

Please cite as:

Dunn, M., & Terrill, A. (2004). Lexical comparison between Papuan languages: Inland bird and tree species. In A. Majid (Ed.), *Field Manual Volume 9* (pp. 65-69). Nijmegen: Max Planck Institute for Psycholinguistics. doi:[10.17617/2.492942](https://doi.org/10.17617/2.492942).

REGULATIONS ON USE

Stephen C. Levinson and Asifa Majid

This website and the materials herewith supplied have been developed by members of the Language and Cognition Department of the Max Planck Institute for Psycholinguistics (formerly the Cognitive Anthropology Research Group). In a number of cases materials were designed in collaboration with staff from other MPI departments.

Proper citation and attribution

Any use of the materials should be acknowledged in publications, presentations and other public materials. Entries have been developed by different individuals. Please cite authors as indicated on the webpage and front page of the pdf entry. Use of associated stimuli should also be cited by acknowledging the field manual entry. Intellectual property rights are hereby asserted.

Creative Commons license

This material is provided under a Creative Commons Attribution-NonCommercial-ShareAlike license (CC BY-NC-SA 4.0). This means you are free to share (copy, redistribute) the material in any medium or format, and you are free to adapt (remix, transform, build upon) the material, under the following terms: you must give appropriate credit in the form of a citation to the original material; you may not use the material for commercial purposes; and if you adapt the material, you must distribute your contribution under the same license as the original.

Background

The field manuals were originally intended as working documents for internal use only. They were supplemented by verbal instructions and additional guidelines in many cases. If you have questions about using the materials, or comments on the viability in various field situations, feel free to get in touch with the authors.

Contact

Email us via library@mpi.nl

Max Planck Institute for Psycholinguistics

P.O. Box 310, 6500 AH, Nijmegen, The Netherlands

**LEXICAL COMPARISON BETWEEN PAPUAN LANGUAGES:
INLAND BIRD AND TREE SPECIES
Michael Dunn & Angela Terrill⁶**

Project	Pioneers of Island Melanesia ⁷
Task	Elicitation tool for collecting plant and bird names
Goal of subproject	The task is aimed at enabling fieldworkers to collect terms for inland bird and tree species. In the past it has proved very difficult for non-experts to identify plant and bird species, so the task consists of a booklet of colour pictures of some of the more common species, with information on the range and habits of each species, as well as some information on their cultural uses, which should enable unambiguous identification. It is intended that fieldworkers will show this book to consultants and use it as an elicitation aid.

Background

The Pioneers project seeks to uncover relationships between the Papuan languages of Island Melanesia. One basic way to uncover linguistic relationships, either contact or genetic, is through lexical comparison. We have seen very few shared words between our Papuan languages and any other languages, either Oceanic or Papuan, but most of the words which are shared are shared because they are commonly borrowed from Oceanic languages.

Research question

This lexical task aims to focus on lexical comparison in specific semantic domains, and in particular on words least likely to have been borrowed from Oceanic languages. One approach is to identify elements of ancient Papuan culture, which we know from the archaeological record to have existed before the arrival of the Austronesian Oceanic-speaking peoples. Such elements include terms for inland plant species, important edible species such as types of nuts and tubers, as well as artifacts like betel nut chewing apparatus, obsidian, sago producing tools, and so on. Our hypothesis is that the words relating to elements existing in the pre-Austronesian world should be less affected by Oceanic loans than words from other semantic domains.

A pilot project for this task was carried out in 2002-3. In the pilot we asked field workers to collect terms relating to broad semantic domains relevant to the pre-Austronesian world. In the new task we have decided to focus on two of these semantic domains in a structured way: inland bird species and inland tree species.

The task collects lexical items which can be directly compared across languages. Once the

⁶ Stimulus preparation: Victoria Rodrigues, Michael Dunn, Angela Terrill

⁷ Not suggested for other Language & Cognition group members, although any non-Pioneers member is welcome to use ideas from this task and adapt them to their own area.

word lists have been collected by individual fieldworkers, the data will be compiled in the project database. Analysis will be done by the traditional linguistic methodology of lexical comparison.

Any possible cognates between Papuan languages first have to be checked as possibly Oceanic loans. In addition, we have to be aware of the possibility of onomatopoeia, particularly with respect to bird names. By comparing the proportion of shared Papuan-Papuan vocabulary in these restricted domains to shared Papuan-Papuan vocabulary in the extended Swadesh word list collected in the 2003 field season, our hypothesis that terms for inland bird and tree species are less likely to be subject to Oceanic loans will be directly confirmed or falsified.

Task

Instructions to accompany the task

1. Lexical elicitation

First, show each picture to the consultant and ask for the name for that species in your field language. For less familiar species there are additional notes to aid identification, which you can explain to the consultant. There may be some species the consultant cannot definitely identify; make sure the consultant knows that this is fine. We've selected the species for wide distribution over Island Melanesia, but some of these islands are notably ecologically depauperate, so it is possible that some of these species may not occur. According to time and inclination please also record as many other species as possible not covered in the booklet; for the trees, collect names of further species and use the botanical information sheet provided in the field manual to aid later identification; for the birds, write a visual and behavioural description along the lines of those in the field manual.

As we are interested in the entire semantic domain, not just in a single word used to name the species, the next step is to collect as much as possible of any associated vocabulary to do with each species identified.

That is, for the trees, collect names for the fruit, in all its growth stages, where applicable. Also collect names for all other named parts, where these are particular to the tree type. For instance, sago trees will almost certainly have special names for their leaves, as well as for the bark that flakes off the base of the trunk, and possibly also for the trunk itself.

For the birds, collect any body part terms specific to that species, e.g. do the beak or talons of the vulture have special terms? Are there special terms for the young of the species, or for the nests or any peculiar characteristics of the birds? The aim is to try and build up as rich a vocabulary in the semantic domain as possible.

It might be useful to carry out this task with a pair or group of informants, to get discussion going which might reveal more terms than with just a single consultant.

2. *Ethnographic information (based in part on Alexiades, 1996)*

Useful information to find out for each tree species:

- How does the consultant him/herself recognise the plant (this gives information on what is culturally salient for this species).
- Is this tree protected (i.e. by people clearing weeds around it?) Cultivated? Or does it grow wild without any human intervention?
- Are there similar species to this one? If so, how do they differ?
- What parts of the tree are used?
- Who harvests or collects the useful parts? (e.g. only men, women etc).
- When is it harvested/collected?
- Are there any special tools used to harvest/collect it?
- Is the part processed before use? If so, how? Any special tools used?
- What purpose is each part used for? (e.g., medicine, food, building material, etc)
- Are there any mythological associations with this tree? E.g., banyan trees are often said to harbor devils in some parts of the Solomon Islands.

Please be careful not to give the impression that we're collecting information to send on to drug companies or similar: remember, the purpose of this part of the task is just to give depth to the lexical entry. We would suggest steering clear of detailed information on medicinal uses, or any other information that could be misused.

For the birds, find out what local knowledge the consultant has about each species.

- Is the bird used for any purpose, or what impact does it have on people's lives?
- Can you learn anything from watching this bird?
- What is its behaviour like? What does its cry sound like?
- Do the males and females look different?
- Does the name mean something? (cf., the cry)
- Is it an important bird? (Why?) Would everybody be able to name one?
- Does it occur in mythology?
- Do people attribute a personality to it, and if so, what?

3. Ethno-taxonomical information

The aim here is to find out whether and to what extent there is a hierarchical structure to this area of the lexicon. Taxonomic relationships are 'kind of' relationships, whereby a lower-order member of the hierarchy is a kind of higher-order member. Berlin (1992) has proposed a universal taxonomical structure of no more than 6 levels for classification of ethno-biological systems. The top level is the "unique-beginner", e.g., 'plant' in English; followed by 'life-form' (e.g., 'tree'); generic 'oak'; 'eucalyptus'; 'pine' etc. Next is the specific level (e.g., under 'eucalyptus' we have 'blue gum'; 'stringy bark'; etc) and finally the varietal level, which may only occur for some specific terms (e.g., under 'snow gum' there is the subtype, 'Wolgan snow gum').

Investigate this area in your language by first finding out whether there is there a super-ordinate term for all plants? All trees? (Also do the same for birds).

Find out what local categories divide the plant world: is there a distinction between trees vs other plants? Land vs sea plants? Is the rainforest divided into different areas, e.g., upper canopy, lower storey, etc. Western biology divides the tree world into ecological zones: coastal forest, lower montane, rainforest, etc. with many subdivisions of each of these. Are there lexical items reflecting ecological zones in your language?

Are there lexical items reflecting taxonomies of tree types? E.g., terms for a type of mangrove, and a term covering all mangroves?

Ways to find this out would be to say, is X a kind of Y? Don't forget to ask whether super-ordinate terms are also a part of something larger. E.g., English 'yellow mangrove' is a type of 'mangrove', which is a type of 'tree'.

How many levels can you discover in the taxonomical hierarchy?

Ethno-taxonomy is an enormous research topic in itself, and you are not expected to get to the bottom of it necessarily, but rather aim to find as much information as will enable an overview of basic categories in this area of your language. There is a useful discussion of folk taxonomy and some of the cognitive issues involved in Foley (1997).

Some useful references

- Alexiades, M. N. (1996). Collecting Ethnobotanical Data: An introduction to basic concepts and techniques. In M. N. Alexiades (ed). *Selected guidelines for Ethnobotanical Research: A Field Manual*, p. 53-94. NY: NY Botanical Garden.
- Alexiades, M. N. (1996). *Selected guidelines for Ethnobotanical Research: A Field Manual*. NY: NY Botanical Garden.
- Beehler, B. M., Pratt, T. K. & Zimmerman D. A. (1986). *Birds of New Guinea. Wan Ecology Institute Handbook No. 9*. Princeton University Press: Princeton.
- Berlin, B. (1992). *Ethnobiological Classification*. Princeton: Princeton University Press.
- Foley, W. A. (1997). *Anthropological linguistics: An introduction*. Oxford: Blackwells.
- Mayr, E. & Diamond, J. (2001). *The Birds of Northern Melanesia*. Oxford: Oxford University Press. (abbreviated here as MD)
- Mueller-Dombois, D. and Fosberg, F. R. (1998). *Vegetation of the Tropical Pacific Islands. Ecological Studies 132*. NY: Springer. (abbreviated here as MDF)