



Chapter 1

Learning to talk

In this chapter you will:

- Understand the typical stages of lexical and grammatical speech development in children
- Appreciate the ways in which language develops with a focus on phonology and semantics
- Explore the central role of discourse in children's language development

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1.1 Stages of development in young children

Language sets humans apart from other animals. More straightforward needs, wants or feelings can be communicated through facial expressions, gestures and non-verbal noises, whereas language enables complex thoughts and innermost feelings to be shared. In the English language alone, there are estimated to be between one and two million words in use. This hints at the complexity of the task ahead of new born babies in their development of one or more languages.

Communication is not limited to verbal language. A child must also navigate the complex systems of signs and symbols that communicate messages and ideas in print, face to face and digitally. At birth, a baby can do little more than cry to communicate basic needs. Within five years, a child is likely to be fluent in at least one and perhaps more languages. This rapid progress indicates an extraordinary rate of neurological, cognitive and linguistic development. It is accepted that a child is usually born receptive to language and that in early language use the child has more sophisticated comprehension of the language in use than the capacity to actually create language in a way that it can be understood.

1.1.1 Pre-verbal language development: production

There are a number of theories about the capacity of an unborn baby to recognise the sound of a parent or sibling's voice. It is often suggested that when the baby kicks or moves prior to birth, it can be an early way of responding to external stimulus, which could be loud noises as well as people's voices.

Once a baby is born, crying is the most obvious form of communication. Crying might express a range of different needs and could indicate hunger, discomfort, pain, loneliness or being over- or under-stimulated. Crying is most frequent in the first few weeks after birth, but the cries are gradually replaced with a wider range of sounds such as gurgling, **cooing** and **babbling** that develop and mature in complexity prior to the child uttering their first recognisable word (sometimes as early as 9 months but more commonly at about 12 months old). Whilst cooing is more detached from recognisable language, babbling gradually becomes more similar in sound to the letter combinations a child will later use. **Reduplicated babbling** involves repetition of the same consonant and vowel combinations (for example, 'mamamama'), whereas **variegated babbling** comes later and shows progression since it will use differing vowel and consonant letter combinations which are vocally more challenging to produce and require greater mouth movement (for example, 'bemo'). This will then develop into the use

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of **proto-words**, utterances that might represent meaning to the child and be used consistently, or have meaning imposed upon them by a caregiver. It may be that the desired word is physically too complex to articulate. For example, 'blanket' might consistently be called 'baa baa'. The combination of vowels and consonants in 'blanket' can be difficult to articulate and so make 'baa baa' a manageable alternative.

KEY TERMS

Cooing: distinct from crying but not yet forming recognisable vowels and consonants

Babbling: vocal play that involves forming vowel and consonant sounds

Reduplicated babbling: vocal play that involves repeated sounds

Variiegated babbling: vocal play that involves different sounds placed together

Proto-words: 'made up' words that a child will use to represent a word they might not yet be able to pronounce, for example, 'rayrays' for 'raisins'

Desmond Morris (2008) suggested that for the first six months of a baby's life these gurgles and babbles will be the same regardless of the baby's nationality or how much parental input the child has had. Deaf children will also create the same sounds. By six months, the child will be increasingly attuned to variations in rhythm of the particular language being used around him or her and the babbling will then resemble this language more closely.

What happens then, for babies born in households where more than one language is spoken? Francois Grosjean (1989) has been researching bilingualism for over thirty years and recently cited an American Community Survey of 2007 that identified 51 million Americans as bilingual, with both English and another language being spoken at home. Simultaneous bilingualism refers to the acquisition of two languages at the same time when both languages have been introduced prior to the age of three. Contrary to some commonly held misconceptions about language development being slower for these bilingual children, it is thought that children born into bilingual households will achieve language development milestones within normal parameters and will not confuse the two languages but learn them discretely from the outset.

Patricia Kuhl (2011) has researched the human brain and language development, and suggests that at birth, babies are 'citizens of the world', but by the age of

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12 months they have become ‘culture bound listeners’. This suggests the critical importance of language in the first 12 months when children are less vocal but are receptors to the language being used around them.

1.1.2 Pre-verbal language development: reception

There is a growing body of research to suggest that, prior to a child uttering their first recognisable word, a huge amount of language development has gone on. Not only is the child experimenting with the creation of sounds but also continuously processing the language around him or her and becoming familiar with the social interactions that underpin talk within his or her immediate surroundings.

Patricia Kuhl and Andrew Meltzoff (2016) have used developments in neuroscience to begin exploring the social development in a baby’s brain and have suggested through brain imaging that social interaction is critical in a child’s language learning journey and that early language exposure can actually correlate with a child’s readiness for school a number of years later. Brooks and Meltzoff (2008) conducted a longitudinal study into the capacity of a child to follow eye gaze (the direction in which an adult is looking steadily with an opened eye) and its place in non-verbal social cues. They suggest that if a child is skilful in following eye gaze at 10 or 11 months, this correlates to an increased vocabulary size at two years old. Language acquisition evidently requires engagement with other language users and the child’s immediate environment. This could go some way to explaining why some infants who are diagnosed with autism (a disorder with its name deriving from the Greek *autos*, meaning ‘self’) will sometimes have delayed language development. If the disorder means that eye contact and interaction with others is difficult for a child, then delayed language development might be a consequence of this.

1.1.3 Early physical development

A number of physical developments must take place before a child can actually talk. At birth, a baby’s larynx is only one third of the size of an adult’s and positioned differently in the neck. Until some growth and movement have taken place, it is physically difficult for words to be created. Adult speech requires the use of over seventy muscles and these are gradually developed through early vocal play that enables tongue, lips, mouth and vocal chords to move so that sound formation is practised as a precursor to speech.

1.1.4 Beginning to convey meaning

At around 9–12 months old, children will begin to communicate in such a way as to make their meaning evident, through individual words accompanied by non-verbal communication. In 1973, the linguist Michael Halliday proposed

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that there were seven reasons why language is initially used. These ‘functions’ are explained in Table 1.1, each with an example to demonstrate how it might appear in early language:

Table 1.1: Functions of language

Function	Explanation	Example
Instrumental	Language used to try to fulfil a need.	‘Nana’ (gesturing for more banana)
Regulatory	Language used to influence others – to command or persuade.	‘Come’ (when wanting to enter a playground with caregiver)
Interactional	Language used to build and strengthen social relationships with others.	‘Love you’ (aimed at sibling at bedtime)
Personal	Language used to develop a sense of self, express preferences, opinions etc.	‘No like it’ (describing a new food)
Representational	Language used to request information from, or give information to, from another participant	‘I eating all my dinner’
Heuristic	Language used to explore the world around oneself.	‘Who that?’ (when hearing a knock at the door)
Imaginative	Language used to play and be imaginative	‘Dragon’

1.1.5 Stages of lexical and grammatical development

There is a commonly held view that language develops in a series of sequential steps. This can be loosely attached to ages, but children vary considerably in the rate and nature of their language development. Each child is unique in how language develops and the variety that exists will often be determined by the unique context in which a child lives. For example, a baby who is the third child within a family with pets and close relatives nearby will probably have a large proportion of nouns in his or her early lexical repertoire that are the names of siblings, pets or other relatives.

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1.1.6 Holophrastic stage (12–18 months)

A child's earliest recognisable language will be at the **holophrastic stage**, when one word can convey a complete idea or a large amount of meaning. In order to avoid confusion, it is important for other participants to be looking for non-verbal communication or contextual clues in order better to understand the child's precise meaning. For example, if a child says 'ball', it could mean the child wants the ball, has found it, likes it or is annoyed that another child has taken the ball. A caregiver will often ask further questions of the child to elicit their exact meaning.

This early lexical development, when language is distilled into individual words to convey units of meaning, inevitably comes before words are placed together and interrelate to create more complex meaning. Katherine Nelson (1973) found that first words were most commonly nouns (60 per cent of first words) followed then by actions, modifiers or what might be called social and personal words (for example, 'hello' and 'bye bye'). These first words will usually be associated with the child's immediate environment. Even if a preposition is used, it is likely to be used as a verb (for example, 'in' to explain the movement of an object to a particular place, as opposed to 'put' which is less clear).

Early words will often be reduplicated for ease of articulation and the child might pick this up from the caregiver who has simplified words in this way (for example, 'bobos' for 'bedtime' or 'mama' for 'mother'). **Diminutives** might also be used by caregivers and then appear in a child's early vocabulary (for example, 'kitty', 'doggie', 'dolly'), acquiring an unnecessary -y suffix to suggest the diminutive nature of the object but perhaps also to provide a vocally pleasing word.

KEY TERMS

Holophrastic stage: the point in a child's development when a child uses just individual words to communicate more than the single word's meaning

Diminutive: a name, formed through the addition of a suffix, that is used informally to show some degree of relative smallness

Whilst initial acquisition of key words will focus on those items or people most important to the child, it is not long before a spurt in vocabulary use occurs. Jean Aitchison (1997) suggested that at about 18 months, a child will realise that every object, person or place has a word or label attached to it and therefore will develop a 'naming insight'. This is then followed by a 'naming explosion' when children rapidly develop new vocabulary, in order to fill the gaps in their lexical knowledge. Although much of the vocabulary building is done by the age of three, a child will continue to acquire new words into adolescence and beyond (see Chapter 5).

ACTIVITY 1.1**First words**

Below is a list of first words acquired by different children (excepting equivalent names for the child's parent or caregivers like 'papa', 'mommy' etc.).

- | | |
|----------------|--------------|
| 1. more | 7. here y'ar |
| 2. teddy | 8. no |
| 3. ce ce | 9. door |
| 4. vroom vroom | 10. der |
| 5. duck | 11. moon |
| 6. cat | 12. hiya |

1. Try to match the words (1–12) with the appropriate contextual information (a–l):
 - a. First independent word uttered to a caregiver who had got distracted whilst feeding the child
 - b. Whilst looking at the domestic pet
 - c. On seeing a full moon outside the kitchen window
 - d. Because the child would often go and feed the ducks in the pond in the local area
 - e. To one of her siblings
 - f. To mean 'Lucy', the child's big sister
 - g. The child liked opening and closing doors
 - h. Pointing at a teddy on the shelf that the child wanted at bedtime
 - i. As a greeting to people the child knew
 - j. Meaning 'there' – to indicate something of interest around her
 - k. To imitate the noise of a car
 - l. Just before dropping a plate or dish over the side of the high chair
2. What do you notice about the types of words that are uttered first?
3. What comment can you make about the functions of these first words? Why has the child uttered this particular word?

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1.1.7 Two-word stage (18–24 months)

Not only is there a vocabulary explosion as a child approaches approximately 18 months, but a development in grammar also emerges. Up to about the age of two, the child will be in the two-word stage of development when there is an emerging recognition of some syntactic relationship between two words being uttered. These two words will usually be the most significant **content words** that convey essential information rather than **grammatical words** that appear later. Examples of these utterances might be ‘dolly gone’, ‘water out’ or ‘milk table’. Usually the words are accurately positioned as they would be in a more complete sentence.

KEY TERMS

Content words: a word within a sentence that is vital to convey meaning

Grammatical words: words within a sentence that are needed in order to indicate the relationship between content words

Roger Brown (1973) conducted a longitudinal study focusing on three American children and their grammatical development. Through this, he identified the syntactic structures of two word utterances, analysing the function of one word to the other. Brown suggested that combinations of words placed together follow a limited range of patterns, as outlined in Table 1.2.

Table 1.2: Word combinations

Combination	Example
Agent + action	‘Daddy go’
Action + object	‘Make cake’
Agent + object	‘Billy bike’
Action + location	‘Run garden’
Object + location	‘Teddy chair’
Possessor + possession	‘Granny gloves’
Object + attribute	‘Coat soft’
Demonstrative + object	‘Here chair’

1.1.8 Telegraphic stage (2–3 years) and post-telegraphic stage (3+ years)

Between approximately the ages of two and three, a child's utterances will gradually get longer. The **telegraphic stage** is the point at which sentences make sense but are not grammatically complete. Language at this point resembles a telegram (a form of communication once used to convey important information briefly and promptly). Utterances are likely to incorporate key content words that are needed to convey meaning but some of the grammatical words will still be omitted.

The **post-telegraphic stage** (approximately 36 months and beyond) is also sometimes called the pre-school language stage. By this point, both content and grammatical words now appear and utterances more closely resemble adult speech. It is particularly evident during this stage that a child's **mean length of utterance** will also be growing.

KEY TERMS

Telegraphic stage: period of time when a child's utterances will tend to be three words and more; there might still be omission of some words, with the content and grammatical words included

Post-telegraphic stage: period of time when a child's language will include both content and grammatical words and more closely resemble adult speech

Mean length of utterance (MLU): the way a typical utterance length can be calculated. In any given transcript, add up the total number of words spoken by a participant and divide this number by the number of utterances

Syntax: the study of how words form larger structures such as phrases, clauses and sentences

As the child begins to speak with greater fluency, more complex learning around grammar (and syntax in particular) will also take place. The importance of **syntax** to meaning can be demonstrated by looking at the following two statements:

The owner walks the dog.

The dog walks the owner.

By inverting the subject and object within this sentence, meaning is changed entirely. The second sentence might be used to convey humour or communicate a message about how difficult it is to walk the dog. By the time a child has

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reached the post-telegraphic stage, such complex understanding about subject and object and positions within an utterance are embedded.

A child will also be gaining confidence with **inflectional functions** and understanding the ways in which particular words might have different endings according to quantity, scale or time. **Open word classes** are nouns, verbs, adjectives and adverbs and are subject to inflections in a way that **closed word classes** might not be (for example, the preposition ‘under’ does not inflect to convey a different meaning).

KEY TERMS

Inflectional functions: the way that an affix shows a grammatical category such as a verb tense or a plural noun

Open word classes: a word class that is generally open to new membership

Closed word classes: a word class which doesn’t readily admit new members

To understand inflectional functions, Table 1.3 gives some indication of the complexity of grammatical development for an early speaker. Not only are there regular inflections, but many words take irregular inflections too.

Table 1.3: Grammatical development and inflectional functions

Word class	Variations – regular	Variations – irregular	Differing meaning
Nouns	dog/dogs	child/children	Singular or plural
Verbs	walk/walks/ walked	go/goes/went	Past or present and singular or plural
Adjectives	big/bigger/ biggest	difficult/more difficult/most difficult	Degree of scale: comparatives or superlatives
Adverbs	fast/faster/ fastest	gently/more gently/most gently	Degree to which something is being done: comparatives or superlatives