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**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.

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## ETHNOGRAPHY OF THE SENSES

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<b>Project</b>	Categories and concepts across language and cognition
<b>Task</b>	Procedural texts; soundscapes; other documentary and observational tasks.
<b>Goals</b>	Explore the perceptual world of your field site and the interaction between the cultural world and the sensory lexicon in your community.
<b>Prerequisites</b>	Language of perception stimuli (Field Manual 2007)

### Background<sup>2</sup>

This entry provides some orientation and task suggestions on how to explore the perceptual world of your field site and the interaction between the cultural world and the sensory lexicon in your community. The data and documentation generated by this subproject will contribute to a collected volume. The idea is for each contribution to be a systemic account of the interaction between the cultural world and the linguistic encoding of sensory modalities in each of our fieldsites. This theme is informed by a hypothesis that elaboration of verbal distinctions in the various sensory fields may be largely motivated by cultural factors, including art and technology. For example, Rossel Island culture has a simple material culture (almost) without (traditional) paints, dyes, textiles, pottery or musical instruments – it seems entirely plausible that the corresponding absence of a full colour terminology, texture vocabulary or musical metalanguage is closely related to this (Levinson 2000). Note that this is a generalisation of the hypothesis in Berlin and Kay (1969), where they suggested that the number of colour words was tied to levels of technology.<sup>3</sup> More generally, one can argue that the lack of elaborated metalanguages for texture, geometric shape, and musical tone on Rossel Island is related to the absence of weaving, pottery, and musical instruments of any kind – it is perhaps the manufacture of complex artefacts that requires separating out abstract qualities from things, as properties that can be talked about.

By *systemic* account, we mean that each of the chapters in the volume should attempt to describe this interaction for the whole sensory field (cf. Question 2 in the entry ‘Views from Anthropology’) so as to provide a basis for comparison of different cultural constructions of the sensorium. At the same time, it is recognised that one particular sensory modality may be privileged in some way (e.g. sound cultures (Feld) vs. smell cultures (Storch)) or that a particular domain in the linguistic system may be more relevant vis-à-vis the publication’s theme, and so there will be space in each contribution to expand on these interests. From the outset, it should be clear that researchers are not expected to undertake a full ethnography within the scope of the Language of Perception project. A thorough ethnography of the senses would be a serious and lengthy

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<sup>2</sup> Thanks to Gunter Senft for input on the development of this entry and to Mark Sicoli for helpful suggestions.

<sup>3</sup> For a more thoroughgoing cultural approach to the growth of colour terminology, see Gage (1995).

undertaking (see e.g. Feld 1984 for inspiration), but you should try to observe the cultural uses of different sensory modalities.

There are a number of logical possibilities in the interaction and correlation between linguistic encoding and cultural elaboration. One scenario is to have a match in levels of development in the cultural world and linguistic system (note that this can imply either a high or a low level of elaboration in both). The other scenario is to have a disparity in the level of elaboration in both these domains — either richly developed cultural systems that are not reflected in linguistic distinctions, or vice versa. A comparative analysis of relative weightings in different cultures would provide a broader picture of this interaction and would also provide valuable background information on the question of whether some sensory fields are consistently cross-culturally more or less codable or ineffable.

A readily accessible domain where this interaction can be observed is material culture — this is of course the starting point of the original hypothesis under question, and so, is also a good starting point for our exploration. Accordingly, one of the tasks in this entry focuses on production of material culture (See ‘Procedural texts’). Another locus of the interaction can be found within social practices and customs (song, ritual, medicine — see below for further suggestions). Note that describing and documenting social practices and customs is not solely our intention; we must link these descriptions to the linguistic system in a tangible way. We also want to cast our nets even further afield and consider the habitat and cultural ecology of the community and the ways people attend to various sensory fields within this habitat. The suggested soundscape task is an example of how to approach this for one sensory domain, the auditory. We have also included a variety of general observational and documentary task suggestions.

### **Developing your ethnographic senses: Some questions to get you started**

A good place to start is artistic activity in a broad sense. Start to notice how elaborated the different art forms are – visual art, music and oratory, patterned textiles, cuisine, the use of scents, and so forth. What kind of technologies underlie these art forms – for example, are there indigenous dyes and paints, how many colours were traditionally manufactured or purchased from outside, are there specialists in these areas, or are all members of the community potentially involved? Are there names for specific patterns in carvings or textiles? In the case of music, what instruments are manufactured, are they tuned to a standard, what kind of metalanguage is used in instruction or rehearsal, are people said to be good singers, and if so how are their special skills described? In the case of cuisine, are there acknowledged excellent cooks, how do people talk about the food they produce, how many different kinds of flavorings do they employ? If there is indigenous production of textiles, what do people value in clothing – strong or soft, fine or coarse, plain or patterned, and how do they talk about these distinctions (e.g. Tamils, with their interest in silk saris, have an elaborate terminology for textile textures and patterns). When people try to be (sexually) attractive, do they use scents, perfumes, oils, flowers? Are such scents or incenses used in rituals, and if so, are there patterned oppositions (god X likes scent A, god Y scent B)? How do they talk about these scents?

Look carefully at the technology involved in the local production of chattels – pots, houses, canoes, carts, textiles, baskets, carvings, body ornaments and the like. How do people talk when assessing whether such objects are well or badly made? What sorts of shape, colour, pattern, texture discriminations do they make? Why do they admire or seek specific exemplars? Other activities, such as herding may also give rise to specialised vocabularies. For example, the Nuer have several hundred terms for describing zebu coats (colour and markings) and other terms specialised for describing horn shapes (Evans-Pritchard 1940).

Note both the culturally constructed and the natural ecological ‘sensorium’. Do people spend a lot of time alone in the forest, or desert, or on the sea or mountain top? If the world is visually closed, as in a jungle, are auditory cues essential for finding your way, locating prey, detecting intruders and the like? Can people infallibly recognise bird species by their calls? One might expect an elaboration of the auditory semantic field in this case, and additional relevance of auditory distinctions in evidentials, deictics and the like. Conversely, if the ecology is open, as in steppe, desert, ocean or high montane country, is there a premium on visual acuity? The ethnographers commonly report amazing abilities to detect and identify distant people, vehicles and boats in these cases – but we know little about how people talk about this (if they do). Turning to the cultural ecology, notice the structure of houses, and how they are built to either hide or display, to dampen or transmit sound, and note features that require specific and complex shape templates (curved roofs, circular ground plans, shaped ovens, etc.). Think about the soundscape of village life – is there a noisy hubbub of social life, or rather a quiet privacy? Are there noises of pounding or grinding grain, or bells, at particular times? What would constitute unusual noisiness or unusual quiet? Think too about ‘smellscapes’ – are there persistent smells of smoke, spices, incense, sewers, bodies? Do people complain about smells?

The issue of when and why people actually use the language of perception is an overarching question. If you have observed a semantic distinction in the language and do not (yet) see any cultural correlation, then try to get a sense of when and why people use the linguistic distinction in question (since, after all, the distinction would not have been learned by speakers if it were not being used in some communicative context). For example, the Kariì have no traditions of painting, carving, or sculpture, yet they have fine vocabulary for three-dimensional shape distinctions (tubular, spherical, etc.) and for surface patterning (single-striped versus multi-striped, sagittal versus lateral, tipped, etc.). They use this vocabulary for describing and distinguishing between many species of mammal, reptile, bird, fish, etc. These notes should start you off thinking about the specific properties of the perceptual world of your field site. Understanding these factors may prove essential in getting a grip on why the culture in question cares, or does not care, about specific domains, thus providing a special motive for lexical elaboration or the lack of it.

## Some examples from two fieldsites

Like Rossel Island culture described briefly above, the Umpila and Kuuku Ya'u people from eastern Cape York Peninsula have a relatively simple material culture. As is the trend with most hunter-gather societies, they produce a relatively small array of objects: spears, hunting and warfare paraphernalia of various kinds; canoes (with outrigger); windbreaks and small temporary shelters; baskets; drums and clap sticks for dance and song; adornments for dancers and musicians, such as, grass skirts, pandanus armbands and headdresses, and necklaces made from beads and shells.

They have no tradition of dying and have almost no paint application. The only traditional pigment application is black/brown, white and red clays used to decorate the bodies of dancers and musicians, and correspondingly, there is limited three term black(dark), white, red colour system.

On the other hand, in other domains levels of lexical elaboration mismatch with development of local technology and cultural preoccupations. For example, Umpila and Kuuku Ya'u have a rich tradition of secular and ceremonial music and dance, and are unusual in the Aboriginal Australian context for having a tradition of drum making and polyphonic vocals. However, their sound vocabulary is limited to all purpose property lexicon: *mukan* 'big', *chu'uchi* 'small', *kani* 'high', *pakay* 'low'.

Likewise, Umpila and Kuuku Ya'u people have extraordinarily detailed environmental knowledge with taxonomic, totemic and moiety systems classifying and categorising the natural world. For example, there are two moieties (*kaapay*, *kuyan*) which divide the world (people, animals, plants, land) and this division is viewed as a fact of nature: 'just like man and woman, always been like that' (Chase 1984). These moieties are said to be manifested in a variety of physical traits: people: hair type, body shape, colouring, lines on the palm of the hand; land: shapes of branches of certain tree species, contrasts between light and shade, topography. However, the cultural import and heightened awareness of shape and colour distinctions doesn't appear to have lead to a rich lexicon in this domain.

The Trobriands Islands, as with most of our fieldsites, are undergoing significant cultural and linguistic change — some aspects of cultural practices are changing or being lost while others persist. For example, grass skirts produced by women from banana leaves are no longer worn, however, they are still distributed as part of mortuary rituals in which they honour the mourner and indicate who has mourned for the deceased and to what degree. Traditionally, pigments of red, yellow and black made from blended concoctions of fruits and bush materials were used to dye the skirts. These dyes are no longer made and this knowledge appears to be now lost. Instead artificial dyes are used and there have been corresponding changes in the linguist system to incorporate some of these new colours.

Creation of string figures and string games is a widespread phenomenon (virtually worldwide), and is everyday knowledge shared by young and old, men and women.

String figures produce a mass of complicated geometric shapes — potentially linguistically ineffable. On the Trobriand Islands, playing of string figure games is associated with the wet season when people's movements are restricted. These figures do not only produce geometric shape but also representations of children, men, animals, geographical features, activities etc. Many of them have specific names, and while they are produced the players recite poem-like verses and songs (*vinas-vinas*) that accompany the specific design.

## Tasks

### (1) Procedural texts

**Task** *Video recording procedural texts describing the production of material culture within your fieldsite*

A procedural text is a text which gives instructions on how to do something, for example, how to make a basket or a canoe, prepare a certain traditional food, how to administer a traditional medicinal treatment, or perform a certain song, and so on. The subject of the procedural texts that will be most fruitful and interesting for each researcher to record will depend on both the cultural knowledge/interests within the community and the researcher's own self-determined focus in their ethnographic explorations.

Procedural texts are useful means to illustrating division of (linguistic and practical) expert and everyday knowledge and offer a glimpse at how this knowledge may be socially distributed and/or socially constructed in group activity. To create recordings which explicitly talk to this point, record texts with different numbers and combinations of consultants, e.g. experts vs. novices, men vs. women, group discussions vs. individual descriptions.

The rich documentation generated by this task will also provide a corpus of natural discourse constructions highly relevant to the grammar of perception descriptions, e.g. constructions about knowing and transmitting knowledge; feeling the texture of wood, twine or textile; the smell of certain natural materials used to produce a particular object etc. (cf. 'Grammar of Perception' entry). It will furthermore assist in unearthing specialised lexicon missed in language of perception stimuli tasks and elicitation sessions.

Suggestions of two approaches to recording procedural texts:

- Informal procedural texts: Texts with limited prompting or questioning by the researcher allowing the discourse to be primarily driven and organised by the consultant.
- Video record actual production: Get the consultant to offer a running commentary on the processes/techniques/tricks of the trade as the production event unfolds. If the activities involve several people, their interaction will be especially interesting.

In the second approach, the researcher should probe for relevant texture, shape, colour, smell or taste lexicon; terms for various qualities of the material being worked with;

specialised lexicon for processes or different stages of production; evaluations and assessments of the features of good or poor examples of the object, and so on.

Also, where relevant and possible, video record narratives, descriptions and other texts types, for example:

- Myths or explanations of cultural beliefs about origin and transmission of important cultural knowledge and technology.
- Narratives or oral histories recounting how the speaker/consultant developed production skills, learnt particular cultural practices, first attempted to produce a certain item or perform a certain cultural practice and so on.
- Texts recording people's perception of changes in knowledge or attitudes to traditional objects and practices, for example, has the introduction of new objects and modern technology affected transmission of traditional knowledge, and how people think and feel about traditional and 'modern' objects?
- Descriptions of cultural artefacts: what lexicon is used to describe the colours, texture, smell, shape/anatomy of this object?
- Interviews on production and procedure: Act as the interviewer yourself, or alternatively, ask a speaker, a local language worker, or even a novice/student wanting to acquire this knowledge, to lead the interview session.

## (2) Soundscapes

**Task**                      *Record soundscapes to document aspects of the aural ecology of your fieldsite*

*'I think that soundscaping is first and foremost acoustic witnessing. The field part of the work is to "be there" in the fullest way.'* (Steven Feld)

Soundscapes document sounds which are typical or even unique for the respective fieldsite. These soundscapes may quickly change due to rapid changes in the community's way of life. Soundscapes consist of more or less unstructured recordings of various sounds and noises of activities of and around the community at different times of the day.

Some sounds will jump out as important or typical in the community (e.g. the pounding of food, the sound of certain tools). Conventionalised sonic signals may be used for announcements (the gong of a town-crier) or to call for a gathering (a drum signal calling all members of a certain clan). These are sounds associated with actual cultural practices and as such they are the most tangible.

Beneath all this, less tangible but ever present, there is the sonic background of day-to-day life in your fieldsite. Think of the orchestra of buzzing insects, birdsong, the hiss of flowing water, the 'feel of forest humidity and spectral presence' (Feld 2001), the cosmic periodicity of meteorological phenomena, significant silences (e.g. the proverbial lull before the storm), and so on.. It is essential to also capture aspects of this acoustic dimension of the environment.

With this distinction in mind, here are two broad types of soundscapes you might want to record:

- **Sounds that are salient and typical for your fieldsite.** This may be sounds accompanying the production of material culture (see task 1 above); the pounding of food; musical instruments; conventionalised auditory signals; animal noises; etc. *Tip:* If you are recording lots of relatively brief sounds, you may find that it is difficult to keep track of metadata, and well-nigh impossible to correctly identify sounds if it's been more than a few hours since you recorded them. This problem is easily solved by starting each recording with a brief statement of the essential metadata (date and time,<sup>4</sup> location, participants, activity).
- **Records of the sonic environment.** Record longer stretches of sound in different locations in and around your fieldsite; and on different times, for example in the early morning, mid-day, afternoon, and night.

*Tip:* Choose locations carefully; keep recording devices out of sight (and out of reach) of children especially in cases of longer recordings where you might not be present all the time.

Note that technical guidelines for recording audio can be found in the final section below. Once you have recorded soundscapes they can be used as custom-made stimuli in the following **subtask**:

- Play the recorded soundscapes back to consultants (you can either do this in a public session or have one consultant provide a running commentary while listening to it on the headphones) and take note of what is attended to and what is singled out for commentary. This will provide valuable clues about the ways in which people in your fieldsite process and talk about auditory information.

### (3) General task suggestions

- **Habitat 'sensorium' walks.** Take walks with different people in your fieldsite to explore colour, shape, text, smell, etc. in the natural and man-made world. Be guided by the interests of your consultant; see what they choose to attend to. Make audio recordings, take pictures, and videotape the whole walk if possible.
- **Song, music and dances.** Document songs, music, and dances and the metalinguistic distinctions made in this domain (see 'Procedural texts' above for associated material culture). For example, is there lexicon for song genres, stylistic features, dance moves? Don't just record final performances; the rehearsals are often much more informative in terms in accessing metalanguage (e.g. being in or out of harmony or rhythm, voices coming together beautifully, running away with a song).
- **Cultural and linguistic change: observational task.** All our fieldsites are seeing rapid change. This change may provide illuminating insights into the connection between cultural and linguistic elaboration of sensory fields. What do people consider

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<sup>4</sup> Date and time are automatically recorded as file properties on devices like the Edirol R-09 and Zoom H2 (but not the Zoom H4!).

as characteristic items of their material culture? How do people think and feel (sentiment) about old vs. ‘modern’ objects? What are the lexical borrowings due to technological replacements and innovations? For example, if artificial dyes have superseded the traditional ones it may well be that the knowledge of how to make them and the terms to refer to them are in the progressing of being forgotten, or that new terms are being borrowed or created to fill gaps in the traditional colour system.

- **Create your own visual stimuli.** Take good images on your habitat walks and during procedural text tasks. Use these as stimuli for more general elicitation sessions with a wider group of consultants. Check semantic range and cross-speaker consistency, and elicit vernacular definitions. The visual stimuli could be also used to create a custom-made sorting task. Print a wide selection of close-up images, have consultants sort them, try to find out what visual features they attend to, what terms are available, and what categories can be created. (Alternatively, if you do not have the possibility to print, images can be sorted on-screen using image viewer software, e.g. Faststone Image Viewer.)

## Technical guidelines

The data and documentation collected under this subproject will contribute to a collected volume. The intention is for this volume to be a rich multimedia representation of the ethnography of the senses, and so from the outset we need to be concerned with producing photographs, illustrations, video and sound documentation in high quality formats that will allow flexibility with future publishing directions, e.g. book, website, CD-ROM/DVD. With this in mind here are some guidelines.

## Photography

### (1) Equipment

We ideally recommend using a digital SLR (DSLR) with an 8 megapixel sensor or greater. A DSLR has a more sensitive image sensor, better lenses, RAW capture and a more powerful flash. Alternatively, a compact point and shoot camera with an 8 megapixel sensor or greater with RAW capture can be used.<sup>5</sup>

### (2) Basic photographic tips

Depending on camera choice, subject and light, guidelines for taking good snaps will change, but here are a couple of basic tips to keep in mind.

**1. Resolution and editing.** In order to ensure our photographs will comply with publisher's image production guidelines and to allow flexible future use we need to take high resolution images, e.g. higher resolution means images can be cropped if required and still retain enough pixels for professionally printing.

- Set your camera on the highest quality setting, ideally RAW capture or alternatively the highest jpeg setting.

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<sup>5</sup> RAW is an optional storage format on some cameras that allows post-processing like a negative – but beware, it *requires* post-processing and much more storage space! Experiment before you use it!

- Take extra memory with you and download the images regularly. Don't be tempted to reduce the quality setting in order to squeeze on more images as you run out of space!
- When you download images from the camera, save a master copy of the file and/or save the file as TIFF prior to editing. If you are editing an image in jpeg format, each time the image is adjusted (cropping or brightness/contrast/saturation adjustments) and saved, the quality is reduced. This doesn't happen with TIFF format.

**2. Optical vs. digital zoom.** If you want take close-up images, for example, intricate craving designs or texture of a woven cloth, then try and use a camera with optical as opposed to digital zoom. Digital zoom simply crops a portion of the image and then enlarges it back to size and in doing so reduces image quality. In order to ensure high image quality you should use a camera with optical zoom instead.

**3. Flash.** Automatic flash settings can be too eager with the flash which will make for over exposed photos. Don't use the flash if you don't need to. However, if you do need to use a flash make sure to stay within the recommended range for your camera's flash. When using a flash, to eliminate harsh shadows cast behind your subject or unnatural light you can easily make a DIY flash diffuser. Simply tape a piece of thin paper (vellum paper) or light cloth over the flash. This will create a softer and more natural light.

**4. Colour and white balance.** An incorrect colour or white balance can create an unrealistic blue, orange/reddish, or even green tinge on your images. Most digital cameras have good automatic white balance and so you shouldn't have to reset the camera's white balance control. However, given that accurately representing the hue of certain artefacts or plant material may be a crucial part of documentation, be sure to regularly download your snaps and check the colour reproduction is accurate.

### (3) Labelling photos

The recommended metadata system for still photos is to use Adobe Bridge plus a custom IMDI template, installed on most field laptops (this writes into the file and thus won't get separated from the photo). Use keywords so you can recover the relevant shots.

## Audio recording of soundscapes

### (1) Equipment

Recording a soundscape requires quality equipment. Pre-amplified (active) microphones are preferred because they are able to pick up low volume sounds with no noise. To capture the stereo field in the most natural way, the microphones need to be in an X/Y set-up (crossed) — if they are not, left and right will be overly spatialised. The recorded sound must be saved in a lossless format (WAV, no MP3).

Soundscapes can in principle be recorded with the usual Flash or DAT recorders, but a few special precautions need to be made. For example, the internal mics of the Edirol R-09 are quite good, but are not in an X/Y set-up. The Zoom H2 and H4 Flash recorders are better in this respect, having internal X/Y mics of reasonable quality; the H4 additionally offers two XLR connections to connect professional microphones.

Probably the best set-up available currently is the Zoom H4 coupled with two external Sennheiser ME-64 mics. This has been tested in the field last year and delivers very clear sound with exceptionally low noise levels. Other reasonable options for soundscapes would be the Edirol R-09 coupled with a Røde SVM microphone; or if you can't take a good external microphone, one of the Zoom recorders (note that the H2 is less bulky and more intuitive than its 'older brother' the H4).

## (2) Basic tips

- Specify the input level manually (use quality headphones to monitor the sound) in order to find the highest input level possible without clipping.
- Do not use the automatic gain control or compressor/limiter functions of the recorder (this messes up the sound irreparably).
- Always use a windshield. The normal foam windshields are not bad but not anywhere near adequate when there is more than a gentle breeze blowing, in which case you will need a so-called 'deadcat' (a fur-like windshield).
- Do not adjust input level or other settings during a recording. This will make postprocessing more difficult.
- Take the time to adjust the date and time of your flash recorder to the local time in your fieldsite. This will ensure that your audio files will be dated correctly and makes it even possible to reconstruct, say, a 'sensory habitat walk' (see under general task suggestions above) on the basis of the date and time of the sound fragments you recorded.
- Rename files after copying them from the flash recorder to your PC so that the filenames include at least the date. This improves findability and hugely accelerates data processing at a later stage.

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