

Please cite as:

Sicoli, M. A., Majid, A., & Levinson, S. C. (2009). The language of sound: II. In A. Majid (Ed.), *Field manual volume 12* (pp. 14-19). Nijmegen: Max Planck Institute for Psycholinguistics. doi:[10.17617/2.446294](https://doi.org/10.17617/2.446294).

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

THE LANGUAGE OF SOUND: II¹

Mark Sicoli, Asifa Majid & Stephen C. Levinson

Project	Categories across language and cognition
Task	Linguistic elicitation for sound vocabulary using sound files
Goal of task	To investigate how languages encode sound – specifically (1) whether there is dedicated vocabulary for encoding simple sound contrasts and (2) how much consistency there is within a community in descriptions.
Prerequisite	You must have completed “Language of perception” (2007: 10-21). To conduct this task you need the audio files “LoS2009.”

Background

This Language of Sound task can be treated as supplemental to the Language of Sound task from Field Manual Volume 10 (Levinson & Majid, 2007), or can serve as a set of stand alone prompts for eliciting vocabulary related to the various contrastive dimensions of sound as it targets the dimensions of the previous task plus several more. Run this task as supplemental to the 2007 task if you had any troubles with the previous stimulus set. This set was specifically designed to overcome some problems with the tempo stimuli from the previous set. Even as a supplement the set should be run in its entirety because it also targets interesting qualities of sound that were not included in the previous task, such as duration, continuous change in pitch or amplitude over time, and simultaneous interval qualities. It also differs by including both binary and ternary contrasts. As with the previous task, we are interested in the natural, non-expert, metalanguage for sounds in the language under study.

Research questions

What are the general resources for describing simple sounds? Is there a dedicated vocabulary, and if so what types of distinctions are encoded? How much consistency is there within a speech community for describing simple sound experiences?

Task

The task is designed to elicit vocabulary for simple sounds. The primary goal is to establish how people describe sound and what resources the language provides generally for encoding/ this domain.

¹ The stimuli in this set were made in consultation with Peter Nijland and Holger Mitterer. Special thanks to Holger Mitterer for producing the original 2007 stimuli and recording a draft set of sounds in 2009. He produced the metronome recordings included in the first tempo set. Special thanks to Peter Nijland for recording the sounds for the other five sets. Additional thanks to Shakila Shayan and Gunter Senft for their consultation.

Consultants

Aim to test 12 participants (the same participants as 2007 if possible). Keep a note of age (approximate age is fine), gender, musical background, and full linguistic background.

Stimuli

The sound stimuli consist of 28 audio files. The stimuli are lettered and numbered and should be played in consecutive order.

The sound stimuli come in six sets: A – Tempo1; B – Amplitude; C – Duration; D – Pitch, E – Interval; F – Tempo2. The stimuli are recordings made up of sounds in pairs or triplets. There are two tempo sets: the first (A) is tempo cued simply by faster or slower metronome clicks; the second set (F) is tempo cued by a single melody played at faster or slower tempos. This is because tempo in the previous sound task was particularly difficult to elicit from some subjects who focused on other qualities of the stimuli.

New to this task are the categories of “Duration” (longer and shorter sounds) and “Interval” (multiple sounds combined simultaneously). The Interval set is made up of notes, chords and clusters. The purpose of this set is to elicit qualitative vocabulary and possible extensions from other perceptual domains. Does one stimulus sound “better”, “sweeter”, or “prettier” than another? Is one “bad”, “bitter”, or “ugly”? Are there emotional responses where one chord is “happy”, “sad”, “angry”, etc? Or are there native terms for interval qualities like “dissonance”, etc?

Like in 2007 we include stimuli made up of pairs that will produce linguistic terms in binary opposition to elicit relational terms (“thin/thick”, “big/small”, “fast/slow”, “strong/weak”). But we have also included stimuli which, in the sequence of running the task, will prompt speakers to then go beyond binary oppositions to describe a third contrasting element, as well as single sounds that vary in some dimension over time.

The motivation to produce a set of stimuli that could go beyond binary oppositions is to produce data that can shed light on our questions of ineffability, such as where the language of one perceptual domain penetrates another. For example, the 2007 stimulus designed to elicit “tempo” was composed of 3 tones becoming successively higher or lower with a greater or lesser pause between tones. The stimulus was problematic for its intended function of eliciting tempo terms. However, the trio of sounds had interesting results with a number of language subjects of different languages. In Zapotec, for example, the opposition of two pitch values prompted contrastive vocabulary of *nerohkko* ‘thick’ for “low” and *nelettze* ‘thin’ for “high”. The binary opposition of loudness differences prompted contrastive vocabulary *jwerte* ‘strong’ and *me7e7* ‘weak/small’. When confronted with three notes that differed in pitch multiple Zapotec speakers brought in the vocabulary from loudness to apply to pitch producing sets such as *nerohkko*, *nelettze*, *me7e7*, and *nelettze*, *nerohkko*, *jwerte*. Similar results occurred among Farsi speakers prompting us to question how producing stimuli that go beyond binary oppositions could inform our concern with the ineffability and interpenetration of perceptual domains.

Procedure

Remember to video~audio-tape your session.

Consultants should listen to the stimuli over good quality headphones.

First orient your consultant to the nature of the task. Explain that you will be playing some sounds and you want them to describe them. This task differs from the others on language of perception in that we are looking for relational terms. Play the sound files as indicated in the list below. Each sound file contains 2 or 3 contrasts and should be played through to the end without eliciting vocabulary so the subject is oriented to the target contrast. Then play the file again pausing the recording at the “rest” between the sounds to elicit separate descriptions for each sound in the file. If you cannot overhear the sounds and pause from your consultants headphones, open the file in a program where you can see the waveforms (Audacity, Praat, ELAN, etc). Ask your consultant in the target language *How does this sound?* Then play the next sound in the same file and ask *How does this sound?* Continuing to the end of that stimulus. We want to elicit a description for each sound but each file must be played in its entirety first to orient the consultant to the relevant dimension of variation. You can play them for a speaker as many times as s/he would like.

Continue with the same procedure running all 28 files of all 6 sets. In the end you should have 71 separate responses (see the excel coding sheet).

Analysis

Each consultant’s responses will be coded for word/phrase/construction used to describe each sound. This will then be analysed for (1) consistency across consultants and (2) category of response. Enter your data in the excel sheet “LoS2009Coding Sheet”.

Outcome

Data will contribute to a description of the grammar of perception in the field language, intended for a collected volume. The pooled cross-linguistic data will also contribute to an overview publication on the encoding of the senses across languages.

Optional post-task elicitation

Follow up these results to explore when else these terms may be employed. Ask for example about birds and their characteristic noises. What happens when a boy grows up and his voice changes? What is the difference between men’s voices and women’s? Do people vary their voice for different social actions, in different social situations, or to take on/perform different social personae?

Now also explore the richer vocabulary there is likely to be for characteristic sounds from given sources, as in the notes above (Do drums roll, bong, or what? Do crocodiles bark, dingoes howl, llamas bray, or what? Do gongs ring, sound, or what? Does the wind howl, the sea roar, or what?). See also the notes on soundscapes in the section “Language

of Perception” (Levinson et al., 2007: 10-21) and in “Ethnography of the Senses” (Dingemanse et al., 2008: 18-28).

References

Levinson, Stephen C. and Asifa Majid (2007). The Language of Sound. *Language & Cognition Department Field Manual Volume 10*, pp 29-31. Nijmegen: Max Planck Institute for Psycholinguistics.

Levinson, Stephen C., Asifa Majid & N.J. Enfield (2007). Language of Perception: The View from Language and Culture. *Language & Cognition Department Field Manual Volume 10*: pp. 10-21. Nijmegen: Max Planck Institute for Psycholinguistics.

Dingemanse, Mark, Clair Hill, Asifa Majid & Stephen C. Levinson (2008) Ethnography of the Senses. *Language & Cognition Department Field Manual Volume 11*: pp 18-28. Nijmegen: Max Planck Institute for Psycholinguistics.

Language of Sound II: Stimulus list

There are 6 sets, Tempo1, Amplitude, Duration, Pitch, Interval, Tempo2 labeled A-F. Run the task in this order.

A. TEMPO1: This set is made up of stimuli using metronome clicks. Play each stimulus through then play each segment pausing the playback between segments to elicit the response.

- A1 Metronome: Slow-Fast
- A2 Metronome: Slow-Fast-Faster
- A3 Metronome: Fast-Slow
- A4 Metronome: Fast-Slow-Slower.

B. AMPLITUDE: This set is made up of single notes that differ only in amplitude. Play each stimulus through then play each segment pausing the playback between segments to elicit the response.

- B1 Amplitude: Quiet-Loud
- B2 Amplitude: Quiet-Loud-Louder
- B3 Amplitude: Loud-Quiet
- B4 Amplitude: Loud-Quiet-Quieter
- B5 Amplitude: FadeIn-FadeOut.

C. DURATION: This set is made up of single notes that differ only in duration. Play each stimulus through then play each segment pausing the playback between segments to elicit the response.

- C1 Duration: Short-Long
- C2 Duration: Short-Long-Longer
- C3 Duration: Long-Short
- C4 Duration: Long-Short-Shorter

D. PITCH: This set is made up of single notes and notes that glide from one pitch to another in contrastive sets. Play each stimulus through then play each segment pausing the playback between segments to elicit the response.

- D1 Pitch: Low-High
- D2 Pitch: Low-High-Higher
- D3 Pitch: GlideUp-GlideUpHigher
- D4 Pitch: High-Low
- D5 Pitch: High-Low-Lower
- D6 Pitch: GlideDown-GlideDownLower

E. INTERVAL: This set is made up of notes, chords and clusters. Play each stimulus through then play each segment pausing the playback between segments to elicit the response.

- E1 SimpleTone-HalfStepDissonant
- E2 HalfStepDissonant-ClusterDissonant
- E3 Major-Major7
- E4 Major-Minor
- E5 Major-ClusterDissonant

F. TEMPO2: This set is made up of a simple melody played at different tempos. Play each stimulus through then play each segment pausing the playback between segments to elicit the response.

- F1 Melody: Slow-Fast
- F2 Melody: Slow-Fast-Faster
- F3 Melody: Fast-Slow
- F4 Melody: Fast-Slow-Slower