Please cite as:

Seifart, F. (2003). Encoding shape: Formal means and semantic distinctions. In N. J. Enfield (Ed.), *Field research manual 2003, part I: Multimodal interaction, space, event representation* (pp. 57-59). Nijmegen: Max Planck Institute for Psycholinguistics. doi:10.17617/2.877660.

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

Encoding Shape: formal means and semantic distinctions

Frank Seifart

Motivation and basic idea

The basic idea behind this task is to find out how languages encode basic shape distinctions such as dimensionality, axial geometry, relative size, etc. More specifically, we want to find out (i) which formal means are used cross linguistically to encode basic shape distinctions, and (ii) which are the semantic distinctions that are made in this domain. In languages with many shape-classifiers, these distinctions are encoded (at least partially) in classifiers. In other languages, positional verbs, descriptive modifiers, such as "flat", "round", or nouns such as "cube", "ball", etc. might be the preferred means. In this context, we also want to investigate what other "grammatical work" shapeencoding expressions possibly do in a given language, e.g. unitization of mass nouns, or anaphoric uses of shape-encoding classifiers, etc. This task further seeks to determine the role of shape-related parameters which underlie the design of objects (see below) in the semantics of the system under investigation. It has often been assumed that dimensionality (i.e. 1- vs. 2- vs. 3-dimensional) is conceptually as well as cognitively the most basic shape-related parameter, but it is unclear to what extent this parameter is in fact represented in the internal organization of systems of individual languages. Shape semantics may also be closely linked to – or even subordinate to – other parameters of categorization, such as position or function. An additional hypothesis we want to test with data from this task is whether speakers of languages with dedicated systems that encode detailed shape distinctions, e.g. numeral classifiers, are better at solving this task.

The task involves firstly an interactive, referential communication task, which involves the matching of arrangements of differently shaped objects. This is complemented by direct elicitation of descriptions of each of the objects. In addition to the research questions outlined above, the task can provide data for the semantic description of shape-encoding expressions (to be complemented by further elicitation, distribution in texts, etc.), as it ideally reveals the extensional limits between shape-encoding expressions in individual languages such as "flat" and "round". Additionally, the interactional data from this task will include expressions of position, topological relations, as well as numerous anaphoric references, deictic expressions, as well as deictic and representational hand gestures.

Material

I. 48 wooden objects with identification numbers

The set contains of 25 types of wooden objects. Of these, 6 are represented three times, 9 are represented twice and the remaining 10 once, adding up to 46 tokens. There are doubles and triples to encourage the use of classifiers that only occur in quantifying expressions, e.g. in numeral classifier languages. Identification numbers consisting of two digits are assigned to the objects on a set of six photos (ShaClaCodSug01-06). The first number refers to its assumed basic dimensionality (11, 12, etc. are saliently one-dimensional; 21, 22, etc. are saliently two-dimensional, and so forth). The identification number for rings begin with "4", for odd distracter objects with "5" and for containers with "6". (Electronic version of the pictures can be found in the folder

The parameters along which the task objects systematically vary are:

- (i) dimensionality: one vs. two vs. three.
- (ii) axial geometry: long (or oval. respectively) vs. thick vs. wide
- (iii) round vs. square (or cube, respectively)
- (iv) negative spaces (i.e. empty/hollow) vs. solid.

Parameters of material and function are controlled for: all objects are made of similar wood, and are in principle afunctional. Additionally, there are a few odd items in the set to obscure the aim of the task and to fish for further shape expressions.

II. 20 numbered photos for matching task

For the matching task, there are 20 numbered photos (ShaClaTa01-20). Each photo depicts between 5 and 11 objects, in different arrangements. The photos are ordered according to complexity, starting with few objects (5) in simple configurations, gradually changing towards more objects and complex configurations. The first 10 of these pictures contain all the basic contrasts at least once. Thus, if for limitations of time you can't run or transcribe all 20 pictures, then at least these first 10 should be used. Electronic versions of these photos are in the folder *L:\Pub\FIELDKIT_ARCHIVE\STIMKITS\ manual2003\classifiers\shape-classif-photos\ ShaClaTa01-20*.

III. 4 numbered photos for elicitation task

For the additional elicitation task, there is a set of 4 photos which indicate the order in which denotations for the objects of the task should be elicited in isolation (ShaClaSup01-04). They are in the folder *L:\Pub\FIELDKIT_ARCHIVE\STIMKITS\manual2003\classifiers\suppl-task-June02\ShaClaSup01-04*.

How to run the task

I. Picture object matching task

Two speakers are seated at a 90% angle to each other, e.g. at the corner of a table. One (the director) is given a stack of photos. The other (the matcher) is given the objects. Make sure the matcher cannot see the pictures that the director is describing. The director should familiarize himself with the objects before starting the task. (Note that you should be already recording when this period of familiarization begins, since interesting and useful data may arise.) Then the director is asked to describe the scene he sees on the photo so the matcher can identify the correct objects and rebuild the scene on the table to a reasonable degree of exactness. After completion of an arrangement, all objects are back in the game again, i.e. should be put together with the rest again (e.g. in the box). After five pictures are done, the director and matcher change roles.

This task must be video-recorded, since it is crucial in coding the data to know which objects are being referred to. Adjust the camera angle in a way that allows as much as possible identification of the objects from the video recording. At the same time, the director as well as the matcher including their full gesture space have to be visible in the video recording. For this reason, the director and the matcher should be seated as close to each other as possible. The task should be run with as many pairs of consultants as possible, but three pairs should be the minimum. If the task is taking too long to complete, only the first 10 of the 20 trials (pictures) should be run.

In an optional variant of the task, the director and matcher are shielded off from one another by a screen, in order to elicit more elaborate linguistic descriptions.

II. Elicitation task

While the director-matcher task will provide spontaneous, interactively negotiated descriptions of the objects, the use of expressions to refer to the objects may be affected by the special circumstances of the task situation, e.g. by the need to contrast two similar looking objects which occur in the same scene. In order to elicit richer descriptions for the objects in a situation that does not involve contrast, denotations of each object in isolation should be elicited in the following way:

Present the objects one by one and ask: 'What/how do you call this?'. Write down the spontaneous answer(s) in order (first, second, etc.). (The elicitation should be recorded, ideally on video, for future reference; in this case, you would not need to write down the responses on the spot.) Additionally, you should elicit which other expressions (especially those that have been used for other objects in the task) can be used and which cannot be used with reference to the object under consideration. This may lead to the establishment of hyponym relations within shape denoting expressions, e.g. one general term for "flat" (things) which can be applied to all flat objects, and one or more specific terms, which only apply to some objects (e.g. rigid ones). After finishing with one object, you should put it away again, to discourage contrastive uses, as well as answers like "a little thinner than that one".

The (pseudo randomized) order in which you should present the objects can be obtained from the pictures "ShaClaSup01-04", located in the folder *L:\Pub\FIELDKIT_ARCHIVE\STIMKITS\ manual2003\classifiers\suppl-task-June02\ShaClaSup01-04*. Please be careful to open 01 first, then 02, etc., since there is no additional marking on the pictures themselves. The only function of these pictures is for you to know the order in which to present the objects. For the transcription of the data from the direct elicitation task, an Excel spreadsheet is provided, where consultant's answers can be filled in directly. It is located in *L:\Pub\FIELDKIT_ARCHIVE\STIMKITS\manual2003\ classifiers\suppl-task-June02\ ShaClaSup.xls*.

Data coding

For the transcription and coding of data from the matching task, there are no particular suggestions, except that you should use the numbers for identifying the objects suggested in the ShaClaCodSug01-06 pictures.

Please contact Frank Seifart if you have run this task.