

Acquiring Auslan as a First Language

What is Auslan?

Auslan (Australian Sign language) is the primary language of the Australian Deaf community. The name 'Auslan' was coined by Trevor Johnston, author of the first Auslan dictionary, in the early 1980s, but the language itself is much older (Johnston & Schembri, 2007). Auslan has its own vocabulary and grammar which are expressed by using a variety of handshapes, together with specific aspects of orientation, location, movement and non-manual movements such as facial expressions and body movements. There are currently 38 different Auslan handshapes and 28 variations which make up thousands of signs.

Features of sign languages

Like spoken languages, sign languages such as Auslan are passed down from one generation of language users to another within distinct social and cultural groups. Moreover, natural or native sign languages are no more likely to be universally understood than spoken languages, although there is an underlying commonality of structure and morphology (Hickok et al., 2001; Johnston & Schembri, 2007).

Sign languages display many of the grammatical features found in spoken languages and are structured like spoken languages at phonological, morphological and syntactic levels (Johnston & Schembri, 2007). However, signed languages are not spoken languages in signed form, but use grammatical rules very different from the spoken languages of their countries or cultures. Cross-linguistic research has shown that children acquiring sign language follow developmental milestones and face the same linguistic challenges as children acquiring spoken language (Mayberry & Squires, 2006; Petitto, 2000). In many cases, children are raised bilingually and they acquire spoken language and sign language as two separate languages, with both languages following the same language milestones, although in a different modality.

Within weeks of life, infants begin to discover the underlying units and rules of the words, sentences, and discourse patterns of the language around them (Bellugi, 1986; Klima & Bellugi, 1979; Marentette & Mayberry, 2000; Meier, 2008). The research findings also indicate

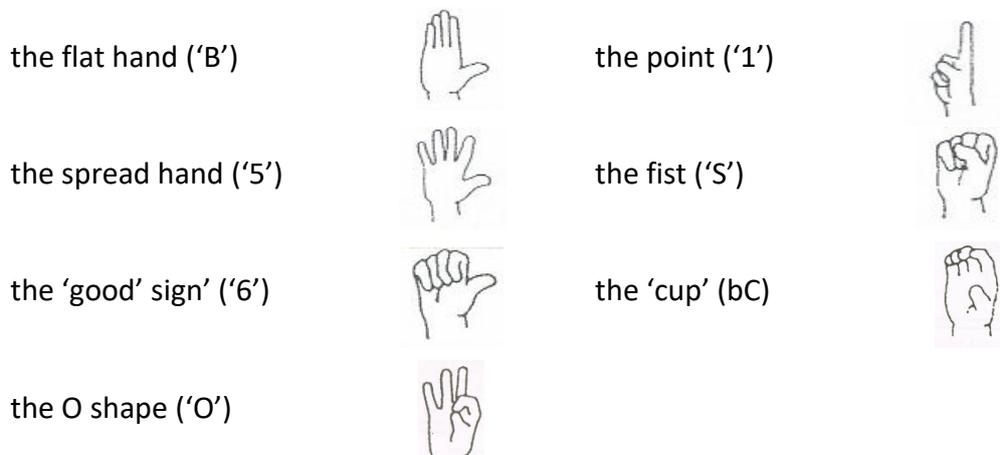
that, regardless of whether the input is auditory or visual, children acquiring spoken and sign languages learn grammatical structures in a similar way, through communicative interactions with their primary caregivers in a social context. Children acquiring sign languages also learn to differentiate emotional from linguistic facial expressions and how to use three-dimensional space for linguistic contrasts (Mayberry & Squires, 2006).

An infant's sensitivity to the rhythm of language

Babies are born with sensitivity to highly specific rhythmic patterns found in natural language and can produce the rhythms of language as effectively on their hands as on their tongue. Between the ages of four to seven months, children acquiring sign language begin to babble on their hands ('manual babbling'), in the same way hearing children babble vocally (Petitto & Marentette, 1991). Manual babbling is unique to visual-gestural languages and possesses the rhythmic patterns which incorporate the phonological features found in sign language input: handshape, orientation, location, movement. This type of babbling also follows the syllabic organization of sign languages, especially with respect to rhythmic timing (Johnston & Schembri, 2007; Schembri, 2005; Petitto & Marentette, 1991).

Manual babble

Manual babble and early sign production incorporate seven 'unmarked handshapes', which are natural, basic hand configurations produced by deaf and hearing infants alike as a normal phase in communication development (Baker & Cokely, 1980; Brentari, 1998; Cormier et al., 1998; Meier & Willerman, 1995). These handshapes are shown below:



The spread ('5') handshape is the most frequent handshape used by infants in their manual babbling and in their first signs. Unmarked handshapes account for more than 60 percent of Auslan signs and occur in the greatest range of combinations with other elements of signs (Johnston & Schembri, 2007). They have also been found to also appear most frequently in other sign languages.

First signs

Manual babble and communicative pointing, present at 10 months of age, decline just before the appearance of the first sign which emerges from as early as eight months to as late as 16 months (Petitto, 1987). Generally, the first 10 signs are produced at around 12 months of age and the first 50 signs from between 19 and 24 months (Anderson & Reilly, 2002; Charron & Petitto, 1991; Petitto, 1987). Development of motor control is evident in early signs with movements made by joints such as the shoulders and elbows, substituted for movements made by joints such as wrists and fingers (Meier et al., 2008).

In a similar way to young children making errors in their production of early speech sounds, signing children inevitably make errors in their early production of signs. The most frequently misarticulated sign parameters are handshape, followed by movement, with location being the most accurate (Marentette & Mayberry, 2000). For example, in Auslan, the sign for 'FATHER' is a two-handed sign which involves tapping the index and middle fingers of the right hand twice on the index and middle fingers of the left hand. Most young children will begin producing this sign with correct location and movement, but incorrect handshape. Initially they will use an open flat right hand tapping on top of the open flat left hand, then some time later will change this handshape to the right index finger tapping on the left index finger, finally producing the correct two-fingered, two-handed formation.

Single signs to two signs

In transitioning from single signs to the two-sign stage at about 12 months of age, gestures and signs both refer to the same meaning and are known as the semantic one-sign stage. At this stage, gestures are combined with a point and a single word, just as babies do when acquiring spoken language. The semantic two-sign stage follows around 16 months with the point and the sign referring to two distinct meanings (Anderson & Reilly, 2002). Less than a

third of children's first signs are composed of vocabulary with iconic qualities, that is, signs that clearly resemble the action, object, or characteristic they represent, such as 'cup' or 'car' (Meier et al., 2008; Tolar et al., 2008). Rather, children's first signs are semantically similar to those of children learning spoken languages, with words closely related to the child's experience appearing first, such as words for people, animals, and food. Question words, cognitive verbs and negation all appear after 100 words have been learned around 18 to 24 months, however non-manual markers are not added consistently or appropriately until the age of 3;6 (Anderson & Reilly, 2002). By the time signing children reach the two-word stage, they are using nominals to refer to people and generally begin to use pronouns by two years of age. The ability to use abstract locations in space to refer to people and objects not present is acquired after 3;6 (Hoffmeister, 1987; Petitto, 1987).

Developing grammar

After the two-word stage, children begin to acquire the more complex elements of sign languages, such as morphology, that depend on the linguistic use of space with signs and non-manual markers, although the latter are not mastered until 12 years of age. These 'facial adverbials' are acquired much like lexical items from the age of 1;10 to 4;6 and older (Anderson & Reilly, 1998) and are typical of native sign languages. Another linguistic feature typical of signed languages is that of 'topicalization' (Johnston & Schembri, 2007; Pichler, 2002). This is a process used to highlight which part of a sentence represents the topic and is usually the first major element in the sentence. Most sign linguists agree that there is some evidence that children can express topicalization using a prosodic break by the age of 2;0 (Pichler, 2002).

From three to four years of age and beyond, the linguistic skills of children acquiring sign language become considerably more complex. They are now able to comprehend conditional sentences, although do not master nonmanual markers to signal this use until they are at least eight years of age (Reilly et al., 1990). Between three and four years, they begin to comprehend the use of locations in space for verb agreement and can inflect verbs using people, places and objects that are present. By five years of age, children who have been exposed to Auslan or other sign languages from infancy will have acquired most of the basic

grammar of the language, although it takes a few more years before all linguistic aspects are consolidated. However, like any language, learning new vocabulary continues throughout life.

Between about six and eight years of age, children display correct production of basic verb agreement (Meier, 2002) and begin to master classifiers, spatial verbs and verb modifications in most contexts. Classifier or depicting signs (Johnston & Schembri, 2007) are amongst the more complex of linguistic skills to be acquired in sign languages and are used to describe or depict specific characteristics of people, animals and objects. They are acquired later in the developmental timeframe because full mastery requires the adept combination of several linguistic skills. To achieve this skill, children must be able to use an array of signs alongside classifier handshapes, coordinate both hands so that they can work together to track figure and ground, and know when to introduce a referent with an identifying sign versus a classifier.

With increasing mastery of complex signs and grammatical structures, children between six and eight years of age become confident communicators in diverse social settings, making use of many adult-like discourse strategies to regulate and maintain conversations. By eight years, they begin to understand non-literal meanings, sarcasm and metaphor and engage in a wide range of discourse, using language skills comparable to children of the same age acquiring spoken language.

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