

Early metaphorical abilities
Nausicaa Pouscoulous & Michael Tomasello

SCIENTIFIC REPORT FOR THE FIRST VISIT:
Nausicaa Pouscoulous went to Leipzig, 8-17 November 2009.

Description of the proposed project

Metaphor development has been investigated extensively in the 1970s and 1980s. Most of these experimental studies suggest that children do not understand metaphors until fairly late in development, and often not until quite late into adolescence (see Gibbs, 1994; Nippold, 1988/1998 and Winner, 1988/1997 for reviews).

Yet, these results might be better explained by various confounding factors, rather than reflecting children's poor pragmatic abilities. Recent work in other areas of children's communicative development, such as their capacity to produce and comprehend certain implicatures, has shown that some experimental tasks place demands on children which interfere with accurate assessment of their pragmatic abilities.

We believe there is no *a priori* reason to think young communicators (aged 2;6 – 5;0) do not master the cognitive processes enabling the understanding of metaphors extremely early on. Therefore, the aim of our study will be to investigate the cognitive capacities of children with regard to the understanding and, to a lesser extent, the production of metaphors. How do very young children fare with fully novel metaphors corresponding to their world knowledge and linguistic competences? How early can they be encouraged to spontaneously produce metaphors?

The focus of the comprehension part of the experiment will be on the ability of very young children (from 2;6-year-olds) to understand the metaphorical process (not explain it or report it).

While our main goal is to assess the comprehension abilities of children, we will also include an elicited production task to investigate whether the same children spontaneously produce novel metaphorical labels.

Aim of the first visit

The purpose of this visit will be to plan the details of the study. We will determine the exact experimental design, control conditions, fillers and importantly agree upon relevant test material (novel metaphors adapted to very young children). Furthermore, the experimental paradigm and material will be piloted on several 3,5-year-olds to assess whether the task is sufficiently simple and entertaining and whether the linguistic expressions are suitable for this age group.

Description of the work carried out during the visit

Ten novel metaphors adapted to very young children were invented and discussed. Corresponding toys were found or constructed in order to act out seven of these (the ones that seemed the most promising). An exact procedure was agreed upon for the comprehension part of the experiment. This includes how the children could be familiarised with the experimenter and the game before the introduction of the test material, how the toys were presented to the children, the exact stories they were told and the precise wording to be used.

These various elements of the experimental design were piloted on three 3-year-olds to assess whether the procedure and material were suitable for them and whether they preferred some ways of expression or toys.

Description of the main results obtained

The piloting yielded very encouraging results. The task was understood by all 3-year-olds, which encourages us to start testing at a younger age than we had previously envisaged (we were thinking of starting with 3,5-year-olds). Many of the novel metaphors invented for the purpose of the study seemed to be comprehended by the children. Yet, some issues remain: some toys are inadequate for the study (either the children don't like them, or they correspond badly to the metaphor we use them for); also, for some metaphors that were comprehended by the children we spotted potential confounding factors (e.g. words which may guide the child's response on other grounds than metaphor comprehension alone). These issues will have to be addressed and a new version of the design will have to be piloted before we can run the experiment itself.

Future collaboration with host institution

A second visit to Leipzig of Nausicaa Pouscoulous is planned for spring 2010. During this visit, a new version of the procedure will be established and tested. Furthermore, we will establish the exact procedure for the elicited production task (to be run at the same time as the comprehension part of the study). If the piloting goes well, data collection and coding could begin towards the end of the second visit.

Projected publications/articles resulting or to result from your grant

We, of course, very much hope to produce at least one article with the results of this study. Yet, before we can start writing it, the procedure must be carefully piloted and the study must be run.

Other comments

We were hoping to be able to run the study with the first age group by the end of this first visit, but the preparation of the exact procedure took a bit longer than expected. Nonetheless, we feel we have made very good progress and that during the second visit the study should be ready to go. We also believe that the changes to the material and design are crucial for the success and soundness of the study.