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On the autonomy of language and gesture: Evidence from the  
acquisition of personal pronouns in American sign language

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### Abstract

Two central assumptions of current models of language acquisition were addressed in this study: (1) knowledge of linguistic structure is "mapped onto" earlier forms of non-linguistic knowledge; and (2) acquiring a language involves a continuous learning sequence from early gestural communication to linguistic expression. The acquisition of the first and second person pronouns ME and YOU was investigated in a longitudinal study of two deaf children of deaf parents learning American Sign Language (ASL) as a first language. Personal pronouns in ASL are formed by pointing directly to the addressee (YOU) or self (I or ME), rather than by arbitrary symbols. Thus, personal pronouns in ASL resemble paralinguistic gestures that commonly accompany speech and are used prelinguistically by both hearing and deaf children beginning around 9 months. This provides a means for investigating the transition from prelinguistic gestural to

linguistic expression when both gesture and language reside in the same modality.

The results indicate that deaf children acquired knowledge of personal pronouns over a period of time, displaying errors similar to those of hearing children despite the transparency of the pointing gestures. The children initially (ages 10 and 12 months) pointed to persons, objects, and locations. Both children then exhibited a long avoidance period, during which one function of the pointing gesture (pointing to self and others) dropped out completely. During this period their language and cognitive development were otherwise entirely normal, and they continued to use other types of pointing (e.g., to objects). When pointing to self and others returned, it was marked with errors typical of hearing children; one child exhibited consistent pronoun reversal errors, thinking the YOU point referred to herself, while the other child exhibited reversal errors inconsistently. Evidence from experimental tasks conducted with the first child revealed that pronoun errors occurred in comprehension as well. Full control of the ME and YOU pronouns was not achieved until 25–27 months, around the same time when hearing children master these forms. Thus, the study provides evidence for a discontinuity in the child's transition from prelinguistic to linguistic communication. It is argued that aspects of linguistic structure and its acquisition appear to involve distinct, language-specific knowledge.

Résumé

Cet article évalue deux hypothèses qui jouent un rôle central dans des modèles récents de l'acquisition du langage: (1) la connaissance de la structure linguistique est un projet sur des formes préalables de connaissance non linguistique, et (2) l'acquisition d'une langue est un apprentissage continu dans lequel l'enfant passe d'une communication gestuelle précoce à la maîtrise de l'expression linguistique. Nous avons étudié l'acquisition des pronoms de première et deuxième personne MOI et TOI chez deux enfants sourds, nés de parents sourds, qui apprenaient l'American Sign Language (ASL) en tant que langue maternelle. En ASL, les pronoms personnels sont formés en montrant directement du doigt l'interlocuteur (YOU) ou soi-même (ME), et ne sont donc pas des symboles arbitraires. De ce fait, les pronoms personnels en ASL ressemblent à des gestes para-linguistiques qui accompagnent souvent la parole et sont utilisés pré-linguistiquement par les enfants sourds et entendants à partir d'environ 9 mois. Cela permet d'étudier le passage du geste pré-linguistique à l'expression linguistique dans un cas où le geste et le langage appartiennent à la même modalité.

Les résultats indiquent qu'il faut un certain temps aux enfants sourds pour acquiescer les pronoms, et qu'ils commettent des erreurs du type de celles que commettent les enfants entendants, en dépit de la transparence des gestes. Au départ (les enfants étaient respectivement âgés de 10 et 12 mois), ils montraient du doigt des personnes, des objets et des endroits. Les deux enfants ont ensuite connu une longue période d'absence, pendant laquelle une des fonctions du geste (montrer les autres et soi-même du doigt) disparut complètement. Pendant cette période, leur langage et leur développement cognitif étaient par ailleurs entièrement normaux, et ils continuèrent à montrer du doigt des objets, par exemple. Lorsqu'ils recommencèrent à montrer du doigt les autres et eux-mêmes, ils commettaient des erreurs courantes chez des enfants entendants; un des enfants commettait des erreurs systématiques d'inversion, pensant que le signe TOI désignait lui-même, alors que l'autre commettait des erreurs d'inversion non systématiques. Les résultats des tâches expérimentales pour le premier enfant montrent qu'il produisait également ces erreurs en compréhension. L'usage des pronoms MOI et TOI ne fut complètement maîtrisé que vers Page de 25 à 27 mois, ce qui correspond à l'âge auquel les enfants entendants maîtrisent ces formes. Notre étude étaye donc l'idée qu'il existe une discontinuité chez l'enfant dans le passage de la communication pré-linguistique à la communication linguistique. Nous essayons de montrer que l'acquisition de la structure linguistique repose vraisemblablement sur des connaissances bien établies, propres au langage.



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