Chelinus	undulatus	hump-headed wrasse

Unidentified: hanga mamada, hanga keketo

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mamada	FAMILY: LABRIDAE NO SUB-FAMILY			Wrasses, rainbow fishes, pig fishes
mamada hanga"	302	Stethojulis	strigiventer	lined rainbow fish
mamada 'ia kekedea"	301	Psendolabrus	guntheri	Günther's rainbow fish
mamada eno"	300	Labroides	dimidiatus	blue-streak

Unidentified: mamada ubu one, mamada fakasusu

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ulafu	FAMILY: SERRANIDAE		(168-173)	Sea basses and rock cods
ulafu	168	Diploprion	bifasciatum	yellow emperor
ulafu kekero	170	Epinephelus	fasciatus	black-tipped rock cod
ulafu afilu	171	Epinephelus	tauvina	estuary rock cod
ulafu rafua	173	Epinephelus	merra	honeycomb rock cod

Unidentified: ulafu hadai, ulafu haga

TABLE I (Continued)

baekwa	ORDER: SELACHII			Sharks
baekwa"				Name given to 7 biological species - distribution in Solomons unknown
baekwa ili"	03	Galeidae	galeocerdo cuvier	Tiger shark
baekwa goulo"	019	Sphridae	Sphrus lewini	hammerhead shark
baekwa leleo"	020	Oreledolobidae	Nebrius concolor	tawny shark

Unidentified: Talenge hara, ani karougo

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kirio	Dolphins, Porpoises, Whales (not illustrated in Marshall)
Subcategory I	Common Name
kirio	Dall's Porpoise, Commeisous Dolphin
robo	Round Head Porpoise, Right Whale Dolphin
unubulu	Common Dolphin
taife	La Plata Dolphin
goumudu	Harbour Porpoise
raa	Mangrove Dolphin
susubora	Mangrove Dolphin

Unidentified: saraibina, usulungwalo

Subcategory II	
gwaa	Gray Whale
gwaahasu or gwaasasu	Whale
ia tekwa	Dugong

TABLE I (Continued)

fonu	Turtles	
	Common Name	
fonu ia"	Green turtle	Chelonia Mydas
fonu ia	Hawksbill turtle	Chelonia Imoricata
bulonga	Leatherback	Dermochilys Coriacea

Unidentified: fonu akwa, fonu bala, fonu falata, fonu beo

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* Numbers in parentheses correspond to the reference numbers of all fish (both those illustrated and those described only in text) that are included in the Family indicated (Marshall: 1964).

** Numbers correspond to those fish illustrated in Marshall and identified by the Lau informants.

" Black and white illustrations only available in Marshall (1964) as basis for Lau.

· No other Lau name given.

\+ No precise identification made, but fish named is regarded by the Lau as being very similar to, but distinct from,fish illustrated in Marshall.

Notes: Biological identification obtained exclusively from data collected by Maranda and Maranda 1967-1968.

See text for discussion.

TABLE II: SUBCATEGORIES OF UPPER LEVEL TAXON IA OBTAINED FROM INFORMANTS' 'CLASSED' MEMORY LISTS (ALPHA-SORTED)*

1. àifatarao

2. alia
   alia bora
   alia bala
   unudola
   angafa
   angafa kedea
   angafa gougou saru
   angafa 'ito

3. alinga
   alinga bulu
   alinga bokofu
   alinga faalu

4. ba'aa
   ba'aa bulu
   menamena
   alagala
   maeto
   maeto i dai
   maeto tabakau
   bolo
   belefa
   ubali sau

5. baekwa
   baekwa leleo
   baekwa leto
   baekwa ili
   talenge hara
   ani karongo

6. bebe
   bebe fakatekwa
   bebe tatafiriogou
   bebe adekwalao
   bebe fakasusu
   bebe i furai fonu
   bebe gogoa
   bebe tekwa
   bebe sulukwakio

7. bilau
   bilau kilakila
   ia ni 'one
   failu
   kwasi
   kweo

8. bokofu
   boubou
   bokofu i matakwa
   ngidubola
   faa
   faa mai
   nara
   rereo
   isi'isi
   o'oto
   susu one
   isi'ofu
   unu'unu
   niginigi
   doo i alo

9. bubu
   bubu i dai
   babalu
   fahato
   bubu i asi
   bubu bubulu
   bubu kekedea
   bubu kwao
   bubu koru

10. daafi
    daafi 'afu
    daafi fonu
    elu akwa
    maelafu

11. doru

TABLE II (Continued)

12. fonu
fonu ia
bulonga
fonu akwa
fonu bala
fonu falata
fonu beo

13. geru

14. gogouru
gogouru albkoa
abakoa moulu
gogouru gwiagwia
gogouru nofu

15. gwareo
kwaikwai rau
abuni

16. gwiagwia
gwiagwia gwegwe
gwiagwia ngwangwaeso
gwiagwia gogouru
gwiagwia inadi
gwiagwia nofu

17. hale
malifu
rau 'alite

18. hanga
hanga gwaila
hanga bualafa
hanga ni'one
hanga ia hahafa
hanga i malau
hanga mamada
hanga kekero
hanga bubulua

19. hau
hau roomaa
hau gwarafeta
hau gela
hau faramela

19. (Continued)
hau inito
hau malifu
hau kakale
hau mela
filu filu
sangata

20. ia bua

21. kalua
kalua goma ni'one
kalua unu tada
kwaibia
eluelu

22. kirio I
robo
unubulu
usulungwalo
taife
robo walade
robo olo
gaia robo
boumudu

kirio II
gwaa
gwaahasu - gwaasasu
ia tekwa

23. mamada
mamada hanga
mamada ia kekedea
mamada eno
mamada fakasusu

24. mara
mara dikwafi
sisile mara
moua
moua tada
koso
babali
burasi
amera
foefoe
magali 'a ala
maelafu

TABLE II (Continued)

25. matasi
matasi fou
ragaraga
foukwai
aga folo
tolibaranga
eno
lae
mafu
gou mae'o
alo rae
balibila
ukauka
malagwaila
gwaila
fakaebua
kekefe'ulu
guli
boa
mara i'ile
magali 'a'ala
gofala
gofala'inomae

26. modomu
ma la modomu
guri modomu
bora bora
usiliae
liutafa

27. muu
muu sio
muu ni furai
alaga
kurumusi
kakarai
babao

28. nara
nara bulu
nara kwao
nara fouboso
nara faka tekwa

29. ooa
ooa ni kwaru
ume kweo
ume bora
ume hango
ume takwalao

30. raemae
raemae i malau
raemae inito
raemae sulubuu
raemae tetere'uo

31. rido
akwasi mai

32. rora
rora i malau
rora i matakwa

34. sifo - sisifo

35. suru
suru taa bou
suru akwaro
suru haolai
suru agalo
hatamela
suru gou
suru kedea
goufu
maa sulua
ugwango
fotobala
bilu
alakwaga
goutoli
aani ni'one

36. tataso

37. uala
romaa
mama kwai

TABLE II (Continued)

37. (Continued)

maosi
buma
faranadi - uka
kefo
alifou
gougou rada

38. ulafu
ulafu rafua
ulafu haga
ulafu bebero
ulafu kekero
ulafu haolai

* All the classes listed here were named by five ouf of nine informants. Members of these classes represent a summation of all those fish named by these informants.

TABLE III: FISH DISTINGUISHED BY SEX, LIFE STAGE, SIZE, ETC.

Mamula	Class Name	Family Mugilidae	Genus unidentified
	Approx. Lengths		
ali	1-2 inches		
uugu	2-8 inches		
edaeda	8-12 inches		
ululusiae	1-2 feet		
modomu	2-3 feet		
oroliu	3-8 feet		
Criteria:	Size changes in life stages of growth, distinct colour changes, morphology, taste		

Kukurubulu	Class Name	Gwaila (older name)	Genus unidentified
	Approx. Lengths		
rarsifou	2 feet max.		
kurubulu	2-3 feet		
oba	3-4 feet		
kukurubulu - gwela	3 feet		
Criteria:	Size, size changes in growth, taste		

Ili	Class Name	Family Carapidae	Sphyraena jello Pick handled barracuda
	Approx. Length		
mamalito	Under 1 foot		
ono	1-2 feet		
basaula	2-3 feet		
Criteria:	Size and colour changes during growth, taste		

TABLE III (Continued)

Mara	Class Name	Family Callyontidae	
babali (male & female)		Callyodon fasciatus	Surf parrot fish
babali (male)	Burasi - Amera		
babali (female)	Malogwaila		
Criteria:	Sex, morphology, colour		
Note:	Marshall notes the marked difference in general morphology and colour between the two sexes of this species		

Kirioa	Class Name	Dolphins & Porpoises
robo	Right whale dolphin, harbor porpoise	
	Size	
robo olo	Smallest robo "takes one man to beach robo 'olo"	
robo walade	Larger than robo olo "takes four men to beach robo walade"	
gaia robo	Larger than robo walade "takes ten-twenty men to beach gaia robo"	

CHAPTER 4

In this final chapter, I shall return to some of the points already outlined and discuss some important areas of further investigation arising from this preliminary study of Lau fish taxonomy.

These points will be formulated in terms of questions and propositions rather than definitive statements about various aspects of the material at hand. The first section of this chapter will deal with the topic of semantic discrimination, of problems of defining the criterial attributes underlying Lau taxonomy. The second section explores avenues of further study and analysis.

Features

It should be clear that these 'features' or semantic dimensions are not in themselves minimal aspects or units of meaning. Each dimension is but an axis along which meaning shifts, and meaning emerges on each dimension when (and only when) in appropriate combination with specific values along at least two other axes or dimensions. These dimensions, then, can be considered operators on which operations may take place -- operations which are expressions of relationship, not irreducible units of meaning.

Indeed, a search for minimally meaningful units more fundamental than the representational design forms themselves in a graphic system such as the Southeastern Nubas as has been shown, fruitless - like searching for the 'meanings' of phonemes, as it were. "It is the catalogue of critical distinctions between meaning -- the relationships -- that we seek, not irreducible units of meaning" (Faris, 1972: 99).

The problems facing the analyst in his search for the critical semantic features of taxonomic systems are very similar to those articulated above. If one actively searches for minimally meaningful units the imposition of pre-existing ethnocentric distinctions is a constant danger. If one expects native informants to articulate and clearly define these units they frequently do not appear. Those who are practitioners of a cultural code do not often verbally articulate its criterial features al-

though they can usually agree to their adequacy (or inadequacy) once presented with them.[1]

Many writers in this area have recently pointed out that taxonomic systems are as this discussion will indicate, normally of much greater complexity than is suggested by the manipulation of simple binary contrasts between features commonly characteristic of the work of some studies in this area[2] (Levi-Strauss, 1963; Conklin, 1962; Frake, 1961, 1962; Berlin, 1970; Berlin, Breedlove and Raven, 1970, 1971; Lounsbury, 1964).

Both explicit ethnomodels and the implicit principles on which they are based are well worth investigating -- but they are similarly, both hard to get and hard to get at. The notions of the existence of these two 'types' of model is theoretically productive, but in terms of praxis, they tell us nothing about how it is possible 1) to elicit and 2) to recognize them.

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1. By "presentation" I am not just referring to the activity of the field researcher, but also to an activity that takes place amongst the people themselves, particularly when the taxonomic status of an object comes into question.
2. In the application of both representational and componential analyses.

Upper Level Taxa

In the case of Lau 'fish' taxonomy, a culturally accepted and agreed-upon set of feature components has emerged by which it is possible to identify the classes, i.e., upper level taxa and their divisions, to which various fish belong.

The eliciting and discovery of these features within the lexically coded folk classification involves the most formidable tasks of asking the right kinds of questions, seeing enough organisms about which to ask these questions, and being present in social situations in which spontaneous discussions about these attributes arise amongst the people themselves.

Ideally, one would like to be able to ask what are the minimally necessary features for the classification of a particular organism within a specific taxon; ideally one would like to be able to uncover all the semantic dimensions necessary to effect a shift in meaning in the taxonomic universe and assign feature attribute values. It was impossible in my case to undertake a detailed examination of all the components of Lau taxonomic system.

The features distinguished at the upper taxonomic levels, i.e., at the levels of distinctions between baekwa, kirio, fonu, ia and between major classes of ia can be, and are discussed in terms of the presence and absence of distinguishing features, of a "binary contrast" between complementary characteristics in many cases. The following table lists the features

of critical importance to the classification of the four main sub-divisions of asi. These are derived from interviews with male informants in which I asked them to explain to me how they recognized members of each of these categories and how they told them apart.

Feature		Category Name			
Lau	English	Kirio	Baekwa	'Ia	Fonu
lifo	teeth	+	-	±	
manga	spout	+	-	-	
babanga	gills	-	+	+	
bobona	dorsal fin	-	-	+	
e'efo	scales	-	-	+	
suu	to breach	+	+	-	
sidu	turtle shell				+
aba	arms				+
	turtle penis				+
colour mentioned as important feature		-	-	+	-

kirio, baekwa and 'ia appear to be related by the presence or absence of critical features constituting a discrete set. fonu, however, does not seem to be distinguished in relation to this set at all, but rather is defined according to the presence of three unique characters. My informants indicated that there could be no problem in identifying a turtle in any case, as all turtles looked similar and were shaped quite differently from all other fish.

A similar 'kind' of distinction, made according to the presence or absence of certain specific features, was made in explanations offered to me concerning the identification of different fish belonging to the

major classes of ia. I was not able to conduct a comprehensive survey of the features of all named classes but of those I did investigate a pattern seems to emerge. The following is an example.

Feature		Class Name			
Lau	English	Suru	Bebe	Ili	Kalua
agali	round	-	+	-	-
tekwa	long	+	-	+	+
bobona	dorsal fin	+	-	+	+
faka tekwa	long mouth	-	-	+	-
ngora tekwa	long nose	-	-	+	-
kiikiiuuna tasia	v-shaped tail fin	+	-	+	-
Coloured		+	+	-	-

All people consulted,both men and women, seemed to be able to agree on the general identification of an individual specimen in terms of one of the named classes. The women, despite their marked lack of interest in talking to me about fish classification in everyday situations became much more willing to discuss these matters prior to markets, as they prepared the fish, sorting some into 'lots' (bata). They identified the fish as they wrapped them in leaves, pointing to each individual specimen and calling it by name. I asked them how they sorted the fish into lots, that is, how they decided which fish in the catch belonged together. I was always given the same response: fish were sorted according to size and taste. Fish they regarded as "too small" to sell or trade individually were grouped together first. Fish that were said to be "good tasting" were then divided

from those thought to be bony or less tasty. Good tasting fish were sorted into bata, the number in each lot depending on the size of each individual fish. Less desirable fish were also put together and frequently these would be eaten by the household or by the women on the way to market.

Women always identified the fish according to their class names. Specific names were never used, even in cases such as mamula, a class of fish categorized, according to the men, by size and growth stage. Fish belonging to different classes were said to be distinguished because they either belonged together or they did not in terms of the two preceding criteria. A suru, I was advised, was so called because it tasted good, like a kalua, but tended to be shorter and more bony than a mamula. Mamula and ili, I was told, were always sorted independently of any other class of fish. Muu could be grouped with any other kind of fish available as they were said to be generally small and fairly good tasting.

The pattern that emerges here again concerns the possibility of the existence of two distinct but interrelated semantic systems amongst the Lau -- one male and one female. Men and women both recognize the same taxonomic boundaries in the case of fish, but distinguishing features are said to be different. A more thorough and lengthy study of fish naming practices would be required before any definitive statement could be made concerning these patterns. I feel, however, that there is enough evidence to warrant such an investigation and that the question is of interest not only in this context, but in terms of any study hoping to discover the rules underlying cognitive processes of classification.

Lower Level Taxa

As indicated previously, discriminations between lower order taxa (which are considered here to be terminal taxa in terms of the entire taxonomic scheme), is made almost exclusively by men. The distinctive features of individual fish regarded as belonging to the same class are generally of the same kind as those used to discriminate between the classes themselves. There is one important difference, however, that emerges upon comparison between the two levels of discrimination. At the class level, distinctions appear to be made according to the presence or absence of a number of certain specific features. At the level of terminal taxa, discriminations are made not according to binary distinctions but according to relationships between these features: for example -- bebe tatafiriogou is said to be rounder than bebe i furai fonu but not as round as bebe gogoa. Bebe i furai fonu has a longer mouth than bebe gogoa but not as long as bebe adekwalao or bebe faka tekwa. Bebe tatafiriogou is said to have a long dorsal fin but not as long as bebe adekwalao. Bebe sulukwakio is regarded as having a dorsal fin longer than bebe adekwalao but a shorter tail fin. Bebe faka susu is said to be longer than bebe gogoa but not as long as bebe tekwa. All bebe are said to taste similar but distinct according to varying degrees of fleshiness and texture. They are all said to be colourful, but some are more colourful than others, some are striped, some more or less than others. As in the case of features invoked to distinguish between classes, these relational criteria cannot be hierarchically ranked, nor reduced to minimal units of meaning.

A class of fish is defined according to a complex matrix of relations between distinctive features, an individual fish according to the relations between relations between distinctive features. This has important implications in terms of the potential application of methods such as componential and representational analysis to such material. Both componential and representational analysis involve the manipulation of discrete units of meaning.

A componential definition of fish classes may be a feasible enterprise due to the binary nature of distinctive features -- but it would tell one nothing beyond information conveyed by the data itself. Not only that, as a method, componential analysis would impede investigations into the nature of distinctions between terminal taxa belonging to the same class as such binary distinctions apparently do not exist in the Lau taxonomic system.

An alternate approach that has been developed for the purpose of conducting studies of complex cognitive systems is put forward by W. Geohegan. In a highly theoretical discussion, Geohegan (1971) presents an axiomatic theory of semantic domains by treating them as coding rules, that is, sequenced decisions about the applicability of semantic features in the cognitive process of categorization. Although I will not discuss this theory at length here, I wish to point out several of the advantages that I see in Geohegan's approach in contrast to the other two methods I have already considered.

.) Geohegan treats categorization as a cognitive process involving conceptual operations by which certain observable entities are handled and classified rendering them intelligible to their users. The other two

approaches deal only with the 'end-products' (the actual classifications) and the 'stimuli' (the observable entities) involved in the construction of a taxonomic scheme.

2) The necessary property of the equivalence of taxonomic status between terms in the classification scheme is not a problem in Geohegan's approach. A categorization process is represented in this case by a network of 'decisions' made on the basis of the correspondence or lack of correspondence between an entity and the properties or set of properties which characterize a category. Terminal taxa would thus be the end products of such operations or series of operations. Other taxa would represent intermediate nodes, or steps, "states", in the decision process.

3) Redundancy is not a problem in Geohegan's approach either, as recursivity of language represents a function in its own right.

4) Categorization can be represented as a probablistic, not deterministic process. In other words, the semantic range of a term in, for example, the environment of another could be assessed. An example might help to clarify this point. In the case of Lau fish taxonomy (according to the preliminary findings of this thesis), all turtles are <u>ia</u> (the upper level taxon) but no turtles are <u>ia</u> (the lower level subdivision of the same taxon). It might be productive to look at the frequency of the use of specific labels in terms of certain sociolinguistic contexts and word environments. When a man catches turtles and other fish does he say that he has so many fish or so many turtles and fish, or so many turtles and so many kinds of fish? In other words, what is

the prime referent of turtle? Is ia (as a lower level taxon) really a discrete category, or is it merely a term for all fish that are not baekwa, kirio and fonu?

Despite these advantageous aspects of Geohegan's set-theoretic structure there is one extremely important point that he completely fails to mention. In order to offer a representation of a process or of component operations one must first acquire the relevant information. This is, in my opinion, the most important problem that now faces the analyst. How does one go about collecting data not only concerning the identification of named categories but also attempting to discover something about the rules of categorization? Word association tests might be useful in establishing the degree of association of concepts and as such, provide an assessment of semantic congruity between certain key words chosen by the researcher.[1] The discovery of distinctive features or properties of specific categories presents an entirely different problem. Questions such as those posed in this preliminary attempt to establish some of the defining features of fish categories might be productive if applied on a larger scale and if they involved a larger more stratified informant sample.

Some additional problems mentioned earlier that, in my opinion, should be investigated in greater detail are as follows:

1. The possibility of the existence of two distinct but interrelated semantic systems (one male and the other female) in the naming of

1. The 'memory lists' discussed previously can, I feel, be regarded as a type of word association test in which the problem of the etic selection of key words is not at issue. The trouble with reliance on this kind of data, however, is that one, necessarily, imposes limits to the full exploration of a semantic domain.

marine organisms should be explored. This would require investigation using two samples of informants divided according to sex. The same research protocol would have to be utilized in each case, the results recorded and a comparison made. Additional information in the form of statements made by the people concerning their own view of these patterns as well as data resulting from observations of the actual use of terms of reference in socio-linguistic context should be included.

2. The taxonomic status of many named marine organisms recorded in the course of this study has not been established. Further investigation of these should be conducted. Additional organisms completely unexplored at this time should be examined. For example, how are coral and seaweeds classified? One would expect, on the basis of preliminary information, that the strong conceptual link that we make between coral, seaweed and land (coral as rock-like, seaweed as plant-like) would be overridden by the strong dichotomization between tolo and asi in the Lau taxonomic universe. This, however, remains to be established.

3. A further inquiry into the attribution of distinctive features to marine organisms at varying levels of specificity -- particularly those dealing with morphological characteristics and colour -- might be conducted by asking the Lau people themselves to produce visual representations of a number of specific organisms. Such drawings could then be compared to verbal explanations of differences between same.

4. A complementary study of Baelelea ethno-ichthyology might be useful not only for comparative purposes, but, in the context of market behavior, such an inquiry might serve to facilitate understanding of the relationships between

articles of exchange. That is, for example, if Baelelea vegetables are to 'sea' vegetables (to the Lau) as Lau fish are to 'hill' fish (to the Baelelea)[1] further speculations as to the transformations of objects by social exchange might be warranted.

In brief summary, this thesis has been an attempt to consolidate pre-existing data (concerning some aspects of Lau marine taxonomy) and to offer some preliminary findings. The major domains and subdivisions of the Lau taxonomic universe have been presented as have a certain number of lower order taxa. The question of the elicitation and analysis of distinctive features has been raised. Certain propositions have been outlined and briefly discussed. The topic is a vast one and my investigation is scarcely a beginning. I have found that it has generated many qustions and answered none. It is my hope, however, that some of the problems raised at this time can be and are worth following to their completion in the future. It is my sincere desire to be a participant in this endeavour.

1. Freshwater and frequently salt water fish are as easily available to the hill people if they catch them themselves, as are Lau domestic vegetables to the sea people.

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APPENDIX

APPENDIX I — Alphabetical listing of Lau Fish Names (from data collected by Maranda and Maranda (1967-1968) and compiled by Tyhurst (1975)).

APPENDIX II — Alphabetical listing of Lau fish names identified by the Lau from Marshall (1964) illustrations and compiled by Tyhurst (1975).

APPENDIX III — Photographs of additional fish identified by the Lau belonging to upper level taxon 'Ia and of other marine organisms named -- taxonomic status undetermined.

APPENDIX I

LIST OF LAU FISH NAMES (MALAITA, SOLOMON ISLANDS)
FINAL COPY AS OF 28 VII 1975

ALPHABETICAL LISTING OF LAU FISH NAMES AND ADDITIONAL INFORMATION INCLUDED ACCORDING TO THE FOLLOWING NUMERICAL CODES AND CORRESPONDING FIELD IDENTIFICATIONS.

CODE/FIELD	SUB-CODE	INFORMATION

2		ENGLISH "COMMON NAME" ACCORDING TO SOURCE GIVEN UNDER CODE 4
3		"SYSTEMATIC" NAME ACCORDING TO SOURCE GIVEN UNDER CODE 4
4		SOURCES: A SOURCE OF INFORMATION CONTAINED UNDER CODES 'FIRST ENTRY' TO '3'
	4M#	MARSHALL PAGE #
	4H#	HALSTEAD PAGE #
	4W#	WEBSTER PAGE #
	4C	FROM MARANDA & MARANDA FIELD FILE CARDS
	4CS	FROM MARANDA & MARANDA FIELD FILE CARDS; SLIDE OR PHOTOGRAPH AVAILABLE
	4F	FOX LAU DICTIONARY
5		SOURCES: B INFORMATION OBTAINED FROM INFORMANTS' MEMORY LISTS OF FISH TYPES
	FIELD FORMAT: 5 L DIGIT HABITAT	
		'5' INDICATES CODE OR FIELD 'DIGIT' INDICATES PAGE IN FIELD NOTES AND LOCATION OF INFORMANT (1,2 = ULUFERA; 3,4,5 = ATA'A; 6,7,8 = FOUEDA)
6		INFORMATION GIVEN REPRESENTS EN ENGLISH "COMMON NAME" AS AN EQUIVALENT FOR THE LISTED LAU NAME BUT NO FORMAL SOURCE OF THIS TRANSLATION IS AVAILABLE
7		SOURCES: C INFORMATION OBTAINED FROM LISTS COMPILED IN THE FIELD CONCERNING THE DIFFERENT TYPES OF FISHES CAUGHT AND IDENTIFIED BY THE INFORMANTS AND RECORDED BY MARANDA & MARANDA
	FIELD FORMAT: 7 K XX YY YY YY O DIGITS	
		'7' INDICATES CODE OR FIELD 'K' INDICATES THAT INFORMATION IS FROM THE INFORMANTS' "CATCH LIST" 'XX' GIVES INFORMANTS' LOCATION: FO = FOUEDA, FF = FUNAFOU, SF = SULUFOU 'YY YY YY' GIVES DATE IN DAY, MONTH, YEAR 'O' GIVES FISH SIZE (SIZE X,Y,Z, AND SHELLS) SIZE (ACCORDING TO AUSTRALIAN CURRENCY) X= 5/- Y= 1/- Z= 10 FISHES FOR 1/- S= SHELLS 'DIGITS' GIVE NUMBER FISHES PER TYPE PER DATE
8		FISH NAMES WITH RITUAL OR TABU SIGNIFICANCE
	8T	REFERENCE: TOATA, 3 PAGES; CF. HANDWRITTEN NOTE
9		ADDITIONAL INFORMATION EXISTS IN ORIGINAL DATA

FIELD FORMAT
9 X DIGIT

'9' INDICATES CODE OR FIELD
'X' GIVES ONE OF THE SOURCE-SYMBOLS OF ADDITIONAL INFORMATION: L = MEMORY LISTS, K = CATCH LISTS, C/CS = CARD FILES WITH/WITHOUT SLIDE/PHCTOGRAPH
DIGIT INDICATES PAGE ON SOURCE LISTS

10 "RELATED" NAMES OF LAU FISH TYPES AND CROSS-REFERENCES GIVEN BY VARIOUS INCLUDED SOURCES

11 LAU FISH NAMES OCCURING IN RIDDLES COLLECTED BY ELLI MARANDA IN 1966-1968; # FOLLCWING CODE '1' CORRESPCNDS TO THE SPECIFICALLY ASSIGNED RIDDLE NUMBER

#FITAU2 2BORING MOLLUSC IN MANGROVE SWAMPS3-4FT.LONG 3KUPHUS 4F#
'ADA'ADA 2A CENTIPEDE-LIKE CREATURE ON THE REEF 4F
'AFU 2 GREEN SEAWEED,5 OR 6 FEET LCNG 4F
'AIFURU 4F
'AKWA 4F
'AKWA 4F
'AKWANGO 2YELLCW-FIN BREAM 3MYLIO AUSTRALIS 4M221,F 5L1AA6MATAKWA
'ALAUO 4F
'IME 2SP MOLLUSC, TRIDACNA SP ARE ABUABULI,DOLO KIKI 4F
'MANEBA 2SP JELLY FISH CF KWAIRABU 4F'
AA 2BLUE-BANDED SEA PERCH 3LUTJANUS KASMIRA 4M197 5L7AA4AA
AA'O 4F
AABEAABE 4F
AAFA 4F
AALANO 5L4AA
AALUKWAGA 5L6MATAKWA
AANINCNI 5L6MATAKWA
AARABA 2HEART SHELL 3ISOCARDIA COR 4W994
AARAGWALA 4CS
AATU 2TOP SHELL 4W2619 5L10
AAUALITE 5L6MATAKWA
ABEKOA 5L6AA 4F
ABUNI 2BLUE-BANDED SEA PERCH 3LUTJANUS KASMIRA 4M197 5L4AA7AA
ABUNI 5L2H
ADOMA 7KSF10/06/68S110
AFALI 4F
AFILU1 2BULLROUT 3NOTESTHES ROBUSTA 4M408 5L1AA4AA7AA
AFILU2 2ESTUARY ROCK COD 3EPINEPHELUS TAUVINA 4M171
AFU'U 7KSF10/06/68Y6
AFU'U 7KSF11/06/68Z20
AFU'U 7KSF12/06/68Y6
AFU'U 7KSF12/06/68Z10
AFU'U 7KSF13/06/68Z10
AGOFOLO 5L6AA
AI'FATARAA 7KFF06/05/68Y 10ABA'I'FOUEDA
AIFATARAO 2SP BLACK FISH WITH REPTILIAN HEAD 4F
AIFATORAO 5L7AA
AIGO 5L4AA
AILAI DAI 5L4AA
AININIU=AINIU 2SP FISH 4F 5I6AA
AINIU=AININIU 2SP FISH 4F
AKWA NIABA 2TRUMPETER PERCH 3PELATES QUADRILINEATUS 4M184CS 5L4AA7AA6MATAKWA
AKWA'AKWA 5L2AH 4F
AKWASIMAI 4CS 5L6MATAKWA

AKWASIMAI 5L2H
ALAGA 2SP SEAWEED 4F
ALAGALO 5L8FAFOILE
ALAHAA 2SCARLET-FIN SOLDIER-FISH 3HOLOCENTRUM SPINIFERUM 4M142 5L3FAFOILE7AA
ALAKWAGA 2SP FISH TABOO TO MAN SUFFERING FROM DIPTHERIA 4F
ALAMAMU 5L6AA
ALASAA 4F
ALASU 5L4AA
ALATE BARO 2HERRING TREVALLY 3CARANX KALLA 4M234
ALAUO 4F
ALI UBERE 2GOLDEN TREVALLY 3CARANX SPECIOSUS 4M236 5L3FAFOILE
ALI 5L2AH
ALIA I KAFU 5L7AA
ALIA 2HUMP-HEADED MAORI-WRASSE 3CHEILINUS UNDULATUS 4M314,F 5L6MATAKWA
ALIA 7KSF10/06/68X4
ALIA 7KSF11/06/68X2
ALIA 7KSF13/06/68X3
ALIFOU 2AUSTRALIAN PILCHARD 3ARENGUS NEOPILCHARDUS 4M77
ALIKAFO 5L1AA
ALIKAFU 5L1FAFOILE
ALIMANGO 2LARGEST SP CRAB, FOUND CN OUTER REEF, BLACK 4F
ALINGA BOKOFU 5L6MATAKWA
ALINGA BULU 5L6MATAKWA
ALINGA FAALU=ALINGE FAALU 2SP LARGE FISH WITH REDDISH FINS AND TAIL, RHOMBUS
ALINGA FAAIU=ALINGE FAALU 5L8FAFOILE
ALINGA 2SCALELESS TUNA 3GYMNOSARDA NUDA 4M342CS 5L3FAFOILE6MATAKWA
ALINGA 7KSF10/06/68X2
ALINGA 7KSF11/06/68X1
ALINGA 7KSF13/06/68X2
ALINGE FAALU 7KSF10/06/68X3
ALINGE FAALU 7KSF11/06/68X5
ALINGE FAALU 7KSF12/06/68X2
ALINGE FAALU 7KSF13/06/68X2
ALINGE FAALU 7KSF14/06/68X3
ALINGE=ALINGA 4CS
ALOA RAE 2SURF PARROT-FISH 3CALLYODON FASCIATUS 4M319 5L6AA6MATAKWA
ALOSA 4F
ALULU 4F 5L1AA
ALULU 5L7AA
ALUMUMU 5L6AA
ALUSA 2SP FISH 4F 5L1FAFOILE
ALUSA 2SP FISH 4F 5L6MATAKWA
AMERA 5L6AA 7KSF14/06/68Y12
ANAFA 7KSF11/06/68Z10
ANGAFA IFO 2SCARLET-BREASTED MAORI-WRASSE 3CHEILINUS FASCIATUS 4M313
ANGAFA ITO 2HARLEQUIN TUSK-FISH 3LIENARDELLA FASCIATUS 4M292 5L7AA
ANGAFA KEKERO 5L7AA
ANGAFA OOLO 2MOON WRASSE 3THALASSOMA LUNARE 4M309
ANGAFA 4CS 7KSF11/06/68Z10
ANGAFA 5L1AA
ANGAFA 5L6AA
ANGILI 5L1FAFOILE
ANGILI 5L6MATAKWA
ANOFI'AE 2SP. MOLLUSC 3NERITA BREVISPINA4F10DOKOFI'AE
ARABA 2COCKLE 3CARDIUM EDULE 4W428
ARAGWALA 5L7AA
ARAKAO 5L7AA
ARERE 7KSF13/06/68Y12Z20
ARERE1 2BLUE TUSK-FISH 3CHOERODON ALBIGENA 4M295,F
ARERE2 2VENUS TUSK-FISH 3CHOERODON VENUSTUS 4M294

ARODO 5L6AA
ASAUNGA 5L6MATAKWA
AU 2PORCUPINE FISH 3TRAGULICHTHYS JACULIFERUS 4M483,F
AULU 5L2H
AULUMAEO 5L2H
AUSUSU 2TULI SHELL 4W2619 5L10
AUSUSUU 2UNICORN SHELL 3LATIRUS OR LEUCOZONIA CINGULATUS 4W2241
AUSUU TEKWA 2TULIP SHELL 3FASCIOLARIA TULIPA 4W2619
BA AA=MENA MENA 2SURGEON FISH 4H86,F 9C
BA'AA BULU 5L8FAFOILE
BA'AA NI FULA 5L4AA
BA'AA 7KFO13/06/68Y2
BA'AA 7KSF10/06/68Y21
BA'AA 7KSF11/06/68X5
BA'AA 7KSF12/06/68Y5
BA'AA 7KSF13/06/68Y17
BA'AA 7KSF14/06/68X16Y36
BAABABA 5L6MATAKWA
BABA AU 5L4AA
BABALI BILA 4F 5L6AA
BABALI 2SP DEEP SEA FISH 4F 7KFF27/04/68Y
BABALU SP. 2BUAMENA SUBSP. 4F,CS 5L8FAFOILE 8T 9SP OF LARGE AND DANGEROUS DEE
BABALU 7KSF10/06/68Y2
BABAO 5L8FAFOILE
BAE HANGO 5L4AA
BAE KEKESI 5L4AA
BAE 5L4AA
BAEKWA I ASI (TOLO) SEA SNAKE 2SP GWOULO,KAFISORO,LELEO,MANGEO,MELEO,RARASIFO
BAEKWA IA KILI 11R659
BAEKWA 2A SHARK 4F
BAEKWAILI 5L7MATAKWA
BAEKWALETO 5L7MATAKWA
BAHAULA1 2SNUB-NOSED GARFISH 3ARRHAMPUS SCLEROLEPSIS 4M112 5L7AA
BAHAULA2 2STRIPED BARRACUDA 3SPHRYAENA OBTUSATA 4M382
BALA I TOLO 2YELLOW SPOTTED ROCK COD 3EPINEPHELUS AREOLATUS 4M168
BALA 2HAWKSBILL TURTLE 3CHELONIA IMBRICATA 4W990,F
BALA 2LOGGERHEAD 3CARETTA CARETTA 4W1270
BAROBARO 2PAPER NAUTILUS 3ARGONAUTA ARGO 4W1560
BASAULA 2NAME FOR SWORDFISH (ILI) AT CERTAIN STAGE OF GROWTH 4F 10ILI
BEBE 2BUTTERFLY FISH 3CHAETODON EPHIPPUM 4F,W363 5L1AA3AA7AA
BEBE ABEKOA 5L7AA
BEBE ADEKWE I LAO 2THREADFIN BUTTERFLY-FISH 3CHAETODON AURIGA 4M261
BEBE ADIBWALAO 5L7AA3AA
BEBE FAKATEKWA1 2BEAKED CORAL-FISH 3CHELMON ROSTRATUS MARGINALIS 4M256
BEBE FAKATEKWA2 2LONG-BILL 3FORCIPIGER LONGIROSTRIS 4M258
BEBE FURAI FONU 5L7AA3AA
BEBE KEKERO 2GOLDEN-STRIPED BUTTERFLY-FISH 3CHAETODON AUREOFASCIATUS 4M265
BEBE NARA 2LONG-BILL 3FORCIPIGER LONGIROSTRIS 4M258
BEBE NI FURAI FONU 2LINED BUTTERFLY FISH 3CHAETODON LINEOLATUS 4M263
BEBE O OLO 2CRISS-CROSS BUTTERFLY-FISH 3CHAETODON VAGABUNDUS 4M262
BEBE TATAFIRIOGU 2SIX-SPINED BUTTERFLY-FISH 3PARACHAETODON OCELLATUS 4M260
BEBE TEKWA 2RIGHT-ANGLED BUTTERFLY-FISH 3CHAETODON TRIFASCIALIS 4M266
BEBERA GWASU 2FIVE-BANDED SURGEON-FISH 3ACANTHURUS TRIOSTEGUS 4F,M328
BEBERIGWASU 7KSF12/06/68Z10
BELAFA 4F 5L1AA
BELEFA 2SP SMALL FISH STRIPED YELLOW AND BLACK 5L4AA
BELEFA 2SP SMALL FISH STRIPED YELLOW AND BLACK 5L8FAFOILE
BEO 2SP TURTLE 4F
BERAGWASU 2SP SMALL FISH 4F 5L8FAFOILE
BERAGWASU 2SP SMALL FISH 5L2AH

BERAKAI 2BLACK-FINNED CARDINAL FISH 11R408
BERAKAI 2BLACK-FINNED CARDINAL FISH 3APOGON ATRIPES 4M149,F 5L1AA4AA6AA
BEREREGWASU 7KSF11/06/68Z10
BIBI 7KSF11/06/68S15
BIBILA 2CARDINAL FISH 3APOGON FASCIATUS FASCIATUS 4M150,F 5L1AA4AA6AA
BIBINU 11R23,486
BIBINU 2SEA URCHIN 3TOXOPNEUSTES ELEGANS 4H50
BIBINU 7KFO11/06/68S10
BIBINU 7KSF10/06/68S20
BIBINU 7KSF10/06/68S20
BIBINU 7KSF11/06/68S70
BIBINU 7KSF12/06/68S70
BIBINU 7KSF13/06/68S38
BIBINU 7KSF14/06/68S72
BIBINU=BINU 2SEA URCHIN 11R486
BII NI MALAU 2BYNOE,S GOBY 3AMBLYGOBIUS BYNOENSIS 4M358
BILADAU 5L7AA
BILAU I MALAU 2CORAL COD 3PLECTROPOMUS MACULATUS 4F,M174 5L4AA6MATAKWA
BILAU KEKERO 5L6MATAKWA
BILAU KILAU 5L6MATAKWA
BILAU 4F 5L1AA
BILAU 7KSF11/06/68X2
BILAU 7KSF12/06/68X4
BILAU 7KSF14/06/68X2
BILU=BILU I MALAU 4F 5L6MATAKWA
BINU 7KFO10/06/68S34
BINU 7KFO11/06/68S7
BOE NI FOU 2STARS AND STRIPES TOAADO 11R511
BOE NI FOU 2STARS-AND-STPIPES TOADO 3TETRAODON HISPIDUS 4M479 5L4AA
BOE 4F
BOKOFU 11R219,376
BOKOFU 2GARFISH 11R376
BOKOFU 2GARFISH 4C,F
BOKOFU'I KAFO 2BLACKSPOT LONG TOM 3TYLOSURUS STRONGYLURUS 4M103
BOKOFU=BUKOFU 2SP GARFISH 4F
BOKORU 2SP OF FISH 4F
BOLO I MATAKWA 2INKY BLACK SP OF BOLO 4F
BOLO I TOLO 2YELLOW SPOTTED ROCK COD 3EPINEPHELUS AREOLATUS 4M168 5L4AA6AA
BOLO 2SP SMALL FISH APPEARING FOR 3 MONTHS 4F 5L1AA
BOLO 5L6AA
BOLO 7KSF12/06/68Z10
BORABORA 4F 5L6MATAKWA
BORABORA 7KFO11/06/68X1
BORABORA 7KSF13/06/68X2
BORBORA 7KSF10/06/68X2
BOU 8T
BOUBABA 5L6MATAKWA
BOUBOU 5L6MATAKWA
BOUBU 4CS 9SPECIES OF BOKOFU 5L1AA3AA6MATAKWA
BUAMARA 5L4AA7AA
BUAMENA 5L7AA
BUBU BULU 4CS,F 9C
BUBU I DAI 2BIG-SPOTTED TRIGGER-FISH 3BALISTES CONSPILLICUM 4M458 5L8FAFOILE
BUBU I MATAKWA 2SPOTTED TRIGGER-FISH 3CANTHIDERMIS ROTUNDATUS 4M462
BUBU KORU 5L7AA
BUBU KWAO 4F
BUBU LA MATAKWA 2SPOTTED TRIGGER-FISH 3CANTHIDERMIS ROTUNDATUS 4M462
BUBU 5L1AA
BUBU 5L2AH
BUBU 7KFO11/06/68S83

BUBU 7KSF14/06/68Z10
BUKOFU=BOKOFU 2SP GARFISH
BULA=BULI=BULISI 2WHITE COWRIE SHELL 3OVULA OVULUM 4F
BULI 2SHELL 3OVULA OVULUM 4F
BULI 2WHITE COWRIE SHELL 3OVULA OVULUM 4F
BULI=BULA=BULISI 3WHITE COWRIE SHELL 4F
BULISI=BULA=BULI 2WHITE COWRIE SHELL 3OVULA OVULUM 4F
BULONGA1 2A TURTLE SPECIES 4C,F
BULONGA2 2GREEN TURTLE 3CHELONIA MYDAS 4W949 9C
BULONGA3 2LEATHERBACK 3DERMOCHELYS CORIACEA 4W1228
BULUBULU 2RED-LINED TRIGGER-FISH 3BALISTAPUS UNDULATUS 4M461 5L8FAFOILE 8T
BUMA AI 4F 5L6MATAKWA
BUMA AI 5L7MATAKWA
BUMA 2SARDINE 4F
BUMA 11R183
BUMA 5L1FAFOILE
BUMA 7KFF02/05/68Z886
BUMA 7KFF04/05/68Z141270
BUMA 7KFF28/04/68Z
BUMA 7KFF29/04/68Z
BUNGU KURU 2WHELK 3BUCCINUM TOTENII 4W2324
BUNGU RAU1 2HARP SHELL 3HARPA ARTICULARIS 4W985
BUNGU RAU2 2TUN SHELL 3DOLIUM PERDIX 4W2215
BUNGU TEKWA 2TRITON 3TRITON VARIE GATUM 4F,W2202
BUNGU 2QUEEN CONCH 11R333
BUNGU 2WENTLETRAP 3SCALARIA PRETIOSA 4W2321
BUNGU1 2QUEEN CONCH 3CASSIS 4F,1753
BUNGU2 2QUEEN CONCH 4F,2619 5L10
BUNU 7KSF13/06/68S15
BURA NI BONGI 5L6AA
BURASI 5L2AH
BURASI 5L6AA
BURASI 7KSF10/06/68Z20
BURASI 7KSF11/06/68Z10
BURASI 7KSF14/06/68Z10
BUUBUU=BUBU 11R658,733
DAAFI 7KFF03/05/68Z
DADA 2GECKO 3GECKONIDAE 4W897
DADALA KEKEROA 2ORANGE COWRIE SHELL 3C.AURANTIA 4F 10BULI,KOLO
DADALA KEKEROA 2ORANGE COWRY 3CYPRAEA AURANTIUM 4F
DADALA 2COWRIE SHELL 3CYPRAEA(WEBSTER) CARABICA(FOX) 4F,W521 10 DODOLO
DADALA 7KSF10/06/68S45
DADALA 7KSF13/06/68S40
DADALA 7KSF14/06/68S19
DADALA=DALA
DAFE 2PEARL SHELL,GOLDEN LIPPED PEARL 4F
DAFI 5L6AA 2GOLDEN LIP PEARL 4F
DALUMA NI ARA 2BANDED TOADO 3SPHEROIDES PLEUROSTICTUS 4M477
DALUMA1 2MARBLED TOADO 3CHELONODON PATOCA 4M481,F 5L4AA
DALUMA2 2TOADO 3TETRAODON STELLATUS 4M480
DALUMA3 5L4AA
DEDEFO 2SEA URCHIN 3AESTHENOSOME IJIMAI YOSHIWARA 4H50
DENGE 2PRAWN(WEBSTER) SP OF FRESHWATER PRAWN(FOX) 3PENEUS 4F,W1690
DENGE=ODO I KAFO
DIADIA 2SP LARGE FISH 4F 5L6MATAKWA
DIADIA 5L1FAFOILE3FAFOILE
DIDIFEO 2FIDDLER CRAB 3GELASINUS MINAX 4W810
DIU 2SP OF FISH 4F 5L4AA 10KWALEU
DOIALO 5L7AA
DOKOFI'AE 2SP MOLLUSC WITH SPINES 3NERITA BREVISPINA 4F 10ANOFI'AE

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DOLO1 2CONGER EEL 3CONGER 4W472
DOLO2 2KILLER CLAM 3TRICANDA GIGAS WITH SMOOTH SURFACE 4H30
DOLO2 7KSF11/06/68S1
DORU LA ONE 2LONG-FINNED GURNARD 3LEPIDOTRIGLA CALODACTYLA 4M427
DORU NI ONE 2PURPLE FLYING GURNARD 3DACTYLOPTENA ORIENTALIS 4M426
DORU 5L1FAFOILE3FAFOILE
DORU 5L6MATAKWA
DORU=DURU
DOU LA SUU 2SPOTTED HERRING 3HARENGULA KONIGSBERGERI 4M74
DOU 4F 5L4AA6AA
DOU 5L6AA
DUFI 5L6AA
DUMUAKWA 5L4AA
DUMULIKOA 5L7AA
DUNGE AKWA 2SPECKLED PUG 3TANDYA MACULATA 4M323 5L7AA
DUNIAKWA 5L7AA
DURU=DORU 2FLYING FISH 4F 9SMALL SP SIFURU 10DURU, AIFURU
E'ENO=ENO 2SP REEF FISH 4F
EDAEDA=MAMULA 4F 7KFF01/05/68Y
EDAEDA=MAMULA 5L6MATAKWA
EDAEDA=MAMULA 7KFF03/05/68Y
EDAEDA=MAMULA 7KFF05/05/68X
EDAEDA=MAMULA 7KFF06/05/68X
EDAEDA=MAMULA 7KFF27/04/68X
EDAEDA=MAMULA 7KFO13/06/68X19
EDAEDA=MAMULA 7KSF10/06/68X2
EDAEDA=MAMULA 7KSF11/06/68X6
EDAEDA=MAMULA 7KSF12/06/68X6
EDAEDA=MAMULA 7KSF13/06/68X2
EDAEDA=MAMULA 7KSF14/06/68X6
EENO 4F 5L1AA
ELU 7KFO10/06/68X1
ELU 7KFO11/06/68Z40
ELU=ELUELU 2SHARK MULLET 3SQUALOMUGIL NASUTUS 4M383,F
ELUELU 5L6AA
ELUELU=ELU 4CS
ENO GAUBU 5L4AA,F
ENO 5L1AA4AA
ENO=E'ENO 2SP REEF FISH 4F
FA'AU 11R285
FA'AU 5L7AA 7KFF03/05/68Y 10MAASULUA
FA'AU 7KFF27/04/68Z
FAA MAI 4F
FAA 5L6MATAKWA
FAERE ILE 2LUNAR-TAILED ROCK COD 3VARIOLA LOUTI 4M164
FAERE=FAERO 2LUNAR-TAILED ROCK COD 3VARIOLA LOUTI 4M164 5L1FAFOILE3FAFOILE
FAERO=FAERE 2LUNAR-TAILED ROCK COD 3VARIOLA LOUTI 4M164 5L6MATAKWA
FAFALUTA 4F
FAFARI 2SCORPION 3SCORPIONIDA 4W1898
FAFULU 5L8FAFOILE
FAKAE BUA 5L6AA
FAKAGOLA 5L8FAFOILE
FALATA 2GOLDEN-LINED SPINEFOOT 3SIGANUS LINEATUS 4M335 5L1AA3AA6AA
FALATA 7KFF05/05/68Y
FALATA 7KSF10/06/68Y15Z3
FALATA 7KSF11/06/68Y11
FALATA 7KSF12/06/68Y24
FALATA 7KSF13/06/68Y9Z10
FALATA 7KSF14/06/68Y37
FALEGO 2SP FISH, SUCKER FISH 4F 5L1AA
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FALEGO 2SP FISH, SUCKER FISH 4F 5L4AA
FALEGO 2SP FISH, SUCKER FISH 4F 5L7MATAKWA
FALI ABAKWA 2ROUND STINGRAY 3UROPHOLUS HALLERI 4H59,60
FALI BORA 5L6AA
FALI I LOLO1 2SPOTTED STINGAREE 3DASYATIS KUHLII 4M43
FALI I LOLO2 2COACHWHIP RAY 3HIMANTURA UARNAK 4M47
FALI LA SUU 2BLUE SPOTTED STINGAREE 3DASYATIS KUHLII 4M43
FALI MANU 2BAT RAY EAGLE RAY 3MYLIOBATIDAE 4H57 58
FALI NI MATAKWA 2BLUE SPOTTED LAGOON RAY 3TAEMURA IGMMA 4M48 9
FALI NI ONE 2BLUE SPOTTED STINGAREE 3DASYATIS KUHLII 4M43
FALI 11R186,230,446,924,951,993,1008
FALI 2STINGRAY 3DASYATIDAE 4H55,57 5L1AA6AA
FALUA 4F
FALUAKWA 5L7AA
FANAMEA 5L1FAFOILE6MATAKWA
FARAKWAOA 5L11 9L11
FARANADI 5L6MATAKWA
FATA=FATU 4F
FATU=FATA 2TOP SHELL 3TROCHUS NILOTECUS 4F,W2619
FAU U 4F 5L7AA
FAUKWAI 2SP FISH 4F 10URA NI BOUGI, MATASE, SINU
FAULALO 5L6MATAKWA
FIFERO 2SP MOLLUSC 3COLUMBELLA 4F
FIFILU 2LARGE SP DUGONG SELDOM SEEN ON MALA BETTER KNOWN ON GELA 4F 5L1FAFOIL
FILUFILU 2SAIL-FISH 3ISTIOPHORUS GLADIUS 4M337 5L3FAFOILE6MATAKWA
FISI MAMAMU 5L1AA
FISI TOTOE 5L2H
FISI 4F
FISIARAO 5L1AA
FITAU1 2SHIPWORM 3TEREDO NAVILIS 4W2619 4L10
FOEFOE 5L6AA 7KSF10/06/68Z10
FOEFOE 7KSF11/06/68Y9
FOEFOE 7KSF11/06/68Z10
FOEFOE 7KSF13/06/68Y7Z20
FOEFOE 7KSF14/06/68Y16Z10
FOFOLAABE MALAU 5L7AA
FOLA ABE TOKITOKI 2BATFISH 3PLATAX PINNATUS 4M275
FOLA ABE 2SICKLE-FISH 3DREPANE PUNCTATA 4M274 5L1AA4AA
FOLAOLA 4F
FOLAOTA 2SP LARGE FISH 4F
FOLATA 4F
FONU AKWA 5L8FAFOILE
FONU BALA 5L8FAFOILE
FONU FALATA 5L8FAFOILE
FONU I TOLO  2WOOD TORTOISE 3CLEMMYS INSCULPTA 4W2348
FONU IA 5L8FAFOILE
FONU IA1 2GREEN TURTLE 3CHELONIA MYDAS 4W949
FONU IA2 2HAWKSBILL TURTLE 3CHELONIA IMBRICATA 4W990
FONU NI TOLO1 2SNAPPING TURTLE 3CHELYDRA SERPENTINA 4W1983
FONU NI TOLO2 2TURTLE 3CHELOPUS GUITATUS 4W2219
FONU 2LOGGERHEAD TURTLE 3CARETTA CARETTA 4W1270 5L1FAFOILE 10SP ARE BALA, BE
FORAE 5L7AA
FORE 2HAIRBACK HERRING 3NEMATALOSA COME 4M68 5L7AA
FOTO BALA 2RED-FINNED EMPEROR 3LETHRINUS FLETUS 4M213 5L3AA6AA
FOTO BALA 7KFO10/06/68X1
FOTO BALA 7KSF10/06/68X1
FOTO BALA 7KSF11/06/68X6
FOTO BALA 7KSF12/06/68X2
FOTO BALA 7KSF13/06/68X2
FOTO BALA 7KSF14/06/68X3
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FOTO 5L7AA
FOU 'ASUFE 2SHELL 3PALLIUMPALLIUM 4F
FOU 'IME 2SHELL 3TRIDACNA 4F
FOU KURAI 7KFF03/05/68Z
FOU LALO 2GREAT TREVALLY CARANX 3SEXFASCIATUS 4M232 5L3FAFOILE6MATAKWA
FOU'ASUFE 2SP MOLLUSC 3PECTEN 4F
FOUKWAI 4CS 5L6AA
FOUKWAI 7KSF10/06/68Y8
FOUKWAI 7KSF14/06/68Y9
FOUTOBI 5L6MATAKWA
FUASA NI'AFU 2SEAHORSE 4F
FUASA 2CROCODILE 4F 10MOKOTORO,WANE,KAFO
FUFU 2SP FISH SWOLLEN LIKE A FOOTBALL 4F
FULA ABU 2JELLYFISH 11R196
FULA'ABU 4F
FULO 2A SPONGE 4F
FUNAMEA 5L6MATAKWA
FUUFUU 2SPIDER 3ARANEIDA 4W2011
GAFAGAFA 5L2AH
GAFALA 5L4AA7AA
GAFAU 2SPOTTED BUTTER-FISH 3SCATOPHAGUS ARGUS 4M254
GAIAROBO 5L11 9L11
GAIFESORO 5L7MATAKWA
GAIFUNU 5L7MATAKWA
GAIROBO 5L6MATAKWA
GALO 2EGGS OF CRAYFISH OR PRAWN (LAMA OF CRAB,BILA OF FISH) 4F
GANALE=GANOLE 4F
GANALE=GONOLE
GANALE1 2CROWNED SOLDIER-FISH 3HOLOCENTRUM DIADEMA 4M143 5L1AA4AA7AA
GANALE2 2RED SOLDIER-FISH 3HOLOCENTRUM RUBRUM 4M145
GANEGANE 2SP BIVALVE MOLLUSC, COCKLE 4F
GANOLE=GANALE 4F
GAOFU 5L6AA
GEGESUHATO 5L1FAFOILE
GELA 2SP LARGE SEAFISH 4F 5L3FAFOILE1FAFOILE
GELE 5L6MATAKWA
GERU 2DIAMOND-SCALED MULLET 3MUGIL VAIGIENSIS 4M392,F 5L1AA 9SP POISONOUS FIS
GERU 5L7AA
GOFALA 4F
GOFALU 5L8FAFOILE
GOFOU 5L6AA
GOGOURADA=GOU GORADA 5L7AA
GOOURU 5L6AA
GOU GORADA=GOGOURADA 5L1AA
GOU LA FANE 5L6MATAKWA
GOU MATANGA 2COW-FISH 3LACTORIA CORNUTUS 4M473
GOUFU U 5L2H6MATAKWA
GOUFU 5L6AA 7KFF05/05/68X
GOUFU 7KFF27/04/68XY
GOUGOU 2MUREX 4W2619 5L10
GOULO 2HAMMERHEAD SHARK 3SPHYRNIDAE 4W976 5L7MATAKWA
GOUMAEO 5L8FAFOILE
GOUMU RAA 5L6MATAKWA
GOUMUDU 5L6MATAKWA
GOURU 11R155
GULI 5L1AA
GULI 5L8FAFOILE
GUMULI 5L6AA
GWAA 5L9 6GRAY WHALE 9L9 10IAGWARI
GWAFOLA 5L1AA

GWAHASU 5L6MATAKWA
GWAHASU 5L9 9L9
GWAI SASU 2A WHALE 4F 10GWASASU
GWAILA 2SP OF LARGE FISH 4F 7KSF11/06/68X2
GWAILA 7KSF13/06/68X1
GWAILI 4F
GWANGOSI AU 2BLUE-BANDED WHIPTAIL 3PENTAPODUS SETOSUS 4M205 5L3AA7AA
GWANGOSI FAFURONGO 5L7AA3AA
GWANGOSI KUKURU 2PEARLY SPINE-CHEEK 3SCOLOPSIS MARGARITIFER 4M204,F
GWANGOSI 5L2AH
GWANGOSI 5L7AA3AA
GWANGWANGO 2NASSA 3NASSA VIBEX 4W1437
GWANGWANGO 2PURPURA LAPILLUS 4W1739
GWANOSI 7KSF13/06/68Z10
GWARAFETA 5L1FAFOILE
GWAREO 2BLACK-SPOT SEA PERCH 3LUTJANUS FULVIFLAMMA 4M201 5L1AA4AA7AA
GWARIGWARI 2SP OF RIVER FISH 4F 5L1AA
GWARO SUKA 2CREATURE IN SAND AT LOW WATER 4F
GWASASU 2WHALE 4F 10KWASASU
GWAUFUU 4F
GWIGWIA GAGAROA 4F 5L6AA
GWIGWIA GOGOURU 2MARBLED CORAL-COD 3SEBASTAPISTES BYNOENSIS 4M406
GWIGWIA 2SP RED FISH WITH SPINES 4F
GWIGWIA 5L2AH
GWIGWIA 5L6AA
GWIOGWIO 2SP SMALL FISH 4F
GWOFALAU=GWOFALU 7KSF10/06/68X2
GWOFALU 7KSF12/06/68X3
GWOUFU 7KSF11/06/68X6
GWOUFU 7KSF12/06/68X6
GWOUFU 7KSF13/06/68X2
GWOUFU 7KSF14/06/68X2
GWOUGWOU 2CRAB WITH NO FLESH, WATERY 4F
GWOUGWOURU 4F
GWOUMUDU1 4F 5L11 6|ROUND HEAD| PORPOISE 9L11
GWOUMUDU2 5L9 6RISSO'S DOLPHIN=HARBOUR PORPOISE 9L9 10KIRIO
GWOURADA 2SP SMALL FISH CLOSE TO ISLANDS, SARDINES 4F
HAANGO 5L7AA
HAFA 2HAMILTON'S ANCHOVY 3THRISSOCLES HAMILTONI 4M63
HAFA 2WHISKERED ANCHOVY 3THRISSOCLES SETIOSTRIS 4M62
HAFA 5L7AA
HAHANGO=HAHANO 4CS
HAHANGO=HAHANO 5L1AA
HAHANO=HAHANGO 7KSF11/06/68Z10
HAKWA I MALAU 2BONE FISH 3ALBULA VULPES 4M59 5L6MATAKWA
HAKWA MALAU 5L6MATAKWA
HAKWA OOLOA 2BONE-FISH 3ALBULA VULPES 4M59
HAKWA SULI 2OX-EYE TARPON 3MEGALOPS CYPRINOIDES 4M58 5L6AA
HAKWA 5L1AA6AA6MATAKWA
HAKWA 5L6MATAKWA
HAKWA 7KSF14/06/68X2
HAKWASULA 7KSF11/06/68Y6
HALE 11R1073
HALE 5L6AA
HALE 7KFC10/06/68Y30
HALE 7KSF14/06/68Z10
HALILI 2PERIWINKLE 4W2619 5L10
HALILI 7KSF12/06/68S30
HALILI 7KSF13/06/68S150
HALILI 7KSF14/06/68S118

HALOA RAE 5L8FAFOILE
HALU BAO 5L6AA
HANA 7KSF11/06/68Z10
HANGA BORA 5L4AA
HANGA BUALAFA1 2BLACK-EYED THICK-LIP 3HEMIGYMNUS MELAPTERUS 4M303
HANGA BUALAFA2 2SWEET-LIP EMPEROR 3LETHRINUS CHRYSOSTOMUS 4M212
HANGA BUALAFA3 5L8FAFOILE
HANGA GOUKWAO 5L4AA
HANGA GWAILA 5L4AA7AAFAFOILE
HANGA GWAILA 5I4AA8FAFOILE
HANGA KEKERO 2SLING-JAW 3EPIBULUS INSIDIATOR 4M279
HANGA NI ONE 5L7AA
HANGA ULIFOLO 2BLACK-EYED THICK-LIP JUVENILE 3HEMIGYMNUS MELAPTERUS 4M303B
HANGA 11R22
HANGA 5L2AH
HANGA 5L4AA7AA8FAFOILE
HANGA 5L4AA7AA8FAFOILE
HAO LAI 5L7AA
HAOLAI 5L7AA
HATAMELA 5L1AA3AA6AA
HATAMELA 7KSF11/06/68Y16
HATAMELA 7KSF12/06/68Y10
HATAMELA 7KSF13/06/68Y8Z10
HATAMELA 7KSF14/06/68Y30
HATEBABA 5L1AA
HAU FARAMELA 2PACIFIC YELLOWFIN TUNA 3NEOTHUNNUS MACROPTERUS 4M346
HAU GELO 2LONG-JAWED MACKEREL 3RASTRELLIGER KANAGURTA 4M339
HAU GWARAFETO1 2LITTLE BONITO 3SARDA AUSTRALIS 4M348
HAU GWARAFETO2 2NORTHERN BLUEFIN TUNA 3KISHINOELLA TONGGOL 4M347
HAU KAKALE 5L6MATAKWA
HAU MALIFU 5L6MATAKWA
HAU MELA 4CS
HAU 2LITTLE TUNA 3EUTHYNNUS ALLETTERATUS 4M344 5L1FAFOILE3FAFOILE
HAU 2WATSON'S BONITO 3CYBIOSARDA ELEGANS 4M345
HAU 5L1FAFOILE
HAU 5L6MATAKWA
HAU 7KSF14/06/68X2
HAU'U 7KSF10/06/68X2
HULILI 7KSF10/06/68S30
IA 11R298,844,859,956
IA 'AAFA 5L6AA
IA A KWALO 7KFF05/05/68X
IA A KWALO 7KFF06/05/68X
IA ABE ELO 5L2AH
IA AKWALO 7KFF01/05/68Y
IA BUA 2SP OF FISH 4F 5L4AA
IA BUA 5L7AA
IA EFOE 5L6AA
IA FIFISI 2SP LARGE WHITE FISH 4F 5L4AA
IA FOFOTO 2BLUE PULLER 3CHROMIS CAERULEUS 4M280
IA FOU1 2BLUE-SPOTTED BOX-FISH 3OSTRACION TUBERCULATUS 4M472 5L4AA 8T
IA FOU2 2LONG-NOSED BOX-FISH 3RHYNCHOSTRACION NASUS 4M471 8T
IA GWARI 2SLENDER SUCKING-FISH 3ECHENEIS NEUCRATES 4F,M455 10GWAA
IA GWARI 5L6MATAKWA
IA HAHAFA 5L1AA6AA
IA I MALAU 2AUSTRALIAN PILCHARD 3ARENGUS NEOPILCHARDUS 4M77
IA IROA 5L2AH
IA KAEBURA 5L6AA
IA KEKIKIKILI 5L2AH
IA KILIKILI 2LIKE A SHARK 11R909

IA KWAKWAOA 2DE VIS, ANCHOVY 3AMENTUM DEVISI 4M66 9
IA KWAOA 2BAR-FACED WEAVER 3PARAPERCIS NEBULOSUS 4M324
IA LASI 5L6MATAKWA
IA MELA 2MANGROVE JACK 3LUTJANUS ARGENTIMACULUS 4M196,CS
IA NA FULI 5L2AH
IA NA MAILADE 2ORANGE ANEMONE-FISH 3AMPHIPRION PERCULA 4M278
IA NGATA 5L6MATAKWA
IA NGENGE 5L1AA
IA NI MALAU 2STAR-GAZER 3ICHTYSCOPUS LEBECK 4M325 5L4AA
IA RAA 2SMALL SEA CREATURE 4F
IA ROBO 2LARGE SEA CREATURE 4F
IA SASAFA 2SP. FISH 4F
IA SURI 2 COW-FISH 3LACTORIA CORNUTUS 4M473 5L4AA 8T
IA SURI 4CS
IA TEKWA 5L1AA7MATAKWA
IA TEKWA 5L7MATAKWA
IA UNA BULU 2MEDIUM-SIZED SEA CREATURE 4F
IA UTOBI 5L6MATAKWA
IA 2A FISH OR ANY SEA CREATURE 4F 10MANU, WAAWAA, II'ANA - ALL SEA CREATURES
IFIFISI 5L1AA
IFINGIDI 5L6AA
IIA RAA 2SMALL SEA CREATURE 4F
IIA ROBO 2LARGE SEA CREATURE 4F
IIA UNA BULU 2MEDIUM-SIZED SEA CREATURE 4F
IIA=IA 2A FISH OR ANY SEA CREATURE 4F 10MANU, WAAWAA, II'ANA - ALL SEA CREATU
IIROIIRO 2NAUTILUS SHELLFISH 3NAUTILUS 4W1441
ILI 2SWORDFISH CS,F 5L8FAFOILE 9C 10BASAULA, ONO,MAMALITO-NAMES FOR STAGES OF
ILI 7KSF13/06/68X4
ILI 7KSF14/06/68X3
ILO 2OYSTER 5F,W2619
IMOLA 2DE VIS' ANCHOVY 3AMENTUM DEVISI 4M66
INADI 11R989
INADI 2RED FIRE-FISH 3PTEROIS VOLITANS 4M410,F
INADI 5L6AA
INI 2OLIVE SHELL 4A2619 5L10
IROIRO 2NAUTILUS 4W2619 5L10
ISIALE 2FLUTEMOUTH 3FISTULARIA PETIMBA 4M117
ISIARAO 5L4AA
ISIKAWE 2AGAMOID LIZARD 3STELLIO STELLIO 4W41
ISIOFU 2FLUTEMOUTH 3FISTULARIA PETIMBA 4M117,F 5L7AA
ISOFU 4F
IWANOSI 7KSF11/06/68Z10
KABOU 4F
KAFISORO SP SEA SNAKE 4F
KAKABOA 2CRESCENT PERCH 3THERAPON JARBUA 4M183,F 5L1AA6AA
KAKARA BONGARE 4F
KAKARAI=KAKARI 2SP SMALL FISH SAID TO BE YOUNG OF SPECIES MUU 4F 5L7MATAKWA
KAKARI=KAKARAI 5L4AA
KAKARU 2CRAB, USUALLY LAND CRAB 4F 10KARU
KAKAURADA 5L7AA
KALUA 2BLUETAIL MULLET 3MUGIL SEHELI 4M393CS,F 5L1AA3AA7AA 9WHITE BODY, UP TO
KALUA 7KSF11/06/68Y19
KALUA 7KSF14/06/68X6
KARAI=KAKARI=KAKARAI 11R512
KARAU DIU 5L1AA
KARONGO 7KFO10/06/68S55
KARONGO 7KFO11/06/68S19
KARONGO 7KFO14/06/68S25
KARONGO 11R41
KARONGO1 2HARP SHELL 3HARPA ARTICULARIS 4W985

KARONGO2 2SCORPION SHELL 3PTEROCERAS CHIRAGRA 4W1898
KARONGO3 2GENERAL NAME FOR ANYTHING COLLECTED ON THE REEF AT LOW TIDE 4F
KASUKASU 2COCONUT CRAB 3BIRGUS LATRO 4F
KASUSU 2LOBSTER 3HOMARUS 4W1265 9C
KAU ABA 2DOLPHIN FISH 3CORYPHAENA HIPPURUS 4M188 5L1FAFOILE
KAUTABA 2SCORPION SHELL 3PTEROCERAS CHIRAGA 4W1898
KEFO 2AUSTRALIAN PILCHARD 3ARENGUS NEOPILCHARDUS 4M77,F 5L6MATAKWA
KEKEDELEO 5L4AA
KELAKELA BULU 5L7AA
KELEKELA KEKEROA 5L7AA
KELUKELO 5L4AA7AA
KEOKWEO 5L6AA
KESIKESI 2BLACKSPOT LONG TOM 3TYLOSURUS STRONGYLURUS 4M103
KEU 2CLAM 11R540
KEU 2VENERIDAE 3GEMMA GEMMA 4F,4W2272
KEUBEA TEKWA 2LONG CLAM 3MYA ARENARIA 4W408
KEUBEA 2QUAHOG OR ROUND CLAM 3VENUS MERCENARIA 4W408
KEULOLO 2SP BIVALVE MOLLUSC IN MANGROVES 4F
KIDA SP SMALL SEA CRAB NEAR MANGROVES =KIKIDA 4F 10 KIKIDA
KIKAU 2SP GASTROPOD MOLLUSC 3TROCHUS 4F
KIKI 2CLAM GIANT CLAM SHELL CLAMSHELL 4H31,30
KIKI 2TRIDACNA OYSTER 3TRIDACNIDAE 4W2197
KIKI 7KFO10/06/68S6
KIKI 7KFO11/06/68S218
KIKI 7KFO14/06/68S14
KIKI 7KSF10/06/68S10
KIKI 7KSF11/06/68S1
KIKI 7KSF12/06/68S2
KIKI 7KSF14/06/68S18
KIKII=KIKI 11R79,267,564,793,876
KIKIFIULA 4F
KIRIO 5L1FAFOILE
KIRIO 5L6MATAKWA
KIRIO 5L9 6DALL,S PORPOISE COMMERSON'S DOLPHIN 9L9 10IAGWARI, KIRAO
KIRIO 5L9 9L9 10GWOUMUDU,SARAIBINA
KIROA 2KILLER WHALE 3GRAMPUS ORCA 4H29
KOKOLA 11R908
KOKOLA 2OCTOPUS, SMALL OCTOPUS(FOX) 3OCTOPODA 4F,W1489 5L9
KOKOSU 2HERMIT CRAB IN ANY SHELL 3EUPAGURUS BERNHARDUS 4W1009
KOLO 2SHELL 3CYPRAEA TESTUDINARIA 4F
KOLO 2SP GASTROPOD MOLLUSC 3CYPRAEA TESTUDINARIA 4F
KOME1 2CONCH 3GENUS STROMBUS 4F,W462
KOME2 2CONE SHELL 3CONUS MARMOREUS 4W469,2619H40 5L10
KOME3 7KFO11/06/68S1
KOME3 7KSF13/06/68S52
KOME3 7KSF14/06/68S49
KOSO 4F
KUKO'AFUTO 2SP GASTROPOD MOLLUSC 4F
KUKULI 2SP POISONOUS FISH 4F 5L4AA6AA
KUKURU BALU 4F
KURUBULU=KUKURUBULU 11R199,232,1012,1094
KUKURUBULU 5L1AA
KUKURUBULU 5L6MATAKWA
KUKURUBULU 7KSF11/06/68X2
KUKURUMUSI 4F 5L6AA
KURU 2SHELL 3PLACOSTYLUS AND PAPUINA 4F
KURU 2SP LAND SHELL 3PLACOSTYLUS ALSO PAPUINA 4F
KUUKUU 2DRILL 3UROSALPINX CINEREA 4W674
KWADA BILI 2LIZARD 4W2619
KWAIBIA 5L6AA

KWAIGOLA 2SP RED JELLY FISH, EATEN BY TURTLES 4F 10KWAIRABA
KWAIHATE1 2MACTRA 3MACTRA LATERALIS 4W1293
KWAIHATE2 2RAZOR SHELL 4C
KWAIKWAI RAU 2TRUMPETER PERCH 3PELATES QUADRILINEATUS 4M183 5L4AA7AA
KWAKWARANGADI 4F
KWALANI BAEKWA 5L8FAFOILE
KWALEU 4F 5L4AA6AA
KWALEU 7KSF11/06/68Y8
KWALEU 7KSF11/06/68Y8A10
KWARANADI 5L7AA
KWASASU 2A WHALE 4F 10GWASASU
KWASI 2WEST INDIAN SPOTTED GROUPER 3PROMICROPS ITAIRA 4H27CS 5L6MATAKWA 9C
KWASI 7KSF11/06/68X2
KWASI 7KSF12/06/68X1
KWASI 7KSF13/06/68X1
KWE HANGA 2HANGA FISH 10HANGA 11R709
KWE IA 11R740
KWEO 5L1AA
KWERATANI 2SP MOLLUSC 4F
LAE 55L2H6AA
LAKENO 8T
LALAKWALO 5L6MATAKWA
LALASI=LASI 2LARGE-MOUTHED LEATHER-SKINNED 3CHORINEMUS LYSAN 4M239
LALASI=LASI 5L2AH6MATAKWA
LAO 2SHELL 3CONUS MARMORATUS 4F
LAOLAO 5L2AH
LASI=LALASI 2LARGE-SCALED TUNNY 3CRAMMATORYCHNUS BICARINATUS 4M354 5L3FAFOILE
LAU 5L6AA
LAUFI 11R149,325,891,926
LAUFI 2SP MOLLUSC 3TURBO PENTHOLATUS 4F 7KSF10/06/68S5 10SALILI
LAUFI 2SP MOLLUSC 3TURBO PENTHOLATUS 4F 7KSF13/06/68S5
LAUFI 2SP MOLLUSC 3TURBO PENTHOLATUS 4F 7KSF14/06/68S9
LAUSIGALE 2CONCH 4W2619 5L10
LELEKO SP FISH, DARK, TOUGH FLESH 4CS,F 9C 5L1AA6AA
LELEKO SP FISH, DARK, TOUGH FLESH 7KFF02/05/68Y
LELEKO SP FISH, DARK, TOUGH FLESH 7KFF03/05/68Y
LELEKO SP FISH, DARK, TOUGH FLESH 7KFF05/05/68X
LELEKO SP FISH, DARK, TOUGH FLESH 7KFF05/05/68Z
LELEKO SP FISH, DARK, TOUGH FLESH 7KFF06/05/68Z 9KFF06/05/68
LELEKO SP FISH, DARK, TOUGH FLESH 7KFF27/04/68Y
LELEKO SP FISH, DARK, TOUGH FLESH 7KFO10/06/68Z20
LELEKO SP FISH, DARK, TOUGH FLESH 7KSF10/06/68X4Y17Z1
LELEKO SP FISH, DARK, TOUGH FLESH 7KSF11/06/68Y21
LELEKO SP FISH, DARK, TOUGH FLESH 7KSF12/06/68X6Z1
LELEKO SP FISH, DARK, TOUGH FLESH 7KSF13/06/68X5Y6Z10
LELEKO SP FISH, DARK, TOUGH FLESH 7KSF14/06/68Y46Z20
LELEO 5L7MATAKWA
LETO 2SP FISH WITH TOUGH BROWN FLESH, COARSE EATING 4CS,F 5L6AA
LETO 5L2H
LIFOTANE=LIFOTANGE 7KSF11/06/68Y8
LIFOTANE=LIFOTANGE 7KSF11/06/68Z10
LIFOTANE=LIFOTANGE 7KSF12/06/68Y5
LIFOTANE=LIFOTANGE 7KSF14/06/68Z10
LIFOTANGE=LIFOTANE 4CS,F
LIFOTANGE=LIFOTANE 7KFO11/06/68Z40
LIFOTANGE=LIFOTANE 7KSF10/06/68Y7
LILIFU 5L4AA
LOBAA 2SP OF RED FISH 4CS,F 9C
LOFO GEREGEREA ANA=LOFOGEREA 5L11 9L11
LOFOGEREA=LOFO GEREGEREA ANA 5L11 9L11

LOI 2SNAKE 4C
LOIGWOUNA 2A SP. OF FISH 4F
LOLOSI 4F
LONGOSITO 2WATER SERPENT 11R164
LOSI 2SPONGE 4F 10LOOSI
MAA AUFISI1 2BLUE-SPOTTED ROCK COD 3CEPHALOPHOLIS CYANOSTIGMA 4M165 5L4AA
MAA AUFISI2 2CORAL TORUT 3CEPHALOPHOLIS MINIATUS 4M167
MAA AUFISI3 2FRECKLED ROCK COD 3CEPHALOPHOLIS CYANOSTIGMA 4M166
MAA KWAI 2FRINGE-FINNED TREVALLY 3CARANX RADIATUS 4M235
MAA LAFU 7KFF03/05/68Y
MAA NEBA 2RED BULLS,EYE 3PRIACANTHUS MACRACANTHUS 4M157
MAA SULUA 7KFF03/05/68Z
MAA SULUA 7KFF27/04/68Y
MADASO 2SP MOLLUSC 4F
MADOMU=MODOMU
MAEI'A 2A FISH 4F
MAELAFU 4F 5L6AA
MAELAFU 7KSF10/06/68Z10
MAELAFU 7KSF11/06/68Z20
MAELAFU 7KSF12/06/68Z10
MAETO 7KSF10/06/68Z30
MAETO FULO 5L8FAFOILE
MAETO 5L6AA
MAETO 5L8FAFOILE
MAETO 7KSF12/06/68Z20
MAETO 7KSF13/06/68Y10Z10
MAETO 7KSF14/06/68Y8Z20
MAFASI 7KFF03/05/68Z
MAFU 2SP OF SMALL RED FISH 4F 5L2AH
MAFU 2SP OF SMALL RED FISH 4F 5L8FAFOILE
MAFU 2SP OF SMALL RED FISH 4F 7KSF10/06/68Y4
MAGALI AALA 5L1AA
MAGALI AALA 5L1FAFOILE
MAGALI AALA 5L6AA
MAGALI 4F 5L1AA
MAGALI 5L6AA
MAGALI 7KFF27/04/68Z
MAGALI 7KSF10/06/68Z20
MAGALI 7KSF11/06/68Z10
MAGALI 7KSF12/06/68Y9Z20
MAGALI 7KSF13/06/68Z30
MAGALI 7KSF14/06/68Z20
MAKAKEDEA 5L1AA
MAKWAI 5L6MATAKWA
MALAGWAILA1 2PURPLE TUSK-FISH 3CHOERDON CEPHALOTES 4M293
MALAGWAILA2 2SURF PARROT-FISH FEMALE 3CALLYODON FASCIATUS 4M319B
MALAHAU 2COMMON MACKEREL 3SCOMBER JAPONICUS 4M340 5L1FAFOILE3FAFOILE6MATAKWA
MALASAU 2KINGFISH 4F
MALAUTANI 5L7AA
MALEFU=MALIFU 2SP FISH RED IN COLOUR, GOOD EATING 4F 5L4AA6AA
MALIFU=MALEFU 5L2H
MALIFU=MALEFU 7KSF10/06/68Y40
MALIFU=MALEFU 7KSF12/06/68X8Y17
MALIFU=MALEFU 7KSF13/06/68Y9
MALIFU=MALEFU 7KSF14/06/68Z10
MALITO 4CS
MALU GWAILA 5L6AA
MAMA 2SP FRESHWATER FISH 4F 5L1FAFOILE
MAMA 5L1AA
MAMADA I KAFU 5L4AA

MAMADA 2RAINBOW-FISH 3HALICHOERES 4M305,304,F 5L4AA7AA
MAMAELADE2SMAL BLUE JELLY FISH ON DEAD CORAL 4F 10KWAIRABU,KWAIGOLA
MAMALITO 2NAME FOR SWORDFISH (ILI) DURING CERTAIN STAGE OF GROWTH 4F 10ILI#
MAMALITO 2PICK-HANDLE BARRACUDA 3SPHYRAENA JELLO 4M381,CS,F 5L1FAFOILE3FAFOIL
MAMALITO 7KFC13/06/68 Y5Z5
MAMAMU 4F 5L2AH
MAMULA=EDAEDA=MAMULA 2TURRUM 3CARANX EMBURYI 4M233,F 5L1AA 9SP FISH LIKE MULI
MAMULA=EDAEDA=MAMULA 7KSF13/06/68X2
MAMULA=EDAEDA=MAMULA 7KSF14/06/68X2
MANGEO 2SP SEA SNAKE 4F
MAOSI 2SP FISH, LARGE SARDINE LIKE BUMA 4F 5L7AA
MARA DIKWALI 5L6AA
MARA I DAI 2BLUE TUSK-FISH 3CHOERODON ALBIGENA 4M295 5L6AA
MARA 4F 5L1AA
MARA 5L4AA6AA
MARA 7KSF10/06/68Y10
MARA 7KSF12/06/68X9
MARA 7KSF13/06/68X3
MARA 7KSF13/06/68Z10
MARALIKWALI 7KFF06/05/68X
MARALIKWALI 7KFF27/04/68X 9KFF27/04/68
MAREMARE 4F
MAREMARE 5L6MATAKWA
MASANGO 2SP MOLLUSC,TURBO 3TURBO MARMORATUS AND TURBO SMARAGDUS 4FW2216
MATANGAA 2A STARFISH 4F
MATASI 4F 5L6AA
MATASI 7KSF10/06/68Z10
MATASI 7KSF11/06/68Z10
MATASI 7KSF12/06/68Y9Z10
MATASI 7KSF13/06/68Y15
MATASI 7KSF14/06/68Z30
MEAMEA 2SP OF SMALL FISH IN SAND, FLATFISH 4F 5L1AA4AA7AA
MELA 2RED-BELLIED FUSILIER 3CAESIO ERYTHOGASTER 4M203,F 5L6AA7AA
MELA 7KFF03/05/68Z
MELAHAU 2RUNNER 3ELAGATIS BIPINNULATUS 4M241 5L6MATAKWA
MEMEA A ALA 2QUEENSLAND HALIBUT 3PSETTODES ERUMEI 4M439
MEMEA LA ONE1 2LARGE TOOTHED FLOUNDER 3PSEUDORHOMBUS ARSIUS 4M440
MEMEA LA ONE2 2PEACOCK SOLE 3PARDACHIRUS PAVONINUS 4M449
MEMEA LA ONE3 2SHARP-HEADED SOLE 3PHYLLICHTHYS SCLEROLEPSIS 4M452
MEMEA LA ONE4 2TWO LINED TONGUE SOLE 3CYNOGLOSSUS BILINEATUS 4M454
MEMEA 5L7AA
MENA ALITE 5L7AA
MENAMENA 7KSF12/06/68Y5
MENAMENA 7KSF13/06/68X2
MENAMENA=BA AA 2SURGEON FISH 4H86,F 9C 5L1AA3FAFOILE8FAFOILE
MISIFANIGORE 4F
MODOMU 7KSF11/06/68X2
MODOMU 7KSF13/06/68X1
MODOMU 7KSF14/06/68X1
MODOMU=MADOMU 2SP FISH FOUND IN PAIRS(IVENS) 4F 5L6MATAKWA
MOKOTORO 2CROCODILE ALLIGATOR IN CHILDREN'S LANGUAGE SEAHORSE 4W535,59 5L1AA
MOREMORE 5L6MATAKWA
MORO I HARA 4F 5L1AA
MORO I MATAKWA 5L1FAFOILE
MORO 2SP FRESHWATER FISH 4F 5L7AA
MOUA BAITA 7KFF06/05/68X
MOUA HALO 2SPANGLED EMPEROR 3LETHRINUS NEBULOSUS 4M211 5L3AA6MATAKWA
MOUA 2SP LARGE FLATTISH WHITE FISH, GOOD EATING 4F 5L1AA
MOUA 5L4AA6AA
MOUA 7KFF05/05/68Y

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MOUA 7KFO10/06/68Y20Z40
MOUA 7KFO13/06/68Y8
MOUA 7KSF10/06/68Y25
MOUA 7KSF10/06/68Z10
MOUA 7KSF11/06/68Y36
MOUA 7KSF12/06/68Y23
MOUA 7KSF13/06/68Y28Z10
MOUA 7KSF14/06/68Y45
MUETO FULO 5L8FAFOILE
MUMU=MUU 5L2H
MUMU=MUU 7KSF10/06/68X4
MUMU=MUU 7KSF14/06/68X2
MUU 11R225,319,947,1130
MUU NI FURAI 2VARIETY OF MUU 4F 5L6AA
MUU 2SP WHITE FISH ON REEF, GOOD EATING 4F 5L6AA 7KFO13/06/68Z2
MUU 7KFF27/04/68Z
MUU 7KFF28/04/68Z
MUU 7KFO10/06/68Z220
MUU 7KSF11/06/68Z40
MUU 7KSF12/06/68Z30
MUU 7KSF13/06/68Z30
MUU 7KSF14/06/68Y7Z20
MUU=MUMU 4CS 5L1AA3AA6AA
MUUMUU GALAU 2YELLOW EMPEROR 3DIPLOPRION BIFASCIATUM 4M163 5L6AA
MUUMUU LA KAFO 2YELLOW EMPEROR 3DIPLOPRION BIFASCIATUM 4M163
MUUMUU1 2HAMLET FISH 3EPINEPHELUS STRIATUS 4W975 5L6AA
MUUMUU2 2PAINTED SWEET-LIPS 3PLECTORHYNCUS PICTUS 4M209
NAARA 4CS 5L3AA
NADI 2SP FISH WITH POISONOUS SPINES 4F
NANANGALI 4F
NANARA AEEKOA 5L6AA
NANARA ABISALO 5L4AA
NANARA AU 2RED VARIETY NANARA 4F 5L4AA
NANARA BULU 2SMALL BLACK SP OF NANARA 4F 5L2AH6AA
NANARA FOUBOSO 2BLACK VARIETY NANARA 4F 5L4AA6AA
NANARA KWAO 2WHITE VARIETY NANARA 4F 5L4AA6AA
NANARA 4F 5L6AA 7KSF10/06/68Z20
NANARA 7KSF11/06/68Y12Z10
NANARA 7KSF12/06/68Z10
NANARA 7KSF13/06/68Y12Z10
NANARA 7KSF14/06/68Y7
NGARANGARA 2HAMMERHEAD SHARK 4CS
NGIDUGOLA 5L6MATAKWA
NGISUFIKORE 2RIFLE-FISH 3TOXOTES CHATAREUS 4M158 5L1AA4AA7AA
NGONGORO=NGORO 5L4AA
NGORO=NGONGORO 5L7AA
NGU=NGUU 5L6AA
NGUU=NGU 5L1AA
NGWANAASI 2SEA SERPENT 11R684
NGWANGWAESO 4CS 5L7AA
NGWANGWAKI 11R1087,1090
NGWANGWAKI 2CUTTLE FISH 3SEPIA OFFICINALIS 4W556,2619 5L7MATAKWA 8T
NGWWANGWAKI=NUTO 11R308
NGWELA INOMAE 2ABALONE 4W2619 10UBE2
NGWENGWERE=NWENWERE 7KSF11/06/68S100
NIGINIGI 5L7AA
NOFU 5L2AH
NOFU 5L6AA
2SQUID 11R86,235,308
NUTO 2SQUID 3OMMASTREPHES ILLECEBROSUS 4W2026 8T
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NUTO=NGANGWAKI 2OCTOPUS SPECIES 4F,CS 5L7MATAKWA
NWENWERE=NGWENGWERE 7KSF10/06/68S50
NWENWERE=NGWENGWERE 7KSF13/06/68S170
NWENWERE=NGWENGWERE 7KSF14/06/68S85
OA NI BORU 2CHINAMAN FISH 3LUTJANUS NEMATOPHORUS 4M194B 5L6MATAKWA
OA 5L2AH
OA 5L7AA
OA 7KSF11/06/68X6
ODO I KAFO=DENGE
ODO 2A PRAWN 4F 10ODO I KAFO=DENGE
ODORAO 2LARGE SP PRAWN 4F
OGU 2SEAWORM 3PALOLO 10ODU,NALU'OGU
OIGO 4F 5L8FAFOILE
ONO 2NAME FOR SWORDFISH (ILI) DURING CERTAIN STAGE OF GROWTH 4F 10ILI#
ONO 4CS 5L7AA
ONOLIU 5L8FAFOILE
OOA 2TOP SHELL 3TROCHUS ZIZYPHINUS 4W2172
OOA 7KSF10/06/68S40
OOA 7KSF13/06/68S55
OOA 7KSF14/06/68S30
OOTO 5L7AA
ORU 2SCRIBBLED ANGEL-FISH 3CHAETODONTOPIUS DUBOULAYI 4M269 5L1AA3AA
OU 5L6MATAKWA
OUGU 2SEA BLUBBER 3CYANEA CAPILLATA 4H33 34
RAA 5L116MATAKWA 6MANGROVE DOLPHIN 9L11
RADA AU 5L4AA7AA
RADA I MATAKWA 5L1FAFOILE
RADA 2RED SOLDIER FISH 3HOLOCENTRUM RUBRUM 4M145,F 5L1AA4AA7AA
RADA 7KSF11/06/68Z10
RADA 7KSF12/06/68Z20
RADA 7KSF13/06/68Z10
RADA 7KSF14/06/68Z10
RADAFOUBOSO 2CROWNED SOLDIER-FISH 3HOLOCENTRUM DIADEMA 4M143 5L4AA7AA
RAEMAE I MALAU 5L6MATAKWA
RAEMAE SULA 5L4AA
RAEMAE 4CS,F 4CS 5L7AA
RAGARAGA 5L1AA
RAGARAGA 5L6AA
RAGARAGA 7KSF14/06/68Z20
RAGOTAI 2SCORPION SHELL 3PTEROCERAS CHIRAGRA 4W2619 5L10
RAGOTAI 7KSF10/06/68S200
RAGOTAI 7KSF11/06/68S436
RAGOTAI 7KSF12/06/68S585
RAGOTAI 7KSF13/06/68S144
RAGOTAI 7KSF14/06/68S125
RAGOTAI2 2SHELL 3LAMBIS LAMEIS 4F
RALUA SIRU 5L6AA
RAMELA 2SEA SLUG 4W2619
RARA I MALAU 5L6MATAKWA
RARAGO 4F
RASIFOU 5L4AA
RAUALITE 4F
RAUALITE 5L6AA
REOREO 2SP MOLLUSC 3NAUTILUS 4F 5L6MATAKWA
REREO 5L1AA
RIDO BALA 2SPOTTED JAVELIN-FISH 3POMADASYS HASTA 4M207
RIDO I MATAKWA 5L6MATAKWA
RIDO 2MANGROVE JACK 3LUTJANUS ARGENTIMACULUS 4M196,CS,F 5L1AA4AA
RIDO 7KFF01/05/68X
RIDO 7KFF05/05/68X
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RIDO 7KFO10/06/68X1
RIDO 7KSF10/06/68X5
RIDO 7KSF11/06/68X6
RIDO 7KSF12/06/68X4
RIDO 7KSF13/06/68X4
RIDO 7KSF14/06/68X4
RIE 5L6MATAKWA
ROBO BA'AA=ROBO 5L11 9L11
ROBO OOLO 5L11 9L11
ROBO WALADE 5L11 9L11
ROBO 5L11 6ROUND HEAD=PORPOISE ,RIGHT WHALE DOLPHIN=HARBOR PORPOISE 9L11
ROBO=ROBO BA'AA 5L119L11
RONGO I ABA 5L7AA
ROOMAA 2SP LARGE FISH 4F,CS 5L6MATAKWA
RORA I MALAU 5L6MATAKWA
RORA1 2MOONFISH 3MENE MACULATA 4M244
RORA2 2PIG-NOSED PONY FISH, SP FISH SARDINE 3SECUTOR RUCONIUS 4F,M250
RORO FOUBOSO 5L7AA
RORO SARABUMA 5L7AA
RORO 2MOONFISH 3MENE MACULATA 4M244,F
RORO 5L6AA
RUTA 2SP MOLLUSC 3NAUTILUS 4F
RUTE 2BARNACLES 4W2619
SAEBULISI'AI 2SP MOLLUSC 3VERMETUS 4F
SAFU ONI 4CS 5L7AA
SAGAFU 5L6MATAKWA
SAIBINA 5L6MATAKWA
SAKWARI 4F 9HILL WORD FOR A FISH
SALILI 2 SP MOLLUSC 3TURBO PETHOLATUS 4F
SANGA 4F
SANGATA 2DOLPHIN FISH 3CORYPHAENA HIPPURUS 4M188 5L1FAFOILE
SAOGORA 2FIGURED LEATHER-JACKET 3OSBECKIA SCRIPTA 4M469
SAOGORO 2BLACK-FINNED TRIPLE-SPINE 3TRIACANTHUS BIACULEATUS 4M457 5L3AA
SARAIBINA 5L9 9L11
SASAGORE 5L2AH
SASAOGORA1 2BEAKED LEATHER-JACKET 3OXYMONACANTHUS LONGIROSTRIS 4M467
SASAOGORA2 2FAN-BELLIED LEATHER-JACKET 3MONACANTHUS CHINENSIS 4M465
SASAOGORA3 2LEATHER-JACKET 4M465,467,469
SATAMELA 2SP OF REEF FISH 4F
SAU 4F
SAUKEDO 5L4AA
SEGO=SEGOSEGO 5L2AH
SEGOSEGO=SEGO 2WOLF HERRING,SP OF LONG THIN FISH 3CHIROCENTRUS DORAB 4F,M61
SIFALA 7KSF11/06/68S100
SIFALA'A 7KSF12/06/68S60
SIFALA'A 7KSF13/06/68S53
SIFALA'A 7KSF14/06/68S32
SIFILA'A 7KSF10/06/68S40
SIGILI 2BOAT SHELL 4W2619
SIKIFAIFU 5L7AA
SINOLO 4F
SINU 4F 7KSF13/06/68Y18
SISI DAI 2FLAT-TAILED TRIGGER-FISH 3ABALISTES STELLARIS 4M460 5L3FAFOILE8FAFO
SISIAFUFU 2SP MOLLUSC 4F
SISIFO 2DIAMOND FISH 3MONODACTYLUS ARGENTEUS 4M191 5L3AA6AA
SISILE 2SP VERY SMALL MOLLUSC 4F
SISILE1 2BARNACLES CFRUTA 4F
STOMIKAFO 5L1AA
SUKA I OLA1 2MITRA 3MITRA EPISCOPALIS 4W1385 9TO BORE HOLES IN CANOE PLANKS
SUKA I OLA2 2TEREBRA 3TEREBRA TIGRINA 4W2129 9TO BORE HOLES IN CANOE PLANKS

SUKURU 5L4AA
SUKURU 5L8FAFOILE
SULA KWAKIO 2FEATHER-FIN BULL-FISH 3HENIOCHUS ACUMINATUS 4M268 5L4AA7AA6AA
SULA KWAKIO 5L2AH
SULA MELA 5L4AA7MATAKWA
SULAMELA 5L6MATAKWA
SULIBU 5L6AA
SUNGATA 5L6MATAKWA
SURI I MATAKWA 2CHINAMAN FISH 3LUTJANUS NEMATOPHORUS 4M194A 5L3FAFOILE6MATAKW
SURU AFIO 5L6AA
SURU AKALO 5L6AA
SURU AKWARO 5L6AA
SURU GOU 2COLLARED SEA BREAM 3GYMNOCRANIUS AUDLEYI 4M215 5L3AA6AA
SURU HALO 5L2H
SURU KEDEA=SURUKEKEDEA 5L4AA
SURU KEKEDEA=SURU KEDEA
SURU KEKERO 2YELLOW TAILED EMPEROR 3LETHRINUS MAHSENA 4M210
SURU 2SMALL SP OF REEF FISH 4CS,F 5L1AA6AA
SURU 7KFF02/05/68Y
SURU 7KFF03/05/68Y
SURU 7KFF27/04/68Z
SURU 7KFF28/04/68Z
SURU 7KFF29/04/68Z
SURU 7KFO10/06/68X1
SURU 7KFO11/06/68Z10
SURU 7KFO13/06/68Z3
SURU 7KSF10/06/68Y3Z1
SURU 7KSF12/06/68Y31
SURU 7KSF13/06/68Y6Z20
SUSU'AU 2SP MOLLUSC,LIMPET 4F
SUSUBORA 5L11 6MANGROVE DOLPHIN 9L11
SUSUBORA 5L6MATAKWA
SUSUBU 2COCKROACH 3BLATIDAE 4W
SUSUKA I OLA1 2MITRA SHELL 3MITRIDAE 4W1385
SUSUKA I OLA2 2TEREBRA SHELL 3TEREBRA TIGRINA 4W2129
SUSUKA I OLA3 2TEREBRA 4W2619 5L10
SUSURI=SURI 11R151
TABANGARU 2MUREX 3MUREX ERINACEUS 4W1423
TAEKEA 2OLIVE SHELL 3OLIVA PORPHYRIA 4W1500
TAFIRIOGU 5L7AA
TAFUIRADA KWAKWAOA 2YELLOW BANDED HUSSAR 3LUTJANUS AMABILIS 4M199
TAFUIRADA 2RED EMPEROR 3LUTJANUS SEBAE 4M198 5L6MATAKWA
TAFULU 2SP MOLLUSC 4F
TAGAFU 5L1FAFOILE6MATAKWA 8T
TAIFANU 5L7MATAKWA
TAIFE SORO 5L7MATAKWA
TAIFE 5L11 6DOLPHIN 9L11
TAKALADE 2TRIDACNA CLAM 3TRICADNA GIGAS 4H31,W2619 9C
TAKWALAO 11R967,1013
TAKWALAO 2SP OF REEF FISH 4F 5L8FAFOILE
TAKWALAO 7KSF11/06/68Y11
TAKWALAO 7KSF12/06/68Z10
TAKWANI BEROBERO 2STARFISH 4F
TALA=TATALA 11R189,1009
TALA 2SEA URCHIN 3DIADEMA SETOSUM 4H50
TALE SAIA 5L2H
TARA BUMA 2MOONFISH 3MENE MACULATA 4M244
TARA KWAOA 5L11 9L11
TARA 4F 5L2AH
TASO=TATASO 4CS

TATAKALADE 2SP MOLLUSC WITH COLOURED FLESH 3TRIDACNA 4W2619 5L10
TATASO=TASO 2HAIRBACK HERRING 3NEMATALOSA COME 4M68
TATASO=TASO 5L2AH6AA
TAUTI 4CS 9C
TAUTU 11R191,312,995
TAUTU 2PORCUPINE FISH 3TRAGULICHTHYS JACULIFERUS 4M483 8T
TE KESI DO 2SP COCKLE CF GOGORI (USED FOR SHAVING) 3PITAR 4F
TELE 5L6AA
TEREUO 5L7AA
TIKI 7KSF10/06/68S20
TOBAU 5L2H 8T
TOBAU 5L6MATAKWA
TOKI 11R1108
TOKI 5L7AA
TOLOUBU 5L6MATAKWA
TOU MAANA AFE 4CS 9BIRD SPECIES
TUTU 7KSF10/06/68S100
U BORA 2A SP OF U CF LOKE 4F
U 2SP SEA EEL 4F
UA FOU 2SP OF LARGE SEA CRAB 4F
UA 2GENERAL TERM FOR A CRAB CF ALMANGO,KARU,NGUDA 4F
UALA 4C 9C
UASUU=TATAFELA 2VERY LARGE REEF CRAB, GOOD EATING 4C,F 9C
UBE1 2SNAIL 4W2619 5L10
UBE2 2SP MOLLUSC ABALONE CF NGWELA INOMAE 3HALIOTIS 4F 10NGWELA INOMAE
UGU 4CS
UGWANE 7KSF10/06/68X1
UGWANGO=UGWANO 5L1AA
UGWANGO=UGWANO 5L6MATAKWA
UGWANGO=UGWANO 7KFO13/06/68Y3
UGWANO=UGWANGO 7KSF12/06/68X3
UKA 4F
UKAUKA 5L6AA
ULA 5L6MATAKWA
ULAFO 7KFO13/06/68Y2
ULAFU A ALA 2HUMP-BACKED ROCK COD 3CROMILEPTES ALTIVELIS 4M176
ULAFU AFILU 2ESTUARY ROCK COD 3EPINEPHELUS TAUVINA 4M171
ULAFU BEBERO1 5L4AA7AA
ULAFU BEBERO2 2GROPER 3EPINEPHELUS LANCEOLATUS 4M172
ULAFU BEBERO3 2HONEY COMB ROCK COD 3 EPINEPHELUS MERRA 4M173
ULAFU BERA=ULAFU BORA 5L7AA
ULAFU BORA=ULAFU BERA 2PIKEY BREAM 3MYLIO BERDA 4M222
ULAFU BULU 2PIKEY BREAM 3MYLIO BERDA 4M222
ULAFU GOUBU 5L8FAFOILE
ULAFU HAAGA 5L4AA7AA
ULAFU HAOLAI 2WHITE-LINED ROCK COD 3ANYPERODON LEUCOGRAMMICUS 4M175
ULAFU KEKERO 2BLACK-TIPPED ROCK COD 3EPINEPHELUS FASCIATUS 4M170
ULAFU NGUNGU 5L7AA
ULAFU RAFU 5L4AA7AA
ULAFU1 2SPECKLED PUG 3TANDYA MACULATA 4M323,CS 5L1AA4AA 8T
ULAFU2 2SP LARGE FISH UP TO 6 FT. LONG, BROWN OR BLUE SPOTS, GROPER 3EPINRPHE
ULAMU 2ROCK FLAG-TAIL 3KUHLIA RUPESTRIS 4M148
ULIMU 5L7AA
ULUMAEO 2KELP SEA PERCH 3LUTJANUS COATESI 4M202 5L6MATAKWA
ULUMUU 2SPOTTED JAVELIN-FISH 3POMADASYS HASTA 4M207
ULUSIAI 5L6MATAKWA
UMARI 2SP MOLLUSC, BLACK-LIPPED PEARL 4F 7KFO11/06/68S9
UME AKWEO 5L8FAFOILE
UME BURO 5L8FAFOILE
UME 11R1004

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JME 2BROWN UNICORN FISH 11R420,383
JME 2BROWN UNICORN FISH 3NASO UNICORNIS 4M331,F 5L3FAFOILE8FAFOILE
JME 7KSF10/06/68X11Y3
JME 7KSF11/06/68X9
JME 7KSF12/06/68/X4
JME 7KSF13/06/68X15
JME 7KSF14/06/68X11
JMEA1 2GIANT THREADFIN 3ELEUTHERONEMA TETRADACTYLUM 4M400 5L1AA
JMEA2 2HAMILTON'S ANCHOVY 3THRISSOCLES HAMILTONI 4M63
JMEA3 2THREADFIN 3POLYNEMUS 4F,M460,402,403 5L1AA
JMEA4 5L2AH
JMEUME 5L8FAFOILE
JNANASI=UNASI 5L6AA
JNASI=UNANASI 7KFO10/06/68X1Y4 9KFO10/06/68
JNASIBALE 5L4AA
JNGADA 5L6MATAKWA
JNU UNU DOU'I ALO 2FLAT-SIDED GARFISH 3HEMIRAMPHUS WELSBYI 4M109 5L3AA
JNU UNU O OTO 2SPOON-FIN GARFISH 3ZENARCHOPTERUS DISPAR 4M110
JNU UNU TAMARA 2BLACK-BARRED GARFISH 3HEMIRAPHUS FAR 4M108
JNU UNU 2GARFISH 4M,F 5L1AA
JNU UNU 5L7AA
JNU UNU 7KSF10/06/68Z10
JNU 2IGWANA 4W2619
JNUBULU 11R906
JNUBULU 5L116MATAKWA 6COMMON DOLPHIN 9L11
JNUDOLA 5L7AA
JNUDOLA 7KFO13/06/68Y4Z20
JNUDOLA 7KSF11/06/68X7
JNUDOLO 5L2H
JRA GWAUBOU 2SP CRAYFISH IN ROCKS 4F
JRA NI ONE 2SP SMALL CRAYFISH IN SAND 4F 5L7AA
JRA 2CRAYFISH 4F 10DENGE
JRAFOU1 2LANGOUSTE 4L591 5L8FAFOILE
JRAFOU2 2SPINY LOBSTER 3PALINURUS VULGARIS 4W1265
JRUBULU 5L6MATAKWA
JRUGWOU 2SP VERY LARGE GREEN AND BLACK CRAYFISH ON OUTER REEF, RED ANTENNAE 4
JSU ONE1 2HASSELT'S SPRAT 3DUSSUMIERIA HASSELTII 4M70 5L4AA7AA
JSUFATA=USUUSUFATA 5L7AA
JSUUSUFATA=UAUFATA 5L4AA7AA
JSUUSUFATA=USUFATA 5L4AA7AA
JUFIAU 5L6MATAKWA
WANE ASI 2SEA SNAKE 4F
WAWAKI 2SP OCTOPUS 4F
WAWARI 4F
WEREWERE 2SP MOLLUSC 3CONUS 4F


$COPY *SKIP
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APPENDIX II

LAU NAME	PLATE TYPE	PLATE NO.	FISH NO.	COMMENT
	CO	55	400	A RIVER FISH
'AGAFOLA	BW	39	246	
AIFATARAO	BW	59	436	
AIFATARAO	BW	64	491A	491B TOP VIEW
AIFATARAO	CO	61	431	
AKWA'AKWA	BW	51	355	
AKWANGO	BW	36	208	
AKWANIABA	CO	19	196	
AKWANIABA	CO	20	198A	JUVENILE
ALAHA OR ALASA	CO	07	142	
ALASA OR ALAHA	CO	07	142	
ALATE BARO	CO	30	235	
ALI UBERE	CO	31	236	
ALIA'I KAFO	CO	08	148	
ALINGA	BW	49	350A	JUV.NO NAME GIV FOR ADULT
ALINGA	BW	50	352A	JUVENILE
ALINGA	BW	50	352B	ADULT
ALUKWAGA	BW	38	240	
ALULU	BW	30	146	
ALUSA	CO	06	112	
ANGAFA	CO	45	297	
ANGAFA HANGA	CO	45	303A	JUVENILE
ANGAFA HANGA	CO	45	303B	ADULT
ANGILI	BW	50	353	
ARADO	BW	19	079	
AREARE GOFALA	CO	44	295	
AREARE KEDEA	CO	44	294	
BA'AA HAULA	CO	54	382	
BABALI	CO	48	319A	MALE
BABALU BUAMENA	CO	65	460	
BAEKWA	BW	02	001	
BAEKWA	BW	02	002	
BAEKWA	BW	04	005	
BAEKWA	BW	04	006	
BAEKWA	BW	04	007	
BAEKWA	BW	05	008	
BAEKWA	BW	05	009	
BAEKWA	BW	05	010	
BAEKWA	BW	05	011	
BAEKWA	BW	05	012	
BAEKWA	BW	05	013	
BAEKWA	BW	06	014	
BAEKWA	BW	06	015	
BAEKWA	BW	06	016	
BAEKWA	BW	06	017	
BAEKWA	BW	06	018	
BAEKWA	BW	08	025	
BAEKWA	BW	08	026	
BAEKWA	BW	10	031	
BAEKWA	BW	10	032	
BAEKWA	BW	10	033	
BAEKWA	BW	11	034	
BAEKWA GOULO	BW	07	019	
BAEKWA ILI	BW	03	003	
BAEKWA ILI	BW	03	004	
BAEKWA LETO	BW	07	021	

BAEKWA LETO	BW	07	022	
BAEKWA LETO	BW	07	023	
BAEKWA LETO	BW	09	030B	
BEBE	CO	38	266	
BEBE	CO	39	269	
BEBE ADEKWALAO	CO	36	261	
BEBE FAKASUSU	CO	36	262	
BEBE GOGOA	CO	37	265	
BEBE SULUKWAKIO	CO	35	258	
BEBE'I FURAI FONU	CO	37	263	
BELAFA	BW	46	326	
BERAGWASU	CO	49	328	
BERAKAI	CO	09	149	
BIBILA	BW	32	154	
BIBILA	BW	55	398	
BIBILA	CO	9	150	
BIBILA DOU	BW	33	161	
BILAU'I MALAU	CO	14	174	
BINIMALAU	CO	49	325	
BO'E	BW	62	476	
BO'E NI ALO	BW	62	782	
BOKOFU	BW	25	110	
BOKOFU	BW	25	111	
BOKOFU NIDUBOLA	BW	24	102	
BOKOFU REREO	BW	24	105	
BOKOFU REREO'I KAFO	CO	05	103	
BORABORA	CO	29	232	
BUBU BABALU	BW	62	459	CONFLICT:FAKAGOLA
BUBU KEKEDEA	CO	66	462	
BUBU'I DAI	CO	65	458	CONFLICT:SISIDAI?
BUBUKORU	BW	51	357	
BUBULU	CO	66	461	
BURASI OR AMERA	CO	48	319A	CONFLICT:BABALI
DALUMA	BW	62	468	
DALUMA	BW	62	474	
DALUMA	CO	70	477	
DALUMA	CO	70	479	
DALUMA	CO	71	480	
DALUMA	CO	71	481	
DALUMA'I SURU	BW	62	475	
DALUMA'I SURU	BW	62	478	
DAMULI KOA	BW	33	178	
DIADIA	BW	47	338	
DORU	CO	59	A	
DORU	CO	59	426	
DORU NI ONE	CO	60	427	
DOU	BW	30	141	
DOU	CO	04	66	
EDAEDA	BW	38	237	CONFLICT:BILU?
EDAEDA ALI	1IN.BW	38	237	
EDAEDA UGU'UGU	8IN.BW	38	237	
ELUELV	BW	39	245	
FAERO	CO	11	164	
FAERO	CO	18	195B	ADULT
FAKAGOLA	BW	62	459	CONFLICT:BUBU BABALU ?
FALATA	CO	50	335	
FALI	BW	14	044	
FALI	CO	01	43A	
FALI	CO	01	43B	
FALI	CO	02	47	

FALI	CO	02	48	
FALI MANU	BW	15	052	
FILUFILU	CO	50	337	
FOFOLA'ABE	CO	40	275B	ADULT
FOLA'ABE	CO	40	275A	JUVENIE
FOUKWAI	BW	39	247	
FUASA NI AFU'U	BW	28	131	
FUASA NI AFU'U	BW	28	134	
GAFAU	CO	34	254	CONFLICT:GWARI TALINE?
GANALE	BW	30	144	
GANALE 2	CO	08	145	
GERU	CO	55	392	
GERU'I KAFO	CO	54	383	
GOGOURU	BW	64	495	
GOGOURU ABAKOA	BW	64	494	
GOGOURU ABAKOA MOULU	BW	64	496	
GOGOURU GWIAGWIA	BW	64	497	
GOGOURU GWIAGWIA	CO	57	406	
GOUGOURADA	BW	17	064	GOUGOURADA=GOGOURADA?
GOUGOURADA	BW	55	399	
GOUGOURADA	CO	05	77	
GOUGOURU	BW	58	417	
GWANGOSI	CO	23	205	
GWARI CHECHE	CO	34		CH ???
GWARI TALINE	CO	34	254	CONFLICT:GAFAU?
GWARIGWARI	BW	61	456	
GWARIO	CO	22	201	
GWIAGWIA	BW	58	416	
GWIAGWIA GWEGWE	BW	57	404	GWIAGWIA AND/OR GOUGORU?
GWIAGWIA INADI	BW	57	411	
GWIAGWIA NGWANGWAESO	BW	57	407	
HAFA	BW	17	067	
HAKWA	BW	17	057	
HAKWA	CO	03	59	
HAKWA SULI	CO	03	58	
HALE	CO	21	200B	ADULT NO NAME GVN FOR JUV
HANGA 'IA HAHAFA	BW	45	310	HANGA? NOT CERTAIN
HANGA BUBULU	BW	45	311	
HANGA GWAILA	BW	45	315	
HANGA NI ONE	BW	45	312	
HANGA'I MALAU	CO	47	313	
HAU	BW	48	343	
HAU ?	CO	51	339	
HAU FARAMELA	CO	52	346	
HAU GELA	CO	51	344	
HAU GWARAFETA	CO	51	342	
IA FOU	CO	69	471	COLOUR DIFF MARKED 471 472
IA FOU	CO	69	472	BUT SIMILAR MORPHOLOG.
IA HAHAFA	BW	59	433	
IA KILIKILI	BW	35	189A	JUV.NO NAME GVN FOR ADULT
IA SURI	CO	70	473	
ILI	CO	54	381	
INADI	CO	58	410	
ISIALE OR ISIOFU	CO	06	117	
ISIOFU OR ISIALE	CO	06	117	
KAKABOA	BW	34	185	
KAKABOA	CO	16	183	
KALUA	BW	55	391	
KALUA	BW	56	396	
KALUA	BW	56	397	

KALUA	CO	55	393	
KALUA GOMA NI ONE	BW	54	386	
KALUA GOMA NI ONE	BW	54	388	
KALUA GOMA NI ONE	BW	55	389	
KALUA GOMA NI ONE	BW	55	394	
KALUA UNU TADA	BW	55	395	
KAU'ABA	CO	16	188	
KEFA	CO	05	70	
KEFO	BW	17	069	
KILAKILA	BW	43	287	
KUBULI	BW	46	330	
KWAIKWAIRAU	CO	19	197	NOT ARAGWALA BEC OF SPOT
KWAKWARA NADI	BW	20	087	
KWAKWARA NADI	BW	34	182	
KWALIU	BW	43	289	
KWASI MALAU	CO	53	358	
KWEO	BW	33	169	
LALAKWALO	BW	38	231	
LASILASI	CO	03	61	
LASILASI	CO	32	239	
LELEKO	BW	35	194	SIM SEEMS MORPHOL:221 222
LELEKO	CO	28	221	
LELEKO	CO	29	222	
MA'AUFISI	CO	12	166	
MA'AUFISI	CO	12	167	
MAELAFU	BW	46	317	
MAETO	BW	46	329	
MALADI	CO	42	278	
MALOGWAILA	CO	48	319B	FEMALE
MAMADA	CO	46	304	
MAMADA	CO	49	324	
MAMADA 'IA KEKEDEA	BW	44	298	
MAMADA ENO	BW	44	301	
MAMADA HANGA	BW	44	302	
MANEBA	CO	10	157	
MEAMEA	BW	60	441	
MEAMEA	BW	60	444	
MEAMEA	BW	60	445	
MEAMEA	BW	60	446	
MEAMEA	BW	60	447	
MEAMEA	BW	61	448	
MEAMEA	BW	61	450	
MEAMEA	BW	61	451	
MEAMEA	CO	63	449	
MEAMEA	CO	63	452	
MELA	CO	22	203	
MELA	CO	32	242	NO MORPHOLOG SIM TO 203
MELA	CO	42	280	
MELA	CO	42	283	
MEMELA	CO	32	241	
MODOMU	CO	30	233	
MOUA	BW	46	318	
MOUA HALO	CO	15	175	
MUMU	BW	37	227	MUMU=MUUMUU?
MUUMUU	CO	24	209	
NANARA	BW	47	333	
NANARA BULU	BW	47	334	
NGISUFIKORE	CO	10	158	
NGWASUSUI	BW	23	101	
NOFU	BW	63	489	

NORU NI ONE	CO	53	363	DORU NI ONE ?
NUTO	BW	24	106	
O'OTO'I KAFO	CO	06	110	
OOA	CO	18	195A	JUVENILE
RADA	CO	07	143	
RAU'ALITE	CO	20	198B	ADULT
RORO	BW	39	251	
RORO 1	CO	33	244	NO. 1 GIVEN BY ALUTA
RORO 2	CO	33	250	NO.2 GIVEN BY ALUTA
SAFU ONI	BW	39	249	SAFU ONI=SAFU ONE?
SASAOGORE	CO	68	465	COLOUR DIFF MARKED 465,7,9
SASAOGORE	CO	68	467	BUT SIMILAR MORPHOLOG.
SASAOGORE	CO	69	469	
SASAU GORE	CO	64	457	
SISIDAI	BW	62	466	
SISIDAI	CO	65	458	CONFLICT:BUBU'I DAI?
SISIFO	CO	17	191	
SISIFO	CO	31	238A	JUVENILE NO ADULT SHOWN
SULAKWAKIO	CO	38	268	CONFLICT:TATAFIRIOGOU?
SULU KWAKIO	BW	47	332	
SURU	CO	26	215	FISH LIST ID AS MOUA HALO
SURU FOTOBALA	CO	26	213	
SURU GOU	CO	25	210	
SURU HAOLAI	CO	25	211	
SURU KEKEDEA	CO	26	212	
SURU TAABOU	BW	36	217	
SURU'I MATAKWA	CO	27	219	
TAIFESORO	BW	12	035	CONFLICT:KAIFESORO?
TAIFESORO	BW	12	037	
TAIFESORO	BW	12	038	
TAIFESORO	BW	12	039	
TAMARA	CO	06	108	
TATAFIRIOGOU	CO	38	268	CONFLICT:SULAKWAKIO?
TATASO	CO	04	68	
TAUTU	BW	63	484	
TAUTU	CO	71	483	
UFI'UFI AU	BW	26	118	
ULAFU	CO	13	168	
ULAFU	CO	48	323	INFO FROM FISH LIST
ULAFU 'A'ALA	CO	15	176	
ULAFU AFILU	CO	13	171	
ULAFU BEBERO	CO	14	173	
ULAFU BULU	BW	32	160	
ULAFU HAHAGA	CO	57	408	
ULAFU KEKERO	CO	13	170	
ULUMAIO	CO	22	202	
UME	CO	50	331	
UMEA	CO	03	62	
UMEA	CO	04	63	
UMEA	CO	56	402	
UNASI	CO	28	220	
UNGADA	BW	38	238	
UNU'UNU DO'I ALO	BW	24	107	
UNU'UNU DOO'I ALO	CO	06	109	
USU'USU ONE	BW	26	116	
U'U	BW	21	094	
U'U	BW	23	097	
U'U	BW	23	098	
U'U	BW	23	099	
U'U	BW	23	100	

APPENDIX III

Key to some additional fish named by Lau informants belonging to upper level taxon 'ia.

1a.	Clsss Name:	mamula
	Fish Name:	edaeda
	Biological Identification:	Ulua mandibularis (Family: Carangidae; Sub-Family: Caranginae)
	Common Name:	Cale-Cale Trevally
	Size:	13.1 inches
1b.	Class Name:	mamula
	Fish Name:	uugu
	Biological Identification:	Ulua mandibularis (Family: Carangidae; Sub-Family: Caranginae)
	Common Name:	Cale-Cale Trevally
	Size:	10.5 inches
2.	Class Name:	suru
	Fish Name:	suru akwaro
	Biological Identification:	Family: Lutjanidae; Sub-Family: Lethrininae; genus unknown
	Common Name:	unknown
	Size:	9.6 inches
3.	Class Name:	bubu
	Fish Name:	bubukwao
	Biological Identification:	Family: Balistidae
	Common Name:	unknown
	Size:	6.0 inches
4.	Class Name:	unknown
	Fish Name:	mela
	Biological Identification:	unknown
	Common Name:	unknown
	Size:	6.0 inches
5.	Class Name:	muu
	Fish Name:	muu sio
	Biological Identification:	unknown
	Common Name:	unknown
	Size:	8.4 inches

6. Class Name: ooa
   Fish Name: hahango
   Biological Identification: Family: Lutjanidae; Sub-Family: Lutjaninae; genus unknown
   Common Name: unknown
   Size: 7.4 inches

7. Class Name: unknown
   Fish Name: a'alano
   Biological Identification: unknown
   Common Name: unknown
   Size: 7.2 inches

8. Class Name: unknown
   Fish Name: falata
   Biological Identification: Siganus lineatus
   Common Name: Golden-lined spinefoot (Family: Acanthuridae)
   Size: 13.4 inches

9. Class Name: unknown
   Fish Name: leto
   Biological Identification: unknown
   Common Name: unknown
   Size: 10.4 inches

10. Class Name: kuhurubulu
    Fish Name: kuhurubulu rarasifou
    Biological Identification: unknown
    Common Name: unknown
    Size: 12.9 inches

11. Class Name: ulafu
    Fish Name: haolai
    Biological Identification: Family: Sewanidae: genus unknown
    Common Name: unknown
    Size: 13.2 inches

12. Class Name: unknown
    Fish Name: hale
    Biological Identification: Lutjanus malabricus; Family: Lutjanidae
    Common Name: unknown
    Size: 10.0 inches

13. Class Name: kalua
Fish Name: kalua
Biological Identification: Family: Muglidae; genus unknown
Common Name: unknown
Size: 15.5 inches

14. Class Name : bubu
Fish Name: daluma
Biological Identification: Family: Balistidae: genus unknown
Common Name: unknown
Size: 20 inches

15. Class Name: muumuu
Fish Name: muumuu galau
Biological Identification: Family: Lutjanidae: Sub-Family: Nemipterinae; genus unknown
Common Name: unknown
Size: 20 inches

16. Class Name: mara
Fish Name: mara ngwangwao
Biological Identification: Family: Callyontidae; genus unknown
Common Name: unknown
Size: 10 inches

17a. Class Name: suru
Fish Name: surukekero
Biological Identification: Family: Lutjanidae; Sub-Family: Lethrininae; genus unknown
Common Name: unknown
Size: 7.6 inches

17b. Class Name: raemae
Fish Name: raemae bara
Biological Identification: unknown
Common Name: unknown
Size: 8.3 inches

18. Class Name: unknown
Fish Name: leleko
Biological Identification: Family: Sparidae; genus unknown
Common Name: unknown
Size: 17.2 inches

Other marine organisms -- taxonomic status undetermined -- see text.

1. Lau Name: ʉna litiu
   Common Name: horseshoe crab
   Biological Identification: unknown
   Class: karu; taxonomic status undetermined

2. Lau Name: ura fou
   Common Name: crayfish
   Biological Identification: unknown
   Class: ura; taxonomic status undetermined

1A

1B

PLATE 1

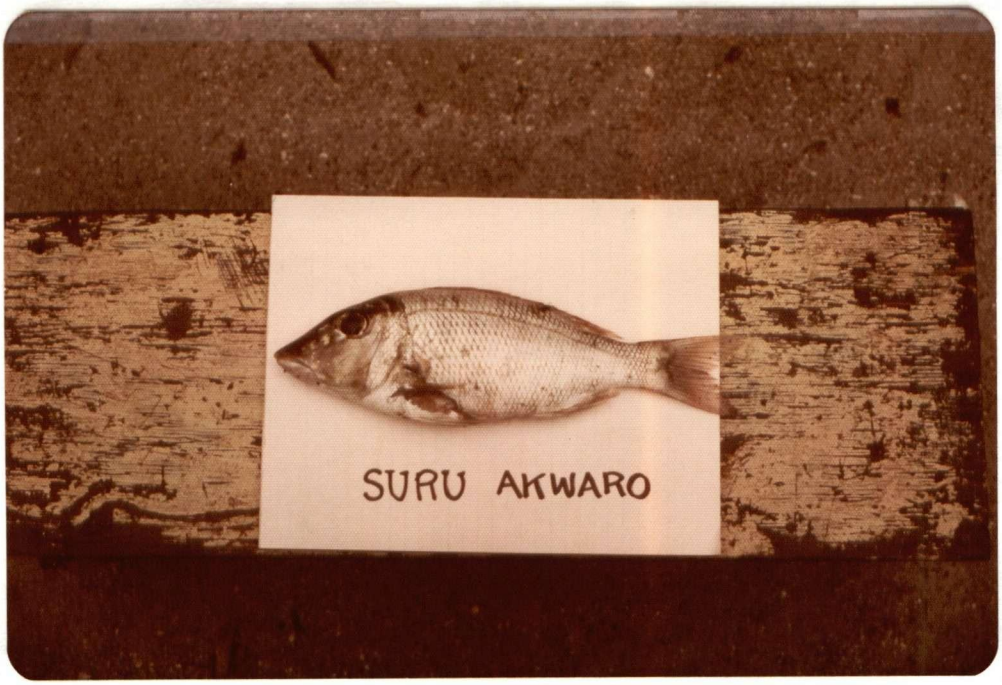

PLATE 2

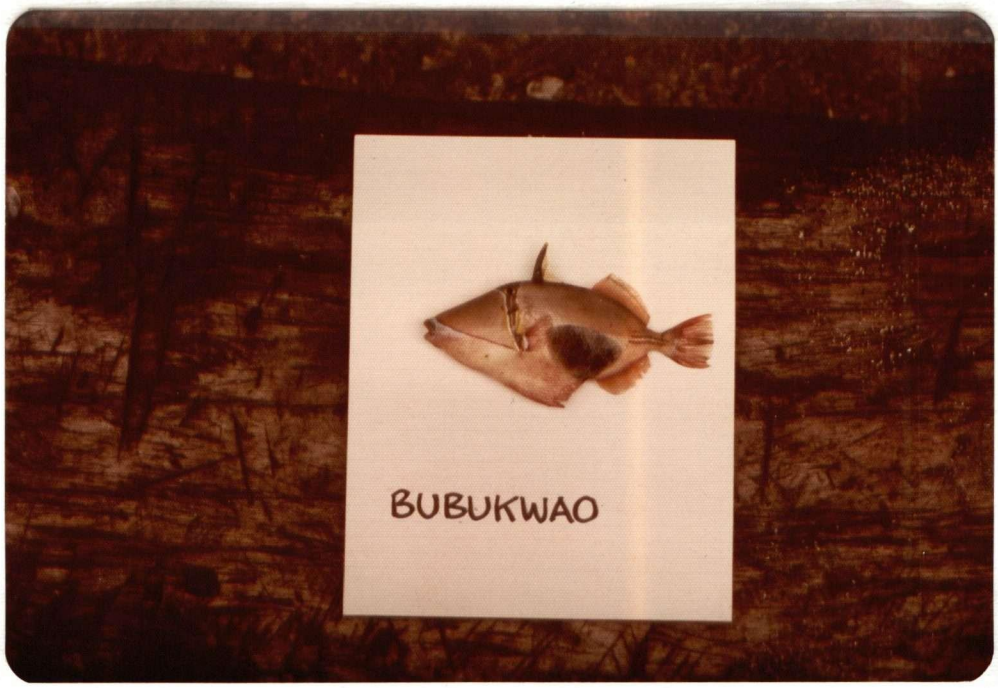

PLATE 3

PLATE 4

PLATE 5

PLATE 6

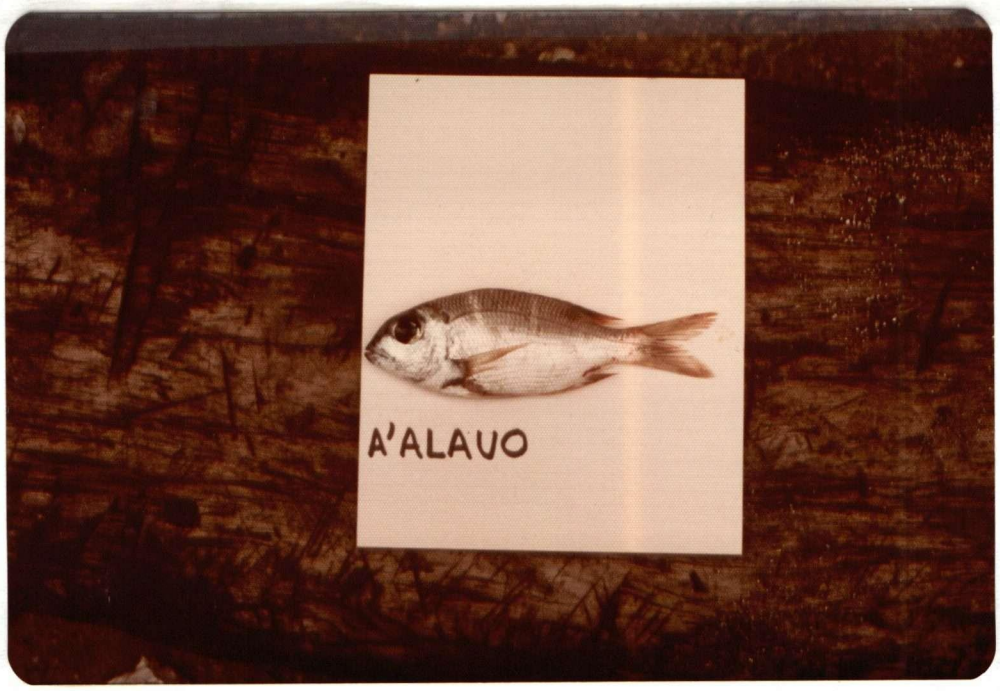

PLATE 7

PLATE 8

PLATE 9

PLATE 10

PLATE 11

PLATE 12

PLATE 13

PLATE 14

PLATE 15

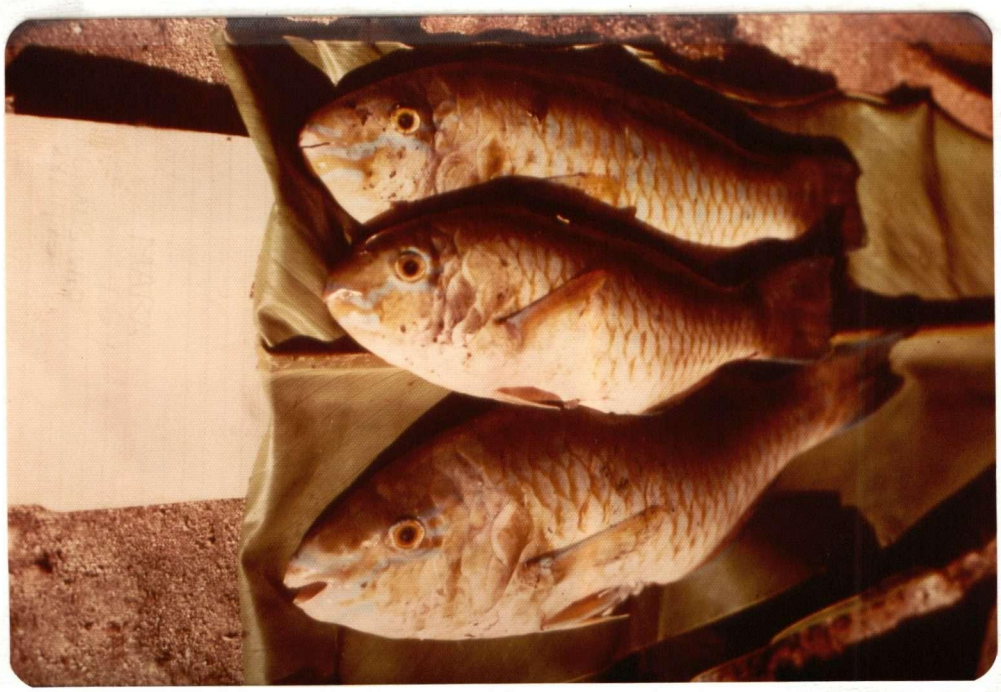

PLATE 16

17A

17B

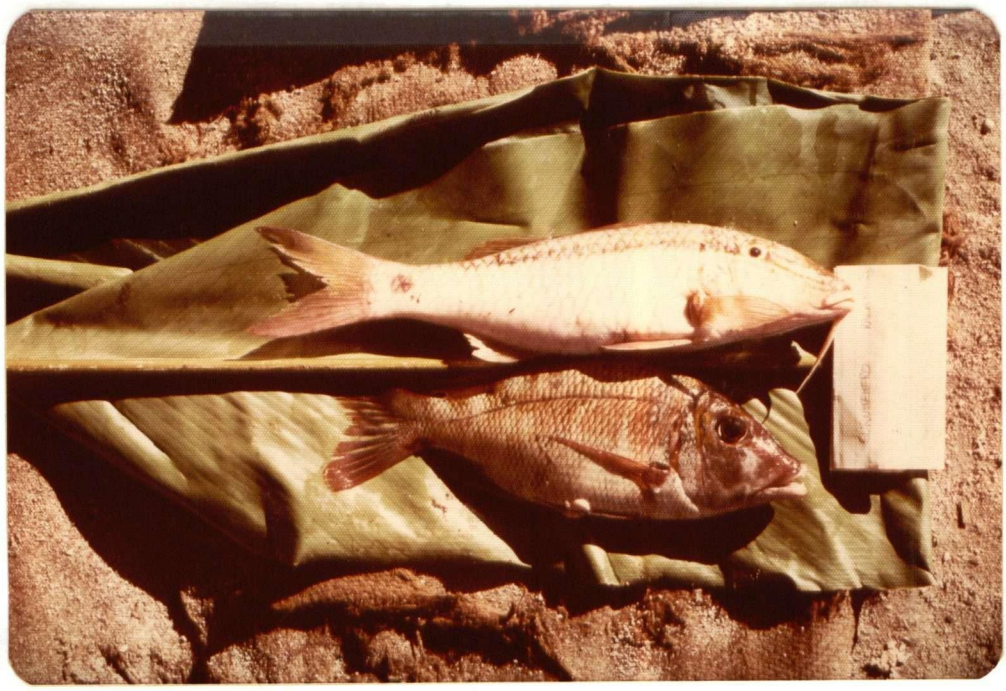

PLATE 17

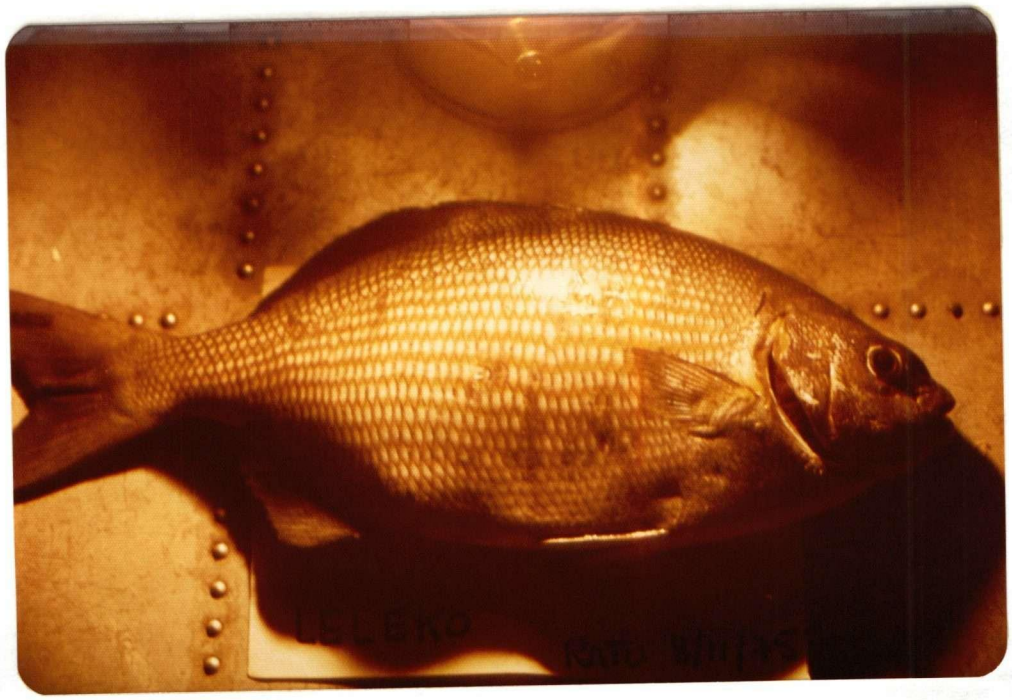

PLATE 18

OTHER MARINE ORGANISMS

TAXONOMIC STATUS UNDETERMINED

PLATE 1

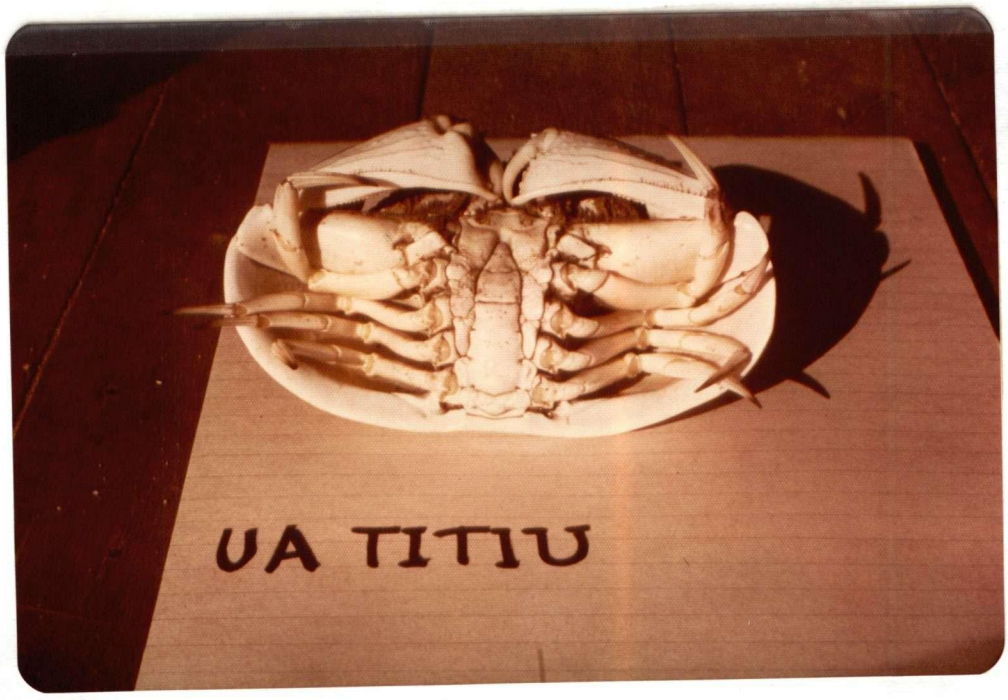

PLATE 1

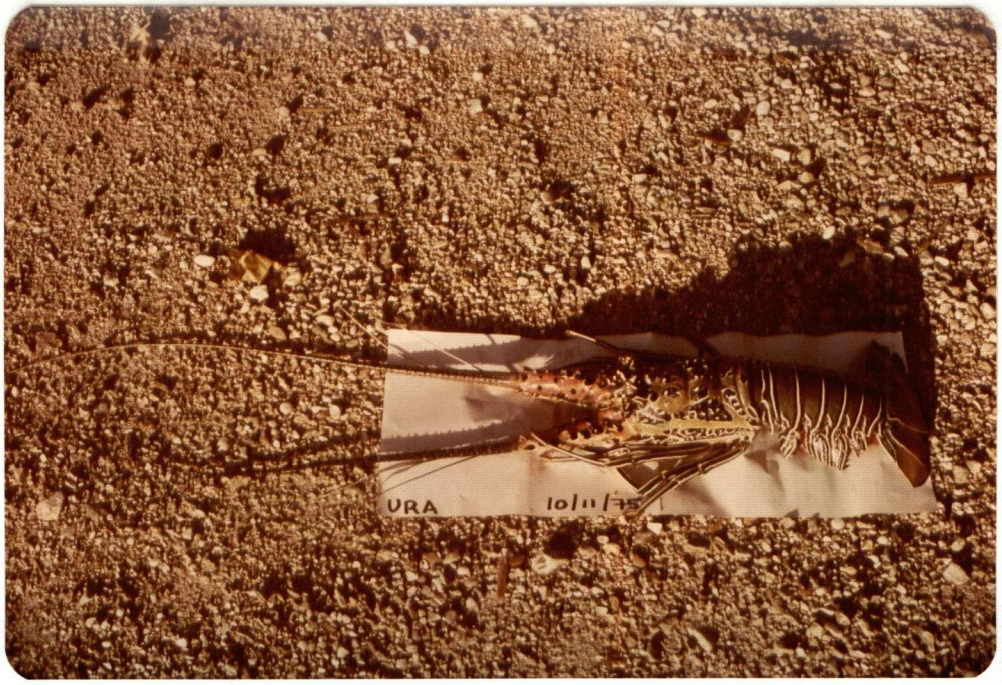

PLATE 2

PLATE 2