

**Early sign language development**  
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Language development happens naturally and without effort in most children. Children exposed to lots of sign language from an early age develop into fluent language users and will go through the same stages of development as that described for children exposed to spoken languages (Morgan & Woll, 2002). Early speech in normally developing hearing children is full of mistakes. For a 2 year old's mouth, the word 'mouth' is harder to say than 'mouse'. A child might confuse 'mouse' with 'mouth' in their own speech, despite being able discriminate between these two words in the adult's speech around them. This means children know what is right and wrong despite not being able to do it themselves. Do signing children have the same intuitions? In our studies of normal sign language development between the ages 0-3 years we have been observing consistent mistakes in children's first sign productions. So far we see that in many respects children exposed to sign make mistakes by following the underlying rules of BSL. This is revealed in some fascinating ways.

### **Handshape Substitutions**

Children learning to talk, often exchange hard sounds with ones that are more frequent and simpler to produce e.g. 'key' gets changed to 'tea'. In sign the same kind of substitution happens. Two year olds swap infrequently occurring handshapes in signs for more common and simpler to produce ones. These substitutions follow rules. The substituted handshape shares some basic properties with the target. It is possible to see this by analysing the sign in terms of layers. At the simplest representational level a common handshape like the '5' hand has a handshape and all the fingers extended. By adding a layer onto the representation we can make a more complex '8' handshape which now includes a value for how many fingers get extended and how many are flexed against the hand.

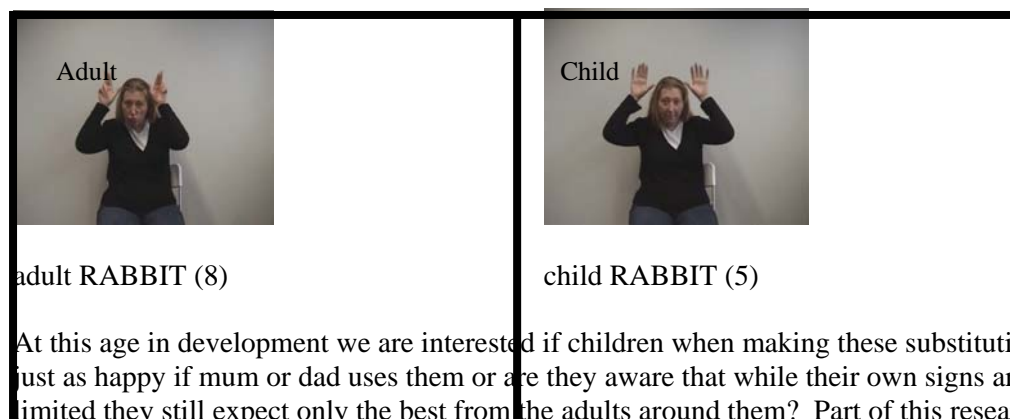


5 (all fingers extended)



8 (two flexed, 3 extended)

When we see sign substitutions in development we see that children do not randomly exchange handshapes. They instead choose substitutions by pruning down the layers of complexity. They take away part of the complex sign's representation.



At this age in development we are interested if children when making these substitutions are just as happy if mum or dad uses them or are they aware that while their own signs are still limited they still expect only the best from the adults around them? Part of this research enables us to understand what problems late exposure to language might cause and how to target particular skills in children who have problems in learning sign language successfully.

### **References**

Morgan, G. & Woll, B. (2002). (eds) Directions in sign language acquisition. Amsterdam: John Benjamins