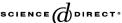


Available online at www.sciencedirect.com



Language Sciences

Language Sciences 28 (2006) 158-161

www.elsevier.com/locate/langsci

## Body colouring task

# Miriam van Staden a,\*, Asifa Majid b

ACLC, University of Amsterdam, General Linguistics, Spuistraat 210, 1012 VT Amsterdam, The Netherlands
Max Planck Institute for Psycholinguistics, Postbus 310, 6500 AH Nijmegen, The Netherlands

#### Abstract

This paper outlines a method for collecting information on the extensional meanings of body part terms using a colouring in task.

© 2005 Elsevier Ltd. All rights reserved.

Keywords: Body part terms; Semantic fields; Extensional meaning; Polysemy; Generality; Vagueness

## 1. Introduction<sup>1</sup>

A core aspect of meaning is linguistic reference, or the extension of a term. How similarly, or differently, do body part terms of different languages segment the body? One way of addressing this question is to give a speaker a picture of a human body, and then ask them to colour in the part of the body that corresponds to a term in their language (see Enfield, this volume). Doing this with a single speaker on a single drawing gives an indication of the reference of a term, but has some limitations. First, the researcher may want to know how consistent an individual is about the extension of the term, i.e. how reliable is the speaker about the exact boundaries denoted. Second, we would like to be able to generalise beyond the individual to the language population. Finally, asking a single speaker about the extensions of a term can have some consequences on the responses they offer. If

<sup>\*</sup> Corresponding author.

E-mail addresses: m.vanstaden@uva.nl (M. van Staden), Asifa.Majid@mpi.nl (A. Majid).

<sup>&</sup>lt;sup>1</sup> This is a revised and expanded version of van Staden and Majid (2003), written for the Language and Cognition Group Field Research Manual, Max Planck Institute for Psycholinguistics, Nijmegen.

a speaker has just indicated that the extension of *foot* covers the area from the toes to the ankle, they may be reluctant to colour in the same area when asked to indicate the extension for *leg*. By asking multiple speakers, and randomising the order of the terms, we can minimise such effects.

The present task was designed initially to address a specific question in body part nomenclature, namely the frequently reported polysemy of terms for the upper and lower limbs. Many languages have a single term for either or both the upper and lower limbs, where in English a distinction is made between *hand* and *arm*, and *foot* and *leg* (Brown, 1976; Andersen, 1978). Different systems can be distinguished based on the number of distinctions found. In systems of type I, there are terms for *hand* and *foot* as well as for the upper and lower limbs, i.e. *arm* and *leg*. In type II languages, there are only two terms *arm* and *leg*. In type III languages there are two terms for the upper limbs *arm* and *hand*, but only one for the lower limbs.<sup>2</sup>

One question that arises is whether in languages of type II and III the single term is polysemous or vague. In most reports on body part nomenclature both in linguistics and anthropology, the terms are given as polysemous between the two English senses of the terms *hand* and *arm* or *foot* and *leg*. The Quechua term *maki*, for instance, is given as three-way polysemous between 'arm', 'lower arm and hand', and 'hand' (Stark, 1969). Yet, few if any arguments are given for a polysemy analysis. Even when researchers make a distinction between vague and polysemous terms, as in Brown (1976), no support is given for either analysis.

A second question is whether the meanings of the terms in languages that have the same system of nomenclature is equivalent, and conversely, whether the meaning of the single term in a type II or III language is necessarily different from the meaning of two terms in a type I language. The colouring in task systematically investigates how people conceptualise the boundaries of body part terms.

## 2. How to run the task

## 2.1. Number of consultants

Minimum 8.

## 2.2. Material

Blue 'fine-liner' pens, a set of stimulus booklets containing between 30 and 40 identical line drawings of an androgonised body (see Fig. 1), and an instructions page in the target language. The stimulus booklets are prepared especially for the language under investigation as follows:

1. Form a list of some 20 body parts terms, including the commonly used terms for the (parts of the) upper and lower limbs, and any other term of interest.

<sup>&</sup>lt;sup>2</sup> It has been claimed that there is no language that has the type VI system where *foot* and *leg* are distinguished, but *hand* and *arm* are not (e.g. Andersen, 1978).

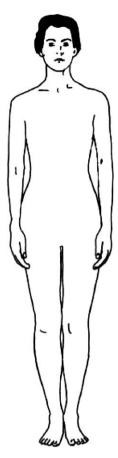


Fig. 1. Outline of body.

- 2. On separate sheets of paper, place the picture of the androgonised body (Fig. 1) in the centre, and in the top right corner write a single body part term. Use appropriate orthography. For body part terms that have 'right' and 'left' members, make two sheets with an arrow pointing at the right side on one, and an arrow pointing at the left side on the other. For the other body part terms, create two identical pages.
- 3. Each term should appear twice. This provides an indication of within-speaker consistency. Sort the pages into two piles so that one contains all the terms for the right side of the body, and the other the terms for the left side (remember to duplicate terms where sideness is not relevant, too). All participants will colour in all pictures twice. Right and left side are counterbalanced across speakers, so that half the consultants colour in the right sides first, and half the left sides.
- 4. Each of the piles is randomised *for each booklet*, that is there is a different order of presentation for each speaker.
- A final page is added to note some personal details about the language and the consultant.

## 2.3. Procedure

Consultants are presented with a booklet. Their task is to colour in the body part for which the word appears on the same page. They should use a blue 'fine-liner' pen. Where literacy is low, it may be necessary for the researcher to read out the term. The investigator first reads the instructions given below. There is no time limit to the task. On the last page please take a note of the participant's age, gender and knowledge of other languages.

## 2.4. Instructions for consultants

In this booklet you will find pictures of a body. On each page the same picture will appear. It is your task to colour in the body part that is named.

If the body part term can refer to two body parts which are the same (e.g. one on the left and one on the right), then only colour in one of these. For example, on the page it may say *ear*. There are two ears in the picture, but we only want you to colour in one of them. Colour in the one indicated by the arrow.

Please, start with the first page. Once you have finished colouring the first body part, turn to the next page and colour in the next body part, and so on. Please do not look through the booklet. Only turn to the next page when you have completed the picture you are on. Do not turn back to see what you have coloured in before. Take the pictures one by one.

Please, colour in ALL of the body part, clearly indicating the boundaries, and only JUST the body part named on the page.

If you have any questions, please ask the experimenter now.

## References

Andersen, E.S., 1978. Lexical universals of body-part terminology. In: Greenberg, J.H. (Ed.), Universals of Human Language. Stanford University Press, Stanford, pp. 335–368.

Brown, C.H., 1976. General principles of human anatomical partonomy and speculations on the growth of partonomic nomenclature. American Ethnologist 3, 400–424.

Enfield, N.J., this volume. Elicitation guide on parts of the body. In: Majid, A., Enfield, N.J., van Staden, M. (Eds.), Parts of the Body: Cross-Linguistic Categorisation. Special Issue of Language Sciences.

Stark, L.R., 1969. The lexical structure of Quechua body parts. Anthropological Linguistics 11, 1-15.

van Staden, M., Majid, A., 2003. Body colouring task 2003. In: Enfield, N.J. (Ed.), Manual for the Field Season 2003. Max Planck Institute for Psycholinguistics, Nijmegen, pp. 66–68.