

# Mathilda Speaking



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# Mathilda Speaking: Notes for Teachers and Students

## Introduction

These materials suggest ways for teachers and students of A Level English Language to explore the data on the DVD *Mathilda Speaking*, along with the accompanying transcripts. There are 14 video clips of Mathilda with her mother, on her own and with friends; there are also two clips of Ellie talking to herself and pretending to read a book.

## Notes on the data

There are a few important points to bear in mind about the nature of this data. There are different approaches to the collection of samples for the study of child language acquisition:

### **longitudinal v cross-sectional**

### **naturalistic v experimental**

This set of recordings makes up a **longitudinal** study: following a single child from the age of 12 months to 3 years and six months, (with some additional data on another child of a similar age). This provides you with the opportunity to observe and discuss the development of Mathilda's language. It is not valid, of course, to generalise from such a small sample and students should be encouraged to consider the aspects that make this particular child unique.

You can, however, compare features of Mathilda's speech with evidence from **cross-sectional studies**, based on larger groups of children. It is likely that you will notice features common to the speech development of many children. But, here again, a word of caution: much research is based on mono-lingual English speaking children from Western industrialised countries.

An **experimental approach** uses a specific task to test a hypothesis about child language acquisition. You can find an example in the so-called 'Wugs' test, devised by Jean Berko-Gleason. The hypothesis/question under scrutiny is whether children do not simply imitate language they have heard, but have an innate understanding of morphology. This 'experiment' consists of a series of tasks for each child to perform. They look at pictures of creatures with invented names, eg. 'wug'. The researcher wants to find out whether the child can add morphemes to indicate plural (two wugs) or possession (the wug's house). (See the Wugs folder on this disk for a full set of Wug pictures and an article by Jean Berko-Gleason. See also [[http://en.wikipedia.org/wiki/Wug\\_test](http://en.wikipedia.org/wiki/Wug_test)]).

On this DVD, the approach is **naturalistic**, as the parents are aiming to record the child's spontaneous speech in familiar situations. Of course, there is the 'observer paradox': namely, that behaviour is likely to be affected by the mere fact of being observed. You should consider the extent to which the young child is aware of being filmed. Even where you feel that the child is reacting naturally, remember that the situation is contrived to some extent from the parents' point of view. They have had to decide when, where and why to set up the video-recorder. The parents will have already noticed some trends over months of daily interaction. The aim is to capture evidence of interesting aspects of Mathilda's speech development – in a relatively short 'window of opportunity' – so the parents may be focusing or directing their speech more than they would do in their daily routine.

## Notes on the DVD

1. The DVD provides an extremely valuable – and comparatively rare – audio-visual record of Mathilda’s speech. It allows students not only to hear all the subtleties of pronunciation, stress, intonation and volume, but also to see some important contextual clues, such as facial expressions and gestures.
2. The transcripts (often the only access to a child’s speech) provide a concrete version that can be used for close analysis after or alongside the DVD. Pronunciation is represented informally, using the alphabet, rather than phonemic symbols. In some cases, students should attempt a formal IPA transcription of some utterances. In other cases (early vocalisations or imitation of animal sounds) this may not be possible!
3. Mathilda’s mother provides her own commentary on each of the clips. This provides students with a fuller picture, providing a context, for example, where Mathilda has produced a particular utterance. It also provides some interesting discussion points: whether, for example, ‘motherese’ or ‘child-directed speech’ fulfils a role of ‘teaching’ the child, or simply promotes use of language for conversation. Although not a linguist, you will also notice that the mother has some familiarity with linguistic concepts from child language study: possessive word endings, short v long vowels. Perhaps most interesting are her comments about non-verbal and social aspects of language use.

## Notes on the materials

These materials provide a series of questions on the data or tasks to focus students on some of the key concepts for A Level language study. The headings assume some familiarity with language study:

- awareness of context – the impact of situational factors
- analysis of language – the key constituents or different levels
- awareness of some psycholinguistic theories and concepts.

Resources on each clip are divided into the following sections:

### Context

Type of interaction: who, where, why, what?

### Child speech

Focus on the utterances at various levels of language:

1. **Phonology**, including familiarity with IPA symbols
2. **Lexis**, including semantics
3. **Syntax**, including morphology and grammar
4. **Discourse**, including pragmatics.

### Issues and theories

Questions about *how* children acquire language:

- imitation (Skinner’s **Behaviourist** theories)
- innate ability (Chomsky’s concept of **LAD and Poverty of Stimulus**)
- social environment (Bruner’s concept of **motherese** or caregiver input, now often termed **child-directed speech**).

Using the concept of stages in development:

- application of terms, such as holophrase and telegraphic speech.

Focus on meanings and functions:

- what is the child using language to *do*?
- applying Halliday’s categories, such as regulatory and interactional.

### An observer comments

The notes also include comments on the clips taken from a recorded conversation between an observer (also a parent of young children) and a teacher. They give some idea of the comments a student might make in response to the clips but are not intended as a model answer.

### Support and further suggestions

Some pointers and further reading linked to key questions are offered where appropriate, with light touch activities and suggestions for how students might extend their exploration.

Students might like to have a go at representing Mathilda's vocalisations more accurately than in the transcript, using the International Phonetic Alphabet. You can download visual and audio charts of the sounds of English from <http://www.bbc.co.uk/worldservice/learningenglish/grammar/pron/sounds/index.shtml> For clips 3a, 5a, 7a and 16a students are asked to transcribe individual words or short phrases using IPA.

### Recommended reading

Anderson Slosberg, Elaine (1990), *Speaking with Style*, Routledge

Aitchison, Jean (1997), *The Language Web: The Power and Problems of Words – The 1996 Reith Lectures* Cambridge University Press

Bavin, Edith and Dale Philip (ed), *The Journal of Child Language*, Cambridge Journals (see <http://journals.cambridge.org/action/displayJournal?jid=JCL>)

Bruner, Jerome (1983), *Child's Talk*, Oxford University Press

Carter, Ron (1989-92), *LINC Language in the National Curriculum* available from Nottingham University, on CD ROM from <http://www.phon.ucl.ac.uk/home/dick/ec/linc.htm> or as a download from Teachit ([www.teachit.co.uk](http://www.teachit.co.uk))

Carter, Ron, Goddard, Angela, Reah, Danutah, Sanger, Keith and Bowring, Maggie (1997. 2<sup>nd</sup> edition), *Working with Texts: A core introduction to language analysis*, Routledge

CHILDES: Child Language Data Exchange System see <http://childes.psy.cmu.edu/>

Clayton Daniel and Kemp, Beth (2008), *AQA A AS English Language Student's Book*, Nelson Thornes

Crystal, David (1976), *Child Language, Learning and Linguistics*, Edward Arnold

Crystal, David (1986), *Listen to Your Child*, Penguin

Fletcher, P. & MacWhinney, B. (1996), *The Handbook of Child Language*, Blackwell

Foster, Susan H. (1990), *The Communicative Competence of Young Children*, Longman

Garton, Alison and Pratt, Chris (1998), *Learning to be Literate*, Blackwell

Gillen, Julia (2003) *The Language of Children*, Routledge Intertext Series

Halliday, Michael (1975), *Learning How to Mean* (Explorations in Language Study), Hodder Arnold

Kress, Gunther (1997), *Before Writing: rethinking the paths to literacy*, Routledge

Lock, Andrew and Fisher, Eunice (1984), *Language Development*, Routledge

Peccei, Jean Stilwell (1994), *Child Language*, Routledge Language Workbooks

Peccei, Jean Stilwell (2006), *Child Language, A Resource Book for Students*, Routledge (a very useful source for students, referred to throughout these notes)

Perera, Katherine (1984), *Children's Reading and Writing*, Routledge

Pinker, Stephen (1994), *The Language Instinct*, Penguin

Thorne, Sara (1997), *Mastering English Language*, Palgrave (one of the sources of definitions given throughout these notes)

## Clip 1a In the High Chair (Age 1;2)

### Context

Before beginning to explore the clip in detail, note any significant details, eg. who is involved in this interaction and the situation they are in.

Early speech is all to do with the 'here and now'.

- What are they – the adults – talking about and why?
- What non-verbal gestures and expressions does Mathilda make? How do you interpret their meaning or function? Do you all agree?
- After you have finished all the questions, listen to the mother's commentary.

### Child speech

There may seem to be little language to comment on here. However, there are already a number of interesting features to explore.

#### 1. Phonology

- Can you explain the child's pronunciation of *tigger* with reference to any research into the development of consonant and vowel sounds?

Mathilda often makes a sound ending in the sibilant /s/.

- Use IPA to show the different vowel sounds that precede /s/.

#### 2. Lexis and semantics

- Do you think these are simply babbling sounds or is she repeating a word? If it is a word, what English word might it be?
- Find evidence that supports the hypothesis that it is the child's vocalization of yes. Find evidence to support an alternative interpretation of the child's meaning.

#### 3. Discourse

- Is Mathilda taking up her turns in the conversation? How might she know when it is her turn? Share your ideas and talk about any differences of opinion.

### Issues and theories

There might seem little point in bothering to talk to a child who can barely articulate even single words. To think about why there might be a point, discuss the questions suggested here.

#### 1. Behaviourist/imitation theory

- Do we talk to small children to provide model examples for the child to repeat?

There is only one example of this happening in this clip: *tigger – ya-yiggers*.

- What do you think is the function of the parents' speech in this clip?

#### 2. Motherese/caregiver language/child-directed speech

The concept of **CDS (child-directed speech)** refers to a manner of speaking that is common in adult-child situations, plus a few others: human-pet; in a romantic situation; when trying to patronise.

- Identify features of the adults' language use that would not usually be found in adult-adult situations. What do you think is the function of such language use?
- In pairs or small groups, talk about how far you agree with the mother that:

- the child is learning about turn-taking in conversations
- ‘the more rich the environment is, the better their language progresses’
- CDS tends to use ‘exaggerated intonation’
- ‘most parents come to [CDS features] naturally’?

### 3. The use of ‘baby-talk’ is more controversial

- Identify some examples where the adult departs completely from Standard English: sound effects and so on.

Such language behaviour seems to ‘come naturally’ to adults when talking to infants.

- Comment on when you think it can be effective or become a hindrance.

### 4. A functional approach

The linguist Michael Halliday (1975) identifies seven functions that language has for children:

- Instrumental: language to express needs (eg. ‘Want juice’)
  - Regulatory: language to tell others what to do (e.g. ‘Go away’)
  - Interactional: language is used to make contact with others and form relationships (eg ‘Love you, mummy’)
  - Personal: language to express feelings, opinions and individual identity (eg ‘Me good girl’)
  - Representational: language to convey facts and information
  - Heuristic: language is used to gain knowledge about the environment (eg. ‘What the tractor doing?’)
  - Imaginative: language to tell stories and jokes, and to create an imaginary environment
- Can you apply one or more of Halliday’s seven categories to Mathilda’s speech in this clip? What do you think she is doing with the utterances *ess* and *ya-yiggers*?

#### **An observer’s comments** (*guided by questions with teacher comments added in brackets*)

Nice repetition on *tigger* – function of ‘naming’ her world? – and confirmation with her mum with the *es* and *er ya*. She’s enjoying having a conversation – smiling – though not really making much sense. She is definitely aware that something was expected of her in the conversation – *es* sounds a bit like ‘it’s’. Even without speech, she uses gestures to express responses. If the sound she makes is ‘yes’, it could function like clapping, an encouragement (like backchannel behaviour?) to the adults to continue. I think *ya-yiggers* is two words – ‘yes tigger’. Her pronunciation is almost like a stammer, once she has started with the sound ‘y’, it carries over to the following word (reduplication). Talking with kids is often fun for the adults, so they play around with words – *ga-giggers* – but maybe try to avoid baby-talk. I think parents need to keep their language straightforward, but accessible; when you are talking with friends, the child will overhear, so it’s not like you have one language for the child and one for friends, you’re teaching (is this a misleading use of the word?) them the same language. I notice some of the features from the list of CDS: the adults use higher pitch and slower speech, but the Dad has a naturally lower voice. Re the function of this from the adult perspective, I think the Dad seems more inclined to entertain – maybe himself as much as Mathilda – and be playful with sounds and gestures, like the bouncing of Tigger and joking about escaping from the high chair. The high chair seems to make Mathilda a bit shy: it’s there for when something practical needs to be done like feeding or drawing and to keep her in one place. The video camera is a point of focus for the child, which is not always a good thing – when you want the child to talk about one thing, they are interested in something else.

#### **Support and further suggestions**

- Remind yourself of the definitions of these concepts:
  - babbling
  - holophrase
  - proto-word.

- Watch the clip of Mathilda again, identifying examples of babbling, holophrases and protoword. Share your examples and talk about any points of difference or disagreement.
- Read the list of features of child-directed speech (CDS) in Peccei (2006) page 44 and 45.
- Talk about how useful and/or appropriate you find this approach to analysing the interactions between Mathilda and her parents in clip 1.

Note that CDS is a culturally-specific feature. That is, many cultures and societies do not interact with young children in this way. Yet all children acquire language by the age of 5 years. This is something you may want to explore further, looking both at current research on the possible roles of CDS in child language acquisition and at research into the ways children in other cultures acquire language.

## Clip 2a Making Animal Noises (Age 1;4)

### Context

The jigsaw is the focus of this interaction, yet we cannot see the images in detail, nor do we know whether Mathilda has played with it before.

- Before beginning to explore the clip in detail, note any significant details, eg. who is involved in this interaction and the situation they are in.
- Observe Mathilda's 'eye gaze'. After which utterances does she look up to her mother? When does she keep her eyes on the pictures? Do you think there is a systematic reason for this non-verbal behaviour?
- After you have finished the questions, listen to the mother's commentary.

### Child speech

It would be difficult to represent the child's utterances using symbols for phonemes of English. The mother interprets some sounds as words (*um-ah; man that's right*) and others as animal cries (*ha-hoo-ha-ho*).

#### 1. Phonology

- How do you interpret the sibilant /s/ sound in this clip – an attempt to say the word 'snake' or a hissing noise? Is the sound different when Mathilda sees the picture of a mouse?
- What other consonant and vowel sounds can you pick out in Mathilda's utterances?

#### 2. Lexis and semantics

- Is Mathilda only babbling here, or is she producing words?
- Why do you think animal sounds are common as first words for children? Is this true universally?
- Are adult learners of English familiar with animal vocabulary like 'paw' at an early stage? Why not?

#### 3. Discourse

- Provide examples where the pattern of turntaking often follows **question-reply-response**, eg.
  - 'What's this?'
  - 'Cup'
  - 'Well done.'

As this 3-part pattern is also common in classroom discourse, this might suggest that the purpose is to teach.

- Do you think this is the case here?
- What do you think Mathilda's role is in this interaction?

### Issues and theories

#### Features and roles of child-directed speech

This clip demonstrates some interesting features of CDS (summarized in the table in Peccei) such as regular 'prompt questions' (eg. *what's this?*). There are, however, no 'corrections for truth' – the mother accepts the animal noise as an acceptable label/word for each creature. Note all the positive confirmation the child receives, (eg. *that's right*).

- If it is true that CDS is not *necessary* for a child to acquire language, what function might this sort of interaction play in child development?

**An observer comments** (*guided by questions with comments from the teacher in brackets*)

More interaction in a conversational sort of way, but I wonder how much is assumed to be correct by the mother, for example *hha-ha* for the duck seems a bit of a stretch. I guess praise and encouragement is the main point here. But the *Um-ah* for man occurs twice and is obviously (really?) a two-word utterance – whether the child realises this or not – as ‘a-man’ may be the only context she’s heard it at this point. It would be good to find examples of ‘this-man’ or ‘that-man’. I don’t think this is ‘babbling’, as Mathilda is providing responses to direct questions. But I can’t see clear evidence of phonological progression. For example the *ha-ha* sound is more a panting sound effect, than the English phoneme /h/. Her squeaking sounds are all subtly different, not simply the English long vowel /i:/. They are playing at animal recognition and it’s easier for the child to make a variable grunting noise than sound out the word ‘monkey’. But she probably knows this word, as you’d get the same response without a picture, if you asked ‘What noise does a monkey make?’. I think children are surrounded from birth by images of animals and people, but it’s much harder to distinguish between people than between an elephant and a monkey. Animal recognition games are a win-win situation all the way through. The child might be able to recognise fruit, but an apple doesn’t make a noise. With animals, you can get a semi-verbal communication from the child. It would be interesting to investigate whether animal noises are universal over time and space. In foreign language learning at school, we began with words for items in shops or our personal possessions, because that’s what we need to talk about. Children want to know about animals – it’s common to all children (how can we be sure?).

**Support and further suggestions**

Students who are interested in exploring phonological development further might like to read the detailed summary on pages 7-14 of Peccei (2006). It should be noted carefully that these are generalised patterns and that individual children vary enormously. Students could consider Peccei’s patterns in relation both to Mathilda and any children they know.

## Clip 3a Getting the Ball and Bag (Age 1;7)

### Context

- Before beginning to explore the clip in detail, note any significant details, eg. who is involved in this interaction and the situation they are in.
- Why do you think the parents decided to set up the video recorder in this situation, at this time? You may want to comment on language and gender issues here – are Mathilda's toys gender-neutral: a car, a ball, a bag?

Note the non-verbal responses Mathilda makes to the adult's speech, eg. *in your toy box*.

- What aspect of language skills does this provide evidence for?

### Child speech

In this clip it is worth focusing on the child's listening comprehension, (sometimes termed **passive understanding**) as well as her speech (sometimes termed **active production**).

- Although there is some initial confusion between words *bag* v *ball*, etc, what concepts does Mathilda clearly understand in her responses?

#### 1. Phonology

- Can you refer to research findings to explain why it is tricky for Mathilda to discriminate between the words *bag* and *ball*?
- Listen to – or transcribe using IPA – her pronunciation of these two words. Do you agree with Mathilda's mother that she can – finally – distinguish (in her production) between the long vowel in *ball* and the short vowel in *bag*.

#### 2. Lexis and semantics

- What nouns does Mathilda understand and which does she produce? What verbs for actions does she respond to appropriately? What prepositions of place (eg. in, on, between) does Mathilda show understanding of? What question words (eg. what, why, when?) does she show understanding of?

#### 3. Grammar

Mathilda seems to be on the threshold of using longer, grammatically complex, utterances.

- Do you interpret her utterance (*la ez wor gor*) in the same way as her mother's expansion (*Is it all gone?*)? What are the similarities between the child's utterance and the mother's version – phonemes making recognisable words or the overall intonation pattern?

#### 4. Discourse

- Find examples from this clip where interrogative forms do not require an 'answer', but a response in the form of an action eg. *Where's your bag?*.

### Issues and theories

#### Functions

- Remind yourself of Halliday's seven functions of child language (see clip 2). Can you use Halliday's categories to comment on the functions for which Mathilda is using language?

#### Influences on child language acquisition

Chomsky uses the term **Poverty of Stimulus** to argue that a child cannot learn by imitation, since the input is too chaotic.

- What do you notice about the input provided by the mother in this clip? Can you find examples of 'framing' and 'expansion' in the child-directed speech? What is the function of these traits? Can you find other features of CDS in this clip?

**Framing:** the repeated use of the same word in several syntactic contexts.

**Expansion:** refers to recasting the child's utterance into the phonologically or grammatically correct form.

### **An observer comments** (*guided by questions with comments from the teacher in brackets*)

Just moving to and fro in response to her mother's prompts seems to be easy for Mathilda. The interesting part is the one piece of information Mathilda offers: Halliday's **Representational Function** for explaining the world. *La es wor gor* has little in it that sounds exactly like 'it was all gone' or 'it is gone', but the rhythm is great and shows she is trying to communicate on her own level. She clearly knows a lot of words – but not the word 'bag' the mother is trying for! She uses framing as she repeats 'bag' in all sorts of structures and the child understands everything but that noun – specific locations *in your toy box* and *behind you*, I think she might be producing the preposition 'under', unless she is just grunting with the effort of looking under the sofa. She also understands the verbs in specific requests for actions *can I catch it?*, *can you give it to mummy?* I can't remember if the mother uses rising intonation on these phrases, because they aren't really questions but commands, and that is how Mathilda interprets them – she doesn't attempt to provide an answer like 'es'. When she utters that sound *es* (.) *ezz* the mother seems to interpret it as the word 'zip' in her expansion '*that's the zips*'. The bag v ball distinction is a tricky one, if you think about the sounds. If we take off the final consonant sound (as children tend to at early stages in phonological development) they are very similar, beginning with the same consonant. Mathilda does produce two distinct vowel sounds, first when she – mistakenly – produces a '*bor*', (long vowel) and finally when she gets the '*ba*' (short vowel). I suppose a bag is stereotypically more associated with females, but I remember how much I loved exploring all the compartments of handbags. Anyway, Mathilda seems more interested in her ball that can be thrown around and the car that can also move – stereotypically male? I think these may be culturally-imposed gender preferences.

### **Support and further suggestions**

Students may find Peccei's table and explanation of terms useful when analysing and discussing child-directed speech in this clip (Peccei, 2006, pages 44 and 45). The list of phonological simplification processes on pages 12-14 might also be helpful.

## Clip 4a Reading a Book (Age 1;7)

### Context

- How do you think this type of activity – an adult and child reading a book together – is likely to affect the language produced by each?
- What can you tell about the book from their interaction (eg. its subject matter, layout, use of pictures and other features such as pop-ups, how familiar it is to Mathilda and her mother)?
- As you watch the clip, pay attention to what Mathilda is doing physically, as well as her vocal responses. Talk about how her actions, facial expressions and so on demonstrate her 'passive' understanding, as opposed to 'active' production of language.

### Child speech

#### 1. Phonology

- Look again at clips 1 ('In the High Chair') and 2 ('Making Animal Noises'). Can you compare the utterances in this clip (age 1;7) with the earlier ones? Talk about the possible function – or functions – of *ess* in this clip.

#### 2. Lexis and semantics

- Is Mathilda producing words eg. naming animals, or making the appropriate animal noises, or is she responding with a comment like 'yes' or 'it's'?
- What range of vocabulary for animal names does Mathilda understand?
- Does Mathilda appear to understand the meaning of numbers? How does she show this?

### Issues and theories

#### 1. Early literacy

- What is Mathilda learning about 'reading' in this sort of activity?
- After you have explored your first thoughts, listen to the mother's comments for more contextual information. How does this information affect your response to the clip?

#### 2. Mean Length of Utterance (MLU)

- You could make a straightforward calculation of the **mean** – or average – **length of utterance (MLU)**, comparing the adult's utterances with those of the child.
- Thinking back to the context for this interaction, discuss the questions suggested here:
  - Why might the results of the MLU calculation be misleading?
  - Has the child's language development regressed, because there is less evidence of language production?
  - Why is the parent taking much longer turns?

#### 3. Child-directed speech

Another feature of child-directed speech is the avoidance of pronouns.

- Why do you think adults tend to use nouns or names instead of 'I, you, he, she, it, they' and so on?
- Find examples where the mother could have substituted a pronoun for an animal name.

Peccei comments, 'Expatiations are expansions with extra information added to the child's comment.'

- Where does the mother provide extra information and vocabulary for the child?

**Scaffolding** is a term used to refer to the way an adult might embed the answer within the question: for example, *Is that a worm?* rather than 'What's that?'

- Can you find examples of both types of questions in the mother's language?

**An observer comments** (*guided by questions with comments from the teacher in brackets*)

Interesting she stopped at rabbit. All other animals were remembered and labelled by the sound they make, something that seems to be counter-productive unless you think of them as pre-names or pre-language (proto-words?) in which case Mathilda has remembered a whole topic's worth of words. So what noise does a rabbit make? We wrinkled our noses for rabbit – just for the record! I think for MLU, you have to compare like with like. All the Mathilda and her mother contexts for talking are different in significant ways. In this one, her mother is entertaining her: try finding the MLU for a stand-up comedy show! Even if she is not actually *reading* a book in this case, any recording of a parent reading to a child will have relatively short turns as the child joins in.

**Support and further suggestions**

Students tackling the question on literate behaviours might like to have a look at the Literacy Trust's reading advice for families of pre-age children (<http://www.literacytrust.org.uk/familyreading/parents/preschool.html>). You can follow the links to see the advice for other age groups, read advice for dads on reading with their children, and also download the key points in a colourful poster format.

## Clip 5a Dressing Up (Age 1;9)

### Context

- What differences do you notice in the roles of child and adult in this clip, compared to the previous one (Clip 4a 'Reading a Book')? Talk about the possible effect this might have on the language both mother and child produce.

In this clip it is worth paying attention to Mathilda's non-verbal responses.

- What do they suggest about her comprehension?

### Child speech

#### 1. Phonology

- Which of Mathilda's vocalisations do you think are simply sounds (grunts of effort) and which do you consider words?
- Can you transcribe and explain her varying pronunciations of *yellow*?

#### 2. Lexis and semantics

- What antonyms (pairs of opposite terms) are understood by Mathilda?
- Which colour words does she understand and which does she produce?
- Which pronouns does she understand and which does produce?

#### 3. Grammar

So far, Mathilda has been producing single words.

- How would you interpret her utterance *abu* – as a holophrase, or as her repetition of the two words *help you*?

#### 4. Discourse

- At what points does Mathilda initiate the topic or turns in this interaction?

### Issues and theories

#### 1. Functions

- Using Halliday's concepts, explain the function of Mathilda's utterance '*abu*'.
- Now consider the function of the whole activity of dressing up in the mother's clothes.
- Listen to the mother's comments about this for more detailed contextual information. How does this information help you understand, or alter your analysis, of this clip?

#### 2. How children learn

Chomsky suggests that a child's **virtuous errors** show their innate ability to create unique but meaningful forms of language.

- Would you classify Mathilda's use of *abu* as a 'mistake' or a 'virtuous error'?
- Do you think her parents later model the standard form 'help me' for her to imitate (ie. a behaviourist theory of language acquisition)?

Mathilda's mother comments that Mathilda has learnt in 'parrot fashion *helpyou* as one word'?

- How far do you agree with this analysis? Might there be more complex processes underlying her creation of this form? Share your different ideas.
- Listen again to the clip, focusing on the way the adults respond to Mathilda's pronunciation of 'yellow'?

- Is there any sense in which the mother is correcting her? In class discussion, explain the reasons for your view of this.

### **An observer comments** (*guided by questions*)

I think Mathilda has captured the rhythm and sound of *abu*. She sees *help you* as one word, one concept. Why she says it? I think repeating something is a way to be a part of the conversation. Nice attempts at *yellow*, shows she's *not* reached a point where she thinks she's making *enough* sense to not bother trying anymore. If parents understand you well enough, a child might stop trying to be perfect – as my child Spike did for a while. The fact she's trying all sorts of variation on 'yellow' shows she's noticed she's imperfect. She knows she hasn't made the sound at the first attempt – it's a sort of trial and error process. The mother is never actually *correcting* her, but encourages her to practise again. Giving the child the chance to say something repeatedly is something parents get into the habit of. I think the mother knows her child is good at colours, so she wants to get this on tape as an example for us – the watchers. It's not really focused on Mathilda's learning – or development, or whatever you want to call it. But when it gets to sizes – *baby* or *big* – I think this is branching into a new topic. She initiates the beads topic – it's not structured learning from the adults any more. Opposites are very handy as a learning tool – *on v off*, as well here. All the *ers* and *ums* from Mathilda, I think, are just sound effects of her exertion, not words as such. Though she may have heard/acquired the noise 'er' made by adults to show they are confused or tired – often for their own benefit, rather than communicating out to others.

### **Support and further suggestions**

You might want to explore the extent to which the variations in Mathilda's pronunciation of *yellow* and utterance *abu* can be explained by ideas about phonological stages of development. Peccei is again a helpful reference for a summary of the phonological stages of development.

In a slideshow of a talk available at <http://www.phon.ucl.ac.uk/home/dick/ec/cliemeetings.htm>, Matthew Saxton lists (on slide 20) 'Possible forms of correction' an adult might use in order to provide his/her child with 'negative evidence'. Students might find this list helpful in answering the questions in the 'Issues and theories' section. Matthew Saxton's talk was about using insights from Typical Language Acquisition as a way of understanding issues in language delay.

## Clip 6a Tea Party (Age 1;9)

### Context

- Think about the 'props' (the objects involved) and the part they play in the mother-child interaction. Are there any similarities with the previous dressing-up situation?

### Child Speech

#### 1. Lexis and semantics

Mathilda produces a few recognisable single word utterances in this short clip.

- Share your thoughts on her use of: *dear*, *bof* (both) and *abu*.

#### 2. Discourse

- In this short conversation, do you feel that Mathilda is focused more on interacting with her mother or with her toys?

### Issues and theories

#### Theories of learning

##### 1. CDS/caregiver language

The input from the mother has a clear influence here on the child's language production.

- Focusing on the three utterances above talk about how and when they are used by the mother.

##### 2. Behaviourist theories

'Drills' are used in some approaches to foreign language learning, often following a three/four-part structure.

- i. Teacher model example: it's a girl
  - ii. Student repetition: (possibly slightly wrong) is a girl
  - iii. Teacher reinforcement: (as correction or confirmation) it's a girl
  - iv. Teacher expansion: the girl's there
- Are there any exchanges between mother-child that follow a similar pattern here?

##### 3. Cognitive theories

In this clip the game Mathilda and her mother are playing is a sort of role-play, a strategy often used both in language and, more informally, in child development.

- Is this sort of role-play part of an emerging part of a child's cognitive and language development?

#### An observer comments (guided by questions with comments from the teacher in brackets)

Mathilda's repetition of *dear* at the beginning reminds me of an old person talking – like a *really* old person talking! 'Do you want to go down to the shops?' 'Shops ... yes.' It's that I'm not offering you anything, but I'm staying in the conversation by repeating what you say at the end. It could be an answer, but you could just be repeating the last word of each sentence. Now the function or meaning of 'oh dear' I think can be used to express sympathy about some bad news. Or in this context, it's showing Mathilda that something has happened: 'Oh look, your Tigger has fallen over!' A bit like 'oopsy daisy'. It's doddering language, another sound effect maybe? I also think Mathilda senses that it is adult-sounding language – a marker of what it is to be an adult, like in the later role-plays. (Another thought: is this why taboo language is irresistible and latched onto immediately, whereas other adult words such as 'incontrovertible' are not repeated?) I think Mathilda's more interested in the cup and saucer anyway, so *I've got both* refers to them. Her use of *abu* happens again – the clips may not actually be close together in real time, but it may be one of those phrases for her: if it works, don't change it! Overall, Mathilda isn't saying so much in this clip. Maybe it's a conservative use of language, when the situation doesn't need her to be any more expressive. Later on, Mathilda adopts the language of her parents to offer more communication, when it is essentially useless – the lorry talk in the car – but she wants to keep talking as a way of matching up to people – her older friend Jessica. In this situation, she had two of something; one of them fell over. It was probably quiet time.

**Support and further suggestions**

Students might find it helpful to explore this clip in the context of Piaget's theories, the part played by role-play in cognitive and language development, as well as debates about the importance of imaginative play.

## Clip 7a Sticklebrick Car (Age 2;0)

### Context

As with many of the adult-child interactions in these clips, there are toys involved.

- Share your ideas about the range and type of toys a child of two might have.

The choice of what to buy is not really determined by the child. It probably varies a lot from group to group – not just along gender lines, but over time and across cultures.

- What is the point (function) of Sticklebricks?

### Child speech

This is a comparatively long interaction, providing an opportunity to observe more evidence of communicative skills, such as turntaking.

#### 1. Phonology – stress and intonation patterns

- The phonemes may not clear enough to identify individual words in what Mathilda says, but what possible sentence patterns could be expressed in the pattern of stress and intonation used in *bry bree do*?

Near the end, Mathilda produces another sentence-like rhythm: *erm ay why ee*.

- Do you interpret this as her mother does as simply a phrase 'a yellow wheel'? (There are no right/ wrong answers here, but some people have a good ear for a child's speech!)
- Transcribe 'orange' using IPA. Why is it such a tricky word for a child to pronounce? (Is it significant that there is no word that rhymes with 'orange'.)

#### 2. Lexis and semantics

- What types of vocabulary is Mathilda producing and/or understanding in this activity?
- Can you group her new vocabulary as either antonyms or hyponyms.

**Antonyms:** opposites such as on v off

**Hyponym:** a word that represents different categories covered by a superordinate. If the superordinate is animal, then the hyponym would be cat, horse, etc.

For example:

Hyponyms

Animals: bear, sheep, etc.

Bear: tigger, teddy, etc.

Mathilda's mother interprets her utterance *metal* as *petrol*.

- Do you think Mathilda might have meant 'metal' or is this concept too abstract?

#### 3a. Grammar – combining two words

- Find examples of adjective + noun combinations. What other combinations are emerging?

#### 3b. Morphology

- Is there evidence here for the use of the '-s' suffix for two distinct functions: plural and possessive of nouns?

#### 4. Discourse

Although the mother often initiates a topic or exchange, Mathilda also plays a part in controlling the direction of the interaction.

- Watch the clip again and find examples where Mathilda is controlling the direction of the interaction.
- How does Mathilda cope when she is not understood – *ey-in wheels*? What other strategies might she develop for helping others to understand her speech?

## Issues and theories

### 1. Child-directed speech

- What is the function of the mother's questions in this clip, eg. those beginning *shall we?*
- Compare this with the mother's occasional use of a telegraphic form of speech, eg. *Mummy find them.*
- Are the questions used to check for knowledge (eg. *What's this?*, where the answer is already known) or genuine enquiries for information?

### 2. Stages of development

Mathilda is beginning to combine words into **two-word** combinations. This was considered to be an identifiable stage of development, with the child operating a structure, known as **pivot grammar**. Later studies suggest that such two-word utterances can simply be considered telegraphic structures – ones that happen to use only two words.

**Telegraphic structures** refer to the way that children go through a stage of omitting the 'little' grammatical/function words.

- Do you think that Mathilda is using a determiner (a) when she says *er (.) car?*
- In the following utterance, is it more likely that she is saying 'a yeah' or 'er yeah'. Notice how the mother repeats (and expands) the child's utterance (*a car?*) and then expands and reframes it (*what's the car...?*).

### An observer comments (guided by questions with comments from the teacher in brackets)

About the possessive '-s' morpheme, I think possession is such an important concept to a child that it's likely to be acquired early, even if it's tricky: 'That's mine!' etc. I was interested in the use of *lady* and *man*. I remember in the jigsaw clip, Mathilda used *aman* as one word. Here she says *ee man*, but later *man* on its own, which is brilliant, because she knows the two words are separate. I know with my daughter Louise, there are some words she thinks are single units ('alot') and I have to explain to her that there are two words there. I was interested in the whole CDS debate and noticed that the mother used three versions (to 'frame') her offer of help: beginning *Shall mummy help you*, then the abbreviated *mummy help you?* and the using the pronoun *Shall I help you?* (That is a 'rich environment' of examples to illustrate how the subject and verb elements can vary.) I don't agree with the mother at all when she interprets *metal* as *petrol*. It might be an in-joke, of course, with the mother knowing that her daughter always confuses the two pronunciations. But maybe the mother has a checklist of things that can be used in a car and the daughter has a separate list. I remember my daughter Louise, at a relatively young age, was interested in metal v plastic, in the sense that she was surprised a fridge was made of metal 'cos it looked and felt like plastic. I mean, a car *needs* metal. Adults may think of the components, but Mathilda may think that it is 90% metal.

## Clip 8a Let's Pretend to be Asleep (Age 2;0)

### Context

- What 'props' is Mathilda using, what is she doing and why?
- Is the child still talking about the 'here and now'?

In her commentary the mother mentions an estimate that a child will have about 50-100 single words in their vocabulary by this stage and add about two per day. She is now interested in the ways the child can combine words into more complex structures and also in the different functions a child can achieve through language use

- When you have finished the questions, listen to the mother's commentary, then watch the clip again. How does the mother's interest impact on her interaction with Mathilda?

### Child Speech

#### 1. Phonology

- Can you apply the term **consonant cluster** to comment on Mathilda's pronunciation of 'sleep' as *seep*?

Mathilda produces the same sound (*seep-bear*) in her repetition of Sheba.

- Do you think she distinguishes (in her understanding/reception) between the words 'sleep' and 'She'.
- Now think about the various ways Mathilda produces *there* (after the word 'sleep') and its similarity to the sound 'bear'. Can you tell whether Mathilda distinguishes between the meaning of these words?

**Fricative** is the term used to describe consonants where air escapes through a small passage making a hissing noise ([v] or [f]).

- Use the term fricative to help you comment on Mathilda's pronunciation of 'feet'.

#### 2. Lexis and semantics

- What do you think Mathilda understands by the word pronounced '*Sheba*' by her mother and '*seep-bear*' by her? In what other contexts might she have heard the phrase 'Queen of Sheba' before?
- Identify a) verbs and b) adverbs (or prepositions) that Mathilda uses. From the evidence of this collection of data, is this the first emergence of these word classes?

#### 3. Grammar

- How does Mathilda combine these word classes (verbs, adverbs and prepositions) into more complex utterances.

Adults often use explicit names or labels rather than pronouns in their speech with children.

- Identify examples of both Mathilda and her mother choosing:
  - a pronoun to refer to people
  - a name to refer to the person.

#### 4a. Discourse

- Do you agree with the mother that Mathilda is clearly initiating this playful interaction?
- Do the mother's interrogative forms respond to/repeat the child, or initiate prompt questions (ie. to elicit new information)?
- Consider the concept and function of backchannel behaviour in adult conversations, eg. the mother's *okay*. Now discuss Mathilda's frequent use of *yeah* in her turns in the conversation.

#### 4b. Pragmatics

- Exactly what a speaker intends to communicate by the words uttered can often only be guessed at. Suggest possible interpretations for the mother's utterance '*...Queen of Sheba*'. However you interpret her implied meaning, do you think that Mathilda understood it in the same way?

## Issues and theories

### 1. Functions

- Would you agree with the mother's comment that the child is developing the range of functions for which she can use language? Share your ideas about the functions for which children use language.

Halliday identifies seven functions of language use in child speech, summarised here (and previously):

- Instrumental: language to express needs (eg. 'Want juice')
  - Regulatory: language to tell others what to do (eg. 'Go away')
  - Interactional: language is used to make contact with others and form relationships (eg. 'Love you, mummy')
  - Personal: language to express feelings, opinions and individual identity (eg. 'Me good girl')
  - Representational: language to convey facts and information
  - Heuristic: language is used to gain knowledge about the environment (eg. 'What the tractor doing?')
  - Imaginative: language to tell stories and jokes, and to create an imaginary environment
- Watch the clip again and find evidence of Halliday's concepts of the **Imaginative** and the **Regulatory** functions of language.

### 2. Stages – telegraphic structures

The mother uses the term telegraphic structures in her commentary to refer to structures common in a child's language development, where some grammatical words are omitted.

- Is there evidence of Mathilda forming telegraphic structures?

The mother uses such abbreviated forms in many of her turns (*sleep there; and mummy sleep there; Tilda sleep sofa; up? up; who up? mummy up*).

- Can you explain why her use of language might change in this particular interaction?

## Support and further suggestions

Pages 12-14 of Peccei (2006) provides an overview of the traits of **phonological simplification processes**.

Students might like to investigate further debates about the importance of seemingly trivial things like fun and nonsense for a child's development. Libby Purves' article about the children's TV writer Oliver Postgate (*The Times*, December 10, 2008) would make a good general starting point for this.

Mathilda's mother mentions the importance of repetitive routines for a child's development. You could read some of the debate about the worth, or otherwise, of children's TV programmes such as *Teletubbies*.

### An observer comments (*guided by questions with comments from the teacher in brackets*)

*Na-night* is nice. I remember it being said to me, me saying it to my children and also to my friends. Might be one of the earliest phrases, said every day, but when do you realise there is a word 'night' in there? Maybe I'm reading too much into it that Daddy sleeps on the sofa, but she does seem to be moving into the past tense with *Daddy did a sleep*. I wasn't sure if *Mummy sleep* was a request or a question. The mother interprets and repeats, but did she really hear 'sofa' at the end? About the Queen of Sheba, I guess it's a biblical character and I guess she had everything her own way. I hear it in the same context as 'Who's she, the cat's whiskers?' More likely to hear it on a soap opera than in the bible. I know there's a cat food called Sheba, so it's ingrained in our culture. Whether it might be from a cartoon character or story, Mathilda will share these cultural references with time. At the moment, it's just a playful insult – she's lying in the lap of luxury, behaving in a queenly manner. It doesn't really matter what the mother says after 'who do you think you are...?' Does Mathilda misunderstand when she appears to say *sheep-bear*? The fact that she repeats it, means she is unfamiliar with it and would like to make it her own.

## Clip 9a Colouring (Age 2;1)

### Context

- What are the 'props' for this activity?

We might assume that a colouring book is for a *child* to enjoy and perhaps to practice some motor skills.

- Is this the case in this clip?

With this clip it is also interesting to think about the worlds *outside* the book and room that their conversation takes them into.

- How does Mathilda respond to this move away from the here and now?

### Child speech

This is such a long clip, rich in data, that a few directions are suggested under each heading.

#### 1a. Phonology

Often children 'know' words, but struggle to pronounce them, eg. 'ice-cream' which is part of a notorious tongue-twister.

- Identify some trends – rather than individual problems – in Mathilda's phonological development exemplified in this clip.
- Can you understand what she is expressing where it says (*incomprehensible*) in the clip? Could it be 'another brown one?' What about the mother's interpretation of *um et a boo jaw* and *ed ed ai cream*?

Mathilda mimes her meaning (*by putting her hands in front of eyes*) and accompanies it with a pattern of indistinct sounds.

- From the stress and intonation alone, can you suggest a sentence structure she may be attempting?

#### 1b. Intonation

- Listen again to the different intonation patterns Mathilda uses – rising to indicate questions, falling to indicate statements, etc. Do you agree with the mother's comments that she is 'learning about intonation' and using 'over the top sing-song language'?

#### 2a. Lexis and semantics

Although the conversation begins by focusing on the colours, Mathilda moves away from this.

- Where does she move to? Trace her train of thought as she moves from one topic to another, as shown here: clouds – sun – sand – ice-cream ...
- Which abstract concepts has Mathilda the words to talk about?
- When and how does she refer to past, imaginary or pretend events?

#### 2b. Morphology

- What suffixes/verb forms does Mathilda use to express various tenses and aspects, eg. *working*, *all gone*; *gon bown*?

#### 3. Discourse

- Listen to the mother's commentary and discuss her claims that:
  - Mathilda is learning about how to communicate in conversations
  - her *yes* is now more 'definite', as she knows a 'response is useful'
  - she is playing *with*, not alongside her mother
  - she is now negotiating and engaging, not simply responding

You might also like to consider her acquisition (and mother's reinforcement) of politeness conventions: *peas* and *thack you*.

## Issues and theories

### 1. Cognitive development:

- What physical processes does Mathilda show understanding of (whether or not she has the precise words), eg. *shade your eyes from bright light*?

### 2. Functions

- Provide examples of the **Imaginative** function, where Mathilda is using language to create an imaginary world.

### 3. CDS

- What functions do the mother's turns perform? Some possibilities include:
  - modelling of language
  - framing
  - expansion
  - expatiation
  - prompt questions and so on.

Individually find examples of these different functions, then share them as a class.

### **An observer comments** (*guided by questions with comments from the teacher in brackets*)

I like the way the topics re-appear – the link from the melting crayon to the ice-cream. I don't know that 'melt' is so complex a concept – children see it as another type of spillage. Mathilda creates a colour for her straw; a lot of children claim to pretend, but would say the colour was 'imaginary'. When she says *ai bee cee bee cee* I thought she was starting to do the alphabet, not 'easy peasy'. For my kids it's a function of entertaining to get praise and Spike brings out the alphabet from nowhere. But that may not be the case in this family! For our children, you're now doing one of your things: you're in charge. I think Mathilda's grasp of colours is worth noting and the fact that she uses *one* to replace the noun. I would have thought that wasn't something sophisticated, but almost the laziest way – it's an easy short-cut as long as you are pointing (note: technical term is 'deixis'). Mathilda's mum is asking a lot of open-ended questions – not right /wrong. With kids, I wonder if some domination or direction is wanted: either you boss others around or are bossed? For my child Louise, a function of colouring is to get attention, some sort of relationship, perhaps a search for knowledge: Here is a question, *not* give me *the* answer, but give me *an* answer. She will sometimes get on with colouring alone, but sometimes she wants input. The great thing about pretend play is you can do it anytime, anywhere. The mother is providing expansions and I think this plays a strong part in child language acquisition: if you are offering a new word, what better place to offer it, than when it is missing?

## Clip 10a Light Off (Age 2;1)

### Context

- What is the focus of Mathilda's attention in this clip? What is it about the light that she is interested in?

### Child Speech

#### 1. Lexis and semantics

- Apart from the on/off antonyms Mathilda has used before, what other pairs of concepts are important here?
- Is there a difference in meaning between 'yeah' and 'yes'? Do you think it is simply by chance that Mathilda uses *yes* in this exchange? Argue for your view, drawing on evidence in this and other clips, and on your knowledge of child language acquisition more generally.

#### 2. Grammar

- How does Mathilda form a question? If you had to guess the 'missing' words, what might she be saying about *an ight off*?
- Compare this telegraphic structure with the short, but perfectly formed '*yes I can reach it*'. Can you explain why this utterance is such a complex achievement?
- After you have explored your own ideas, listen to the mother's commentary.

#### 3. Discourse (pragmatics)

Speakers often convey as much by the manner in which they speak, as by the actual words spoken.

- Consider the function of beginning to speak by uttering a hesitant 'uh' or 'er' followed by a pause. What might it signal to the listener?

### Issues and theories – child-directed speech

The mother is providing a running commentary (rather like a radio sports commentary) on Mathilda's actions.

- What do you think the function of this is?
- Referring to the concept of pragmatics above, what clues about implied meanings does the mother's intonation give to the child?

### An observer comments *(guided by questions with comments from the teacher in brackets)*

Mathilda is responding to her mother's question '*can you reach it?*' which can be interpreted (at a pragmatic level) as meaning various things. The underlying meaning is asking after her ability, ie. do you need a chair? (You could think here about the form v function distinction often cited in pragmatics.) Her response is not just grammatically correct, but communicatively apt: Mathilda is learning that there are different types of questions.

### Support and further suggestions

In considering the child speech question, students should be encouraged to consider:

- phonology
- pragmatics (focus on the practical implications of language used, as opposed to focus on the surface form/structure of the words)
- grammar
- any other aspects you consider relevant.

Productive grammatical issues might include:

- modal verbs
- question forms
- declarative forms
- deictic reference
- pronouns.

## Clip 11a Asking to Talk (Age 2;3)

### Context

This is the first chance we have had to see Mathilda's father interacting with her, rather than operating the camera.

- Consider – from your own experience – whether you think that fathers tend to adopt slightly different roles with children.

The father typically (but increasingly less so) spends less time than the mother with the young child.

- Discuss the possibility that the whole situation – mother now operating a camera, pointing at the two of them in the middle of the room – might seem a bit strange to Mathilda. If this is the case, how might this impact on her language use?
- Consider the influence of other contextual factors. For example:
  - whether they are engaged in a specific activity (colouring, dressing up, reading, etc)
  - what other 'props' are present in the situation
  - what we learn about recent past events
  - whether the time of day is a factor – is first thing in the morning after a late night the best time for talking?

### Child speech

#### 1. Phonology

- Listen again to the later utterance recorded on the transcript as (*incomprehensible but in recognisable tone pattern*). Would the sentence 'I don't know his name' fit this 'tune'? What other sentences might fit the tone pattern and the context?

#### 2. Lexis and semantics

- Although one utterance sounds similar to the word 'guess', provide a more likely interpretation of it.
- Is it possible Mathilda is using the filler *um* systematically to indicate hesitation – she is not sure how to reply? Share your thoughts on this.

#### 3. Discourse

Mathilda's initial turns do not communicate clearly and on the transcript are recorded as (*babbling*), as is a later turn.

- Can you suggest any explanation for this?

Mathilda's father interprets the first two utterances as *talk* and *talk about something*?

- Do you agree with this interpretation?

There seems to be a bit of confusion in their attempts to communicate.

- Do you think they are at cross-purposes about the *boy* Mathilda is referring to: a) the doll she picks up or b) the real boy who visited?
- How can you make sense of Mathilda's response *daddies* to her father's previous turn?

**Issues and theories**

**Scaffolding** is a term to refer to questions that have the vocabulary for the response included within them (*don't you mean Ethan who came this morning to see you?*). Some research suggests that fathers use more **open questions** 'What shall we do then?'

- Watch the clip again and use the terms scaffolding and open questions to help you discuss the father's attempt to engage Mathilda in talk.

**Observer paradox** seems relevant here, as does the tendency for children to clam up when you wish them to speak; to chatter on, when you wish them to be quiet!

- Listen to the mother's comments that Mathilda does, generally, love to talk – talking is an enjoyable activity in itself. But, as she admits, it is 'difficult to figure what they want to talk about'.
- Compare this slightly frustrating lack of talk with the later clips, showing how children will happily chatter to themselves with very little stimulus.

**An observer comments** (*guided by questions*)

As a father I have often found that trying to elicit a response with questions can have the opposite effect. I think when Mathilda's desired to talk, she didn't really want a question and answer session, indicated by her playful (*babbling*) at the beginning. The father probably remembers some real gems of conversations they had previously, so set up the camera to try to capture an example. Maybe sometimes a bit of quiet, or less structure from adults elicits more from a child?

## Clip 12a Talking to Herself (Age 2;5)

### Context

- What 'props' has Mathilda got? Do you feel that she is aware of a camera? Compare this example of a child 'talking to herself' with the later clip of Ellie.

### Child speech

#### 1. Phonology

- Might it be simpler to produce the phoneme sequence in *Jon's* than in *Kate's*?

#### 3. Discourse

- Is this clip truly a monologue? If Mathilda is simply talking to herself, what purpose might the child's speech have?

#### 2a. Grammar

- What structure is Mathilda trying out with variations?
- Why is the term telegraphic structure used to refer to features such as *this one Jon's*?

A **copula verb** is one that connects (or links) the subject to the complement. Examples in English include the verbs 'to be to look, to feel, to seem, to appear, to get, to become'.

- Although often omitted, can you hear a structure where Mathilda uses the verb 'to be'?

#### 2b. Morphology

- Is Mathilda's use of the possessive '-s' morpheme consistent?

### Issues and theories

#### 1. Functions

- Would you say this speech was achieving an **Imaginative** function?

Pre-sleep monologues are one example of a child's speech, where the child seems to be producing language – not to communicate with others – but to rehearse patterns encountered earlier and to be used later.

- In what ways might Mathilda's monologue here serve a similar function?

#### **An observer comments** (*guided by questions*)

I was interested in the couple dynamic. Do all little girls like to pair off a man and a woman; a boy and a girl; two girls sometimes? Two boys never – in my experience of a young daughter playing.

## Clip 13a Mathilda with Friends (Age 2;7)

### CLIP (i) MATHILDA AND HER COUSIN, JESSICA, IN THE CAR

#### Context

- Consider the differences between a child-adult interaction and that of two children together.
- How might the physical situation of the two children influence their language use? What can they do or see?

#### Child speech

##### 1. Phonology

- Refer to your knowledge of patterns of phonological development to comment on these forms: *dat*, *den*, *dere* and *taw it*.

##### 2. Lexis and semantics

- How many words do the children use related to the concept of 'being in a car, but not moving'?
- How do they modify the noun 'lorry' to be more and more specific in their descriptions?

##### 3a. Grammar

- Identify and comment on Mathilda's production of interrogative/question forms.
- What forms does Mathilda use as she echoes her Dad's explanation?
- How does her cousin, Jessica, transform that utterance yet again? Which auxiliary verbs is she using?
- Does Mathilda pick up on the use of auxiliary verbs in her next utterance?
- What forms of the copula verb 'to be' do the children produce?
- What conjunctions does Mathilda use and to convey what meaning?

##### 3b. Morphology

- Is Mathilda consistent in her use of verb endings?
- Can you explain the function of the various inflectional suffixes ('-s', '-ing', '-ed')?

##### 4a. Discourse

- Who initiates a new topic and how do the two children expand on the ideas, as they take turns?

##### 4b Pragmatics

- Do you feel there is there an element of playful competition as each child adds more information to the turn before? What might the child be conveying apart from new information? Explain your reasons.

#### Issues and theories

##### 1. Development of structures for verb phrases

- See Peccei (2006) for details this aspect of child language acquisition.

##### 2. Functions

- Use Halliday's concepts to comment on the functions for which the two children are using language here.

**An observer comments** (*guided by questions with comments from the teacher in brackets*)

They're working on any and all stimulus from the outside world, mostly because they are strapped into car seats, which is a great way of focusing your attention *out*. With two children (especially of slightly different ages) the tone seems more competitive, although this isn't the main reason *for* talking, the opportunity to make yourself sound better (Pragmatically, a possible underlying message communicated by the information about lorries and directions?) is always there. Very patient too, maybe because they don't have too much to say at this point in their lives, they are willing to take turns more readily than in an adult-adult conversation. And they either say the same thing or the complete opposite (*It came from over there no it didn't*).

## CLIP (ii) MATHILDA PLAYING WITH JESSICA

### Context

- Compare the situation in which this clip takes place with the previous one (in the car). Think about the impact on the different situations have on the children's language.
- What activity would you say the children are engaged in: actually ironing or playing at ironing?
- Whose house/bedroom would you say they are in? What difference might that make to their behaviour or language?
- Do you have any sense that they are aware of being recorded?

### Child speech

As this is role-play in a physical sense, it is likely the children have also picked up some of the language conventions of such adult activities. This means that it is helpful to begin by looking at the children's language in the 'largest' sense of discourse/genre conventions.

#### 1a. Discourse

- Are there two slightly separate agendas going on here? Why might this be so?
- In what ways does Mathilda show awareness of the conventions of 'ironing-speak'?
- Is there also a 'discourse of danger/health and safety'? Suggest how children might acquire this. Why might the children feel it necessary to articulate it in this context?

#### 1b. Pragmatics

- What might the children be communicating by their references to 'being careful' etc?

#### 2. Phonology

- Do you interpret Mathilda's utterance as *oh fats* or *all flat*? Could *don't put it on me* be the child's pronunciation of *don't push it on me*? Use IPA and your knowledge of phonological development traits to explain these possible interpretations.
- Is there evidence of the 'th' phoneme emerging as a fricative, but sometimes becoming a dental plosive /d/?

#### 3. Lexis and semantics – discourse markers

There is a lot of **phatic** communion going on here – identify words and phrases that communicate in other ways than for information-giving.

- Do you consider *all by itself* to be an idiom, more like a single unit than a phrase? If so, what suggested this to you?

#### 4a. Grammar

The previous clip provided evidence of development of interrogative forms.

- Identify use of a **negative imperative** structure here. Can you provide examples from research studies of alternative forms children might use at an earlier stage?

The copula verb ('to be') is often omitted at early stages.

- Provide two examples from the data: one from each child.
- What conjunctions does her friend, Jessica, use to form more complex sentences?

#### 4b. Morphology

- What verb suffixes do the children use to manipulate verb tenses and aspects?
- Is there evidence that the child is aware of irregular past tense forms?

**Issues and theories****1. How children acquire language**

- What words and phrases seem to be largely the result of imitation of adult language?

Telegraphic structures cannot be the result of imitation.

- Why do think the copula verb is so often omitted: *that hot; I being careful; this not done.*
- Comment on the other word class omitted in this structure: *I being careful with ironing board.*

**2. Functions**

- Can you find evidence for several of Halliday's functions in this brief interaction?

**An observer comments** (*guided by questions*)

There seems to be a lot of personal comment on the theme of: 'Look how good we're being!' re safety and politeness issues. These are often uppermost in child's mind: though they don't understand the reasons for them, they yield 'rewards or punishments'. And it's often the negative reactions that are noticed! The comment about being *careful* is not addressed so much to her friend as to the parent? Also *I iron that for her* is either her talking to herself or to her parent, but again does not seem to be to the friend. If we think about child-directed speech or the functions of interaction from a child's perspective, I suggest there are at least four: information received; needs provided for; personal closeness and control of behaviour. These may be what a child tries to imitate with friends: they are often adopting roles, involving the important issue of who's in charge.

**Support and further suggestions**

For further information on morphological development stages, see Peccei pages 18-21. The following website is a good source of online information: [www.hoboes.com/FireBlade/Politics/Texas/Morphological%20Development/](http://www.hoboes.com/FireBlade/Politics/Texas/Morphological%20Development/)

### CLIP (iii) MATHILDA, JESSICA AND MEGAN PLAYING IN THE BEDROOM

#### Context

- What are the children doing, where and why?

#### Children's speech

##### 1. Discourse

- What evidence is there of children acquiring politeness conventions?

##### 2. Phonology

- Identify and comment on some recurring traits in children's development of pronunciation.

##### 3. Lexis and semantics

- Would you class *there you go* as an idiom, functioning as a single unit, rather than a clause? Think about the options for transforming the structure, eg. 'you go there', 'there I go', 'there you come'. How common are these structures?

##### 4a. Grammar

- Comment on Jessica's use of *lost my sock* rather than 'losed my sock'. Find another example where she uses the standard irregular past tense form.
- What pronouns and other **deictic** terms do the children use, instead of repeating the word 'sock'.
- Comment on the form Mathilda uses to express her offer: *I find it for you?*
- Comment on the way she expresses her second offer: *I elp help.*
- You might compare this structure with Jessica's previous utterance: *I can't find it.*
- As well as a modal auxiliary verb, what subordinating conjunction does Jessica use?

**Deitic:** terms used to denote words or expressions that rely on the context to convey meaning, eg. pointing/referring words, such as pronouns.

##### 4b. Morphology

- The –s morpheme has three completely different functions in English. What are they? Which one does Jessica use?

#### Issues and theories

##### How children acquire language

- Is there evidence in this clip for the various positions about the ways in which children acquire language:
  - by imitation
  - by innate ability
  - through social interaction?

##### An observer comments

*There you go* sounds like grown-up language, perhaps used as a single phrase. And then I noticed it was uttered again in another clip a year later.

#### Support and further suggestions

This clip could be used as the starting point for introducing students to research findings into children's morphological development:

- inflectional suffixes for regular and irregular verbs
- the '-s' morpheme for different functions.

The texts suggested in the recommended reading on page 3 are a good source of this material.

## Clip 14a Mathilda with Friends (Age 3;7)

### Context

- Comment on this situation: the children are no longer focused on the 'here and now'. How does this affect their language use?
- Why do think 'playing house' is so common?
- What physical props are actually there and which are imaginary?
- What other types of role-play might children of this age engage in (cops and robbers; cowboys and Indians; Barbie and Ken, etc)? What do you think influences the choice of imaginary situation?
- Do you think the presence of adults in the vicinity has an impact on the children's behaviour?

### Child speech

#### 1. Discourse

- Identify aspects that capture an adult manner of speech.
- What evidence is there that the children have acquired some politeness conventions?
- Where does the 'voice' revert to a more direct, child-like manner of speech?

#### 2. Phonology

**Elision** is common between certain classes of words.

- Where does the transcript indicate a child and an adult 'running two words together'? Listen again to decide whether elision happens in other cases.

It is common not to **stress** (thus children may omit) auxiliary verbs as well as many other grammatical word classes. If there is stress on such words, it is termed **contrastive** or **emphatic** stress.

- What do you make of Jessica's utterances *but we do have dog food* and *yes I do want you to*. Are there other examples where the children place emphatic stress on auxiliary verbs? Share your ideas about this use of emphatic stress.

#### 3. Lexis and semantics

Mathilda uses the clause *there you go* again.

- Does this suggest that she has learnt it as a unit? What is its function for the child? In what situations do you think she has heard people utter this phrase?

A group of nouns for household animals occur.

- Can you relate this to earlier speech about monkeys, sheep, etc?
- What words do the children use to express abstract concepts – of things not present?

#### 4. Grammar

- Identify the children's use of auxiliary verbs to construct various forms and achieve various functions. Highlight each one first, then discuss the form and function. For example:
  - *I could get some* – use of modal verbs to express possibility, or a politely formal offer.
- What forms do the children use to express hypothetical or future situations?

When and why do we use terms of address?

- The children do not generally address each other by name in this clip. Identify two occasions when Mathilda addresses another person by a name.

There is an example in this clip of a complex structure, with one clause embedded (an **embedded clause structure**) within the previous one, which is in turn embedded within the first main clause.

- Identify this utterance and bracket each embedded clause to represent it as boxes within boxes.

## Issues and theories

### 1. Development

Piaget and others suggested that a child's language development cannot be separated from their general cognitive development.

- Comparing this clip with earlier ones talking about things and events in the 'here and now', what evidence is there of development of more complex concepts?

### 2. Functions

The imaginative function is apparent in this clip. Halliday suggests that this function emerges later in a child's development.

- Why do think this is so?

### An observer comments *(guided by questions)*

I think Jessica is playing the role of a cat here, as she is using a baby-voice – compared with the clip in the car – to establish roles within the game, where Mathilda is in charge? If that is the case, it helps explain the pronunciation of *to-mai-oh*, possibly a word she can manage pretty well, but here sounding like a cat miaowing. Mathilda is offering excuses and Jessica is unable – as a cat, or a younger child in the role-play – to provide for herself. It is always Mathilda who needs to do the shopping *I think it's tomorrow now (.) so I will get some for you just today*. As an improvisation, saying the shop is shut closes off the action, so Mathilda needs to jump ahead 24 hours. The utterance *there you go pull myself in* is to herself, and seems an echo of the way adults talk out loud.

### Support and further suggestions

See Johnstone, Keith (2007) *Impro: Improvisation and the Theatre*, Methuen Drama, for more information about the potential role of improvisation in child development.

## Clip 15a Ellie Talking to Herself (Age 2;3)

### Context

Note: there is no-one behind the camera.

- Use the following questions to focus your discussion of the context and its possible impact on Ellie's language.
  - Although there are no other people, what else is in her environment?
  - What time of day do you think it is? What impact might this have on Ellie's speech?
  - If she is also 'playing house', what particular social aspect is she enacting?
  - Do you think she is really only talking to herself?
  - Who might she be addressing?
  - Does she use a single voice – is she speaking only as the child Ellie?
  - Is there any sense that she is aware of a camera or of being observed?

### Child speech

#### 1. Phonology

- What clues indicate the child changing from one voice to another?
- Is there a hint of accent in Ellie's pronunciation, eg. *gel*.
- You will be familiar with the feature *bery* for 'very', but how could you explain *biz* for 'because'?

#### 2. Lexis and semantics

- Identify the range of nouns the child uses to refer to food and associated party paraphernalia.
- What adjectives does she use to add detail to the partly-imaginary scene?
- What verbs does she use? Do these add to the excitement towards the end of her 'story/scene'?

#### 3a. Grammar

- What range of sentence types/functions does Ellie use to keep the monologue going:
  - declarative
  - interrogative
  - imperative
  - exclamatory.
- Comment on the way that she repeats and expands her own utterance *it's time for our party*.

#### 3b. Conjunctions

Conjunctions function to keep adding more elements to the utterance, either simple linking with co-ordinating conjunctions, or embedding, with subordinating conjunctions.

- Watch the clip again and on the transcript mark and comment on the use and function of Ellie's conjunctions.

#### 4. Discourse

As a monologue, there is no turntaking.

- What effect does this have on the child's speech?
- Are the topic shifts abrupt or surprising, or is there a coherent thread of subject matter?
- Where do you sense hints of fictional/imaginative discourse genres, such as songs and stories, as well as the discourse of real conversations?
- What evidence suggests that Ellie is playing the role of host at her own party?
- At which points do you feel she is adopting a clearly adult voice, rather than a child's?

## Issues and theories

### 1. How children acquire language

- The phrase 'parrot fashion' has negative connotations, but are there cases where you feel that Ellie is mimicking an entire adult phrase, complete with all its grammatical, lexical and phonological flourishes?

Listen again to:

- come and sit down supper time
- now that everyone is sitting on some chairs
- you usually fall over you silly gel
- oh now look what you've done
- I'll have to tell er what you have done
- now look the silver balls have all spilt

You might notice the complexity of some utterances with clauses embedded within other clauses:

subject	verb	indirect object	direct object
I	tell	her	this
I	'll have to tell	er	what you have done

Although Ellie is still at the stage of producing telegraphic utterances *look what you ^ done*, she produces a polished version complete with a highly irregular past participle and an inserted adverbial between auxiliary and main verb: *the silver balls have all spilt*.

### An observer comments (guided by questions)

*Precious party* is a striking phrase from a child. Where might she have got it from? 'Precious' is often used in ironic sense by adults – or perhaps she has been reading *The Lord of the Rings*! Fantasy needs some realistic structure and realism can be a boring – Ellie has struck a good balance here. She has a bizarre *combination* of food stuffs – cakes and sandwiches, yes; served in cups, less likely; cups of milk, yes; cups of pepper, more unusual. And there may or may not actually be any silver balls. At this age, it is not possible to say whether her pronunciation of *gels* is affected by dialect. The word is similar to *balls* – which may be her version of 'bowls'? – so the consonant sounds at the end are tricky and may affect the preceding vowel. It could even become her idiolect, or be a sign of her idiolect emerging: to pronounce the final consonant more like a /w/ (as in *Phiw Mitchew*)?

## Clip 16a Ellie Pretending to Read (Age 2;3)

### Context

- Think about the different ways in which a child engages in reading a book – compare Ellie’s reading with Mathilda and her mother in Clip 4a.
- What physical actions does Ellie make: pointing at pictures or words, turning pages, etc?
- Is she ‘reading’ in the sense of decoding written words?
- Is Ellie really reading ‘by herself’ or does she seem to have a sense of audience – someone she is reading to? You may notice her sister just out of sight on the sofa. Who else might Ellie be aware of?

### Child speech

This is another monologue, in the sense that Ellie is the only person talking. But consider elements of dialogue and different voices in this clip.

#### 1. Phonology:

- How many different voices does Ellie adopt and how does she indicate the changes?

Some phonemes (or combinations of sounds) are still tricky to produce.

- Transcribe and comment on the following: *souted, delicious, pancake*.
- Why do think Ellie pronounces some quite complex combinations confidently, eg. *hungry little boys come after, soon a pancake passed, please let me eat you*.

#### 2. Grammar

- What conjunctions does Ellie use to indicate a sequence of events in the story?

#### 3. Discourse

- What elements are there in Ellie’s speech of the **narrative genre**, eg:
  - a narrator
  - plot
  - characters
  - dialogue, etc?
- What has Ellie learnt about the different language use in crafted stories v everyday accounts? Try rephrasing ‘I asked my mum if Charlie could stay over but she said she couldn’t’ into a stereotypical (parody of?) style of children’s narratives.

Ellie uses some complex noun phrases in this clip.

- Identify and comment on examples of nouns with pre-modification (adjectives and/or determiners).
- Comment on Ellie’s formation of past tenses in the verbs: *come, passed, soured, said*. Can you explain why the forms of the verb ‘come’ might be more difficult to acquire?
- Identify and comment on the complexities in this structure: *I don’t want to be eaten*: a) negative form b) embedded clause c) passive voice.

### Issues and theories

#### 1. Literacy

For what reasons do you think young children read books?

- Listen to the commentary (15b) by Dr Bonamy Oliver (Mathilda’s mother). How convincing do you find her claim that experience of books even at such a young age is vital for success in later life?

## 2. Reading strategies

When children start learning to read at primary school, they often guess at a word – wrongly – from contextual clues, such as the pictures of what came before.

- Why might predicting be as important a skill as sounding out each letter carefully?

## 3. Theories of learning

There is some evidence here in support of imitation being an important factor in children's acquisition of language.

- Do think it is more to do with phonology and lexis, or are there examples of grammatical structures?

### An observer comments *(guided by questions)*

My interpretation of *deir woman* is that the hungry little boys each have 'Their women': old book, old language, old sensibilities? The dialogue can only be fairytale language. If you are going to attack and devour something, you – except Hannibal Lector? – don't normally ask politely, *you look like a delicious pancake please let me eat you*. Nor does the attackee explain their reasons *oh no I don't want to be eaten*.

## Support and further suggestions

Before discussing this clip with your students you find it helpful to remind yourself of research studies into children's phonological development. Once again Peccei (2006) is a good reference.

## Taking it further

Many students choose Child Language Acquisition as a focus for their coursework investigations. Many of the questions and hypotheses that have been introduced in this material would make fascinating projects.