

Appendix One.

Ethical Approval for the Current Study

1.1. University Research Ethics Application Form

Cover Sheet

<p>I confirm that in my judgment, due to the project's nature, the use of a method to inform prospective participants about the project (e.g. 'Information Sheet' / 'Covering Letter' / 'Pre-Written Script'):</p>	
Is relevant:	<div style="border: 1px solid black; padding: 2px; display: inline-block;">Mark 1 Box</div>
Is <u>not</u> relevant:	X
(if relevant then this should be enclosed)	

<p>I confirm that in my judgment, due to the project's nature, the use of a 'Consent Form':</p>	
Is relevant:	<div style="border: 1px solid black; padding: 2px; display: inline-block;">Mark 1 Box</div>
Is <u>not</u> relevant:	X
(if relevant then this should be enclosed)	

<p>Is this is a 'generic' application (i.e. does it cover more than project that is sufficiently similar)?</p>	
Yes:	<div style="border: 1px solid black; padding: 2px; display: inline-block;">Mark 1 Box</div>
No:	X

Part A

A1. Title of Research Project:

Investigating Interactions between Word Juncture Development and the Acquisition of Syntax

A2. Contact person (normally the Principal Investigator, in the case of staff-led research projects, or the student in the case of supervised-postgraduate researcher projects):

Title: Mrs. **First Name/Initials:** Sarah C. **Last Name:** Bryan
Post: Postgraduate Research Student **Department:** Human Communication Sciences
Email: s.c.bryan@shef.ac.uk **Telephone:** 0114 2222416

A2.1. Is this a postgraduate researcher project?

Yes

If yes, please provide the Supervisor's contact details:

Dr. Sara Howard
Email: s.howard@shef.ac.uk
Telephone: 0114 2222448

A2.2. Other key investigators/co-applicants (within/outside University), where applicable:

Please list all (add more rows if necessary)

Title	Full Name	Post	Responsibility in project	Organisation	Department

A3. Proposed Project Duration: Two years and 8 months

Start date: 01/2010

End date: 09/2012

A4. Mark 'X' in one or more of the following boxes if your research:

<input type="checkbox"/>	involves testing a medicinal product *
<input type="checkbox"/>	involves investigating a medical device *
<input type="checkbox"/>	involves additional radiation above that required for clinical care *
<input type="checkbox"/>	involves taking new samples of human biological material (e.g. blood, tissue) *
<input checked="" type="checkbox"/>	involves children or young people aged under 18 years
<input type="checkbox"/>	involves using samples of human biological material collected before for another purpose
<input checked="" type="checkbox"/>	involves only identifiable personal data with no direct contact with participants
<input type="checkbox"/>	involves only anonymised or aggregated data
<input type="checkbox"/>	involves prisoners or others in custodial care (e.g. young offenders)
<input type="checkbox"/>	involves adults with mental incapacity or mental illness
<input type="checkbox"/>	has the primary aim of being educational (e.g. student research, a project necessary for a postgraduate degree or diploma, other than an MD or PhD)

* If you have marked boxes marked * then you also need to obtain confirmation that appropriate University insurance is in place. The procedure for doing so is entirely by email. Please send an email addressed to insurance@shef.ac.uk and request a copy of the 'Clinical Trial Insurance Application Form'.

A5. Briefly summarise the project's aims, objectives and methodology.

(this must be in language comprehensible to a lay person)

This project aims to investigate interactions between phonological and syntactic development in connected speech. The data to be analysed form part of the dense database of child language collected by Professor Elena Lieven and colleagues from the Max Planck Child Study Centre, University of Manchester and the Max Planck Institute for Evolutionary Anthropology, Leipzig. The data comprise mostly audio data and some video data collected from several children over a period of three years, together with transcripts in a suitable format for computer-based analysis. This Project aims to analyse data from a minimum of

two participants. The analysis will involve a combination of perceptual and computer-based methods.

A6. What is the potential for physical and/or psychological harm / distress to participants?

The prevention of harm to participants in this study involves the continued implementation of measures to ensure the confidentiality of their data, as specified by Professor Lieven. (Please see section A10 and appended documents for further information.)

A7. Does your research raise any issues of personal safety for you or other researchers involved in the project? (especially if taking place outside working hours or off University premises)

This research will be entirely computer-based, taking place either within the department or in the student's home. There are therefore no additional risks to those encountered in a typical office environment.

If yes, explain how these issues will be managed.

A8. How will the potential participants in the project be:

i. Identified?

The two participants in this project have been selected on the grounds that a comprehensive data corpus is available for them both, they have been compared in previous research and their linguistic skills have been found to differ considerably.

ii. Approached?

N/A

iii. Recruited?

N/A

A9. Will informed consent be obtained from the participants?

YES NO

If informed consent or consent is not to be obtained please explain why. Further guidance is at: www.shef.ac.uk/researchoffice/gov_ethics_grp/ethics/er/guidance.html

The participants' consent has previously been obtained by Professor Lieven and colleagues prior to data collection. Professor Lieven has granted the student and supervisors permission to use the database for the purposes of this study.

A9.1. This question is only applicable if you are planning to obtain informed consent:

How do you plan to obtain informed consent? (i.e. the proposed process?):

A10. What measures will be put in place to ensure confidentiality of personal data, where appropriate?

The children's pseudonyms (as previously allocated by Professor Lieven) will be used at all times. None of the videos will be played in public. None of the audio data will be played publicly at an internal seminar without the explicit permission of the project supervisor. If it becomes desirable to play any audio data at an external event such as a conference, then professor Lieven's consent will also be sought beforehand. No quotations from the data which could identify the participants or their families will be used. The data is stored on an external hard drive, which is kept in a locked filing cabinet in the student's shared office. No one else will be given access to the data without express permission from the student's supervisor and Professor Lieven. (Please see appended documents for further details of the measures taken to ensure confidentiality, as specified by Professor Lieven.)

A11. Will financial / in kind payments (other than reasonable expenses and compensation for time) be offered to participants? (Indicate how much and on what basis this has been decided)

YES NO

A12. Will the research involve the production of recorded media such as audio and/or video recordings?

YES NO

A12.1. This question is only applicable if you are planning to produce recorded media:

How will you ensure that there is a clear agreement with participants as to how these recorded media may be stored, used and (if appropriate) destroyed?

Guidance fact-sheets on 'Safety and Well-Being', on 'Consent' and on 'Anonymity, Confidentiality and Data Protection' are at:

www.shef.ac.uk/researchoffice/gov_ethics_grp/ethics/factsheets.html

These three fact-sheets have been updated in the light of new findings from three Social Research Association-funded research projects, which were published in 2008, that focused on the perspective of participants regarding their experience as participants

Part B – The Signed Declaration

Title of Research Project: Investigating Interactions between Word Juncture Development and the Acquisition of Syntax

I confirm my responsibility to deliver the research project in accordance with the University of Sheffield's policies and procedures, which include the University's '*Financial Regulations*', '*Good Research Practice Standards*' and the '*Ethics Policy for Research Involving Human Participants, Data and Tissue*' (Ethics Policy) and, where externally funded, with the terms and conditions of the research funder.

In signing this research ethics application form I am also confirming that:

- The form is accurate to the best of my knowledge and belief.
- The project will abide by the University's Ethics Policy.
- There is no potential material interest that may, or may appear to, impair the independence and objectivity of researchers conducting this project.
- Subject to the research being approved, I undertake to adhere to the project protocol without unagreed deviation and to comply with any conditions set out in the letter from the University ethics reviewers notifying me of this.
- I undertake to inform the ethics reviewers of significant changes to the protocol (by contacting my academic department's Ethics Administrator in the first instance).
- I am aware of my responsibility to be up to date and comply with the requirements of the law and relevant guidelines relating to security and confidentiality of personal data, including the need to register when necessary with the appropriate Data Protection Officer (within the University the Data Protection Officer is based in CiCS).
- I understand that the project, including research records and data, may be subject to inspection for audit purposes, if required in future.
- I understand that personal data about me as a researcher in this form will be held by those involved in the ethics review procedure (e.g. the Ethics Administrator and/or ethics reviewers) and that this will be managed according to Data Protection Act principles.
- If this is an application for a 'generic' project all the individual projects that fit under the generic project are compatible with this application.

- I understand that this project cannot be submitted for ethics approval in more than one department, and that if I wish to appeal against the decision made, this must be done through the original department.

Name of the Principal Investigator (or the name of the Supervisor if this is a postgraduate researcher project):

Dr. Sara Howard

If this is a postgraduate researcher project insert the student's name here:

Sarah Bryan

Signature of Principal Investigator (or the Supervisor):

Date: ...

Email the completed application form and provide a signed, hard copy of 'Part B' to the Ethics Administrator (also enclose, if relevant, other documents).

1.2. Letter of Approval

**THE UNIVERSITY OF SHEFFIELD
DEPARTMENT OF HUMAN COMMUNICATION SCIENCES
RESEARCH ETHICS REVIEW PANEL**

Proposer: Sarah Bryan

Project Title: Investigating interactions between word juncture development and the acquisition of syntax

Date: 20th January 2010

Documents reviewed:

1. University research ethics application form

Dear Sarah

Thank you for the submission of your ethics application form to the departmental Ethics Review Panel. The proposal was read by three reviewers. The following compulsory amendment was required. This amendment does not require resubmission to the Ethics Panel: Section 7: Video data should not be viewed at home. Video data should only be used/accessed in private test rooms or offices within the department. Only research on copies of anonymised audio recordings and derived data (e.g., transcripts, score sheets) should be conducted outside the department (i.e., in the student's home).

Yours sincerely

Professor Rosemary Varley
Chair Ethics Review Panel (Staff & PGR Applications)

1.3. Conditions of Use of the Dense Database

Elena Lieven

I agree to abide by the following conditions with regard to my use of the Dense Database:

(1) Confidentiality: no portions of the audiotapes and videos will be played publicly without the explicit permission of my dissertation supervisor. No quotations that identify the family in any way will be made in public, either spoken or written. The child's pseudonym will be used at all times.

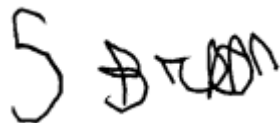
(2) Security: the data will be kept securely at all times, and no-one other than myself will have access unless agreed by my supervisor.

(2) Use of the data: this will be used exclusively for the purposes agreed by my supervisor.

(3) Acknowledgement: in any written account of the data, proper acknowledgement will be made of the families, the Max Planck Institute (MPI-EVA) and the Max Planck Child Study Centre at Manchester

Name (printed): Sarah Bryan

Signature:

A handwritten signature in black ink, appearing to read 'S. Bryan', written in a cursive style.

Appendix Two

Thomas's Realisations of Target Alveolar and Velar Plosives

2.1. Tables Showing Thomas's Realisations of Target Alveolar and Velar Plosives Sampled at Age 2;3;10

Table 1. Thomas's Realisations of Word-Initial Target Voiceless Alveolar Plosives at Age 2;3;10

Utterance	Realisation	Description of Phenomena
1. "Oh <u>dear</u> "	[^h d'i:ə]	Dentalised voiced alveolar plosive
2. " <u>Two</u> smarties please"	[^h tʃ]	Dentalised alveolar plosive
3. "Poo's all <u>done</u> "	[^h d ^w ʊn ^w]	Dentalised voiced alveolar plosive, labialised throughout utterance
4. "xxx <u>doors</u> "	[^h dʊəs]	Dentalised voiced alveolar plosive
5. "What bow <u>doing</u> ?"	[^h duwĩn]	Retracted voiced alveolar plosive
6. "More <u>down</u> "	[^h d̪aũd̪]	Dentalised voiced alveolar plosive
7. "Yes I <u>do</u> it"	[^h duw]	Dentalised voiced alveolar plosive
8. "One a <u>time</u> "	[^h t̪aĩm]	Dentalised voiceless alveolar plosive
9. "Oh this one a <u>time</u> "	[^h ka'i]	Voiceless velar plosive

Table 2. Thomas's Realisations of Word-Initial Target Velar Plosives at Age 2;3;10.

Utterance	Realisation	Description of Phenomena
1. "A <u>cake</u> "	[^h deɪt̪]	Voiced alveolar plosive
2. "A mess (.) <u>crumbs</u> "	[^h gʊðmz]	Voiced velar plosive
3. "I <u>can</u> "	[^h ʝ t̪æ̃n]	Dentalised voiced alveolar plosive. Falling tone
4. " <u>I can</u> "	[^h æ̃ t̪æ̃n]	Voiced palatal plosive. Falling (sing-song) tone
5. "A big truck <u>coming</u> "	[^h t̪ĩmĩn]	Dentalised voiceless alveolar plosive despite final velar in preceding truck
6. "a@sc <u>weed gone</u> "	[^h wiʔ gab̪]	Voiced velar plosive

Note: Thomas did not produce any words with target word-medial alveolar plosives at age 2;3;10.

Table 3. Thomas's Realisations of Word-Medial Target Velar Plosives at Age 2;3;10

Utterance	Realisation	Description of Phenomena
1. "Ice-cream bus"	[ʔn'dɪm]	Voiced alveolar plosive

Table 4. Thomas's Realisations of Word-Final Target Alveolar Plosives at Age 2;3;10

Utterance	Realisation	Description of Phenomena
1. "Spade"	['θpe:d]	Dentalised voiced alveolar plosive
2. "Yes I do it"	[ɪt̪]	Dentalised voiceless alveolar plosive
3. * "a@sc more weed"	['wi:t̪]	Dentalised voiceless alveolar plosive
4. "No shed"	['ʃeɪt̪]	Dentalised voiceless alveolar plosive, after voiceless palatal fricative, possibly caused by groping

Table 5. Thomas's Realisations of Word-Final Target Velar Plosives at Age 2;3;10

Utterance	Realisation	Description of Phenomena
1. "A cake"	['deɪt̪]	Dentalised voiceless alveolar plosive
2. "A truck in there"	['t̪ʰɒt̪]	Dentalised voiceless alveolar plosive
3. "Nin-nin a big bang"	['bɪ:g̃]	Voiced velar plosive, no audible release
4. "Fork"	['fɔʔh]	Glottal plosive and fricative
5. "A big truck coming"	[t̪uʌk]	Voiceless velar plosive. Open juncture preceding an initial alveolar in <i>coming</i>
6. "A fork"	['ʔɔk̪]	Very weak, quiet and slightly retracted voiceless velar plosive
7. "Rake"	['waɪt̪]	Dentalised voiceless alveolar plosive
8. "Back a@sc shed"	[bæʔ]	Final glottal plosive

2.2. Tables showing Thomas’s Realisations of Target Alveolar and Velar Plosives Sampled at Age 2;6;12

Table 6. Thomas’s Realisations of Word-Initial Target Alveolar Plosives at Age 2;6;12

Utterance	Realisation	Description of Phenomena
1. “Police-car <u>too</u> ”	[t̪ ^h u]	Labialised dentalised voiceless alveolar plosive
2. “ <u>Together</u> ”	[t̪u'gɛ'βɛ]	Dentalised voiceless alveolar plosive
3. “Fireman Sam <u>too</u> ”	[d̪u]	Dentalised voiced alveolar plosive
4. “ <u>Thomas</u> ”	[t̪θm̩əː]	Dentalised voiceless alveolar plosive
5. “Big <u>tail</u> , big paws”	[t̪ɛɪjə]	Dentalised voiceless alveolar plosive
6. “There a@sc <u>dirty</u> ”	[t̪d̪ɪ]	Dentalised voiced alveolar plosive
7. “No <u>tummy</u> ”	[t̪ ^h ʊmɪ]	Aspirated voiceless alveolar plosive
8. “ <u>Talk</u> Mummy a moment”	[t̪d̪ʔ]	Dentalised voiced alveolar plosive
9. * “And a@sc make the <u>tower</u> ”	[t̪ ^h auə]	Dentalised voiceless alveolar plosive
10. “No <u>Daddy</u> Rod”	[d̪ædɪ]	Retracted voiced alveolar plosive

Table 7. Thomas’s Realisations of Word-Initial Target Velar Plosives at Age 2;6;12

Utterance	Realisation	Description of Phenomena
1. “ <u>Can</u> ’t see it”	[k̪ãʔ]	Weak voiceless velar plosive
2. “No ambulance a@sc Fireman Sam <u>come</u> ”	[t̪ ^h ʒm̩]	Labialised voiceless alveolar plosive
3. “And a policeman and a (babble) Fireman Sam <u>come(d)</u> , ambulance”	[d̪ʊm̩d̪]	Retracted voiced alveolar plosive
4. “xxx a@sc <u>crispies</u> ”	[p̪uɪspɪs:]	Voiceless bilabial plosive. Possible within-word consonant assimilation
5. “&na <u>Crunchy</u> ”	[g̪vɔ̃n̩ʃi]	Voiced velar plosive
6. “a@sc <u>cross</u> ”	[d̪vɔ̃ʒ]	Retracted voiced alveolar plosive
7. “ <u>Cross</u> ”	[g̪vɔ̃s:]	Voiced velar plosive
8. “Mummy <u>carry</u> ”	[t̪æwi]	Dentalised voiceless alveolar plosive
9. “ <u>Climb</u> a lot”	[k̪lɔ̃m̩]	Voiceless velar plosive
10. “No <u>climb</u> a ladder”	[d̪vɑ̃m̩]	Retracted voiceless alveolar plosive

Table 8. Thomas's Realisations of Word-Medial Target Alveolar Plosives at Age 2;6;12

Utterance	Realisation	Description of Phenomena
1. "Chasing <u>after</u> now"	[ˈæaft̪ɛ]	Dentalised voiceless alveolar plosive
2. "Police-car <u>harder</u> "	[ˈhɑd̪ə]	Dentalised voiced alveolar plosive
3. " <u>Harder</u> "	[ˈhɑd̪ə]	Retracted voiced alveolar plosive
4. "No <u>Gordon</u> "	[ˈdɔd̪ən]	Voiced alveolar plosive. All consonants retracted
5. "There a@sc <u>dirty</u> "	[ˈd̪ɜt̪i]	Dentalised voiceless alveolar plosive
6. * "xxx <u>lady</u> "	[ˈleɪd̪i]	Dentalised voiced alveolar plosive
7. "Medicine a@sc <u>hiding</u> There"	[ˈharˈd̪ɪn]	Dentalised voiced alveolar plosive
8. "Make (it?) a <u>ladder</u> "	[lˈæd̪ə]	Dentalised voiced alveolar plosive
9. "One at <u>bottom</u> "	[bɒʔt̪ʷɜn]	Retracted voiceless alveolar plosive
10. "Pippin's <u>eating</u> "	[ˈiːt̪ɪŋ]	Dentalised voiceless alveolar plosive

Table 9. Thomas's Realisations of Word-Medial Target Velar Plosives at Age 2;6;12

Utterance	Realisation	Description of Phenomena
1. "Police-car <u>too</u> "	[(C)ɪʒd̪ɑ]	Dentalised voiced alveolar plosive
2. " <u>Together</u> "	[ˈtuˈgeˈβɛ]	Voiced velar plosive
3. " <u>Abigail</u> Thomas a@sc bath"	[ˈabədəɪjɪl]	Voiced alveolar plosive
4. "&ne <u>blackcurrant</u> "	[ˈ(C,Vd)æʔt̪ʷwənt]	Glottal stop followed by dentalised voiceless alveolar plosive
5. " <u>Making</u> slide"	[ˈb̥erˈkɪn]	Voiceless velar plosive
6. "No <u>scarecrow</u> on"	[ˈʃkʷekvəʊ]	Voiceless velar plosive
7. " <u>Looking</u> "	[lɒʔt̪ɪn]	Dentalised voiceless alveolar plosive
8. "No see <u>helicopter</u> "	[ˌʔeləˈkɒʔtɜ]	Voiceless velar plosive

Table 10. Thomas's Realisations of Word-Final Target Alveolar Plosives at Age 2;6;12

Utterance	Realisation	Description of Phenomena
1. "Hands <u>bite</u> "	[ˈbʌɪ̯t̪]	Dentalised voiceless alveolar plosive
2. "Oh &sa <u>bit</u> hard"	[bɪ̯t̪]	Weak dentalised voiceless alveolar plosive
3. "Not <u>get out</u> "	[d̪ɪʔ ˈdɑːʊʔt̪]	Either glottal stop or resyllabified dentalised voiced alveolar plosive
4. "Not <u>get out</u> "	[d̪ɪʔ ˈdɑːʊʔt̪]	Retracted voiceless alveolar plosive
5. "Watch <u>it</u> "	[ɪ̯t̪]	Dentalised voiceless alveolar plosive
6. "&ne <u>blackcurrant</u> "	[ˈ(C,Vd)æʔˈtʰwənt̪]	Retracted voiceless alveolar plosive
7. " <u>Head</u> "	[ˈhɛ̯d̪]	Dentalised devoiced alveolar plosive
8. "Thomas <u>eat it</u> "	[ˈiːd̪]	Retracted voiced alveolar plosive
9. "Mummy <u>sit up</u> "	[sɪ̯t̪ ˈʊp]	Dentalised voiceless alveolar plosive
10. *" <u>Front/flat</u> "	[ˈfɹwæʔt̪]	Retracted voiceless alveolar plosive

Table 11. Thomas's Realisations of Word-Final Target Velar Plosives at Age 2;6;12

Utterance	Realisation	Description of Phenomena
1. "No <u>break them</u> "	[ˈbweɪʔ]	Glottal plosive
2. " <u>Big</u> tail, big paws"	[bɪ̯j]	Weak voiced palatal fricative
3. " <u>Big</u> paws"	[bɪ̯g̊]	Final voiced velar plosive with no audible release
4. "Oh a@sc &de <u>mark</u> "	[ˈb̥ak]	Voiceless velar plosive
5. " <u>Pink</u> "	[pɪ̯ŋk]	Voiceless velar plosive
6. "(A)nother <u>pink</u> red"	[pɪ̯nʔ]	Alveolar nasal and glottal stop
7. " <u>Yuck/yack</u> "	[ˈjæk̊]	Weak voiceless velar plosive
8. " <u>Talk</u> mummy a moment"	[ˈd̪ʔʔ]	Glottal stop
9. " <u>Make</u> a tower"	[ˈ(C,Vd)eɪk]	Voiceless velar plosive
10. " <u>Make</u> a tower"	[ˈmeɪt̪]	Dentalised voiceless alveolar plosive

2.3. Tables showing Thomas's Realisations of Target Alveolar and Velar Plosives Sampled at Age 2;9;15

Table 12. Thomas's Realisations of Word-Initial Target Alveolar plosives at Age 2;9;15

Utterance	Realisation	Description of Phenomena
1. "Down the floor"	[d̪aʊn]	Dentalised voiced alveolar plosive
2. "I put them in the digger"	[ˈd̪ɪgə]	Dentalised voiced alveolar plosive
3. "Take (th)em off mummy"	[kɛp]	Voiceless velar plosive
4. "Them do"	[ˈdu:]	Retracted voiced alveolar plosive
5. "Not talk"	[ˈkʰɔk]	Voiceless velar plosive. Possible within-word consonant assimilation
6. "A letter in the dustbin wagon"	[d̪əʃˈbɪn]	Dentalised voiced alveolar plosive
7. "xxx Two (.) went in my tummy"	[ˈtʰu]	Aspirated voiceless alveolar plosive
8. "xxx Two (.) went in my tummy"	[ˈt̪ɔmi]	Unaspirated retracted voiceless alveolar plosive
9. "The Thomas the Tank-Engine slipped"	[ˈt̪ʰɔməʃ]	Dentalised voiceless alveolar plosive
10. "The Thomas the Tank-Engine" slipped"	[ˈt̪ʰæŋkɛndʒɪn]	Aspirated dentalised voiceless alveolar plosive

Table 13. Thomas's Realisations of Word-Initial Target Velar Plosives at Age 2;9;15

Utterance	Realisation	Description of Phenomena
1. "Not collect (th)em"	[ˈkʰɛkʰtʰ]	Voiceless velar plosive with lateral release
2. "Course we can"	[ˈkʰæ̃n]	Aspirated voiceless velar plosive
3. "Ah can't see here"	[ˈkʰɑ:nʔ]	Voiceless velar plosive
4. "Where's it come from"	[ˈkʰɔm]	Voiceless velar plosive
5. "Your cot"	[ˈkʰɔtʰ]	Voiceless velar plosive
6. "Go crocodile"	[ˈkʰɒxədæəʊ]	Voiceless velar plosive
7. "I'm coming"	[ˈkʰɔmɪŋg]	Voiceless velar plosive
8. "Cab"	[ˈkʰæb]	Voiceless velar plosive
9. "Ah Mummy got a ginger cat"	[kʰætʃ]	Voiceless velar plosive
10. "Ah! big cuddle"	[ˈkʰɑ:dʒɛl]	Voiceless velar plosive

Table 14. Thomas’s Realisations of Word-Medial Target Alveolar Plosives at Age 2;9;15

Utterance	Realisation	Description of Phenomena
1. “ <u>Letters</u> ”	[ʔe...təz]	Dentalised voiceless alveolar plosive
2. “Memo <u>holders</u> ”	[ˈhəʊtɔdɔz]	Voiced alveolar plosive
3. * “There <u>gentleman</u> ”	[ˈjɛntɪmən]	Dentalised voiceless alveolar plosive
4. “Hey! It’s <u>Daddy’s</u> jumper”	[ˈdædɪz]	Dentalised voiced alveolar plosive
5. “Ah! Big <u>cuddle</u> ”	[ˈkʰɑːdʒɛl]	Dentalised voiced alveolar plosive
6. “Much much <u>better</u> now”	[ˈpɛtə]	Dentalised voiceless alveolar plosive
7. “Get this <u>plaster</u> ”	[ˈplæstɹʷə]	Labialised dentalised voiceless alveolar plosive
8. “Thomas <u>tidy</u> up this mess”	[ˈtaɪdɪs]	Dentalised voiced alveolar plosive
9. “I’m <u>hiding</u> under here”	[ˈhaɪdɪn]	Dentalised voiced alveolar plosive
10. “I’m <u>hiding</u> under here”	[ˈɛndə]	Dentalised voiced alveolar plosive

Table 15. Thomas’s Realisations of Word-Medial Target Velar Plosives at Age 2;9;15

Utterance	Realisation	Description of Phenomena
1., 2. and 3. “ <u>Hokey-Cokey</u> ”	[ˌlɛʊkʰiˈkɔkʰi]	Three word-medial voiceless velar plosives, two aspirated, one unaspirated
4. “The Thomas the <u>tank-engine</u> slipped”	[ˈtʰæŋkɛndʒɪn]	Voiceless velar plosive
5. “ <u>Looking</u> in my vest”	[ˈlʊkɪn]	Voiceless velar plosive
6. “Go <u>crocodile</u> ”	[ˈkɒxədəəʊ]	Voiceless velar fricative
7. “ <u>Pillow-case</u> ”	[ˈtʰɪlɔtʰeɪs]	Dentalised voiceless alveolar plosive. Possible within –word consonant assimilation
8. “ <u>Pillow-case</u> ”	[ˈpʰɪlɔkʰeɪs]	Voiceless velar plosive
9. “Erm, a@sc my a <u>doctor</u> ”	[ˈdɒktə]	Weak voiceless velar plosive
10. “ <u>Okay</u> ”	[ˈəʊ:kʰeɪ]	Voiceless velar plosive

Table 16. Thomas's Realisations of Word-Final Target Alveolar Plosives at Age 2;9;15

Utterance	Realisation	Description of Phenomena
1. "Do they <u>fit</u> ?"	[^l fit̚]	Retracted voiceless alveolar plosive
2. " <u>It</u> is"	[it̚]	Dentalised voiceless alveolar plosive
3. "Mummy, I'm gonna <u>put</u> (th)em/it/her on that train"	[^h pʰʊt̚]	Voiceless alveolar plosive
4. "It's <u>not</u> "	[^h nɒt̚]	Slightly retracted voiceless alveolar plosive
5. "Not <u>collect</u> them"	[^h k ^l ɛk t̚ʰ]	Aspirated voiceless alveolar plosive
6. "Grandad <u>brought</u> it"	[^h ʊɔpt̚]	Dentalised voiceless alveolar plosive
7. "xxx Two (.) <u>went</u> in my tummy"	[wɛnt̚ʰ]	Aspirated dentalised voiceless alveolar plosive
8. "It's put in my <u>vest</u> "	[vest̚]	Dentalised voiceless alveolar plosive
9. "Oh I <u>missed</u> it"	[mɪsɔd̚]	Dentalised voiced alveolar plosive
10. "I missed another <u>bit</u> "	[bʊɛt̚]	Dentalised voiceless alveolar plosive

Table 17. Thomas's Realisations of Word-Final Target Velar Plosives at Age 2;9;15

Utterance	Realisation	Description of Phenomena
1. " <u>Look</u> "	[^h lʊɒt̚]	Retracted voiceless alveolar plosive
2. "Not <u>talk</u> "	[^h kʰɔk̚]	Voiceless velar plosive
3. "Does it <u>work</u> "	[^h wɜk̚ʲ]	Palatalised voiceless velar plosive
4. "The train-man <u>like</u> a chocolate"	[laɪg̚]	Voiced velar plosive. Possibly context-sensitive voicing
5. "Oh <u>thank</u> you train driver"	[^h ʃæŋk̚ʲ]	Palatalised voiceless velar plosive
6. " <u>Take</u> (th)em off mummy"	[kɛp̚]	Voiceless bilabial plosive, although initial voiceless velar plosive
7. " <u>Take</u> all these off"	[ɛt̚ʰ]	Dentalised voiceless alveolar plosive
8. "I'm <u>coming</u> "	[^h kʰõmɪŋg̚]	Voiced velar plosive
9. * "No want stay in the <u>dark</u> "	[^h ɖɔk̚ʲ]	Palatalised voiceless velar plosive
10. " <u>Smoke</u> "	[^h ʃməʊk̚]	Voiceless velar plosive

2.4. Tables showing Thomas's Realisations of Target Alveolar and Velar Plosives Sampled at Age 3;0;2

Table 18. Thomas's Realisations of Word-Initial Target Alveolar Plosives at Age 3;0;2

Utterance	Realisation	Description of Phenomena
1. * "Daddy xxx Thomas"	[^l dædi]	Retracted voiced alveolar plosive
2. * "Daddy xxx Thomas"	[^l tʰɔ̃məs]	Retracted voiceless alveolar plosive
3. "I ticklemouse"	[tɪkɫ]	Dentalised voiceless alveolar plosive
4. "Tell me reason I saw it"	[^l tɛʊ]	Unaspirated dentalised voiceless alveolar plosive
5. "Teddybear"	[^l tʰɛðibe:ɪ]	Weak retracted voiceless alveolar plosive
6. "There two snakes"	[^l tʰɹ]	Aspirated dentalised voiceless alveolar plosive
7. * "And (a)bout (..) (a)bout (...) singing tooth toothbrush"	[^l tuf ^l tʊsbvəʃ]	Dentalised voiceless alveolar plosive
8. "That falled a tower wall"	[^l təwər]	Dentalised voiceless alveolar plosive
9. "Brush my teeth"	[^l tɪˌf]	Dentalised voiceless alveolar plosive
10. * "Er er Purdie xxx she (.) just (4) tickle my ears"	[ɪkɪkɫ]	Voiceless velar plosive. Within-word consonant assimilation

Table 19. Thomas's Realisations of Word-Initial Target Velar Plosives at Age 3;0;2

Utterance	Realisation	Description of Phenomena
1. "I being a big crocodile under here"	[kʊɒk ^h ɔ̃dɪl]	Voiceless velar plosive
2. "Getting cross"	[^l kʷɔ̃s]	Voiceless velar plosive, even though <i>getting</i> had final [n]. No assimilation
3. "Um I want crispies"	[^l kuɪspɪz]	Voiceless velar plosive
4. "No no cornflakes no no milk"	[^l k ^h ɔ̃fleɪs]	Voiceless velar plosive
5. "You're go catch a train"	[^l kx ^h ætʃ]	Voiceless velar plosive with affricated release
6. "It coming round a@sc round"	[^l k ^h ɔ̃mɪŋ]	Aspirated voiceless velar plosive
7. "I can't do it like that"	[^l k ^h an]	Aspirated voiceless velar plosive
8. "(A)bout cuckoo"	[^l k ^h kuʔk ^h u]	Two successive retracted voiceless velar plosives (almost uvular)
9. "Call fire-engine"	[ku]	Unaspirated voiceless velar plosive
10. "It's quiet"	[^l kxwaijəʔt]	Voiceless velar affricate

Table 20. Thomas's Realisations of Word-Medial Target Alveolar Plosives at Age 3;0;2

Utterance	Realisation	Description of Phenomena
1. * "Felix xxx like <u>water</u> "	[^l wɔʊtə]	Dentalised voiceless alveolar plosive
2. " <u>Later</u> "	[^l leɪtə]	Retracted voiceless alveolar plosive
3. " <u>Purdie</u> sit in that <u>rock-a-tot</u> "	[^l p ^h ʒɹ̥ɹ̥i]	Dentalised voiced alveolar plosive
4. " <u>Purdie</u> sit in that <u>rock-a-tot</u> "	[^l vɒkətɒt]	Retracted voiceless alveolar plosive
5. "Um <u>sister</u> "	[^l ʃɪstə]	Dentalised voiceless alveolar plosive
6. "Um <u>Sooty</u> bag"	[^l ʃʊt̪eɪ]	Dentalised voiceless alveolar plosive
7. " <u>Getting</u> cross"	[gɛt̪ɪm]	Dentalised voiceless alveolar plosive
8. * "Um the big other/older the (a)nother one say smack a@sc <u>bottom</u> "	[^l bɒt̪əm]	Dentalised voiceless alveolar plosive
9. "A big <u>post-lorry</u> "	[^l p ^h əʊst ^l lɒrɪ]	Voiceless alveolar plosive with lateral release. Coarticulation prior to [l]
10. "This is a <u>plaster</u> "	[^l plæst̪ə]	Dentalised voiceless alveolar plosive

Table 21. Thomas's Realisations of Word-Medial Target Velar Plosives at Age 3;0;2

Utterance	Realisation	Description of Phenomena
1. "I being a big <u>crocodile</u> under here"	[^l kʊk ^h əd[ai]	Voiceless velar plosive
2. "That's more like <u>chicken</u> like that like that friend chicken"	[^l t̪ ^h ɪk ^h ɪn]	Aspirated voiceless velar plosive
3. " <u>Purdie</u> sit in that <u>rock-a-tot</u> "	[^l vɒkətɒt]	Voiceless velar plosive
4. "And it comes out <u>again</u> "	[ə'gɛn]	Voiced velar plosive
5. "Up a@sc <u>rocket</u> and down like a rain"	[^l vɒk ^l ɪk ^l]	Palatalised voiceless velar plosive
6. "(A)bout <u>cuckoo</u> "	[^l k̠k̠ʊʔk ^h u]	Strongly aspirated retracted voiceless velar plosive (almost uvular)
7. " <u>Becca</u> "	[^l β̥ɛk ^h ə]	Aspirated voiceless velar plosive
8. * "Er er Purdie xxx she (.) just (4) <u>tickle</u> my ears"	[ɪkɪk̠]	Voiceless velar plosive
9. * "My er Molly er Felix more like <u>diet-coke</u> "	[^l da:ək ^h əʊk]	Retracted voiceless velar plosive, almost uvular

Table 22. Thomas's Realisations of Word-Final Target Alveolar Plosives at Age 3;0;2

Utterance	Realisation	Description of Phenomena
1. "My <u>favourite</u> "	[^l feɪɔ̞'vʊt̚]	Voiceless alveolar plosive
2. "Purdie <u>sit</u> in that rock-a-tot"	[^l ʃɪt̚]	Dentalised voiceless alveolar plosive
3. "Purdie sit in that <u>rock-a-tot</u> "	[^l vɒkətɒt̚]	Voiceless alveolar plosive
4. "It's <u>hot</u> "	[^l hɒ'ʔt̚]	Dentalised voiceless alveolar plosive
5. "You're your, your say <u>brilliant</u> a train"	[^l bʊɪlɪjənt̚ʂ̺]	Retracted voiceless alveolar plosive
6. " <u>Spilt</u> "	[^l sprɪʈ̚]	Weak retracted voiceless alveolar plosive
7. "Having a nice <u>rest</u> "	[^l veʂ̺t̚]	Weak dentalised voiceless alveolar plosive
8. "Yes <u>it</u> is"	[ɪt̚]	Dentalised voiceless alveolar plosive
9. "Up a <u>rocket</u> and down like a@sc rain"	[^l vɒk'ɪk̚ ^h]	Palatalised voiceless velar plosive. Possible within-word consonant assimilation
10. * "I just (.) er need a@sc <u>put</u> it here"	[p ^h ʊd̚]	Retracted voiced alveolar plosive. Possibly context-sensitive voicing

Table 23. Thomas's Realisations of Word-Final Target Velar Plosives at Age 3;0;2

Utterance	Realisation	Description of Phenomena
1. * "Um um it's made my <u>cheek</u> sore"	[t̚ʃɪk̚ ^h]	Weak, but aspirated voiceless velar plosive. Only just audibly released
2. "Big <u>pig</u> "	[^l p ^h ɪg]	Voiced velar plosive
3. "Big large <u>snake</u> "	[^l ʃneɪ...k̚ ^j]	Palatalised voiceless velar plosive
4. * "xxx <u>Drink</u> it xxx"	[^l duɪŋk̚ ^j]	Palatalised voiceless velar plosive
5. "It's more <u>like</u> doing sick"	[laɪk̚ ^h]	Voiceless velar plosive with no audible release
6. "It's more like doing <u>sick</u> "	[^l ʃɪk̚ ^j]	Palatalised voiceless velar plosive
7. * "Um the big other/older the (a)nother one say <u>smack</u> a@sc bottom"	[smækt̚ə]	Dentalised voiceless alveolar plosive. Possible consonant assimilation with <i>bottom</i> .
8. "I need draw a big large <u>snake</u> "	[^l ʂneɪt̚ʃ]	Voiceless post-alveolar affricate
9. " <u>Look</u> at that snake there"	[lʊk̚]	Voiceless velar plosive
10. "You a you be a front, Julian be a <u>back</u> "	[^l bɑ'q̚ ^h]	Voiceless uvular plosive

2.5. Tables Showing Thomas's Realisations of Target Alveolar and Velar Plosives Sampled at Age 3;3;3

Table 24. Thomas's Realisations of Word-Initial Target Alveolar Plosives at Age 3;3;3

Utterance	Realisation	Description of Phenomena
1. "And I reach something <u>down</u> , mightn't I?"	[ˈd̪ɑʊ]	Dentalised voiced alveolar plosive
2. " <u>Daddy</u> "	[ˈd̪æd̪i:]	Dentalised voiced alveolar plosive
3. * "Don't know"	[ˈd̪əʊnʔ]	Dentalised voiced alveolar plosive
4. "Oh (noise) I <u>didn't</u> "	[ˈd̪ɪd̪ɔ̃nʔ]	Dentalised voiced alveolar plosive
5. "I <u>do</u> "	[ˈd̪u]	Dentalised voiced alveolar plosive
6. "Oh I want <u>to</u> "	[t̪ü]	Retracted voiceless alveolar plosive
7. "Let's do a <u>top</u> ones"	[ˈt̪ʰɒʔ]	Aspirated voiceless alveolar plosive
8. "I just seen on the <u>telly</u> "	[ˈt̪eleɪ]	Dentalised voiceless alveolar plosive
9. "Big <u>tin</u> "	[ˈt̪ɪn]	Dentalised voiceless alveolar plosive
10. Hmm <u>dear</u> "	[ˈd̪ɪə]	Voiced alveolar plosive

Table 25. Thomas's Realisations of Word-Initial Target Velar Plosives at Age 3;3;3

Utterance	Realisation	Description of Phenomena
1. "What <u>cupboard</u> ?"	[ˈkʰʊbəʔ]	Aspirated voiceless velar plosive. Maybe also final consonant, but inaudible owing to extraneous noise
2. " <u>Can</u> of soup"	[k̪æ̃n]	Weak voiceless velar plosive
3. "(Be) <u>cause</u> I can't get this bit out"	[kʰɒs]	Aspirated voiceless velar plosive
4. "(Be) <u>cause</u> I <u>can't</u> get this bit out"	[ˈkʰɑ̃ʔ]	Aspirated voiceless velar plosive
5. "I'm very <u>cross</u> "	[ˈkʰɒs]	Voiceless velar plosive
6. " <u>Coffee-bags</u> "	[ˈt̪ɒfiˈbægz]	Dentalised voiceless alveolar plosive
7. "Been to <u>collect</u> "	[ˈkʰlekʰt̪]	Voiceless velar plosive with lateral release
8. "I <u>come</u> back for more litter"	[ˈkʰɔ̃m]	Aspirated voiceless velar plosive
9. " <u>Crispies</u> "	[ˈkwɪʃpɪz]	Voiceless velar plosive
10. * "Just putting it near door <u>case</u> I need it"	[ˈkʰɛs]	Aspirated voiceless velar plosive

Table 26. Thomas's Realisations of Word-Medial Target Alveolar Plosives at Age 3;3;3

Utterance	Realisation	Description of Phenomena
1. * "Go on my <u>computer</u> "	[k ^h ɔ̃m'pjʊt ^{hwɔ̃} ɔ̃]	Aspirated, labialised, retracted voiceless alveolar plosive
2. "I just, I will play um, I need my <u>computer</u> after that"	[k ^h ɔ̃m'pjʊtə]	Dentalised voiceless alveolar plosive
3. "I just, I will play um, I need my <u>computer</u> after that"	[æftə]	Dentalised voiceless alveolar plosive
4. "Farty-pants has just been in your <u>bottom</u> "	[^l bɔ̃tɔ̃m]	Dentalised voiceless alveolar plosive
5. "And I reach something down, <u>mightn't</u> I?"	[^l maɪtɔ̃n]	Dentalised voiceless alveolar plosive
6. " <u>Farty-pants</u> has just been in your bottom"	[^l fɑ̃tɪ'pænts]	Dentalised voiceless alveolar plosive
7. "(To) <u>matoes</u> "	[^l matəʊs]	Voiceless alveolar plosive
8. "Look! I <u>bitten</u> off his arm"	[^l βɪt ^h ən]	Aspirated dentalised voiceless alveolar plosive
9. "I come back for more <u>litter</u> "	[^l lɪtə]	Dentalised voiceless alveolar plosive
10. " <u>Smarties</u> "	[^l smɑ̃tɪ'z]	Dentalised voiceless alveolar plosive

Table 27. Thomas's Realisations of Word-Medial Target Velar Plosives at Age 3;3;3

Utterance	Realisation	Description of Phenomena
1. * "Er got my <u>finger/fingers/thingy</u> stuck in the (.) in the bin"	[^l fɪŋgɪ]	Voiced velar plosive
2. "Mmm! <u>Ice-cream</u> "	[aɪ ^l kwiɔ̃m]	Voiceless velar plosive
3. "We don't need a <u>microphone</u> do we?"	[^l maɪkʊəfəʊn]	Voiceless velar plosive
4. " <u>Chocolate</u> "	[^l tʃɔ̃kəlɪʔ]	Voiceless velar fricative
5. " <u>Cocoa Powder</u> "	[^l k ^h əʊkəʊ]	Voiceless velar plosive
6. " <u>Drinking</u> chocolate"	[^l tʊɪŋk ^l lɪŋ]	Voiceless velar plosive with lateral release
7. " <u>Drinking</u> chocolate"	[^l dʊɪŋk ^h lɪŋ]	Voiceless velar plosive
8. " <u>Drinking</u> chocolate"	[^l tʃɔ̃k ^l lɪʔ]	Voiceless velar plosive with lateral release
9. "(Be)cause I <u>broken</u> it"	[^l bwɔ̃k ^h ən]	Aspirated voiceless velar plosive
10. "I/I'm <u>making</u> some orange juice"	[^l meɪkɪŋ]	Dentalised voiceless alveolar plosive

Table 28. Thomas's Realisations of Word-Final Target Alveolar Plosives at Age 3;3,3

Utterance	Realisation	Description of Phenomena
1. "I <u>want</u> alarm-bell"	[wɔ̃n̥t̪ ^l]	Dentalised voiceless alveolar plosive with lateral release
2. "I can't get this one <u>out</u> "	[^l aʊ̃t̪]	Retracted voiceless alveolar plosive
3. "No we <u>don't</u> "	[^l d̪eʊ̃n̥t̪]	Dentalised voiceless alveolar plosive
4. "Oh (noise) I <u>didn't</u> "	[^l d̪ɪd̪ɔ̃n̥ʔt̪]	Voiceless alveolar plosive
5. "Drinking <u>chocolate</u> "	[^l t̪ʃp̪k̪l̪ət̪]	Dentalised voiceless alveolar plosive
6. "Bread <u>what?</u> "	[^l wʌʔt̪]	Dentalised voiceless alveolar plosive
7. "I think it's a <u>sweet</u> "	[^l ʃwi:t̪]	Dentalised voiceless alveolar plosive
8. "What is it?"	[ɪt̪ ^h]	Aspirated dentalised voiceless alveolar plosive
9. "I <u>put</u> (th)em on stairs"	[p̪ʊ̃t̪]	Unaspirated dentalised voiceless alveolar plosive
10. "Been to <u>collect</u> "	[^l k ^l l̪ɛk ^l t̪]	Dentalised voiceless alveolar plosive

Table 29. Thomas's Realisations of Word-Final Target Velar Plosives at Age 3;3,3

Utterance	Realisation	Description of Phenomena
1. * " <u>Look</u> what/at I built"	[lʊk]	Voiceless velar plosive
2. "Er got my finger/thingy <u>stuck</u> in the (.) in the bin"	[^l ʃt̪ʊk ^h]	Voiceless velar plosive
3. "I put some <u>music</u> on"	[^l mju:zɪk]	Voiceless velar plosive
4. "To <u>milk</u> "	[^l mɪ̃ʊk]	Voiceless velar plosive
5. "I <u>think</u> it's a sweet"	[^l fɪ̃n̪k̪]	Voiceless velar plosive with a degree of context-sensitive voicing
6. " <u>Big</u> tin"	[bɪg ^ˈ]	Voiced velar plosive with no audible release
7. "I just putting (th)em <u>back</u> "	[^l bæʔk ^l]	Palatalised voiceless velar plosive
8. "What's the <u>flask</u> "	[^l flæʃk]	Voiceless velar plosive
9. "Just turn this <u>black</u> thing on?"	[^l blæk ^l]	Voiceless velar plosive with no audible release
10. "I <u>take</u> it"	[^l t̪ɛɪk ^{xj}]	Palatalised voiceless velar plosive with affricated release

2.6. Tables showing Thomas's Realisations of Target Alveolar and Velar Plosives Sampled at Age 3;6;6

Table 30. Thomas's Realisations of Word-Initial Target Alveolar Plosives at Age 3;6;2

Utterance	Realisation	Description of Phenomena
1. "Goes one <u>two</u> blast-off"	[tu]	Retracted voiceless alveolar plosive
2. "But I won't just won't <u>tell</u> him off and go ah!"	[t̥ɛl]	Weakly aspirated dentalised voiceless alveolar plosive
3. "I want <u>to</u> get that one off"	[t̥ʰʊ]	Aspirated dentalised voiceless alveolar plosive
4. * "No not on the top"	[t̥ʰɒpʰ]	Aspirated retracted voiceless alveolar plosive
5. "Captain <u>Thomas</u> ready to launch"	[t̥ʰmɒs]	Alveolar ejective
6. * " <u>Teletubbies</u> now can I watch?"	[t̥ʰɛlɪt̥ʰɒbɪz]	Weak dentalised voiceless alveolar plosive
7. "I wish I was watching <u>telly</u> and nobody (di)sturb me"	[t̥ʰɛli]	Aspirated voiceless alveolar plosive
8. "And you you can/could just (pre) <u>tend</u> you're naughty"	[t̥ʰɛn]	Aspirated dentalised voiceless alveolar plosive
9. "See what <u>time</u> it is in the &wur (.) in the shops"	[t̥ʰaɪm]	Aspirated dentalised voiceless alveolar plosive
10. "Daddy, Mummy <u>take</u> a (e)quipment/equipment off"	[t̥ʰeɪk]	Aspirated dentalised voiceless alveolar plosive

Table 31. Thomas’s Realisations of Word-Initial Target Velar Plosives at Age 3;6;2

Utterance	Realisation	Description of Phenomena
1. * “Buzz Lightyear doesn’t xxx <u>kill</u> ”	[^h k ^h ɪʊw]	Aspirated voiceless velar plosive
2. “ <u>Careful</u> ”	[^h k ^h ɛ̃əfʊ]	Aspirated voiceless velar plosive. Putting on funny voice
3. “It <u>can</u> fly on its own, but it doesn’t fit in there” ”	[^h k ^h æ̃n]	Aspirated voiceless velar plosive
4. “ <u>Captain</u> Thomas ready to launch”	[^h k ^h ʌp ^h tɪ]	Aspirated voiceless velar plosive
5. “I <u>can</u> ’t tell you about it”	[^h k ^h ə ^h hɑ̃ntʃ]	Aspirated voiceless velar plosive
6. * “I say don’t <u>care</u> ”	[^h k ^h ɛ:]	Aspirated palatalised voiceless velar plosive
7. * “I’m <u>coming</u> with my police-helmet”	[^h k ^h ʊmɪ̃n]	Aspirated voiceless velar plosive
8. “I got a watch and just (pre)tend these/it’s my <u>keys</u> ”	[^h k ^h ɪz]	Strongly aspirated palatalised voiceless velar plosive
9. “And I will <u>catch</u> you up and lock you again”	[^h k ^h ætʃ]	Aspirated voiceless velar plosive
10. “(Be) <u>cause</u> you’re being naughty”	[^h k ^h ɒʒ]	Aspirated voiceless velar plosive

Table 32. Thomas’s Realisations of Word-Medial Target Alveolar Plosives at Age 3;6;2

Utterance	Realisation	Description of Phenomena
1. “Goes one two <u>blast-off</u> ”	[^h blæstɒf]	Dentalised voiceless alveolar plosive
2. “I <u>wanted</u> that one”	[^h wɒntɪd ^h]	Dentalised voiceless alveolar plosive
3. “ <u>Captain</u> Thomas ready to launch”	[^h k ^h ʌp ^h tɪ]	Unaspirated retracted voiceless alveolar plosive
4. “ <u>Teletubbies</u> now can I watch?”	[^h tɛlɪt ^h ɒbɪz]	Weak dentalised voiceless alveolar plosive
5. “(Be) <u>cause</u> you’re being <u>naughty</u> ”	[^h nɔ̃ti]	Dentalised voiceless alveolar plosive
6. “Oh look! There’s <u>letters</u> . We don’t want those do we?”	[^h lɛtə̃z]	Dentalised voiceless alveolar plosive
7. “Two scary <u>monsters</u> going up to fright daddy and Purdie”	[^h mɒ̃nstə̃z]	Dentalised voiceless alveolar plosive
8. “You can put that one out near <u>buttons</u> , I can put it out near telly”	[^h bʊt ^h ənz]	Aspirated voiceless alveolar plosive
9. “Just look <u>after my</u> watch and now I just gonna borrow your key”	[æfɪ̃m]	Weak dentalised voiceless alveolar plosive
10. “Now they gone <u>upstairs</u> ”	[ʊpstə̃z]	Dentalised voiceless alveolar plosive

Table 33. Thomas’s Realisations of Word-Medial Target Velar Plosives at Age 3;6;2

Utterance	Realisation	Description of Phenomena
1. “For the space <u>rocket</u> ”	[^h ʊbɔkɪʔ]	Voiceless velar plosive
2. “And you know what I’m <u>making</u> ”	[^h meɪkʲɪŋg]	Palatalised voiceless velar plosive
3. “ <u>Monkeys</u> ”	[^h mʊŋkʲɪʔ]	Aspirated palatalised voiceless velar plosive
4. “And I tickle <u>tickle</u> you all down”	[^h trəkʰt]	Voiceless velar plosive
5. “Look! <u>Ice-cream!</u> ”	[^h eɪʃkəɪm]	Voiceless velar plosive
6. “Now I’m just a <u>burglar</u> ”	[^h bɜgələ]	Voiced velar plosive
7. “ <u>Smacky/smacking</u> bottoms”	[^h ʃnækʲi]	Palatalised voiceless velar plosive
8. “You think it’s <u>chocolate</u> sweet”	[^h tʃɔkləʔ]	Voiceless velar plosive
9. “What’s happening a@sc <u>walkman</u> ”	[^h wɔkɪmæn]	Weak voiceless velar plosive
10. “So we lock you all up and you can’t go anywhere <u>again</u> or (a)gain (five times)”	[ə ^h gaɪn]	Voiced velar plosive

Table 34. Thomas’s Realisations of Word-Final Target Alveolar Plosives at Age 3;6;2

Utterance	Realisation	Description of Phenomena
1. “Buzz Lightyear’s (.) flies a rocket <u>doesn’t</u> he”	[^h dʊzŋtʰ]	Aspirated dentalised voiceless alveolar plosive
2. “ <u>First</u> , I/I’m going to pick my back up and I won’t be long”	[^h fɜʃtʰ]	Weak voiceless alveolar plosive
3. “You know <u>what</u> ”	[^h wɔ:ʔtʰ]	Dentalised voiceless alveolar plosive
4. “It can fly on its own, but it doesn’t <u>fit</u> in there”	[^h ftʰ]	Aspirated voiceless alveolar plosive
5. “No he <u>isn’t</u> , he’s real”	[^h ɪzntʰ]	Dentalised voiceless alveolar plosive
6. “He <u>got</u> little xxx (makes noise)”	[^h gɒtʰ]	Dentalised voiceless alveolar plosive
7. “Um <u>just</u> there”	[^h dʒstʰ]	Dentalised voiceless alveolar plosive
8. “Want to get another one to <u>put</u> on my ears”	[pʊr]	Alveolar tap
9. “I <u>can’t</u> tell you about it”	[k ^h ə ^h hāntʰ]	Weak retracted voiceless alveolar plosive
10. “But they/they’re <u>not</u> on/in my pants”	[^h nɒt]	Voiceless alveolar plosive

Table 35. Thomas's Realisations of Word-Final Target Velar Plosives at Age 3;6;2

Utterance	Realisation	Description of Phenomena
1. "First, I/I'm going to <u>pick</u> my back up and I won't be long"	[pɪkʰ]	Voiceless velar plosive with no audible release
2. "First, I/I'm going to pick my <u>back</u> up and I won't be long"	['bæk]	Voiceless velar plosive
3. " <u>Look</u> at Buzz Lightyear"	['lʊk]	Voiceless velar plosive
4. "I want to <u>hook</u> on"	[hʊk]	Voiceless velar plosive
5. "Um this <u>book</u> "	['bʊk]	Voiceless velar plosive
6. " <u>Quick</u> "	['kwɪkʰ]	Palatalised voiceless velar plosive
7. "Daddy, Mummy, <u>take</u> a (e)quipment/equipment off"	['tʰeɪk]	Voiceless velar plosive
8. "Now I want my (a)nother <u>drink</u> "	[dʒɪŋkʰ]	Aspirated voiceless velar plosive
9. "All like tight <u>like</u> this"	[laɪʔk]	Voiceless velar plosive
10. * "I <u>think</u> I'm happy with a yellow one"	['fɪŋk]	Voiceless velar plosive

2.7. Tables Showing Thomas’s Realisations of Target Alveolar and Velar Plosives Sampled at Age 3;9;3

Table 36. Thomas’s Realisations of Word-Initial Target Voiceless Alveolar Plosives at Age 3;9;3

Utterance	Realisation	Description of Phenomena
1. “Play <u>together</u> later”	[^h tʊgɛvə]	Dentalised voiceless alveolar plosive
2. “ <u>Telly</u> ”	[^h tʰɛli]	Aspirated dentalised voiceless alveolar plosive
3. “And now another one for <u>Thomas</u> ”	[^h tʰmɑs]	Retracted voiceless alveolar plosive
4. “You can look as well (.) you want <u>to</u> ”	[tʊ]	Voiceless alveolar plosive
5. “Mummy, (...) <u>talking</u> about (.) fire-extinguishers and fire-ropes”	[^h tʰɔkʰɪd]	Dentalised voiceless alveolar plosive
6. “That’s what I was <u>tidying</u> up”	[^h tʰæ:ɪdijɪŋg]	Dentalised voiceless alveolar plosive
7. * “Excuse I’m <u>too</u> busy putting the fire out”	[^h tʰu]	Aspirated dentalised voiceless alveolar plosive
8. “Mummy, you want to <u>tell</u> something to the fireman?”	[^h tʰɛʊ]	Dentalised voiceless alveolar plosive
9. “(Be)cause I’m going on holiday <u>today</u> ”	[tʰə ^h deɪ...]	Aspirated voiceless alveolar plosive
10. “She’s coming/come back <u>tomorrow</u> , because she said she would/will bring cakes”	[tʰɔm ^h ɔr ^h əʊ]	Aspirated voiceless alveolar plosive

Table 37. Thomas's Realisations of Word-Initial Target Velar Plosives at Age 3;9;3

Utterance	Realisation	Description of Phenomena
1. "Purdie <u>could</u> be nothing"	[x ^j ʊ]	Palatalised voiceless velar fricative
2. * "Is the <u>crane</u> well up?"	[^l kɹeɪ̃n]	Voiceless velar plosive
3. * "You know xxx you know what I <u>can</u> see?"	[kxæ̃n]	Aspirated voiceless velar affricate
4. " <u>Coming</u> "	[^l k ^h ʒ̥: ^l mɪŋg]	Aspirated palatalised voiceless velar plosive
5. "Stop <u>cars</u> coming"	[k ^h ɑ...s]	Aspirated voiceless velar plosive
6. "No (be) <u>cause</u> he left (th)em there just"	[k ^h əz]	Aspirated voiceless velar plosive
7. "You know why I was going so <u>quickly</u> ?"	[^l kwi:k ^l i]	Voiceless velar plosive
8. "I <u>can</u> 't eat that one (be)cause it's all soggy"	[^l k ^h ʌ̃nʔ]	Aspirated voiceless velar plosive
9. "She's coming/come back tomorrow, because he said she would/will bring <u>cakes</u> "	[^l k ^h eɪkʒ̥]	Aspirated, palatalised voiceless velar plosive
10. "This could be my secret present <u>couldn</u> 't it"	[^l kʊd̥ɔ̃nʔ ^h]	Unaspirated voiceless velar plosive. Generally hyponasal throughout utterance, possibly due to a cold

Table 38. Thomas’s Realisations of Word-Medial Target Alveolar Plosives at Age 3;9;3

Utterance	Realisation	Description of Phenomena
1. “Not <u>eating</u> it”	[ˈiːtɪŋ]	Dentalised voiceless alveolar plosive
2. “I’ll have it <u>later</u> on”	[ˈleɪt̪ʰəv]	Aspirated dentalised voiceless alveolar plosive
3. “A fat <u>bottom</u> ”	[ˈbɒt̪ʰəm]	Aspirated dentalised voiceless alveolar plosive
4. “Go <u>upstairs</u> puss”	[pɒˈst̪eɪz]	Dentalised voiceless alveolar plosive
5. “Oh! What a little <u>letter</u> ”	[ˈleɪt̪ə]	Dentalised voiceless alveolar plosive
6. “ <u>Just</u> a little one”	[ˈdʒʊt̪]	Dentalised voiceless alveolar plosive
7. * “And you was in bed on <u>yesterday</u> morning”	[ˈjɛst̪ədeɪ]	Dentalised voiceless alveolar plosive
8. “Mummy you’d/you <u>better</u> be inside having your breakfast”	[bɛr̩]	Alveolar tap
9. * “Excuse I’m too busy <u>putting</u> the fire out”	[pʊd̪ɪn]	Dentalised voiced alveolar plosive. Context-sensitive voicing
10. “It’s got all <u>water</u> on it”	[ˈwɔt̪ʰər]	Aspirated, retracted voiceless velar plosive

Table 39. Thomas’s Realisations of Word-Medial Target Velar Plosives at Age 3;9;3

Utterance	Realisation	Description of Phenomena
1. “ <u>Walking</u> down the main street”	[^h wɔkɪn]	Voiceless velar plosive
2. “ <u>Okay</u> ”	[ə ^h kxeɪ]	Voiceless velar affricate
3. “Mummy, (4.) <u>talking</u> about (.) fire-extinguishers and fire-ropes”	[^h tɔk ^h ɪd̪]	Aspirated voiceless velar plosive
4. * “You’re having your <u>breakfast</u> didn’t you?”	[^h brek ^h fəs]	Voiceless velar plosive with no audible release
5. * “Mummy go in <u>circles</u> , you don’t want to (.) see what the fireman’s doing”	[^h sək ^h lɪz]	Voiceless velar plosive with lateral release. Coarticulation
6. * “ <u>Excuse</u> I’m too busy putting the fire out”	[ɪks ^h kjʊ]	Voiceless velar plosive
7. “You know why I was going so <u>quickly</u> ?”	[^h kwi ^h k ^h leɪ]	Voiceless velar plosive with lateral release
8. “Been a good boy on holiday xxx that <u>suitcase</u> ”	[^h su ^h k ^h eɪs]	Palatalised voiceless velar plosive
9 and 10. “(Be)cause I got a <u>walky-talky</u> ”	[^h wɔk ^h i ^h t ^h ɔk ^h i]	Two palatalised voiceless velar plosives. Coarticulation

Table 40. Thomas’s Realisations of Word-Final Target Alveolar Plosives at Age 3;9;3

Utterance	Realisation	Description of Phenomena
1. * “I <u>didn</u> ’t, but I saw her treading on dragons”	[^l dɪrdɔ̃nt̚]	Dentalised voiceless alveolar plosive
2. “ <u>Not</u> eating it”	[nɒt̚]	Voiceless alveolar plosive
3. “(Be)cause I just don’t <u>want</u> it”	[^l wɔ̃nt̚]	Dentalised voiceless alveolar plosive
4. * “But that could be down the road <u>couldn</u> ’t it?”	[^l kudɔ̃nt̚ ^h]	Aspirated dentalised voiceless alveolar plosive
5. * “But that could be down the road <u>couldn</u> ’t <u>it</u> ?”	[ɪt̚]	Dentalised voiceless alveolar plosive
6. “Walking down the main <u>street</u> ”	[^l ʃtɹiʔt̚]	Dentalised voiceless alveolar plosive
7. “Mummy, (...) talking <u>about</u> (.) fire-extinguishers and fire-ropes”	[ə ^h baʊʔt̚]	Dentalised voiceless alveolar plosive
8. “ <u>Just</u> a little one”	[^l dʒʊʃt̚]	Dentalised voiceless alveolar plosive
9. “That’s <u>what</u> I was tidying up”	[wəd̚]	Dentalised voiced alveolar plosive. Apparent context-sensitive voicing
10. “And <u>that</u> ”	[(C,Vd)æʔt̚]	Voiceless alveolar plosive. Creaky voice throughout utterance

Table 41. Thomas’s Realisations of Word-Final Target Velar Plosives at Age 3;9;3

Utterance	Realisation	Description of Phenomena
1. “ <u>Jake</u> ”	[^l dʒeɪk ^h]	Aspirated palatalised voiceless velar plosive
2. “You can <u>look</u> as well”	[^l lʊk]	Voiceless velar plosive
3. * “And you could hear the sounds and you <u>think</u> it’s ambulance don’t you”	[^l θɪŋk]	Voiceless velar plosive
4. “A big transporter <u>truck</u> ”	[^l tʃvʊk]	Voiceless velar plosive
5. “I just sleep/sleeping/sleep in there for one day and then I come <u>back</u> ”	[^l bæk ^x]	Voiceless velar plosive with slight affricated release
6. “It’s an <u>alarm clock</u> ”	[ə ^h lɑ̃m ^h k ^l lʊk ^x]	Voiceless velar plosive with slight affricated release
7. “Mummy, you look out of your <u>big</u> window bedroom and say “wowie!” ”	[^l bɪg]	Voiced velar plosive
8. “Here’s somebody <u>stuck</u> up here”	[^l ʃtʊk ^h]	Aspirated voiceless velar plosive

2.8. Tables Showing Thomas's Realisations of Target Alveolar and Velar Plosives Sampled at Age 4;0;7

Table 42. Thomas's Realisations of Word-Initial Target Alveolar Plosives at Age 4;0;7

Utterance	Realisation	Description of Phenomena
1. "Look what's happening <u>to</u> my house"	[t ^h ə]	Aspirated voiceless alveolar plosive
2. "Do you know how <u>ta</u> ll it goes?"	[t ^h ɔl]	Aspirated dentalised voiceless alveolar plosive
3. "Every <u>ti</u> me I was hungry, I could break off the house"	[t ^h ã]	Aspirated dentalised voiceless alveolar plosive
4. "What would a <u>toi</u> let be like if you flush it?"	[t ^h ɔrləʔ]	Aspirated dentalised voiceless alveolar plosive
5. "And coming out of the <u>ta</u> p might be bags of/like soft cheese"	[t ^h æp ^ˀ]	Aspirated dentalised voiceless alveolar plosive
6. "I hope it does <u>ti</u> ckle"	[tɪkɫ]	Dentalised voiced alveolar plosive, possibly assimilating with [d] in <i>does</i>
7. "Crawling under the <u>ta</u> ble"	[tɛɪbət]	Unaspirated dentalised voiceless alveolar plosive
8. "But, but I want to <u>ta</u> lk all about the building site"	[tɔk]	Unaspirated voiceless alveolar plosive
9. "Mum, I want you to <u>te</u> ll that story again"	[tɛʊ]	Dentalised voiceless alveolar plosive
10. * "xxx could turn it into a curly <u>ca</u> ble"	[tɛ̃n]	Aspirated dentalised voiceless alveolar plosive

Table 43. Thomas's Realisations of Word-Initial Target Velar Plosives at Age 4;0;7

Utterance	Realisation	Description of Phenomena
1. " <u>Can</u> you help us?"	[kǎn]	Unaspirated voiceless velar plosive
2. "(Be)ca <u>use</u> I'm (pre)tending"	[kuǎm]	Unaspirated voiceless velar plosive
3. "I am <u>quite</u> deaf"	[ˈkwaɪʔ]	Voiceless velar plosive
4. * "The roof <u>come</u> off and xxx house it and then the glass smashes"	[kʰǔm]	Aspirated voiceless velar plosive
5. "I ordered <u>crisps</u> for my lunch"	[ˈkɹɪspʔ]	Voiceless velar plosive
6. "When you first had a <u>quaver</u> "	[ˈkweɪ:və]	Voiceless velar plosive
7. "Not <u>comfortable</u> "	[ˈkʰǔmfʔəbɪ]	Aspirated voiceless velar plosive
8. "Mum you <u>can't</u> "	[ˈkǎ...nt]	Unaspirated voiceless velar plosive
9. "They/they'd <u>keep</u> falling over"	[ˈkxʰɪpʔ]	Voiceless velar plosive with slight affricated release
10. * "I think you just <u>climb</u> on a xxx and go ah!"	[ˈklaɪm]	Voiceless velar plosive

Table 44. Thomas's Realisations of Word-Medial Target Alveolar Plosives at Age 4;0;7

Utterance	Realisation	Description of Phenomena
1. "I'm just <u>putting</u> this on the/its bottom xxx"	[ˈpʰʊtɪŋ]	Dentalised voiceless alveolar plosive
2. "I'm just putting this on the/its <u>bottom</u> xxx"	[ˈbɒtʰǒm]	Aspirated voiceless alveolar plosive
3. "Just <u>pretend</u> I couldn't hear anything"	[pəˈtɛnd]	Dentalised voiceless alveolar plosive
4. "Not <u>comfortable</u> "	[ˈkʰǔmfʔəbɪ]	Dentalised voiceless alveolar plosive
5. "They must be <u>advertising</u> reds"	ˈæʃəvəˌtʌɪzɪŋ]	Dentalised voiceless alveolar plosive
6. "I like <u>grunting</u> "	[ˈgɹʊŋtɪŋ]	Dentalised voiceless alveolar plosive
7. "These are <u>better</u> "	[ˈbetʰə]	Aspirated voiceless alveolar plosive
8. "Save that for <u>later</u> "	[ˈleɪtə]	Retracted voiceless alveolar plosive
9. "Hurts more than <u>sitting</u> on it"	[ˈsɪtɪn]	Dentalised voiceless alveolar plosive
10. "xxx <u>Yesterday</u> "	[ˈjeʃtədeɪ]	Dentalised voiceless alveolar plosive

Table 45. Thomas’s Realisations of Word-Medial Target Velar Plosives at Age 4;0;7

Utterance	Realisation	Description of Phenomena
1. “Ah! <u>Secret</u> supply”	[ˈsɪkɪɾʔ]	Voiceless velar plosive
2. “I’m gonna make a <u>basket</u> too”	[ˈbæʃkʰɪʔ]	Palatalised voiceless velar plosive
3. “But those are <u>stickers</u> ”	[ˈstɪkəzɪ]	Voiceless velar plosive
4. “Look! I’m standing in/standing/stand in the <u>concrete</u> that’s wet”	[ˈkʰɒŋkwiʔ]	Voiceless velar plosive
5. “First, did you think it was <u>exploding</u> ”	[ɪkʰsɪpləʊdɪŋ]	Voiceless velar plosive
6. “Are you <u>thinking</u> what pudding might be?”	[ˈfɪŋkʰɪŋ]	Aspirated voiceless velar plosive
7. “Must be made of ick lick <u>liquorice</u> ”	[ˈlɪkɪʃ]	Voiceless velar plosive
8. * “xxx Lots xxx This is a <u>excavator</u> ”	[ˈɛʔstəveɪtə]	Dentalised voiceless alveolar plosive
9. “I hope it does <u>tickle</u> ”	[ˈdɪkɪ]	Voiceless velar plosive
10. “ <u>Chocolate</u> ”	[ˈtʃʌklɪtʰ]	Voiceless velar plosive

Table 46. Thomas’s Realisations of Word-Final Target Alveolar Plosives at Age 4;0;7

Utterance	Realisation	Description of Phenomena
1. “Mum I’ve done <u>it</u> ”	[ɪtʰ]	Dentalised alveolar ejective
2. “Ah! Who’s <u>ripped</u> it?”	[ˈdɪpʰtʰ]	Dentalised voiceless alveolar plosive
3. “Try and <u>put</u> it there”	[pʊɾ]	Alveolar tap
4. “Look <u>at</u> our house”	[ət]	Alveolar tap
5. “That’s the chimney that’s not <u>fixed</u> on”	[fɪkʃɪd]	Weak dentalised voiceless alveolar plosive. Weakly articulated final cluster
6. * “xxx It on that <u>plate</u> ”	[ˈpleɪtʰ]	Alveolar ejective
7. “Mum, when you <u>first</u> had one, what was it like”	[ˈfɜːstʰ]	Aspirated dentalised voiceless alveolar plosive
8. “I slept”	[ˈsɪpʰtʰ]	Dentalised voiceless alveolar plosive
9. “If you would/can <u>shut</u> up”	[ʃʊt]	Retracted voiceless alveolar plosive
10. “Mum you <u>can’t</u> ”	[ˈkɑː...nt]	Voiceless alveolar plosive

Table 47. Thomas's Realisations of Word-Final Target Velar Plosives at Age 4;0;7

Utterance	Realisation	Description of Phenomena
1. "xxx <u>Magic</u> look xxx the house"	[^h mædʒɪk ^h]	Palatalised voiceless velar plosive
2. "xxx Magic <u>look</u> xxx the house"	[lʊk]	Voiceless velar plosive
3. "But I didn't use the <u>pink</u> "	[^h pɪŋk ^h]	Voiceless velar plosive
4. "You said "Would you <u>like</u> a jam sandwich?" "	[lajɪ]	Weak voiced velar fricative
5. * "I'm gonna, I'm gonna <u>make</u> a bigger house"	[^h meɪk ^h]	Aspirated voiceless velar plosive
6. "Every time I was hungry, I could <u>break</u> off the house"	[^h bɪeɪk ^h]	Voiceless velar plosive
7. "First, did you <u>think</u> it was exploding?"	[^h fɪŋk ^h]	Voiceless velar plosive
8. "and/it xxx would it be <u>work</u> ?"	[^h wɜ:k ^h]	Velar ejective
9. "Can I look at (..) can I look at the <u>back</u> "	[^h bæk ^h]	Voiceless velar plosive
10. "With <u>milk</u> "	[^h mɪɫk ^h]	Voiceless velar plosive

Appendix Three

Thomas's Realisations of *Can* and *Can't* at Age Two

3.1. Tables Showing Thomas's Realisations of Can and Can't Sampled at Age 2;3

Table 1. Thomas's Realisations of *Can* and *Can't* at Age 2;3;10

Utterance	Realisation	Description of Phenomena
1. " <u>I can</u> "	[ɔ̃ 'tæ̃n]	Immediate imitation of mother. Stress on <i>can</i> , although mother stressed <i>I</i> .
2. " <u>I can</u> "	[æ̃ 'jæ̃:n]	Immediate repetition of mother. Stress on <i>can</i> , although mother stressed <i>I</i> .

3.2. Tables Showing Thomas's Realisations of Can and Can't Sampled at Age 2;5

Table 2. Thomas's Realisations of *Can* and *Can't* at Age 2;5;10

Utterance	Realisation	Description of Phenomena
1. * "Yes <u>I can</u> "	[ə 'tʰæ̃n]	Stressed. Spontaneous. Contextually incongruent
2. * "Yes <u>I can</u> "	[æ 'tʰæ̃n]	Stressed. Response to mother's request for clarification
3. * "Yes <u>I can</u> "	[ə 'tʰæ̃n]	Stressed. Response to mother's request for further clarification

3.3. Tables Showing Thomas's Realisations of Can and Can't Sampled at Age 2;6

Table 3. Thomas's Realisations of *Can* and *Can't* at Age 2;6;12

Utterance	Realisation	Description of Phenomena
1. " <u>Can't</u> see it"	[kãʔ sij]	Unstressed. First use of <i>can't</i> as auxiliary. First close juncture form of <i>can't</i> . Immediate imitation of mother

Table 4. Thomas's Realisations of *Can* and *Can't* at Age 2;6;19

Utterance	Realisation	Description of Phenomena
1. * "No I <u>can't</u> "	[kʰãŋʔt:]	Stressed. Spontaneous. Open juncture. Mother immediately repeats, also with open juncture. Contextually congruent
2. "Bob the Builder, yes we <u>can</u> "	[kʰã̃n]	Stressed. Short vowel. Formulaic
3. "Yes it <u>can</u> "	[kʰã̃n:]	Stressed. Formulaic
4. "Yes it <u>can</u> "	[kʰæ:n:ə]	Stressed. Immediate repetition
5. "Yes we <u>can</u> "	[kʰã̃n]	Stressed. Elicited by rhyme. Formulaic. Speaking together with mother
6. "Yes we <u>can</u> "	[kʰã̃n]	Stressed. Spontaneous, formulaic. Forming argument with mother
7. "Yes, <u>can</u> "	[tʰã̃n]	Stressed. Formulaic. Continuing argument with mother

Table 5. Thomas's Realisations of *Can* and *Can't* at Age 2;6;22

Utterance	Realisation	Description of Phenomena
1. "Yes we <u>can</u> "	[kʰã̃n]	Stressed. Formulaic
2. "Yes we <u>can</u> "	[kʰã̃n]	Stressed. Formulaic. Repetition

Note: the utterance "yes we can" occurred very frequently and was therefore not transcribed beyond this age, unless it demonstrated novel phonetic, phonological or syntactic phenomena.

Table 6. Thomas's Realisations of *Can* and *Can't* at Age 2;6;25

Utterance	Realisation	Description of Phenomena
1. " <u>Can</u> 't"	[ˈt̥ɑːn̥t̥]	Stressed. Realised with final dentalised [t̥]. Contextually congruent. Mother repeats also with final [t]

Table 7. Thomas's Realisations of *Can* and *Can't* at Age 2;6;26

Utterance	Realisation	Description of Phenomena
1. " <u>Can</u> 't"	[kʰɑ̃n̥t̥]	Whispered. Repetition
2. * " <u>Can</u> 't"	[ˈt̥hɑ̃n̥t̥]	Stressed. Dentalised. Contextually congruent

3.4. Tables Showing Thomas's Realisations of Can and Can't Sampled at Age 2;7

Table 8. Thomas's Realisations of *Can* and *Can't* at Age 2;7;1

Utterance	Realisation	Description of Phenomena
1. "Can't <u>reach</u> "	[k ^h ǣn? 'vɪtʃ]	Unstressed. First spontaneous usage of <i>can't</i> with main verb

Table 9. Thomas's Realisations of *Can* and *Can't* at Age 2;7;5

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> "	[k ^h ǣnt]	Stressed. Initial [k]. Dentalised final [t]
2. * "I <u>can't</u> sleep"	[gǣ? 'θlɪp]	Stressed. Second spontaneous use of <i>can't</i> with main verb. Initial voiced velar plosive. Response to request for clarification
3. "No I <u>can't</u> "	[tʃǣnt]	Stressed. Initial alveolar plosive. Providing further clarification following "I can't sleep"

Table 10. Thomas's Realisations of *Can* and *Can't* at Age 2;7;9

Utterance	Realisation	Description of Phenomena
1. "I <u>can</u> see you"	[a m ʃi]	First weak form of <i>can</i> . Greatly reduced. Also first spontaneous SVO. Mother imitates with weak form
2. "Can't <u>see</u> you"	[k ^h ǣn? 'si]	First spontaneous <i>can't</i> with main verb in SVO clause

Table 11. Thomas's Realisations of *Can* and *Can't* at Age 2;7;14

Utterance	Realisation	Description of Phenomena
1. "Can't <u>talk</u> apple now" (meaning "I can't talk because I'm eating an apple now")	[(C)ǣn tʌ?]	Unstressed. May have been <i>can</i> . First possible VSOA construction

Table 12. Thomas's Realisations of *Can* and *Can't* at Age 2;7;15

Utterance	Realisation	Description of Phenomena
1. "Yes <u>can</u> hear (and a)"	[xǎn hiev]	Second weak form. Nearer to adult form than previous weak form

Table 13. Thomas's Realisations of *Can* and *Can't* at Age 2;7;25

Utterance	Realisation	Description of Phenomena
1. "Can't <u>open</u> it"	[ʔǎnʔ 'ʔəʊpən]	Unstressed. Unusual form

Table 14. Thomas's Realisations of *Can* and *Can't* at Age 2;7;26

Utterance	Realisation	Description of Phenomena
1. "Can <u>see</u> please?"	[t ^h ǎn si]	First question, although with declarative, rather than interrogative structure

Table 15. Thomas's Realisations of *Can* and *Can't* at Age 2;7;28

Utterance	Realisation	Description of Phenomena
1. "Oh yes <u>we</u> can"	[wɪ: k ^h ǎm]	Stressed. Contextually more congruent than previous examples

3.5. Tables Showing Thomas's Realisations of Can and Can't Sampled at Age 2;8

Table 16. Thomas's Realisations of *Can* and *Can't* at Age 2;8;21

Utterance	Realisation	Description of Phenomena
1. "Bob the Builder, <u>can we</u> fix it?"	[tʰæn 'wɪ]	Stressed. Initial [t]. Formulaic
2. "Can <u>get it</u> out"	[tʰæn ɢet]	Stressed. Whole utterance dentalised. Possible progressive alveolar assimilation. No velar assimilation. Categorical as open juncture. Immediate imitation of mother including stress pattern. Mother assimilates previous utterance. VOA construction
3. " <u>Not can't</u> "	[nɒʔ tʰɑnt]	Stressed

Note: the utterance "can we fix it" occurred increasingly frequently and therefore was not transcribed beyond this age, unless it demonstrated novel phonetic, phonological or syntactic phenomena.

Table 17. Thomas's Realisations of *Can* and *Can't* at Age 2;8;24

Utterance	Realisation	Description of Phenomena
1. "Mummy not <u>can't see</u> " (meaning "Mummy can't see")	[tʌnʔ 'si]	Unstressed. Close juncture with glottal stop
2. "Not can't see now" (meaning "I can't see now")	[tkʰʌnʔ 'si]	Unstressed. VA structure

Table 18. Thomas's Realisations of *Can* and *Can't* at Age 2;8;25

Utterance	Realisation	Description of Phenomena
1. "xxx <u>Can't see it</u> "	[tʌn sɪʔi ɪ]	Unstressed. Close juncture with final nasal

3.6. Tables Showing Thomas's Realisations of Can and Can't Sampled at Age 2;9

Table 19. Thomas's Realisations of *Can* and *Can't* at Age 2;9;1

Utterance	Realisation	Description of Phenomena
1. "Of course <u>you can</u> "	[ju 'k ^h æ̃n	Stressed. Formulaic
2. "I <u>Can't</u> talk"	[k ^h ɑ̃n? 't ^h ɔk ^j]	Unstressed. Close juncture. SVO. Speaking with mouth full

Table 20. Thomas's Realisations of *Can* and *Can't* at Age 2;9;2

Utterance	Realisation	Description of Phenomena
1. "Don't think <u>I can</u> "	[maɪ 'k ^h æ̃n]	Stressed. First embedded clause, but formulaic and immediate imitation of mother

Table 21. Thomas's Realisations of *Can* and *Can't* at Age 2;9;3

Utterance	Realisation	Description of Phenomena
1. "Can <u>see</u> flowers"	[(C,Vls)ɪ̃ si]	Unstressed. Almost adult-like weak form

Table 22. Thomas's Realisations of *Can* and *Can't* at Age 2;9;7

Utterance	Realisation	Description of Phenomena
1. * "I <u>can see</u> a little carrot"	[g ^h ɔ̃ sɪj]	Stressed. First SVO with O:NP modified by an adj

Table 23. Thomas's Realisations of *Can* and *Can't* at Age 2;9;15

Utterance	Realisation	Description of Phenomena
1 * "Course we can"	[k ^h æ̃n]	Stressed

Table 24. Thomas's Realisations of *Can* and *Can't* at Age 2;9;17

Utterance	Realisation	Description of Phenomena
1. "Eh! I <u>can't see</u> "	[k ^h ãnʔ si]	Unstressed. Close juncture. Spontaneous, rather than imitative
2. "I <u>can't see</u> "	[^h kãnʔ si]	Stressed. Close juncture. Spontaneous. Communicative
3. "I <u>can't find</u> Cranky"	[k ^h ãnʔ ^h fæn]	Stressed. Close juncture

Table 25. Thomas's Realisations of *Can* and *Can't* at Age 2;9;18

Utterance	Realisation	Description of Phenomena
1. "And I <u>can't see</u> "	[k ^h ãndõ si]	Unstressed. Open juncture with voicing and epenthesis

Table 26. Thomas's Realisations of *Can* and *Can't* at Age 2;9;21

Utterance	Realisation	Description of Phenomena
1. "I <u>can see</u> Purdie"	[yõ si]	Weak form with initial voiced velar fricative. First use of <i>see</i> with an object other than <i>you</i>

Table 27. Thomas's Realisations of *Can* and *Can't* at Age 2;9;22

Utterance	Realisation	Description of Phenomena
1. "I <u>can't see a</u> farmer"	[k ^h ãnʔ ^h sɪ ə]	Unstressed. Close juncture. <i>see</i> with new object
2. "I <u>can't see</u> fire"	[k ^h ãn ^h tsi]	Unstressed. Semi-open juncture. Another new object, indicating generalisation of <i>see</i> to new SVO clauses
3. "I <u>can't hear</u> her"	--	Untranscribable. No linking between audio and Chat files

Note: utterances containing *can see* or *can't see* were not transcribed beyond 2;9;22, unless they demonstrated novel phonetic, phonological or syntactic phenomena.

Table 28. Thomas's Realisations of *Can* and *Can't* at Age 2;9;23

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> get it open"	[^h kʌnʔ (C,Vd)et]	Stressed. Close juncture. No assimilation. Mother repeats with assimilation

Table 29. Thomas's Realisations of *Can* and *Can't* at Age 2;9;24

Utterance	Realisation	Description of Phenomena
1. "Yes I <u>can't</u> talk a her, er my a little baby" (meaning "I can't talk to her, I'm a little baby")	[k ^h ʌnʔ 'təw]	Unstressed. Close juncture. First attempt at coordination

Table 30. Thomas's Realisations of *Can* and *Can't* at Age 2;9;25

Utterance	Realisation	Description of Phenomena
1. * "I <u>can't</u> get this postbox out"	[^h kʌnt ^w Y deʔ dis]	Stressed. Open juncture with epenthesis. No velar assimilation, but maybe progressive alveolar assimilation

Table 31. Thomas's Realisations of *Can* and *Can't* at Age 2;9;28

Utterance	Realisation	Description of Phenomena
1. "Can't <u>close</u> it properly"	[kʌnʔ 'kləuz]	Unstressed. Close juncture with glottal stop. No assimilation. Mother repeats, also without assimilation
2. "Bob Builder <u>can't</u> do Wendy's zip"	[dʌnʔ du]	Unstressed. Close juncture. Possible progressive alveolar assimilation. Complex S and O noun phrases
3. "I <u>can't</u> get through now"	[^h kʌn gɛʔ]	Close juncture. No assimilation. Mother repeats without assimilation

Table 32. Thomas's Realisations of *Can* and *Can't* at Age 2;9;29

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> see a Teletubbies saying"	[^h kʰã̃n̩ t̩sij]	Unstressed. Semi-open juncture with affrication. First non-imitative attempt at subordinate object clause
2. * "Can't <u>see</u> a Teletubbies saying"	[kã̃n̩ʔ s̩ij]	Unstressed. Repeating in response to request for clarification
3. "Can't (<u>really?</u>) sit down there"	[^h kʰã̃m̩ wi]	Stressed. Bilabial assimilation before [w]
4. "No I <u>can't</u> do it this"	[^h kʰã̃n̩ʔ ^h duw]	Unstressed. Close juncture with glottal stop

Note: the utterances "can", "I can", "we can", "can't", "I can't" and "can't do it" occurred very frequently and were therefore not transcribed beyond this age, unless they demonstrated novel phonetic, phonological or syntactic phenomena.

Table 33. Thomas's Realisations of *Can* and *Can't* at Age 2; 9;30

Utterance	Realisation	Description of Phenomena
1. "Can't <u>reach</u> it"	[^h kʰã̃n̩: ^h rit̩]	Unstressed. Close juncture with final nasal

3.7. Tables Showing Thomas's Realisations of Can and Can't Sampled at Age 2;10

Table 34. Thomas's Realisations of *Can* and *Can't* at Age 2;10;0

Utterance	Realisation	Description of Phenomena
1. "Can't <u>reach</u> up high"	[k ^h ãnʔ wi(C,Vls)]	Unstressed. Close juncture with glottal stop
2. "I <u>can't</u> see a blue ink"	[k ^h ãnt̚ ʃi]	Unstressed. Open juncture. Second adj in O:NP

Table 35. Thomas's Realisations of *Can* and *Can't* at Age 2;10;6

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> <u>fix</u> him"	[k ^h ãnʔ 'fiks̩]	Unstressed. Close juncture. Contextually congruent, not just <i>Bob the Builder</i> formula

Table 36. Thomas's Realisations of *Can* and *Can't* at Age 2;10;7

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> see Purdie now"	[k ^h ãn 'ʃi]	Unstressed. Close juncture with final nasal. SVOA construction
2. " <u>Please can</u> I have a chocolate cake"	['pli xæʊv əv]	Unstressed. Most complex interrogative form produced, but not used as a question. Great phonetic reduction

Table 37. Thomas's Realisations of *Can* and *Can't* at Age 2;10;8

Utterance	Realisation	Description of Phenomena
1. "Ah! I <u>can't</u> (re)member"	['k ^h ãnt̚s̩ (.) 'mɛə̃m]	Stressed. Open juncture with pause

Table 38. Thomas's Realisations of *Can* and *Can't* at Age 2;10;13

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> <u>get</u> it off now xxx stuck"	[^h kʰãŋʔ g ^j ɛt]	Stressed. Close juncture with glottal stop. No assimilation, possibly because of following palatalised plosive. Possible attempt at subordination
2. "I <u>can't</u> (re)member it"	[^h kʰãm ˈmɛmbəʊ]	Stressed. No glottal stop in <i>can't</i> . First bilabial assimilation
3. "I <u>can't</u> <u>see</u> her now"	[^h kʰʌrʔ tsi]	Stressed. Unusual articulation. SVOA construction

Table 39. Thomas's Realisations of *Can* and *Can't* at Age 2;10;21

Utterance	Realisation	Description of Phenomena
1. * "Can't <u>see</u> it under there"	[^h kʰãŋ si]	Unstressed. Close juncture with final nasal. VSA clause. Adverbial prepositional phrase

Table 40. Thomas's Realisations of *Can* and *Can't* at Age 2;10;24

Utterance	Realisation	Description of Phenomena
1. * "Can't (re)member it"	[^h kʰãn: ˈmɛmbəʊ]	Stressed. Close juncture with final nasal. No assimilation

Table 41. Thomas's Realisations of *Can* and *Can't* at Age 2;10;26

Utterance	Realisation	Description of Phenomena
1. "I can't (re)member it"	[gɒ ˈmɛmbəʊ]	Unstressed. Close juncture with no final cluster. No assimilation

3.8. Tables Showing Thomas's Realisations of Can and Can't Sampled at Age 2;11

Table 42. Thomas's Realisations of *Can* and *Can't* at Age 2;11;0

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> <u>blow</u> it"	[^h kʰãm 'blə:ʊ:w]	Stressed. No final glottal stop in <i>can't</i> . Bilabial assimilation
2. "I <u>can't</u> <u>blow</u> it"	[^h kʰãm 'bləʊw]	Stressed. No final glottal stop in <i>can't</i> . Bilabial assimilation

Table 43. Thomas's Realisations of *Can* and *Can't* at Age 2;11;6

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> see it under here"	[^h kʰʌn̩ 'tʃi]	Unstressed. Short vowel. Another adverbial prepositional phrase
2. * "I <u>can't</u> <u>put</u> it on now fall down the floor again"	[^h kʰʌn̩? mʊ:t]	Stressed. No regressive bilabial assimilation, but progressive nasal assimilation

Table 44. Thomas's Realisations of *Can* and *Can't* at Age 2;11;10

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> see my spanner"	[^h kʰʌn̩? tʃi]	Stressed. New object noun phrase with modifying possessive pronoun
2. "I <u>can't</u> see my spanner anywhere"	[^h kʰʌn̩? tʃi]	Stressed. SVOA. New adverbial
3. "Erm I <u>can't</u> (re)member it"	[^h ʔæ hæ 'membəʊ]	Unstressed on <i>can't</i> . Close juncture. No final consonant. No assimilation
4. * "I <u>can</u> (.) off people"	[^h kʰɪn: (.) 'ʔɒf]	Unstressed. Vowel alteration. Pause and open juncture No main verb was absent
5. "I <u>can't</u> see him anywhere"	[^h kʰʌn̩? ʃɪ ðm]	Unstressed. Close juncture with glottal stop. SVOA

Table 45. Thomas's Realisations of *Can* and *Can't* at Age 2;11;12

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> see <u>her</u> tummy	[k ^h ãn? 'si ɜ]	Unstressed. Close juncture with glottal stop. New possessive adjective and object

Table 46. Thomas's Realisations of *Can* and *Can't* at Age 2;11;13

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> see any more	[k ^h ãn 'tsɪ]	Unstressed. Semi-open juncture with affrication. SVA clause
2. "I <u>can't</u> (re)member"	[k ^h ãm: 'membəvə]	Stressed. Bilabial assimilation

Table 47. Thomas's Realisations of *Can* and *Can't* at Age 2;11;14

Utterance	Realisation	Description of Phenomena
1. "Your <u>can't</u> see a big huge box yet"	[k ^h ãn? sij]	Stressed. Close juncture with glottal stop. SVOA with object noun phrase modified by two adjectives
2. "I <u>can't</u> "	[k ^h ãn]	Stressed. No final /t/ in utterance-final position
3. "Erm I <u>can't</u> "	[k ^h ãn?]	Stressed. Final glottal stop in utterance-final position

Table 48. Thomas's Realisations of *Can* and *Can't* at Age 2;11;18

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> see my yellow spanner"	[k ^h õn si]	Unstressed. Unusual form
2. "No I <u>can't</u> see a rainbow up in sky"	[k ^h ãn? si]	Unstressed. Close juncture. SVOA. Adverbial prepositional phrase with qualifying prepositional phrase

Table 49. Thomas's Realisations of *Can* and *Can't* at Age 2;11;25

Utterance	Realisation	Description of Phenomena
1. "You <u>can't</u> see any more letters"	[k ^h ã si]	Stressed. Close juncture with no final cluster in <i>can't</i> . First <i>can't</i> with subject pronoun <i>you</i> .
2. "You <u>can go</u> home now"	[k ^h ŋ gəu]	Adult-like weak form. Open juncture. No assimilation. First <i>can</i> with subject pronoun <i>you</i> .

Table 50. Thomas's Realisations of *Can* and *Can't* at Age 2;11;27

Utterance	Realisation	Description of Phenomena
1. "Just too heavy these trains, because, I <u>can't</u> hold xxx"	[k ^h ãn 'həʊfd]	Unstressed. Close juncture with consonant elision. Coordination
2. "His car, you <u>can't</u> see where's the money"	[k ^h ãnʔ 's'i:]	Unstressed. Close juncture with glottal stop. Subordinate object clause
3. "You <u>can't</u> see a train"	[k ^h ãn tʃi:]	Stressed. Semi-open juncture with affrication. Second <i>you</i> as subject

Table 51. Thomas's Realisations of *Can* and *Can't* at Age 2;11;28

Utterance	Realisation	Description of Phenomena
1. "Can't (re)member that"	[k ^h ãm 'membɛv]	Stressed. Bilabial Assimilation
2. * "Can't <u>you</u> smell xxx"	[k ^h ãnʔ je]	Stressed. Close juncture with glottal stop. Possible interrogative with subject-verb inversion, but meaning unclear

3.9. Notes on Transcription Discrepancies

Utterances marked by asterisks indicate that there is a discrepancy between the interpretations of the current author and the original transcribers. Many of these discrepancies result from the denotation of a schwa in the Chat transcript when the transcriber was unable to identify a function word, but the current author could confidently identify it. The nature of each discrepancy is given below with reference to the Chat transcripts available from the CHILDES database.

1. Age 2;5;10: All three realisations of “yes I can” read “yes. a@p can” in the Chat transcript (see lines 434, 438 and 441).
2. Age 2;6;19: “No I can’t” reads “a@p can’t” in the Chat transcript (see line 282).
3. Age 2;6;19: “Can’t” reads “it can’t” in the Chat transcript (see line 1180).
4. Age 2;7;5: “I can’t sleep” reads “can’t sleep” in the Chat transcript (see line 1448).
5. Age 2;9;7: “I can see a little carrot” reads “a@p can see a little carrot” in the Chat transcript (see line 567).
6. Age 2;9;25: “I can’t get this post-box out” reads “I can’t get Jess &s post-box out” in the Chat transcript (see line 721).
7. Age 2;9;29: “I can’t see a Teletubbies saying” and “can’t see a Teletubbies saying” read “I can’t see a@p Teletubby saying” and “what 0is [*] the Teletubby saying?” respectively in the Chat transcript (see lines 11 and 13).

8. Age 2;9;29: “Can’t really sit down there” reads “can’t sit down there” in the Chat transcript (see line 1195).

9. Age 2;10;21: “Can’t see it under there” reads “I can’t see under there” in the Chat transcript (see line 150).

10. Age 2;11;6: “I can’t put it on now fall down the floor again” reads “I can’t put it on a@p throw down a@p floor again” (see line 1935).

11. Age 2;11;10: “I can (.) off people” reads “I can take them off people” in the Chat transcript (see line 775).

12. Age 2;11;28: “Can’t you smell xxx” reads “can’t smell” xxx in the Chat transcript (see line 992).

13. Many of the utterances given here are transcribed as multiple utterances in the Chat transcripts according to transcription conventions. However, they were considered as single utterances here because they were uttered in one breath or they appeared to form a single construction.

14. Not all tokens of each utterance were transcribed, especially in the case of utterances which increased greatly in frequency without showing the phonological and syntactic changes relevant to this study.

3.10. Frequency Counts for Can and Can't at Age Two

Table 52. Frequencies of *Can* and *Can't* at Age 2;3

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
2;3;10	2	0
Total frequency	2	0

Table 53. Frequencies of *Can* and *Can't* at Age 2;5

Age	<i>Can</i> frequency	<i>Can't</i> frequency
2;5;10	3	0
Total Frequency	3	0

Table 54. Frequencies of *Can* and *Can't* at Age 2; 6

Age	<i>Can</i> frequency	<i>Can't</i> Frequency
2;6;12	0	1
2;6;19	6	1
2;6;22	6	0
2;6;25	3	1
2;6;26	0	2
Total frequency	15	5

Table 55. Frequencies of *Can* and *Can't* at Age 2;7

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
2;7;1	2	0
2;7;5	1	3
2;7;6	0	1
2;7;9	1	1
2;7;12	0	3
2;7;13	1	4
2;7;14	1	7
2;7;15	1	0
2;7;16	2	1
2;7;19	0	8
2;7;23	1	3
2;7;24	0	2
2;7;25	0	2
2;7;26	2	0
2;7;27	0	2
2;7;28	1	0
Total frequency	13	37

Table 56. Frequencies of *Can* and *Can't* at Age 2;8

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
2;8;0	2	0
2;8;5	0	2
2;8;6	0	1
2;8;12	1	0
2;8;21	2	1
2;8;21	0	3
2;8;25	0	2
2;8;28	2	0
Total frequency	7	9

Table 57. Frequencies of *Can* and *Can't* at Age 2;9

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
2;9;1	1	1
2;9;1	1	0
2;9;3	1	4
2;9;4	5	0
2;9;7	1	0
2;9;8	1	0
2;9;10	2	1
2;9;11	1	0
2;9;15	2	1
2;9;17	2	5
2;9;18	1	1
2;9;21	1	0
2;9;22	0	4
2;9;23	0	2
2;9;24	1	4
2;9;25	0	6
2;9;28	0	5
2;9;29	0	4
2;9;30	0	2
Total frequency	20	40

Table 58. Frequencies of *Can* and *Can't* at Age 2;10

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
2;10;0	0	2
2;10;6	2	1
2;10;7	1	1
2;10;8	0	1
2;10;9	1	2
2;10;11	0	1
2;10;12	1	1
2;10;13	0	3
2;10;20	2	0
2;10;21	0	1
2;10;22	0	3
2;10;23	2	0
2;10;24	0	1
2;10;25	0	1
2;10;26	0	1
2;10;27	0	2
2;8;28	0	1
Total frequency	9	22

Table 59. Frequencies of *Can* and *Can't* at Age 2;11

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
2;11;00	0	5
2;11;3	0	1
2;11;4	1	1
2;11;6	0	4
2;11;7	0	1
2;11;10	4	6
2;11;12	0	1
2;11;13	0	2
2;11;14	0	14
2;11;18	0	4
2;11;21	0	8
2;11;25	1	2
2;11;26	2	1
2;11;27	0	3
2;11;28	1	2
Total Frequency	9	55

3.11. Summary of Frequency Counts for Can and Can't at Age Two

Table 60. Frequencies of *Can* and *Can't* Occurrence at Age Two: Summary

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
2;3	2	0
2;5	3	0
2;6	15	5
2;7	13	37
2;8	7	9
2;9	20	40
2;10	9	22
2;11	9	55

Appendix Four

Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Ages Three and Four

4.1. Tables Showing Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites Sampled at Age 3;0

Table 1. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;0;0

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> get this out"	[k ^h ãn dʒɛ'trɪs]	Close juncture with final nasal. No assimilation
2. "I <u>can't</u> bang"	[k ^h ãn 'bã:nɔ̃]	Close juncture with final nasal. No assimilation

Table 2. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;0;1

Utterance	Realisation	Description of Phenomena
1. " <u>Can't</u> get it out"	--	Not sufficiently audible for transcription and intended utterance uncertain
2. " <u>Can't</u> get it out"	[k ^h ãn 'dʒɛt it]	Close juncture with final nasal. Possible progressive alveolar/dental assimilation

Table 3. Thomas's Realisations of *Can* and *Can't* at Age 3;0;2

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> do it like that"	[k ^h ãn 'dʒu:w]	Close juncture with final nasal
2. "No <u>can't</u> "	[k ^h ãm(C,Vls)]	Final bilabial nasal with indeterminate word-final click-like consonant

Note: *can* and *can't* did not occur at any sites at age 3;0;3, 3;0;7, 3;1;0, 3;1;1 or at 3;1;2.

4.2. Tables Showing Thomas's Realisations of Can and Can't at Potential Assimilation Sites Sampled at Age 3;1

Table 4. Thomas's Realisations of *Can* and *Can't* at Age 3;1;2

Utterance	Realisation	Description of Phenomena
1. "Then, you <u>can see</u> him"	[^h kʰæ̃ sij]	Stressed No final nasal, but vowel nasalisation
2. "You <u>can leave</u> my toys on my shoulders like this"	[^h kʰæ̃(Nas) ^l (app)iv]	Stressed. Syllable-timed
3. * "I <u>can't wear</u> it, I can't"	[kʰãmʔ wɛəʊ]	Close juncture. Bilabial assimilation prior to [w]
4. * "I can't wear it, I <u>can't</u> "	[^l (C,Vls)ə(C,Vls)]	Unusual articulation
5. "Of course you <u>can</u> "	[kʰ ^h æ̃n]	Stressed
6. "Look, You <u>can stroke</u> his hair"	[kʰæ̃n stʊəʊk]	Stressed, but not tonic

Table 5. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;1;3

Utterance	Realisation	Description of Phenomena
1. "I <u>can</u> (.) <u>make</u> some room now"	[^l aɪ kʰæ̃m (.) meɪ]	Unstressed. Bilabial assimilation despite pause at word boundary

Note: *can* and *can't* did not occur at any potential assimilation sites at age 3;1;4.

4.3. Tables Showing Thomas's Realisations of Can and Can't at Potential Assimilation Sites Sampled at Age 3;2

Table 6. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;2

Utterance	Realisation	Description of Phenomena
1. "That <u>can't</u> go in"	[^h kʰãnʔ gəʊ]	Close juncture with glottal stop. No assimilation

Table 7. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;2;3

Utterance	Realisation	Description of Phenomena
1. "You <u>can</u> count number one"	[^h tʰãn 'tau]	Unstressed. No vowel reduction. Open juncture. No regressive velar assimilation, but possible progressive alveolar assimilation
2. " <u>Can</u> count one two number six"	[^h kʰãn (.) 'tʰaɪ]	Stressed. Open juncture. No regressive velar assimilation, but possible progressive alveolar assimilation

Table 8. Thomas's Realisations of *Can* and *Can't* at Age 3;2;4

Utterance	Realisation	Description of Phenomena
1. "Mummy, this is xxx Purdie <u>can do</u> I'm Purdie"	[k ^h æ...æ...nn dʒ]	Stressed, but not tonic. Relatively long vowel. Possibly counts as two separate sentences, as analysed in Chat file
2. "Oh I <u>can't get</u> this out"	[^h kʰãŋ geʔ]	Stressed. Velar assimilation
3. " <u>Can't get</u> it out"	[kǎgã jɛʔ]	Unstressed. Unusual form. Close juncture with no final cluster
4. " <u>Can't fall</u> down"	[kam fɔʔ]	Labiodental assimilation
5. "Purdie <u>can say</u> that"	[kǎ̃ ʃɛij]	Unstressed. No vowel alteration. No final nasal. Weak consonant articulation throughout whole utterance
6. " <u>Can eat</u> (th)em"	[^h gãɛn ^h iʔ ɛm]	Stressed. No vowel reduction. Initial consonant voicing
7. "Purdie <u>can't get</u> in"	[^h kʰãŋʔ geʔ]	Close juncture with glottal stop. No assimilation
8. "No you <u>can't</u> "	[^h kãŋʔ]	Stressed. Final glottal stop
9. "No you <u>can't</u> "	[gã]	Unstressed. Initial voiced consonant. Short vowel. No final consonant

Table 9. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;2;5

Utterance	Realisation	Description of Phenomena
1. "I get a, I, I <u>can</u> pl, Teletubbies can play with my fishing-rod"	[^h k ^h æm p̚]	Stressed. Bilabial assimilation despite false start in the following word
2. "I get a, I, I can pl, Teletubbies <u>can</u> <u>play</u> with my fishing-rod"	[^h k ^h æ̃n 'pleij]	Stressed. Syllable-timed. Open juncture revision
3. "You <u>can't</u> go wee"	[k ^h ə̃ 'k ^h ʌn? gəʊ]	Weak form of <i>can't</i> . No final consonant. No assimilation. Close juncture
4. "I <u>can</u> <u>catch</u> it in my hands"	[^h k ^h æ̃n 'kwæ(Pl, Vls)]	Stressed, but not tonic. No assimilation. Open juncture
5. " <u>Can't</u> pay"	[^h k ^h æ̃n feɪ]	Weak form of <i>can't</i> . Close juncture with final nasal. No assimilation
6. "Look this, you <u>can</u> <u>put</u> in"	[^h k ^h ε̃ʔ pʊʔ]	Stressed. Vowel alteration. No final nasal. Open juncture with glottal stop. No assimilation
7. "And your money <u>can</u> <u>go</u> "	--	Inaudible

Table 10. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;2;6

Utterance	Realisation	Description of Phenomena
1. "Now I <u>can't</u> pl play anymore this"	[k ^h ãm? pl pleij]	Bilabial assimilation. False start
2. "You know, he <u>can</u> get on there"	[k ^h æn 'gɪt]	Stressed, but not tonic. No assimilation. Open juncture
3. "We <u>can</u> make stickers now"	[k ^h æ̃(Nas) mer?k]	Stressed. Final nasal inaudible. Unclassifiable
4. "I <u>can't</u> get the flower"	[k ^h ãn? 'gɛʔ]	Unstressed. Close juncture with glottal stop. No assimilation
5. "Oh this one <u>can't</u> get off that bee"	[k ^h ün? gɛt]	Unstressed. Close juncture with glottal stop. No assimilation
6. "Oh I <u>can't</u> get off that one"	[k ^h ũŋ? gɛt]	Unstressed. Velar assimilation
7. * " <u>can't</u> get off"	[Gã? gɛd]	Unstressed. No final nasal. Close juncture. No assimilation
8. * "I <u>can't</u> get off"	[k ^h ãn? gɛt]	Unstressed. Close juncture with glottal stop. No assimilation
9. * "I need (a)nother batteries I <u>can't</u> get out of here"	[k ^h ãn gɛt]	Close juncture with final nasal. No assimilation. Possibly two sentences

4.4. Tables showing Thomas's Realisations of Can and Can't at Potential Assimilation Sites Sampled at Age 3;3

Table 11. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;3;2

Utterance	Realisation	Description of Phenomena
1. "This <u>can</u> be a train spotter"	[k ^h æ̃ bij]	Unstressed. Close juncture with no final nasal. No assimilation
2. "But I <u>can't</u> get it in"	[^h kʰã̃n get]	Close juncture with final nasal. No assimilation
3. "Two of them <u>can</u> go in there"	[k ^h æ̃ŋ gɛ]	Unstressed. Velar assimilation
4. "Don't know why he <u>can't</u> get out today"	[^h kʰã̃n get]	Close juncture with final nasal. No assimilation
5. * "Can't go back back again"	[^h kʰã̃n bæʊ]	Close juncture with final nasal. No assimilation. Unusual articulation
6. "You <u>can</u> be Bob the Builder"	[k ^h æ̃n bi...]	Unstressed. No vowel reduction. Open juncture
7. "I <u>can</u> be a policeman"	[k ^h æ̃m bij]	Unstressed. No vowel reduction. Bilabial assimilation
8. "And then, we <u>can</u> play with a tractor"	[k ^h æ̃n 'pleɪ]	Unstressed. No vowel reduction. Open juncture

Table 12. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;3;3

Utterance	Realisation	Description of Phenomena
1. "I <u>can't</u> get this one out"	[k ^h ã̃ŋʔ gɛʔ]	Unstressed. Velar assimilation. Also [ŋ] word-finally in <i>one</i>
2. "(Be)cause I <u>can't</u> get this bit out"	[^h kʰã̃...ʔ gɛ...ʔ]	Stressed. Close juncture with glottal stop. No assimilation
3. "I <u>can</u> be ice-cream man"	--	No linking between transcript and sound file

Table 13. Thomas's Realisations of *Can* and *Can't* at Age 3;3;4

Utterance	Realisation	Description of Phenomena
1. "It's start shouting, that's mean you <u>can't hear</u> it that's why"	[k ^h ʌn? 'hiəv]	Unstressed. Close juncture with glottal stop
2. "No, I <u>can do</u> it on my own"	[^l xæ̃n duw]	Stressed, but not tonic. Initial friction owing to weak articulation
3. "Course we <u>can</u> "	[k ^h ɑ̃]	No final nasal
4. "Then we <u>can eat</u> a jelly"	[kɿ ʔit]	Weak form
5. "I take, I <u>can take</u> it"	[k ^h æ̃n teɪk]	Stressed. Syllable-timed. Recording too distorted to hear vowel clearly
6. "There go flowers you <u>can have</u> a drink now, (...) can't you?"	[k ^h æ̃n hæv]	Unstressed. No vowel reduction
7. "There go flowers you can have a drink now, (...) <u>Can't</u> you?"	[^l k ^h ʌn? jə]	Stressed. Close juncture with glottal stop. Delayed tag question following utterance 6
8. "Course we <u>can</u> "	[^l qχiæ̃n]	Stressed. Word-initial uvular articulation
9. "I <u>can see</u> one"	[kxæ̃ 'si]	Unstressed. Word-initial velar affrication
10. "Course <u>they can</u> "	[^l k ^h ɑ̃]	Stressed. No word-final nasal
11. * "Then you <u>can be</u> a Daddy"	[k ^h æ̃(Nas) bij]	Unstressed. No vowel reduction. Indeterminate final nasal
12. "I <u>can do</u> a bit of sweeping"	--	Recording too distorted for transcription
13. "Then I <u>can</u> (.) <u>just</u> put on one stalk, then can sweep it/sweep in/sweeping"	[k ^h æ̃n (.) dʒɹɹɹ]	Unstressed. Vowel alteration
14. "Then I can (.) just put on one stalk, then <u>can sweep</u> it/sweep in/sweeping"	[k ^h æ̃n 'swɪpɪ(Nas)]	Unstressed. No vowel reduction
15. "I <u>can do</u> it"	[k ^h æ̃n 'duw]	Unstressed. No vowel reduction
16. * "I <u>can do</u> , I can do it"	[^l k ^h æ̃n dɔ̃]	Stressed
17. * "I can do, I <u>can do</u> it"	[^l k ^h æ̃n: duw]	Stressed. Open juncture
18. "I <u>can</u> "	[^l k ^h æ̃n]	Stressed
19. "There now <u>can sweep</u> up and down"	[k ^h æ̃n swɪp]	Unstressed. No vowel reduction
20. "Your <u>can't pinch</u> it"	[kɑ̃m 'pɪntʃ]	Unstressed. Bilabial assimilation
21. "Oh daft, I <u>can't say</u> mouth"	[k ^h ʌn? 'tʃeɪ]	Unstressed. Dental affrication at word boundary

22. "I <u>can't</u> walk"	[kʰǎn 'wʊʔk]	Unstressed. Close juncture with final nasal
23. "And then, I <u>can't</u> go on the high street"	--	Recording too distorted for accurate transcription
24. " <u>Can</u> have two"	[kʰǎn hæv]	Stressed, but not tonic
25. "You <u>can</u> let go"	[kʰǎn lɛʔ]	Unstressed. No vowel reduction
26. "You <u>can</u> hold that way"	[kʰǎd həʊl]	Partial vowel reduction towards weak form with additional hyponasality
27. "No, I <u>can't</u> see one"	[kʰǎn 'tʃi]	Unstressed. Affrication at word boundary
28. "I <u>can't</u> (...) xxx"	[kʰǎn]	Stressed. Short vowel. Final nasal. Remainder of utterance inaudible
29. "And you <u>can</u> hold xxx"	[kʰǎn 'həʊʔ]	Unstressed, but not tonic
30. " <u>You</u> can hold the other one"	[juw ǎn həʊʔdʔ]	Unstressed. No vowel reduction. No initial consonant
31. "We <u>can</u> do it, just on my own"	[kʰǎn duw]	Unstressed. No vowel reduction
32. "Course I <u>can/can't</u> "	[kʰǎn]	Whispered
33. * "Oh no, I need that because you <u>can</u> be the lady looking for number one"	[kǎm mi]	Unstressed. No vowel reduction. Bilabial assimilation with gemination
34. "You <u>can</u> be lady"	--	Recording too distorted for accurate transcription
35. "Mummy <u>can</u> walk"	[kʰǎm 'wɔk]	Unstressed. No vowel reduction. Bilabial assimilation prior to [w]
36. "You <u>can</u> be a postman changing it"	[ɣǎm bij]	Unstressed. No vowel reduction. Weak initial consonant articulation. Bilabial assimilation
37. * "I <u>can</u> be a parcel"	[kʰǎm bij]	Unstressed. No vowel reduction. Bilabial assimilation

Table 14. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;3;6

Utterance	Realisation	Description of Phenomena
1. "Then it <u>can be</u> my fire station"	[k ^h ʊm bi]	Unstressed. Vowel alteration. Vowel alteration. Bilabial assimilation
2. * "Erm, you think he <u>can</u> (.) cry and he get his hat back?"	[k ^h æ̃n̩ (.) 'kvaɪj]	Stressed, but not tonic. Pause at word boundary. No assimilation
3. "Erm you <u>can be</u> a girl (.) fast asleep"	[k ^h æ̃mi]	Unstressed. No vowel reduction. Possibly combined regressive bilabial assimilation and progressive nasal assimilation
4. * "Ah you <u>can</u> , I can be, you can be a bear"	[ˈyæ̃m]	Stressed. False start with evidence of bilabial assimilation
5. * "Ah you can, I <u>can be</u> , you can be a bear"	[k ^h æ̃m 'bi]	Stressed. Syllable-timed. Bilabial assimilation
6. * "Ah you can, I can be, you <u>can be</u> a bear"	[k ^h æ̃m bi]	Unstressed. No vowel reduction. Bilabial assimilation
7. "You <u>can be</u> , I can be a girl"	[k ^h æ̃'mi]	Unstressed. No vowel reduction. Regressive bilabial assimilation, progressive nasal assimilation or a combination of both. Revision following false start
8. "You can be, I <u>can be</u> a girl"	[k ^h æ̃n bi]	Unstressed. No vowel reduction. Open juncture revision

Table 15. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;3;7

Utterance	Realisation	Description of Phenomena
1. "xxx <u>Can get</u> that one"	--	Recording too faint for accurate transcription
2. "You <u>can come</u> "	[k ^h æ̃n 'kʲɪ̃m]	Stressed. Syllable-timed. Open juncture
3. "You <u>can be</u> Mummy elephant"	[k ^h æ̃n bi]	Stressed. Syllable-timed. Open juncture

4.5. Tables Showing Thomas's Realisations of Can and Can't at Potential Assimilation Sites Sampled at Age 3;4

Table 16. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;4;0

Utterance	Realisation	Description of Phenomena
1. "And this <u>can go</u> in the recycling, and this can go in recycling"	[^h kʰæŋ ˈgəʊ]	Stressed. Velar assimilation
2. "And this can go in the recycling, and this <u>can go</u> in recycling"	[k ^h æŋ gəʊ]	Unstressed. No vowel reduction. Velar assimilation
3. * "It means dustbin wagons just <u>can't go</u> through it, and cars, and big dustbin wagons"	[k ^h ʌn gəʊ]	Unstressed. Close juncture with final nasal. No assimilation
4. "You said, you can, you <u>can keep</u> that ever and ever"	[k ^h æŋ ˈkʰip]	Unstressed. No vowel reduction. Open juncture
5. "I <u>can mess</u> hair"	[k ^h æŋ mes]	Unstressed. No vowel reduction. Open juncture, but nasals close together and almost indistinguishable. Mother repeats with same realisation of nasals, but with weak form [kɹ]
6. "Reversing yes it <u>can move</u> "	[^h kʰæm ˈmu:v]	Stressed. Bilabial assimilation

Table 17. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;4;1

Utterance	Realisation	Description of Phenomena
1. "I <u>can't get</u> you any sixpence"	[^h kʰæŋ gət]	Stressed. Velar assimilation
2. "Mummy, you go, you <u>can be</u> a counter/counting now"	[k ^h æm bi:]	Unstressed. No vowel reduction. Bilabial assimilation
3. "Then, I <u>can make</u> you cup of tea"	--	No linking between transcript and audio file

Table 18. Thomas's Realisations of *Can* and *Can't* at Age 3;4;2

Utterance	Realisation	Description of Phenomena
1. "You (pre)tend that's money, <u>can't</u> you?"	[ˈkʌnʔ ju]	Stressed. Close juncture with glottal stop
2. "xxx you <u>can</u> "	[ˈkʰæ̃]	Stressed. No final nasal
3. "Then you <u>can put</u> it in here"	[kæm pʊt]	Unstressed. No vowel reduction. Bilabial assimilation
4. "You <u>can have</u> little big one"	[kʌn hæv]	Unstressed. No vowel reduction. Unaspirated initial consonant
5. " <u>Can</u> I roll it?"	[ˈkʰæ̃n ˈʔaɪ]	Stressed. Syllable-timed Words separated by glottal stop
6. "Yes we <u>can</u> "	[ˈkʰæ̃n]	Stressed. Formula from <i>Bob the Builder</i>
7. "We <u>can</u> "	[ˈcæ̃n]	Stressed. Initial palatal plosive. Formula from <i>Bob the Builder</i>
8. "I <u>can mix</u> it"	[kʰæ̃m ˈmɪks]	Unstressed. No vowel reduction. Bilabial assimilation. Mother repeats without assimilation
9. "I <u>can roll</u> it"	[ˈkʰʰæ̃n vəl]	Stressed, but not tonic
10. " <u>Can</u> we fix it"	[ˈhæ̃n wi]	Stressed, but not tonic. Weak initial consonant articulation. Formula from <i>Bob the Builder</i>
11. "Yes we <u>can</u> I'm gonna do it"	[ˈkʰæ̃n ˈaɪm]	Stressed. Slightly hyponasal
12. * "And then, just on here, then, <u>can sprinkle</u> it can't you"	[kʰæ̃n ˈspwɪ > klɪt]	Unstressed. No vowel reduction
13. * "And then, just here, then, can sprinkle it <u>can't</u> you?"	[kɔ̃ ˈju]	Unstressed. Vowel alteration
14. "I <u>can't do</u> a flower"	[kʰʌnʔ du]	Unstressed. Vowel in <i>can't</i> whispered
15. * " <u>Can maybe</u> do some more"	[xæ̃m ˈmɛɪbi]	Unstressed. No vowel reduction. Bilabial assimilation producing germination
16. "I <u>can't</u> "	[ˈkʰʌnːt]	Stressed. Very quiet final /t/ articulation
17. * "And I <u>can</u> "	[ˈkʰæ̃m]	Stressed
18. "Now what I <u>can do</u> that/I can go on there"	[kʰæ̃n ˈdu]	Unstressed. No vowel reduction. Final [m]
19. "Now what I can do that/I <u>can go</u> on there"	[ˈkʰæ̃n (.) ɣəʊw]	Unstressed. Pause at word boundary. Open juncture

20. "You <u>can eat</u> (th)em <u>can</u> <u>you</u> a blue?"	--	No linking between transcript and audio file
21. "You <u>can have</u> this one"	--	No linking between transcript and audio file
22. "Of course I can"	--	No linking between transcript and audio file
23. "Course you <u>can</u> "	--	No linking between transcript and audio file

Table 19. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;4;3

Utterance	Realisation	Description of Phenomena
1. "Mummy you <u>can be</u> a xxx"	[k ^h æ̃m 'bij]	Unstressed. No vowel reduction. Bilabial assimilation
2. "Mummy, you <u>can be</u> a xxx (one syllable)"	[k ^h æ̃m 'bij]	Unstressed. No vowel reduction. Bilabial assimilation
3. "Bits and bobs, there they <u>can go</u> xxx"	--	Recording too distorted for accurate transcription
4. "Because over here checking the wagon <u>can go</u> fast"	[^h k ^h æ̃n (.) gəʊ]	Stressed. Pause and breath at word boundary, creating open juncture
5. "And that's why I'm checking it it <u>can go</u> fast look!"	[xæ̃n gəʊ]	Stressed. No vowel reduction. Open juncture
6. "It can, it still <u>can broom</u> "	[k ^h æ̃m bũm]	Unstressed. No vowel reduction. Bilabial assimilation
7. "I <u>can collect</u> it now"	[^h k ^h æ̃ŋ k ^h l ^h l ^h ɛʔt ^h]	Stressed, but not tonic. Velar assimilation
8. * "I <u>can be</u> a low wagon, driving a big man (be)cause I'm a dustbin xxx"	[K ^h æ̃m mij]	Unstressed. No vowel reduction. Bilabial assimilation and progressive nasal assimilation, producing gemination
9. * "I <u>can be</u> a xxx you can be a fireman"	[k ^h æ̃m mi]	Unstressed. No vowel reduction. Bilabial assimilation combined with possible progressive nasal assimilation, creating gemination
10. * "I can be a xxx you <u>can be</u> a fireman"	[xæ̃m bij]	Unstressed. No vowel reduction. Vowel alteration and weak initial consonant articulation. Bilabial assimilation
11. "It <u>can be</u> a fire it can be a fireman"	[k ^h æ̃m bij]	Unstressed. No vowel reduction. Bilabial assimilation
12. "It can be a fire it <u>can be</u> a fireman"	[k ^h æ̃m bij]	Unstressed. No vowel reduction. Bilabial assimilation

Table 20. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;4;4

Utterance	Realisation	Description of Phenomena
1. "You <u>can be</u> "	[k ^h æ̃m 'bi]	Unstressed. No vowel reduction. Bilabial assimilation
2. "I <u>can't</u> put it up"	[^h k ^h æ̃nʔ pʊd]	Stressed. Close juncture with glottal stop

4.6. Tables showing Thomas's Realisations of Can and Can't at Potential Assimilation Sites Sampled at Age 3;5

Table 21. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;5;2

Utterance	Realisation	Description of Phenomena
1. "You <u>can be</u> , erm a talking man"	[k ^h æ̃m bi]	Unstressed. No vowel reduction. Bilabial assimilation
2. "You <u>can be</u> a talking man"	[k ^h æ̃n bi]	Unstressed. No vowel reduction. Open juncture. Repetition
3. "Mummy, telephone <u>can be</u> ringing"	[k ^h æ̃n bi]	Unstressed. No vowel reduction. Open juncture
4. "No I <u>can't</u> (be)cause I'm a busy man"	[^h kʰãnʔ kɔz]	Stressed. Close juncture with glottal stop

Table 22. Thomas's Realisations of *Can* and *Can't* at Age 3;5;3

Utterance	Realisation	Description of Phenomena
1. * "And I <u>can eat</u> (th)em"	[k ^h æ̃n 'it̩]	Unstressed. No vowel reduction
2. * "And put (th)em in a big box and then you <u>can eat</u> 'em/some"	[k ^h æ̃n }isõm]	Unstressed. No vowel reduction

Table 23. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;5;4

Utterance	Realisation	Description of Phenomena
1. "Mummy, you <u>can be</u> sign saying no post lorries allowed"	[k ^{wh} æ̃m bi]	Unstressed. No vowel reduction. Vowel alteration. Bilabial assimilation
2. "No I <u>can't (be)cause</u> I didn't fit a trailers on the back of the tractors"	[^h kʰãnʔ kɔz]	Stressed. Close juncture with glottal stop. Possibly eating
3. "We have a drink you <u>can be</u> a cof a coffee (ma)chine"	[k ^h æ̃mij]	Stressed. No vowel reduction. Bilabial assimilation, possibly combined with progressive nasal assimilation
4. "You can, I <u>can press</u> a button"	[k ^h æ̃m pves]	Unstressed. No vowel reduction. Bilabial assimilation
5. "No you <u>can't (be)cause</u> it's my job for a day"	[^h kʰãnʔ kɔz]	Stressed. Close juncture with glottal stop
6. "Er this man is opening a field and then a big wagon <u>can get</u> past"	[k ^h æ̃ŋ gɛʔ]	Unstressed. No vowel reduction. Velar assimilation

Table 24. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;5.5

Utterance	Realisation	Description of Phenomena
1. "Mummy, you (0.5) you <u>can be</u> naughty"	[k ^h æ̃n bi]	Unstressed. No vowel reduction. Open juncture
2. "Yeah, I <u>can be</u> a policeman"	[tõm bi]	Weak form with initial dentalised alveolar plosive. Bilabial assimilation
3. " <u>This can be</u> a police house"	[ʃæ̃m bij]	Unstressed. No vowel reduction. No initial consonant, so final /s/ in <i>this</i> became ambisyllabic. Bilabial assimilation
4. "This <u>can be</u> a police house"	[k ^h æ̃m bij]	Unstressed. No vowel reduction. Bilabial assimilation
5. "You <u>can be</u> a s, you can be a sweet punnet"	[k ^h æ̃m bij]	Unstressed. No vowel reduction. Bilabial assimilation
6. "You can be a s, you <u>can be</u> a sweet punnet"	[k ^h æ̃m bij]	Unstressed. No vowel reduction. Bilabial assimilation
7. * "And you can't, (.) you <u>can</u> , (.) <u>go</u> (..) call for policeman can't you?"	[^h kæ̃n ^j (..) 'gəʊ]	Stressed, but not tonic. Pause at word boundary. Possible evidence of assimilation in palatalisation of final nasal
8. "You <u>can be</u> (.) you can get this"	[kæ̃m bi]	Weak form. Bilabial assimilation
9. "You can be, (.) you <u>can get</u> this"	[kæ̃ŋ 'geʔ]	Unstressed. Vowel alteration. Velar assimilation
10. "Mummy, you <u>can go</u> (..) nee-na nee-na can't you?"	[k ^h æ̃n 'gɒʊ]	Unstressed. No vowel alteration. Open juncture
11. "I say you <u>can't get</u> out snake"	[k ^h æ̃n gɪt]	Unstressed. Close juncture with final nasal
12. " <u>Can't get</u> out"	[kæ̃ʔ kœt]	Unstressed. Close juncture with no final nasal. Unusual form of <i>get</i>
13. "You <u>can be</u> snake"	[kæ̃m bi]	Unstressed. No vowel reduction. Bilabial assimilation with possible evidence of progressive nasal assimilation
14. "You <u>can go</u> out to play"	[kæ̃ gəʊ]	Weak form. Close juncture with no final nasal. No assimilation. Falsetto voice quality throughout utterance
15. "Er bathroom <u>can be</u> on fire"	--	No linking between transcript and audio file

4.7. Tables showing Thomas's Realisations of Can and Can't at Potential Assimilation Sites Sampled at Age 3;6

Table 25. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;6;0

Utterance	Realisation	Description of Phenomena
1. "You <u>can be</u> Missus Mayberry can't you"	[k ^h æm bi]	Unstressed. No vowel reduction. Bilabial assimilation
2. "Then you <u>can get</u> on, (..) shall we?"	[k ^h æŋ gɛt]	Unstressed. No vowel reduction. Velar assimilation
3. "Anybody <u>can get</u> on"	[^l k ^h æŋ gɛt]	Stressed, but not tonic. Open juncture
4. "You <u>can keep</u> (th)em"	[k ^h æŋ ^h kʰip]	Unstressed. No vowel reduction. Open juncture
5. "You want anymore, I <u>can put</u> it back where it goes"	[^h k ^h æm p ^h ʊd]	Unstressed. No vowel reduction. Bilabial assimilation
6. "You <u>can be</u> a driver"	[k ^h ʊm bij]	Unstressed. Vowel alteration. Bilabial assimilation
7. "You <u>can be</u> a driver can't you"	[k ^h æm bij]	Unstressed. No vowel reduction. Bilabial assimilation
8. "I <u>can</u> 'be 'one and you can sit next to me I can (0.5) be a driver"	[^l k ^h æm 'beɪ]	Stressed. No vowel alteration. Bilabial assimilation despite slow speech with equal stress on each word throughout utterance
9. "I can be one and you can (0.5) sit next to me, I <u>can be</u> a driver"	[k ^h æŋ (0.5) 'bi:]	Unstressed. No vowel reduction. Still slow and careful. Open juncture
10. " <u>Can</u> put it on can I put it on?"	[k ^h ŋ p ^h ʊ(Pl, Vls)]	Weak form. Open juncture
11. "I <u>can't</u> go xxx"	[^l k ^h æn? gəʊ]	Whingeing/crying. Stressed. Close juncture with glottal stop. No assimilation
12. "Mummy this <u>can be</u> a work can't it?"	[k ^h æ̃m 'bi:]	Unstressed. Extra short vowel with partial reduction towards weak form. Bilabial assimilation
13. "You <u>can be</u> a teacher can't you?"	[xʊm bij]	Unstressed. No vowel reduction. Consonant lenition and vowel alteration. Bilabial assimilation

Table 26. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;6;1

Utterance	Realisation	Description of Phenomena
1. "But you <u>can't</u> <u>get</u> out"	[k ^h ãŋ gɛʔ]	Unstressed. Velar assimilation
2. "When I'm better I <u>can</u> <u>get</u> it"	[^h kãŋ ˈgɛʔ ^s]	Stressed, but not tonic. Lengthened nasal with audible transition from alveolar to velar articulation
3. "But I can't (be)cause I'm"	[^h kãŋ kɔz]	Stressed. Continued voicing across word boundary. No assimilation
4. "Then I <u>can</u> <u>get</u> past"	[k ^h æŋ gɛʔ]	Unstressed. Short vowel. Velar assimilation

Table 27. Thomas's Realisations of *Can* and *Can't* at Age 3;6;2

Utterance	Realisation	Description of Phenomena
1. "It <u>can</u> fly on its own, but it doesn't fit in there"	[^h kʰæ̃n 'flaɪ]	Stressed
2. "I pull (th)em off <u>can</u> we"	[^h kʰæ̃m wi]	Stressed. Bilabial assimilation prior to word-initial [w]
3. "I can't tell you about it"	[^h kʰə̃hã::nʈ̚ (..) tɛ]	Stressed. Open juncture with pause at word boundary
4. * "Teletubbies now <u>can</u> I watch?"	[kʰn̩ aɪ]	Weak form
5. "I <u>can't</u> "	[^h kʰhã̃n]	Stressed. Strongly aspirated
6. "I got I <u>can't</u> reach a/her police helmet"	[^h kʰã̃n vit̚]	Stressed. Close juncture with no final consonant
7. "And you can't go open again (be)cause I lock you all up"	[^h kʰã̃ŋ gəʊ]	Stressed. Velar assimilation
8. * "And you <u>can</u> stay there for ever and ever and ever and ever"	[kʰɤ̃ 'steɪ]	Weak form with no final nasal
9. "So we lock you all up and you <u>can't</u> go anywhere again or (a)gain"	--	No linking between transcript and audio file
10. "You don't say anything naughty, you <u>can</u> keep this helmet"	[^h kʰæ̃n 'kʰɪb̩]	Unstressed. No vowel reduction. No assimilation.
11. "...When we out of the shops you <u>can</u> get it again"	[^h kʰæ̃nɔ̃ 'gʲɛ̃t̚]	Stressed. Open juncture with slight epenthesis
12. "Course you <u>can</u> "	[^h kʰæ̃n]	Stressed. Lenis initial consonant articulation
13. "You <u>can</u> have you know what?"	[^h kʰæ̃n 'hæʔ]	Stressed
14. "You <u>can</u> have a pink one"	[^h kʰæ̃n hæβ]	Unstressed
15. * I <u>can</u> (.) keep, (.) I can have that one"	[^h kʰæ̃n:: (..) 'kʰi]	Stressed. Short vowel and long nasal. Pause at word boundary. No assimilation. Open juncture
16. * "I can (.) keep (.) I <u>can</u> have that one"	[kʰæ̃m hæv]	Unstressed. No vowel reduction. Final [m].
17. "Please <u>can</u> I have my police helmet?"	[^h kʰæ̃n a]	Unstressed. No vowel reduction
18. "You <u>can</u> put that one out near buttons I can put it out near telly"	[kʰæ̃m pʊʔ]	Unstressed. Partial vowel reduction towards weak form. Bilabial assimilation

19. “You can put that one out near buttons I <u>can put</u> it out near telly”	[k ^h æ̃m pur]	Unstressed. No vowel reduction. Bilabial assimilation
20. “And you <u>can have</u> mine for little bit”	[k ^h æ̃ hæv]	Unstressed. No vowel reduction. No final nasal
21. “You <u>can put</u> those (.) you <u>can put</u> that (.) naughty monster in the oven”	[k ^h æ̃m 'p ^h ʊʔ]	Unstressed. No vowel reduction. Bilabial assimilation
22. “You can put those (.) you <u>can put</u> that (.) naughty monster in the oven”	[kæ̃m p ^h ʊʔ]	Unstressed. No vowel reduction. Bilabial assimilation
23. “I <u>can put</u> this one in the oven”	[k ^h m p ^h ʊʔ]	Weak form. Bilabial assimilation
24. “Now <u>can I</u> watch the telly now?”	[kɔ̃n ə]	Weak form
25. * “Then I can (.) change xxx”	[k ^h æ̃n 'tʃe:ndʒ]	Unstressed. Short vowel. No vowel reduction
26. “You <u>can build</u> that I can pinch it”	[k ^h æ̃m 'bɪʊd]	Weak form. Bilabial assimilation
27. “You can build that I <u>can pinch</u> it”	[kæ̃m 'pɪntʃ]	Unstressed. No vowel reduction. Bilabial assimilation
28. “You <u>can build</u> it I can pinch it”	[k ^h æ̃m 'bɪʊd]	Unstressed. Partial vowel reduction towards weak form. Bilabial assimilation
29. “You can build it I <u>can pinch</u> it”	[k ^h æ̃m 'p ^h ɪntʃ]	Unstressed. No vowel reduction. Bilabial assimilation
30. ”Letter side then I <u>can pinch</u> it”	[k ^h æ̃m 'pɪntʃ]	Unstressed. Some vowel reduction towards weak form. Bilabial assimilation
31. “Please you <u>can I</u> watch telly?”	[^l k ^h æ̃'n æ]	Stressed
32. “ <u>Can we</u> have a look?”	[k ^h æ̃ wɪ]	Unstressed. No vowel reduction
33. “Can I have one?”	[K ^h æ̃...n... 'aɪ...]	Unstressed. No vowel reduction. Whingeing
34. “I gonna find I <u>can see</u> some more”	[xɔ̃ ʃɪ]	Weak form
35. “Oh I <u>can find</u> another blue”	[k ^h æ̃m faɪnd]	Unstressed. No vowel reduction. Labiodental assimilation
36. “You <u>can have</u> that bit there”	[k ^h æ̃ hæv]	Unstressed. No vowel reduction. No final nasal
37. * “And normally when a clock gets to bottom <u>can</u> ”	[k ^h æ̃n]	Unstressed. Short vowel. No vowel reduction

Table 28. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;6;3

Utterance	Realisation	Description of Phenomena
1. "Just me <u>can pull</u> it off"	[^h kʰæm pʊl]	Stressed, but not tonic. Bilabial assimilation
2. "Then I <u>can keep</u> that one."	[^h kʰæn kʰipʰ]	Unstressed. No vowel reduction. Open juncture
3. "You <u>can be</u> a shop seller now"	[kɔ̃m bɪ]	Weak form. bilabial assimilation
4. "There you go, you <u>can be</u> seller now"	[kʰə̃ wɪ]	Weak form with no final consonant. No assimilation
5. "And you <u>can be</u> , I can be a customer."	[kɔ̃m ɸi:]	Weak form. Bilabial assimilation
6. "And you <u>can be</u> , I <u>can be</u> a customer."	[kɔ̃m bɪ]	Weak form. Bilabial assimilation
7. "Then you know what Mummy? You <u>can go</u> a bridge"	[^h kʰæŋ gəʊ]	Unstressed, but not tonic. Velar assimilation
8. "I <u>can be</u> a co, I can be a man <u>can't I?</u> "	[^h kʰəm bi:]	Weak form. Bilabial assimilation. False start
9. "I can be a co, I <u>can be</u> a man <u>can't I?</u> "	[^h kʰæn bi:]	Unstressed. No vowel reduction. Open juncture revision
10. "I <u>can't Mum</u> "	[^h χɑ:~:n? mʊ]	Stressed. Close juncture with glottal stop. No assimilation. Creaky voice and hyponasal because crying
11. * "I <u>can't get</u> any no"	[^h kʰə̃ŋ? gət]	Unstressed. Velar assimilation

Table 29. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;6;4

Utterance	Realisation	Description of Phenomena
1. * “Erm you <u>can</u> put it through that little slot won't you?”	[k ^h æ̃m 'pʊt]	Unstressed. Partial vowel reduction towards weak form. Bilabial assimilation
2. “You <u>can</u> put/post it through there and I can post it back”	[k ^h æ̃m 'pʊs]	Unstressed. No vowel reduction. Bilabial assimilation
3. “You can put/post it through there and I <u>can</u> post it back”	[kæ̃m pəʊst]	Unstressed. No vowel reduction. Bilabial assimilation.
4. * “Then you <u>can</u> get it”	[k ^h æ̃n gɛt]	Unstressed. No vowel reduction. Open juncture
5. “Then I you <u>can</u> pick it up”	[k ^h æ̃m p ^h ɪk]	Unstressed. No vowel reduction. Bilabial assimilation
6. “And then you <u>can</u> catch them”	[k ^h ə̃ŋ 'k ^h ætʃ]	Weak form. Velar assimilation
7. “And then, (.) I <u>can</u> be a seller-man”	[k ^h æ̃m biʃ]	Unstressed. Partial vowel reduction towards weak form. Bilabial assimilation
8. * “You can slot (th)em through there I can post (th)em in”	[k ^h æ̃m pʊs]	Unstressed. No vowel reduction. Bilabial assimilation
9. * “Then I <u>can</u> be, I can be a seller-man can't you?”	[kæ̃m biʃə]	Unstressed. No vowel reduction. Bilabial assimilation
10. * “Then I can be, I <u>can</u> be a seller-man can't you?”	[kæ̃m biʃ]	Unstressed. No vowel reduction. Bilabial assimilation

4.8. Tables showing Thomas's Realisations of Can and Can't at Potential Assimilation Sites Sampled at Age 3;7

Table 30. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;7;1

Utterance	Realisation	Description of Phenomena
1. * "Mummy I <u>can be</u> a man (.) do (.) it happy birthday to"	[kæ̃n bij]	Unstressed. No vowel reduction. Open juncture
2. "You can have that, you <u>can be</u> Mummy, (.) and (0.5) you can put the light in there and I can be a man to sell something"	[kə̃m bi]	Weak form. Bilabial assimilation
3. "You can have that, you can be Mummy, (.) and (0.5) you <u>can put</u> the light in there and I can be a man to sell something"	[kʰæ̃m pʰʊʔ]	Unstressed. No vowel reduction. Bilabial assimilation
4. "You can have that, you can be Mummy, (.) and (0.5) you can put the light in there and I <u>can be</u> a man to sell something"	[kʰæ̃m bij]	Unstressed. Partial vowel reduction towards weak form. Bilabial assimilation
5. "I <u>can be</u> a man a shopkeeper couldn't I?"	[kæ̃m bij]	Partial vowel reduction towards weak form. Bilabial assimilation
6. * "Mummy, you can put it through there and say (.) I shout toot toot"	[kæ̃ pʊtʰ]	Unstressed. Partial vowel reduction towards weak form. Bilabial assimilation
7. "You <u>can't get</u> me can you?"	[kʰʷɔŋʔ gɛʔ]	Unstressed. Creaky voice. Velar assimilation
8. * "Ah you <u>can't get</u> me"	[kʰɔŋ gɛʔ]	Unstressed. Velar assimilation
9. "You <u>can't catch</u> me (be)cause I'm eating your nips"	[kɔŋ kætʃ]	Unstressed. Velar assimilation
10. "Mummy, (...) oh I can't get my ladders"	--	Untranscribable owing to extraneous noise
11. "xxx do my nails, then you can you <u>can cut</u> it off you can (.) do it at home"	[kʰæ̃ŋ kʰʊʔ]	Unstressed, but not tonic. Velar assimilation

Table 31. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;7;2

Utterance	Realisation	Description of Phenomena
1. * “ <u>Can't</u> catch me (be)cause I'm the poeey-man”	[k ^h ãŋ? k ^h ?æ?]	Unstressed. Velar assimilation
2. “You <u>can't</u> catch me (be)cause I'm a gingerbread poeey-man”	[(C,Vls)ãŋ kæʃ]	Unstressed. Velar assimilation
3. * “ <u>Can't</u> catch me (be)cause) I'm a gingerbread candle”	[k ^h æŋ? ?æ(C,Vls) (C,Vls)æ?]	Unstressed. Open juncture with glottal stop. Unusual phonetic form
4. “I <u>can't</u> (.) Mum”	[^l k ^h ãnt (.) Mum]	Stressed. Open juncture with pause
5. * “You <u>can't</u> catch me (be)cause I'm the/a gingerbread lady”	[k ^h ãŋ? kxætʃ]	Unstressed. Velar assimilation
6. “Mummy I <u>can't</u> go to sleep”	[k ^h ãŋ? gəʊ]	Unstressed. Close juncture with glottal stop. Whingeing
7. “Mummy, you <u>can</u> be sly fox can'tn't you?”	[kxɛm bi]	Unstressed. Vowel alteration. Bilabial assimilation
8. “Mummy, this <u>can</u> be one there”	[k ^h æm bi]	Unstressed. No vowel reduction. Bilabial assimilation
9. * “You <u>can</u> , (0.5) you can bake something”	[k ^h æm:] [k ^h æm 'beik]	Unstressed. Slight vowel reduction. Bilabial assimilation. Also evidence of anticipatory bilabial assimilation in false start
10. “I <u>can</u> bake something”	[yæm 'be...k]	Unstressed. No vowel reduction. Bilabial assimilation
11. “You <u>can't</u> catch me (be)cause I'm a sausage-man”	[^l k ^h ãŋ? kæʃ]	Stressed. Velar assimilation
12. “Mummy, (.) you <u>can</u> be next Mummy say “stop sausage-man” ”	[k ^h ɔm bi]	Weak form. Bilabial assimilation
13. “Mummy, you <u>can</u> cross the road with your cat can'tn't you?”	[k ^h ɔŋ 'kʊs]	Weak form. Velar assimilation
14. “Mummy, you <u>can</u> put it there Mummy”	[k ^h æm pʊr]	Unstressed. No vowel reduction. Bilabial assimilation
15. * “Mummy, you can roll some out and I <u>can</u> pinch it”	[g ^j æm 'pɪntʃ]	Unstressed. No vowel reduction. Bilabial assimilation. Actually labiodental plosive at onset of <i>pinch</i> , but lacking symbol

16. “Mummy, (.) you can roll it out and I <u>can pinch it</u> ”	[k ^h æ̃m 'pĩntʃ]	Unstressed. No vowel reduction. Bilabial assimilation
17. * “You can roll it and/out I <u>can pinch it</u> ”	[k ^h æ̃m 'fĩtʃ]	Unstressed. Partial vowel reduction towards weak form. Bilabial assimilation. Falsetto voice quality
18. * “You <u>can put it</u> out on the ground can't you?”	[kãm pʊr]	Weak form. Bilabial assimilation
19. * “And I <u>can pinch it</u> ”	[k ^h æ̃m 'p ^h ĩntʃ]	Unstressed. No vowel reduction. Bilabial assimilation
20. * “Mummy, you <u>can make</u> something what you making?”	[k ^h æ̃m]meɪk]	Unstressed. No vowel reduction. Bilabial assimilation

Table 32. Thomas's Realisations of *Can* and *Can't* at Age 3;7;3

Utterance	Realisation	Description of Phenomena
1. * “And now we <u>can</u> play outside <u>can't</u> we Farty-Pants?”	[k ^h æ̃m plɛɪj]	Unstressed. No vowel reduction. Bilabial assimilation
2. * “And now we can play outside <u>can't</u> we Farty-Pants?”	[^h k ^h ãntə wi]	Stressed. Open juncture with epenthesis
3. “When it's down there, I <u>can't</u> reach it <u>can</u> I?”	[k ^h ãn? 'vɪçɔ]	Unstressed. No vowel reduction. Close juncture with glottal stop
4. “When it's down there, I can't reach it <u>can</u> I?”	[^h k ^h æ̃n ɑ]	Stressed
5. “I <u>can</u> get it”	[^h k ^h æ̃n 'gɛt ^h]	Stressed. Open juncture
6. “ <u>Can</u> I see as well”	[kæ̃n 'aɪ]	Unstressed. No vowel reduction. Vowel slightly raised
7. * “ <u>Can</u> I see you (a) big bang?”	[kã̃n 'aɪ]	Weak form
8. “Mummy, (hiccup) (..) I <u>can</u> be a postman (..) <u>can't</u> (..) (hiccup) I?”	[kxæ̃m biʃ]	Unstressed. No vowel reduction. Bilabial assimilation
9. “Mummy, (hiccup) (..) I can be a postman (..) <u>can't</u> (..) (hiccup) I?”	[^h k ^h ãn? (..) aɪ]	Stressed. Final glottal stop, but open juncture owing to pause and hiccups
10. “It <u>can't</u> go through”	[k ^h ã̃n? gəʊ]	Unstressed. Velar assimilation
11. * “ <u>Can</u> I keep ...”	[k ^h ã̃n 'aɪ]	Weak form
12. “Please <u>can</u> I have Vimto?”	[k ^h æ̃n ə æ]	Weak form
13. “And (..) you know what, you know, you know what you <u>can</u> do (..) sometimes?”	[k ^h æ̃n 'dju]	Unstressed. No vowel reduction
14. “You <u>can</u> hold if you like”	[^h k ^h æ̃n 'heʊtɪd]	Stressed, but not tonic
15. “I <u>can't</u> drink all that, (..) could I?”	[k ^h ã̃n? dɪŋk]	Unstressed. Close juncture with glottal stop
16. “I <u>can't</u> drink it then”	[k ^h ã̃n 'dɪŋk]	Close juncture with final nasal
17. “Mummy, sometimes you <u>can</u> take it home”	[k ^h æ̃n 'teɪk ^h]	Unstressed. No vowel reduction
18. * “You <u>can</u> play with it you like”	[k ^h ɔ̃m 'plɛɪ]	Weak form. Bilabial assimilation

Table 33. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;7;4

Utterance	Realisation	Description of Phenomena
1. "You <u>can</u> put (th)em there"	[k ^h æ̃m pʊt]	Unstressed. No vowel reduction. Bilabial assimilation
2. "You <u>can</u> be a lady-man"	[kæ̃n 'bij]	Unstressed. Partial vowel reduction towards weak form. Open juncture
3. * "And I <u>can</u> be a big/bin man"	[k ^h ʌɪ̃n 'bij]	Unstressed. Vowel alteration. Devoiced/weak final nasal in <i>can</i> . Bilabial assimilation
4. "And I <u>can</u> be a big man"	[k ^h æ̃m bij]	Unstressed. No vowel reduction. Bilabial assimilation
5. "And I <u>can</u> collect it there"	[k ^h æ̃n kələʔt]	Unstressed. No vowel reduction. Open juncture
6. * "You can to, you <u>can</u> be a man can't you"	[k ^h ə̃m bij]	Weak form. Bilabial assimilation
7. * "You <u>can</u> be Daddy and then you can be a Mummy again"	[k ^h æ̃m bi]	Unstressed. No vowel reduction. Bilabial assimilation. False start
8. "You <u>can</u> be Daddy and then you can be a Mummy again"	[kə̃m bij]	Weak form. Bilabial assimilation. Revision
9. * "Erm (.) mm (.) this one could be away and you <u>can</u> crash couldn't you?"	[k ^h ə̃n 'kvæʃ]	Weak form. Open juncture
10. "And you Daddy <u>can</u> be in that car"	[k ^h æ̃m bij]	Unstressed. No vowel reduction. Bilabial assimilation
11. "And Purdie <u>can</u> be in that car"	[k ^h ə̃m bij]	Weak form. Bilabial assimilation
12. "You <u>can</u> be, you could be in that, couldn't you?"	[k ^h æ̃m bi]	Unstressed. No vowel reduction. Bilabial assimilation
13. "You <u>can</u> be in it"	[kə̃m bij]	Weak form. Bilabial assimilation
14. "And you <u>can</u> be a big grabber"	[kə̃m bij]	Weak form. Bilabial assimilation
15. * "I <u>can</u> be a big grabber couldn't I?"	[kæ̃m 'mij]	Unstressed. No vowel reduction. Bilabial assimilation and germination
16. "You can, I <u>can</u> build/built your house couldn't I?"	['k ^h æ̃n] ['k ^h æ̃m 'brʊʔ]	Stressed, but not tonic. Open juncture false start, with bilabial assimilation in revision

17. * “xxx You <u>can built</u> another one”	[^h kʰæ̃m 'bɪʊt]	Stressed, No vowel reduction. Bilabial assimilation
18. “And you <u>can come</u> here”	[k ^h ʔɨŋ k ^h õm]	Weak form. Velar assimilation
19. * “xxx You <u>can come</u> to my house to (..) play (.) with my big boulder”	[k ^h æ̃ŋ k ^h õm]	Unstressed. No vowel reduction. Velar assimilation
20. “xxx I <u>can (0.5) put</u> ‘em all back together like that, you can build them”	[kæ̃m(0.5) pʊ̃t]	Unstressed. No vowel reduction. Bilabial assimilation, despite 0.5
21. “xxx I <u>can (0.5) put</u> ‘em all back together like that, you can build them”	[k ^h æ̃m (0.5) 'bɪʊd]	Unstressed. No vowel reduction. Bilabial assimilation
22. “You <u>can build it</u> couldn’t”	[k ^h æ̃m 'bɪʊd ɪʔ]	Unstressed. No vowel reduction. Bilabial assimilation
23. * “And I <u>can build</u> them/on it”	[k ^h õm brʊ]	Weak form. Bilabial assimilation

Table 34. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;7;5

Utterance	Realisation	Description of Phenomena
1. "You can <u>be</u> (0.5) a man"	[k ^h õm bi]	Weak form. Bilabial assimilation
2. "You <u>can be</u> a lady to watch"	[k ^h õm bij]	Weak form. Bilabial assimilation
3. "You can <u>can't catch</u> me (be)cause I'm a pee-wee-man"	[^h kãnʔ k ^h ætʃ]	Close juncture with glottal stop
4. * "Say, (.) Mummy you <u>can be</u> a vet"	[ɣõm bij]	Weak form. Bilabial assimilation
5. "And you <u>can be</u> little animal"	[k ^h õm bi]	Weak form. Bilabial assimilation
6. * "You can <u>just</u> scratch your back, you can <u>be</u> a window-cleaner"	[k ^h ãŋ] [k ^h ãŋm bij]	Unstressed. No vowel reduction. Bilabial assimilation
7. "So I <u>can be</u> a snake"	[k ^h ãŋm ^h bij]	Unstressed. Stron No vowel reduction. Bilabial assimilation
8. "And, (0.5) you <u>can be</u> a vet you can be"	[kõm bij]	Weak form. Bilabial assimilation
9. "And (0.5) you can be a vet you <u>can be</u> "	[kõm bi]	Weak form. Bilabial assimilation
10. * "And Mummy, you <u>can be</u> a Mummy"	[k ^h õm bij]	Weak form. Bilabial assimilation
11. "You <u>can get</u> a hospital"	[k ^h õŋ gɛt]	Weak form. Velar assimilation
12. "You <u>can go</u> (0.5) nee-naw nee-naw all the way and just park just there Mum"	[^h kãŋ ^h gəʊ]	Stressed and syllable-timed. Velar assimilation
13. * "Mummy, you <u>can be</u> ambulance, ambulance xxx"	[kə bij]	Weak form. Close juncture with no final nasal
14. * "Mummy you <u>can be</u> along and you can drive a lorry"	[k ^h õm bij]	Weak form. Bilabial assimilation
15. * "You <u>can be</u> a vet say "what's wrong?" "	[k ^h õm bij]	Weak form. Bilabial assimilation
16. "Mum, you <u>can be</u> a crocodile again couldn't we?..."	[k ^h õmij]	Weak form. Possibly combined regressive bilabial assimilation and progressive nasal assimilation
17. "There was/wasn't (.) you <u>can make</u> a friendly crocodile"	[k ^h m ^h meɪk]	Weak form. Bilabial assimilation
18. "...Mummy, you <u>can</u> (.) <u>be</u> a doctor couldn't you? A vet	[k ^h õm (.) ^h bi]	Weak form. Bilabial assimilation, despite pause at word boundary

couldn't you?"		
19. * "you you <u>can be</u> your friends"	[kɔ̃m bi]	Unstressed. Vowel alteration. Bilabial assimilation
20. "you <u>can be</u> a vet, (.) Apple"	[k ^h ɔ̃m bi]	Weak form. Bilabial assimilation
21. "You <u>can be</u> a vet and I can crawl away"	[k ^h ɔ̃m bi]	Weak form. Bilabial assimilation
22. * "You can be a vet and I can crawl away"	[kæ-n 'kɹʌʊ]	Unstressed. Vowel alteration. No assimilation

4.9. Tables Showing Thomas's Realisations of Can and Can't at Potential Assimilation Sites Sampled at Age 3;8

Note: *can* and *can't* did not occur at any potential assimilation sites at age 3;8;1 or 3;8;2

Table 35. Thomas's Realisations of *Can* and *Can't* at Age 3;8;3

Utterance	Realisation	Description of Phenomena
1. * “And then you <u>can collect(?)</u> ”	[k ^h æŋ; k ^h ɒ ^l ɛtt]	Unstressed. No vowel reduction. Velar assimilation
2. “And you <u>can...</u> ”	[^l k ^h æŋ ^v]	Stressed. Immediately follows utterance 1. Final nasal has some velar features
3. “You <u>can watch</u> ”	[k ^h æm 'wɒtʃ]	Unstressed. No vowel reduction. Bilabial assimilation prior to [w]
4. “This <u>can go dud-dud</u> ”	[k ^h æ gəʊ]	Unstressed. No vowel reduction. Close juncture with no final nasal
5. “Course they <u>can</u> . They go (hissing noises)”	[^l k ^h æŋ neɪ]	Stressed. Gemination of [n] across word boundary
6. “You <u>can say</u> “Oh dear””	[k ^h æŋ ^h seɪj]	Stressed
7. “Please <u>can you hold that Mummy?</u> ”	[k ^h æn ju]	Weak form
8. “ <u>can I</u> have that now?”	[k ^h æŋ aɪj]	Unstressed. No vowel reduction
9. “ <u>Can't use</u> that”	[k ^h æn? 'jʊz̥]	Unstressed. Close juncture with glottal stop
10. * “We need dustbin bag to be full-up yet, (.) and then you <u>can push</u> me along”	[k ^h æŋ 'pʊʃ]	Unstressed. No vowel reduction. Open juncture
11. * “And you <u>can be little girl</u> watching the dustbin-men”	[k ^h æm mɪj 'ɪkʊʃ]	Unstressed. No vowel reduction. Combined bilabial assimilation and progressive nasal assimilation, producing gemination
12. “Need to tip some rubbish, so we <u>can xxx</u> ”	---	Inaudible owing to extraneous noise
13. “But I <u>can't sing</u> it”	[^l k ^h æn? sɪŋ]	Stressed. Close juncture with glottal stop
14. “I <u>can't (re)member</u> it”	[k ^h əm 'mem]	Unstressed. Bilabial assimilation.

		Transcription breaks off because final syllable of <i>(re)member</i> inaudible
15. “But when you get out you <u>can have</u> one (0.5) for tea and one for (0.5) lunch. (O)kay?”	[k ^h æ̃n 'æv]	Unstressed. No vowel reduction
16. * “ <u>Can I</u> have one more now, (.) (be)cause there’s lots of (th)em”	[k ^h æ̃n aɪ]	Unstressed. No vowel reduction
17. “Course she <u>can</u> ”	[^l k ^h æ̃n]	Stressed
18. “When there’s another one we <u>can</u> ”	[k ^h æ̃n]	Unstressed
19. “And you <u>can fill</u> up my truck, (.)and I will drive”	[k ^h æ̃m 'fɪl]	Unstressed. Partial vowel reduction towards weak form
20. “Mummy, phone hospital-man to drive (.) ambulance and I <u>can be</u> a lorry”	[k ^h æ̃m bi:]	Unstressed. No vowel reduction. Bilabial assimilation.
21. * “Um I <u>can see</u> (..) (noise, possibly hiccup) rubbish from here”	[^l kæ̃n 'ʃi]	Unstressed. No vowel reduction
22. “I <u>can be</u> a man running”	[k ^h ə̃m mi:]	Weak form. Combined bilabial assimilation and progressive nasal assimilation, producing gemination
23. “And I <u>can</u> (0.5) fire in the fire over there”	[^l k ^h æ̃m· (0.5) 'fajəɪ]	Stressed. Final bilabial nasal in anticipation of [f] despite brief pause at word boundary. Features of place assimilation, although not exact assimilation
24. “I <u>can</u> ’t”	[^l k ^h ɑ̃n(C,Vls)]	Stressed
25. “You <u>can make</u> me better and say, “lie down little snake” ”	[kə̃m meɪʔ]	Weak form. Bilabial assimilation
26. * “but then, (.) and then he <u>can post</u> letters”	[^l k ^h æ̃n pəʊst ^l]	Stressed. Open juncture
27. “Please <u>can I</u> help?”	[k ^h ɪ 'aɪ]	Weak form
28. “You <u>can do</u> those too, and I will be walking Okay?”	[kx̃ɪn̩ dʊ]	Unstressed. Vowel alteration, possibly towards a weak form

29. * “Mummy, I will open the door and you <u>can</u> (.) <u>fly</u> on into my back door, (0.5) okay?”	[k ^h æ̃n (.) 'fla]	Stressed, but not tonic. Pause at word boundary
30. * “You <u>can</u> (0.5) <u>fly</u> on/ <u>them</u> back into boxes”	[k ^h æ̃ŋ (0.5) 'fləʊðm]	Unstressed. No vowel reduction. Brief pause at word boundary. Final velar nasal, but no potential velar assimilation site

Table 36. Thomas’s Realisations of *Can* and *Can’t* at Potential Assimilation Sites at Age 3;8;4

Utterance	Realisation	Description of Phenomena
1. “Oh now we <u>can</u> <u>bake</u> ”	[k ^h ə 'be:ɪk ^{jh}]	Weak form. Close juncture with no final nasal. Falsetto voice quality throughout utterance
2. “I <u>can</u> , (..) (be)cause) (...) my ears are there”	[k ^h æ̃n (..) kə:z]	Stressed. Open juncture with long pause at word boundary
3. * “There, <u>can</u> <u>put</u> on my head”	[kæ̃m pʊt ^h]	Unstressed. No vowel reduction. Bilabial assimilation
4. “I know what we <u>can</u> <u>put</u> on as well”	[kʌ̃m p ^h ʊt ^h]	Unstressed. Partial vowel reduction towards weak form. Bilabial assimilation

Table 37. Thomas’s Realisations of *Can* and *Can’t* at Potential Assimilation Sites at Age 3;8;5

Utterance	Realisation	Description of Phenomena
1. “I <u>can</u> <u>blow</u> on this”	[kxə̃ bləʊ]	Weak form. Close juncture with no final nasal

4.10. Tables Showing Thomas’s Realisations of Can and Can’t at Potential Assimilation Sites Sampled at Age 3;9

Table 38. Thomas’s Realisations of *Can* and *Can’t* at Potential Assimilation Sites at Age 3;9;1

Utterance	Realisation	Description of Phenomena
1. “And you <u>can call</u> the fire brigade”	[kənʃ 'kʰɔl]	Weak form. Open juncture with consonant insertion

Table 39. Thomas’s Realisations of *Can* and *Can’t* at Potential Assimilation Sites at Age 3;9;2

Utterance	Realisation	Description of Phenomena
1. * “You <u>can call</u> (th)em shoes actually (be)cause (.) shop-man called xxx shoes”	['kʰǎn 'kʰɔl]	Stressed. Open juncture
2. “Look, I <u>can (0.5) cut</u> ”	[kʰŋ (0.5) 'kʰʊt]	Weak form. Open juncture with brief pause
3. “I <u>can cut</u> something”	[kǎn 'kʰəʔ]	Weak form. Open juncture
4. “You <u>can pull</u> (0.5) (intake of breath) a heart off (be)cause it’s your favourite”	[kʰǎn pʰʊ]	Unstressed. No vowel reduction. Open juncture
5. “You <u>can pull</u> it off”	[kʰǎm pʰʊ]	Unstressed. No vowel reduction. Bilabial assimilation
6. “I <u>can’t get</u> them”	[kǎŋ 'gɛʔ]	Unstressed. Velar assimilation

Table 40. Thomas's Realisations of *Can* and *Can't* at Age 3;9;3

Utterance	Realisation	Description of Phenomena
1. * "You know what xxx? You know what I <u>can see</u> "	[k ^h æ̃n 'ʃi]	Unstressed. No vowel reduction
2. "Can I have one I said?"	[kə̃ 'aij]	Weak form. No final nasal
3. "You <u>can look</u> as well"	[k ^h ə̃ 'lʊk]	Weak form
4. "Look Mummy, you <u>can look</u> as well, (.) you want to"	[kæ̃n lʊk ^h]	Unstressed. Partial vowel reduction towards weak form
5. "Mummy, I <u>can</u> xxx"	[gæ̃n]	Unstressed. No vowel reduction. Following word could not be transcribed because inaudible
6. "Can't read it"	k ^h [ɔ̃n? 'viɔ̃]	Unstressed.
7. "Can you hear my engine?"	[k ^h æ̃n ij 'iə]	Unstressed. No vowel reduction
8. "I can't eat that one (be)cause it's all soggy"	[^h k ^h ɔ̃n? i?]	Stressed
9. "Please <u>can I have</u> a hula-hoop please?"	[xæ̃nn ə̃ ə̃v]	Unstressed. Strong. No vowel reduction. Very short vowels, so that the three words appear to merge into one phonetically
10. "Can you look after it?"	[^h k ^h æ̃ jʊ]	Stressed. No vowel reduction. No final nasal
11. "And I <u>can be</u> the fireman (...) n: steel"	[k ^h ə̃bi]	Weak form. Combined bilabial assimilation and progressive nasal assimilation. Resulting consonant is a hypernasal [b] or a hyponasal [m]. Not gemination, as consonant too short. Possibly has a cold
12. "You <u>can't see</u> them"	[^h kxän? 'tʃi:]	Stressed. Close juncture with glottal stop. Sing-song intonation
13. "You <u>can have</u> my hosepipe a treat"	[k ^h ə̃n æv]	Weak form
14. "Actually it's mine, but you <u>can have</u> it for a while"	[xæ̃di 'hæv]	Unstressed. No vowel reduction. /n/ in <i>can</i> consonant either a hypernasal [d] or a hyponasal [n]. Additional final vowel, may have been a false start

Table 41. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;9;4

Utterance	Realisation	Description of Phenomena
1. "You <u>can go</u> in the back with the lorries and cars"	--	Missing sound file

Note: two occurrences of *can* were detected at potential assimilation sites at age 3;9;5.

However, both of these may equally have been realisations of the word *could*. These utterances have not been included in the data analysis because of this uncertainty. A control analysis was conducted for *could* at the same age. Six occurrences were found, one of which equally may have been *can*.

4.11. Tables Showing Thomas’s Realisations of Can and Can’t at Potential Assimilation Sites Sampled at Age 3;10

Table 42. Thomas’s Realisations of *Can* and *Can’t* at Potential Assimilation Sites at Age 3;10;0

Utterance	Realisation	Description of Phenomena
1. * “When I finished doing this printings, we <u>can</u> (0.5) <u>play</u> fire-engines”	[k ^h ɔ̃m (0.5) ˈpleɪ]	Weak form. Bilabial assimilation, despite brief pause at word boundary
2. “You <u>can</u> (.) <u>put</u> it in the brush and squish around”	[ˈk ^h æ̃n (.) ˈp ^h ʊr]	Stressed. Open juncture
3. “Stacking the saucers up <u>can</u> <u>be</u> great fun”	[k ^h ʌ̃m bɪ]m bɪ]	Possible partial vowel reduction towards weak form. Bilabial assimilation

Table 43. Thomas’s Realisations of *Can* and *Can’t* at Potential Assimilation Sites at Age 3;10;1

Utterance	Realisation	Description of Phenomena
1. “So I <u>can</u> mix”	[k ^h æ̃ˈm...ɪks]	Unstressed. No vowel reduction. Bilabial assimilation and slight gemination

Table 44. Thomas's Realisations of *Can* and *Can't* at Age 3;10;2

Utterance	Realisation	Description of Phenomena
1. "Mummy, look at that big hole I <u>can</u> (0.5) <u>see</u> "	[k ^h ɔ̃n (0.5) 'tʃi]	Unstressed. Partial vowel reduction towards a weak form
2. "Mummy you/Mummy know what I <u>can see</u> through this big hole?"	[k ^h æ̃n 'si]	Stressed
3. "I <u>can't see</u> "	[k ^j ɔ̃n? 'ʃi?i]	Weak form of <i>can't</i>
4. "I <u>can't</u> ..."	[kɔ̃t]	Weak form of <i>can't</i> . Utterance unfinished because interrupted by mother
5. * "Mummy, <u>can't see it</u> "	[kɔ̃? 'ʃij]	Unstressed. Partial vowel reduction towards a weak form
6. * "mm <u>can't can't hear you</u> "	[k ^h ɔ̃n? 'hɪ:]	Stressed. Shouting
7. " <u>Can't hear you</u> "	[k ^h ɔ̃n? 'hɪ:]	Stressed. Close juncture with glottal stop. Shouting
8. * " <u>Can I</u> mess with this card?"	[k ^h æ̃ ai]	Unstressed. No vowel reduction
9. " <u>Can I</u> (.) play with that nice..."	[k ^h æ̃ 'ai]	Unstressed. No vowel reduction
10. "I <u>can't see</u> the apples"	[g ^h ɔ̃n? tsi]	Unstressed
11. * "It's (.) Springtime, and (.) er Auntie Mabels (.) is on at Springtime, and Mrs. Plattford said (.) "You <u>can play</u> out at Springtime"	[g ^j ɔ̃m pleij]	Weak form. Merging of <i>you</i> and <i>can</i> . Bilabial assimilation
12. "Yes, and then I <u>can knock</u> on the window"	[xɔ̃n 'nɔk]	Weak form
13. " <u>Can I</u> (..) can I give you (.) erm"	[k ^h æ̃n 'ai:]	Unstressed. No vowel reduction
14. "Can I (..) <u>can I</u> give you (.) erm"	[k ^h æ̃n 'ai]	Stressed. Lengthened vowel
15. " <u>Can I</u> (..) erm just....."	[k ^h æ̃n 'ai]	Unstressed. No vowel reduction
16. "No <u>can you</u> have a bit of it"	[k ^h æ̃n 'ju]	Unstressed. Partial vowel reduction towards weak form
17. "Please <u>can I</u> have Eeyore cake please?"	[k ^h ɔ̃n aij]	Unstressed. Partial vowel reduction towards a weak form
18. "Um, I <u>can't eat</u> any more jam"	[k ^h ɔ̃n 'iɖ]	Unstressed
19. "Please <u>can I</u> have, um a	[k ^h æ̃n aij]	Unstressed. No vowel reduction

bit of that crunchy bit?”		
20. “Open the back door and I <u>can hear</u> ”	[kʰæn iʌ]	Unstressed. No vowel reduction
21. * “You <u>can (re)member</u> it”	[kʰæ̃n 'mɛməv]	Unstressed. No vowel reduction. Open juncture
22. “ <u>Please can (a)nother</u> bit?”	[pi xɛn 'nɔvə]	Unstressed. Phonetic reduction throughout whole utterance
23. “(be)cause it <u>can’t know</u> where’s the stairs”	[ʰkʰãñʔ nəv]	Stressed
24. * “Oh please <u>can I</u> have it?”	[(C,v)lɔʃn aɪ]	Weak form
25. “ <u>Can I</u> (.) have two of that red one?”	[kʰæ̃n 'aɪ]	Unstressed. No vowel reduction
26. ”Please <u>can I have</u> another bit”	[kʰə'leɪv]	Weak form. Phonetic reduction throughout utterance
27. “Please <u>can I</u> have the blue bookbag?”	[Tʰæ̃n əj]	Unstressed. No vowel reduction
28. * “Excuse me, <u>Can you</u> shut your ears (be)cause it’s this the big crinkling sound?”	[kʰæ̃n jɪ]	Unstressed. No vowel reduction
29. “xxx <u>Can’t see</u> her face”	[ʊ'wãdʔ ʃij]	Stressed
30. “ <u>Can’t get</u> past”	[ʰkʰãñʔ gɛʔ]	Stressed. Velar assimilation
31. “ <u>Can’t see</u> ”	[kʰãñʔ tɕi]	Weak form of <i>can’t</i> . Close juncture with glottal stop
32. “Mummy, (..) <u>please can I</u> have that machine where you blow big, big, big bubbles?”	[ʰpliẽn aɪ]	Weak form. Merging of <i>please</i> and <i>can</i>
33. “You <u>can’t see</u> it (be)cause (.) Mummy, it’s all shade up”	[kʰãñ 'ʃijʰ]	Unstressed. Short vowel
34. “Er er (0.5) I <u>can see</u> the pictures through here”	[kʰæ̃n 'ʃi]	Unstressed. No vowel reduction
35. * “ <u>can</u> ”	[ʰcãñ]	Stressed
36. “I <u>can see</u> Berta”	[kʰæ̃n ʃi]	Unstressed. No vowel reduction
37. “Mummy, excuse me <u>can</u> I (.) um get a bookbag?”	[ʰkʰæ̃n aɪ]	Stressed
38. “ <u>Can you</u> hold it”	[ʰkʰæ̃ñ juw]	Stressed

Table 45. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;10;3

Utterance	Realisation	Description of Phenomena
1. " <u>Can't</u> get up"	[kʰɔ̃ŋ gɪʈ]	Weak form of <i>can't</i> , or putting on funny voice. Velar assimilation
2. "I <u>can</u> get it"	[kʰɔ̃ŋ ˈgɛʈʰ]	Weak form. Velar assimilation
3. "I <u>can</u> go round here"	[kʰɛ̃n: ˈgəʊ]	Unstressed. Vowel alteration. Open juncture
4. "I <u>can't</u> get the others out"	[kʰɔ̃nʔ gɛʈʰ]	Stressed. Open juncture

Note: although two occurrences of *can* occurred at potential assimilation sites at age 3;10;4, neither could be included in the analysis. The first may have been an instance of *could* and was therefore eliminated. The second instance could not be transcribed owing to disruption to the sound file.

4.12. Tables Showing Thomas's Realisations of Can and Can't at Potential Assimilation Sites Sampled at Age 3;11

Table 46. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;11;2

Utterance	Realisation	Description of Phenomena
1. "Yeah, and he's forgotten it, but you <u>can keep</u> it"	[k ^h ʔn̩ ˈk ^h i:p]	Weak form. Open juncture

Table 47. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 3;11;3

Utterance	Realisation	Description of Phenomena
1. * "Then I <u>can be</u> flying super-xxx"	[k ^h ʔ ˈbi]	Weak form. Close juncture with no final nasal
2. "Hey! "I <u>can make</u> myself (...) um be alive again"	[xəˈmeɪʔ]	Weak form. Ambisyllabic nasal at word boundary. Either bilabial assimilation or no final nasal in <i>can</i> and therefore no assimilation. Unsure, so unclassifiable
3. " <u>Can go</u> baa now"	[hŋ ˈgəʊ]	Weak form. Velar assimilation
4. "I got something (...) you <u>can</u> you <u>can make</u> (...) pet"	[gɪn] [k ^h ʔm ˈmeɪk ^x]	False start with no vowel reduction and no assimilation. Revision with weak form and bilabial assimilation
5. "Now <u>you can go</u> now"	[ɪ h ⁱ ŋ ˈgəʊ]	Weak form. Velar assimilation

Table 48. Thomas's Realisations of *Can* and *Can't* at Age 3;11;5

Utterance	Realisation	Description of Phenomena
1. * “xxx <u>Can</u> I weigh it”	[k ^h ɪn 'aɪ]	Unstressed. Short vowel gives some features of a weak form
2. “You <u>can</u> tip it in”	[ˈgɔ̃n 'tʰɪp ^h]	Stressed, perhaps through vowel lengthening. Schwa vowel, similar to weak form
3. “ <u>Can</u> I have some more?”	[kə aɪ]	Weak form
4. “Mummy, <u>can</u> I have some more”	[kɔ̃n ə 'æv]	Weak form. Immediate repetition of last utterance
5. “ <u>Can</u> I have some more of this with a spoon?”	--	Not sufficiently audible for transcription
6. “ <u>Can</u> I have some more?”	[m̩ ə 'æ]	Weak form. Creaky voice throughout utterance
7. “I <u>can't</u> do it”	[k ^h ʌn? 'dʊw]	Unstressed. Close juncture with glottal stop
8. “ <u>Can</u> I do that”	[ˈk ^h æ̃n äɪ]	Stressed, but with vowel features of a weak form. Putting on a funny voice
9. “ <u>Can</u> I?”	[k ^h æ̃n 'aɪ]	Stressed. Immediately following previous “can I do that?”
10. “You <u>can</u> do the jelly-babies”	[k ^h ɔ̃n dʊ]	Weak form
11. “I <u>can</u> manage”	--	Not sufficiently audible for transcription
12. “ <u>Can</u> I have this one?”	[x ⁿ 'aɪ]	Partially devoiced weak form
13. * “Mummy, <u>can</u> I have xxx?”	[x ^l æ̃n aɪ]	Unstressed. No vowel reduction
14. “Please <u>can</u> I have this one?”	[x ^l æ̃ æv]	Stressed. No vowel reduction. Merging of ‘I’ and ‘have’
15. “ <u>Can</u> I eat them?”	[k ^h ɔ̃n äɪ]	Weak form
16. “And they <u>can</u> climb up my arm if they want”	[k ^{jh} ɔ̃ŋ 'k ^l lɑ̃ɪm]	Weak form. Velar assimilation
17. “Mum, <u>please can</u> I have that one?”	[ˈpli mə əz]	Unstressed. Phonetic reduction and merging of “can I have”
18. “Please <u>can</u> I have that one?”	[k ^l æ̃ŋ]	Unstressed. Phonetic reduction and merging of “can I have”
19. * “And <u>can</u> I have (..) the black hair Kira?”	[ˈk ^h æ̃n ə]	Stressed
20. “You <u>can</u> have (0.5) any of them, you can (.) choose”	[k ^h ɔ̃n 'æv]	Weak form

21. “You can have (0.5) any of them, you <u>can</u> (.) <u>choose</u> ”	[x̩n: tʃuz]	Weak form
22. “You <u>can</u> <u>have</u> it”	[k ^h ɔ̃n 'æv]	Weak form
23. * “Oh you <u>can</u> <u>have</u> (..) this if you want?”	[kɔ̃n æv]	Weak form
24. “Please <u>can</u> <u>you</u> have it, (.) can I have a lift in your truck?”	[ˈplɪʃæ̃n jə]	Unstressed. Partial vowel reduction towards weak form
25. “Please can you have it, (.) <u>can</u> I <u>have</u> a lift in your truck?”	[k ^h æ̃n æv]	Unstressed. Partial vowel reduction towards weak form

Note: no realisations of *can* or *can't* were sampled at age 3;11;6 owing to incomplete transcription of the sound file.

4.13. Tables Showing Thomas's Realisations of Can and Can't at Potential Assimilation Sites Sampled at Age 4;0

Table 49. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 4;0;2

Utterance	Realisation	Description of Phenomena
1. "No, I <u>can't</u> <u>manage</u> my drink"	[^h k ^h ãm 'mãẽnɪd͡ʒ]	Stressed. Bilabial assimilation and gemination
2. "Erm, I <u>can</u> <u>come</u> home if I want to"	[k ^h ãŋ 'k ^h ũm]	Weak form. Velar assimilation

Table 50. Thomas's Realisations of *Can* and *Can't* at Age 4;0;4

Utterance	Realisation	Description of Phenomena
1. "Er (0.5) you <u>can</u> be the passenger"	[k ^h ə 'bi]	Weak form. Close juncture with no final nasal
2. "What <u>can</u> I do for you"	[k ^h ə̃ ð̃ aɪ]	Weak form
3. "You <u>can</u> wait on that (..) platform"	[k ^h ə 'waɪts ^h]	Weak form. No final nasal
4. "You <u>can</u> be elephant too"	[k ^h ə biʃ]	Weak form. Close juncture with no final nasal
5. "xxx You <u>can't</u> do it"	[k ^h ən̩ 'dʊw]	Unstressed. Close juncture with final nasal
6. "Cats <u>can't</u> do anything yet"	[k ^h ən̩? ɹɪw]	Unstressed. Close juncture with glottal stop
7. " <u>Can't</u> they Mum?"	[^h k ^h ən̩? ɹeɪ]	Stressed. Close juncture with glottal stop
8. " <u>I</u> can"	[^h aɪ]k ^h æ̃n̩]	Stressed
9. * " <u>can</u> can you make it into a fish?"	[kʌm̩ ɡæ̃n̩ jü]	Stressed. False start and correction with different realisations
10. * "You <u>can</u> say "that train's been long time" "	[k ^h ʊ̃ 'sɛɪ]	Unstressed. Possible partial vowel reduction towards weak form
11. "Here you <u>can</u> sit with (.) Mum"	[k ^h æ̃n̩ 'sɪt ^h]	Unstressed. No vowel reduction
12. "I <u>can</u> be the police-man as well"	[k ^h ə bi]	Weak form. No final nasal
13. "And you <u>can</u> say "Oh dear! He's got a poorly leg" "	[k ^h ə ʃeɪɪ]	Weak form. No final nasal
14. " <u>Can</u> you look after my hammer?"	[kən̩ jʊ]	Weak form
15. "You <u>can</u> keep them"	--	Not sufficiently audible for transcription
16. "You <u>can</u> share my letter"	[gə 'ʃeɪ]	Weak form
17. " <u>Can</u> I go over there?"	[k ^h ən̩ əɪ]	Weak form
18. " <u>Can't</u> see it"	[k ^h ən̩'tsɪj]	Unstressed. Partial vowel reduction towards weak form. Affrication across word boundary
19. " <u>Can't</u> see"	[k ^h ən̩'tsɪ]	Unstressed. Affrication across word boundary

Table 51. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 4;0;7

Utterance	Realisation	Description of Phenomena
1. "If he <u>can</u> , (..) if we <u>can</u> <u>go</u> outside"	[k ^h ǎn̩] [kǎŋ gəʊw]	Weak form. Open juncture false start. Revision with velar assimilation
2. "I <u>can go</u> schhhooo"	[k ^h ǎ 'gəʊ]	Weak form. Close juncture with no final nasal
3. * "You <u>can go</u> down and then down"	[xǎŋ 'gəʊ]	Weak form. Velar assimilation
4. "I <u>can't</u> <u>get</u> past"	[k ^h ǎŋʔ 'gɛʔ]	Stressed. Velar assimilation

Table 52. Thomas's Realisations of *Can* and *Can't* at Potential Assimilation Sites at Age 4;0;9

Utterance	Realisation	Description of Phenomena
1. "No I <u>can't</u> Mum"	[k ^h ǎnʔ mǔm]	Close juncture with glottal stop

4.14. Notes on Transcription Discrepancies

Utterances marked by asterisks indicate that there is a discrepancy between the interpretations of the current author and the original transcribers. Some of these discrepancies result from the denotation of a schwa in the Chat transcript when the transcriber was unable to identify a function word, but the current author could confidently identify it. Many of the discrepancies involved issues of intelligibility, where the current author either identified words previously marked unintelligible (xxx), or could not identify words marked in the Chat transcripts. The nature of each discrepancy is given below with reference to the Chat transcripts available from the CHILDES database.

1. Age 3;1;2: “I can’t wear it, I can’t” reads “<I can't wear> [/] I can't” in the Chat transcript (see line 1157).
2. Age 3;2;6: “I need (a)nother batteries I can’t get out of here” reads “another batterys I can't get out here” in the Chat transcript (see line 1674).
3. Age 3;3;2: “Can’t go back back again” reads “can go back [/] back again” in the Chat transcript (see line 563).
4. Age 3;3;4: “Then you can be a Daddy” reads “then can be a@p Daddy” in the Chat transcript (see line 1074).
5. Age 3;3;4: “I can do, I can do it” reads “<I can> [<] [/] I can do it” in the Chat Transcript (see line 1209).
6. Age 3;3;4: “Oh no, I need that because you can be the lady looking for number one” reads “oh no I need that (be)cause you can be a lady looking for number one” (see line 1916).

7. Age 3;3;4: “I can be a parcel” reads “I can be postman” in the Chat transcript (see line 1985).

8. Age 3;3;6: “Erm, you think he can (.) cry and he get his hat back?” reads “erm do you think he can cry and get his hat back” in the Chat transcript (see line 401).

9. Age 3;3;6: “Ah you can, I can be, you can be a bear” reads “you can [//] I can be [//] you can be a bear” in the Chat transcript (see line 1677).

10. Age 3;4;0: “It means dustbin wagons just can't go through it, and cars, and big dustbin wagons” reads “it means dustbin wagons can't go through and cars and big dustbin wagons” in the Chat transcript (see line 264).

11. Age 3;4;2: “And then, just on here, then, can sprinkle it can't you” reads “and then just on here then 0you [*] can sprinkle it (.) you” in the Chat transcript (see line 909).

12. Age 3;4;2: “Can maybe do some more” reads “can <please we> [*] do some more?” in the Chat transcript (see line 1282)

13. Age 3;4;2: “And I can” reads “&da can” in the Chat transcript (see line 1528).

14. Age 3;4;3: “I can be a low wagon, driving a big man (be)cause I'm a dustbin xxx” reads “I can be a low [?] wagon driving a big man (be)cause I'm a dustbin <want to> [?] drive it” in the Chat transcript (see line 1300).

15. Age 3;4;3: “I can be a xxx you can be a fireman” reads “<I [?] can be> [//] <there's a> [//] can be a fireman” in the Chat transcript (see line 1919).

16. Age 3;5;3: “And I can eat (th)em” reads “and I can eat some” in the Chat transcript (see line 1450).
17. Age 3;5;3: “And put (th)em in a big box and then you can eat ‘em/some” reads “I put them in the big boxes there and they can eat them” in the Chat transcript (see line 1451).
18. Age 3;5;5: “And you can’t, (.) you can, (.) go (..) call for policeman can’t you?” reads “<and you [?] can't> [<] [//] he can go <call for> [?] policeman ,, can't you?” in the Chat transcript (see line 509).
19. Age 3;6;2: “Teletubbies now can I watch?” reads “xxx Buzz_Lightyear now can I watch?” in the Chat transcript (see line 203).
20. Age 3;6;2: “And you can stay there for ever and ever and ever and ever” reads “and [/] and you can stay there forever and ever and ever” in the Chat transcript (see line 402).
21. Age 3;6;2: I can (.) keep, (.) I can have that one” reads “I can have that one” in the Chat transcript (see line 538).
22. Age 3;6;2: “Then I can (.) change xxx” reads “then I can change (.) um + ...” in the Chat transcript (see line 766).
23. Age 3;6;2: “And normally when a clock gets to bottom can” reads “and xxx when 0the [*] clock gets 0to [*] 0the [*] bottom can” in the Chat transcript (see line 1558).
24. Age 3;6;3: “I can’t get any no” reads “I can't get xxx” in the Chat transcript (see line 744).

25. Age 3;6;4: “Erm you can put it through that little slot won’t you?” reads “erm you can put it through that little slot ,, can't you?” (see line 64).

26. Age 3;6;4: * “Then you can get it” reads “then you can pick it up” In the Chat transcript (see line 231).

27. Age 3;6;4: “You can slot (th)em through there I can post (th)em in” reads as two separate utterances “you can slot them through there” “I can put them in” in the Chat transcript (see lines 450 and 451).

28. Age 3;6;4: “Then I can be, I can be a seller-man can’t you?” reads “I [/] I can be a sellerman@c ,, can't you [*]?” in the Chat transcript (see line 585).

29. Age 3;7;1: “Mummy I can be a man (.) do (.) it happy birthday to” reads “Mummy , I <can be a man > [>] (.) do happy birthday do me happy birthday to” in the Chat transcript (see line 415).

30. Age 3;7;1: “Mummy, you can put it through there and say (.) I shout toot toot” reads “Mummy , you can put it through there and say I 0will [*] shout hoot^hoot” in the Chat transcript (see line 586).

31. Age 3;7;1: “Ah you can’t get me” reads “you can't get me .” in the Chat transcript (see line 764).

32. Age 3;7;2: “Can’t catch me (be)cause I’m the poeey-man” Reads “you can't catch because I'm the poeey^man@c” in the Chat transcript (see line 232).

33. Age 3;7;2: “Can’t catch me (be)cause) I’m a gingerbread candle” reads “you can't catch me because I'm a gingerbread^candle@c” in the Chat transcript (see line 256).

34. age 3;7;2: “You can’t catch me (be)cause I’m the/a gingerbread lady” reads “you can't catch me because I'm the gingerbread^lady@c” in the Chat transcript (see line 590).
35. Age 3;7;2: “You can, (0.5) you can bake_something” reads “*CHI: you [/] you can bake something” in the Chat transcript (see line 968).
36. Age 3;7;2: “Mummy, you can roll some out and I can pinch it” reads as two separate utterances “Mummy , you can roll it out .” “I can pinch it” in the Chat transcripts (see lines 1492 and 1493).
37. Age 3;7;2: “You can roll it and/out I can pinch it” reads ”Mummy , you can roll it out and I can pinch it” in the Chat transcript (see line 1502).
38. Age 3;7;2: “You can put it out on the ground can’t you?” reads ”you can put it out on the ground ,, couldn't you?” in the Chat transcript (see line 1513).
39. Age 3;7;2: “And I can pinch it” reads “I can pinch it” in the Chat transcript (see line 1532).
40. Age 3;7;2: “Mummy, you can make something what you making?” reads as two separate utterances “Mummy , you can make something” “what 0are [*] you making?” in the Chat transcript (see lines 1566 and 1567).
41. Age 3;7;3: “And now we can play outside can’t we Farty-Pants?” reads “and now we can play outside ,, couldn't we , farty pants?” in the Chat transcript (see line 271).
42. Age 3;7;3: “Can I see you (a) big bang?” reads “can 0you [*] see a big bang?” in the Chat transcript (see line 638).

43. Age 3;7;3: “Can I keep ...” reads “can I xxx” in the Chat transcript (see line 814).
44. Age 3;7;3: “You can play with it you like” reads “you can play with it if you like” in the Chat transcript (see line 1562).
45. Age 3;7;4: “I can be a big/bin man” reads “and I can be a big man” in the Chat transcript (see line 27).
46. Age 3;7;4: “You can to, you can be a man can’t you” reads “<you can say> [//] you can be a man ,, can't you?” in the Chat transcript (see line 184).
47. Age 3;7;4: “You can be Daddy and then you can be a Mummy again” reads as two separate utterances “<you can> [<] be Daddy [?]” “you can be a Mummy again” in the Chat transcript (see lines 297 and 298).
48. Age 3;7;4: “Erm (.) mm (.) this one could be away and you can crash couldn’t you?” reads “erm this one could be away and you can crash ,, couldn't you?” in the Chat transcript (see line 306).
49. Age 3;7;4: “I can be a big grabber couldn’t I?” reads “Mummy [<] , I can be a big grabber@c ,, couldn't I?” in the Chat transcript (see line 492).
50. Age 3;7;4: “xxx You can built another one” reads “*you can build another one” in the Chat transcript (see line 934).
51. Age 3;7;4: “xxx You can come to my house to (..) play (.) with my big boulder” reads “you can call to my house to play with my big boulder” in the Chat transcript (see line 963).

52. Age 3;7;4: “And I can build them/on it” reads “you can build them” in the Chat transcript (see line 1045).

53. Age 3;7;5: “Say, (..) Mummy you can be a vet” reads “say <Mummy , you can be the vet”]” in the Chat transcript (see line 916).

54. Age 3;7;5: “You can just scratch your back, you can be a window- ” reads as two separate utterances “you can just scratch your back “ “you can be 0a [*] window cleaner” in the Chat transcript (see lins 919 and 920).

55. Age 3;7;5: “And Mummy, you can be a Mummy” reads “Mummy , you can be a Mummy” in the Chat transcript (see line 1055).

56. Age 3;7;5: “Mummy, you can be ambulance, ambulance xxx” reads as two separate utterances “Mummy , you can be +/” “ambulance xxx , Mummy” in the Chat transcript (see lines 1152 and 1154).

57. Age 3;7;5: “Mummy you can be along and you can drive a lorry” reads as two separate utterances “Mummy” ”you can move along and you can drive a lorry” in the transcript (see lines 1160 and 1162).

58. Age 3;7;5: “You can be a vet say “what’s wrong?”” reads ”You can be a vet” “say < what's wrong??” In the Chat transcript (see lines 1271 and 1272).

59. Age 3;7;5: “you you can be your friends” reads “those can be your friends” in the Chat transcript (see line 1471).

60. Age 3;8;3: “And then you can collect(?)” reads “you can xxx” in the Chat transcript (see line 17).

61. Age 3;8;3: “We need dustbin bag to be full-up yet, (.) and then you can push me along” reads “we need 0a [*] dustbin bag xxx full up yet and then you can push me around” in the Chat transcript (see line 705).

62. Age 3;8;3: “And you can be little girl watching the dustbin-men” reads “and you can be a little girl watching the dustbin men” in the Chat transcript (see line 730).

63. Age 3;8;3: “Can I have one more now, (.) (be)cause there’s lots of (th)em” reads “can I have one xxx now (be)cause there's lots of them” in the Chat transcript (see line 937).

64. Age 3;8;3: * “um I can see (..) (noise, possibly hiccup) rubbish from here” reads “I can see rubbish from here” in the Chat transcript (see line 1406).

65. Age 3;8;3: “but then, (.) and then he can post letters” reads “< and then > [/] and then he can post letter-s” in the Chat transcript (see line 95)

66. Age 3;8;3: “Mummy, I will open the door and you can (.) fly on into my back door, (0.5) okay?” reads “Mummy , I will open the door and you can # fly into my back door ,, Okay??” in the Chat transcript (see line 105).

67. Age 3;8;3: “You can (0.5) fly on/them back into boxes” reads “you can fly into box-s” in the Chat transcript (see line 108).

68. Age 3;8;4: “There, can put on my head” reads “”there I can put it on my head” in the Chat transcript (see line 842).

69. Age 3;9;2: “You can call (th)em shoes actually be)cause) (.) shop-man called xxx shoes” reads “you can call them shoes actually (be)cause shop man called them shoes” in the Chat transcript (see line 53)

70. Age 3;9;3: “You know what xxx? You know what I can see” reads “you know when I look 0at [*] Daddy you know what I can see?” in the Chat transcript (see line 126).
71. Age 3;10;0: “When I finished doing this printings, we can (0.5) play fire-engines” reads “when we've xxx painting we can play +/” in the Chat transcript (see line 40).
72. Age 3;10;2: “Mummy, can't see it” reads “Mummy , you can't see it” in the Chat transcript (see line 92).
73. Age 3;10;2: “mm can't can't hear you” reads “< < mmhm (.) I> [<] can't hear you> [=! shouting]” in the Chat transcript (see line 191).
74. Age 3;10;2: “Can I mess with this card?” reads “can I play [?] with this card?” in the Chat transcript (see line 210).
75. Age 3;10;2: “It's (.) Springtime, and (.) er Aunty Mabels (.) is on at Springtime, and Mrs. Plattford said (.) “You can play out at Springtime”” reads “it's springtime (.) and er (.) Auntie_Mabel's is on at springtime and Miss [//] Mrs_Plattford can play out at springtime” in the Chat transcript (see line 331).
76. Age 3;10;2: “You can (re)member it” reads “you can xxx it??” in the Chat transcript (see line 979).
77. Age 3;10;2: “Oh please can I have it?” reads “oy <please can I have it> [>]?” in the Chat transcript (see line 1069).
78. Age 3;10;2: “Excuse me, Can you shut your ears (be)cause it's this the big crinkling sound?” reads as two separate utterances “Mummy [<] , excuse me” “can you shut your ears (be)cause this the big crinkly sound” in the Chat transcript (see lines 1169 and 1170).

79. Age 3;10;2: “can” reads “I can” in the Chat transcript (see line 1666).
80. Age 3;11;3: “Then I can be flying super-xxx” reads “”then I can be 0a [*] flying Superman” in the Chat transcript (see line 101).
81. Age 3;11;5: “xxx Can I weigh it” reads “<can I> [//] can I weigh it?” in the Chat transcript (see line 72).
82. Age 3;11;5: “Mummy, can I have xxx?” reads “Mummy , <can I> [//] can I have this?” in the Chat transcript (see line 775).
83. Age 3;11;5: “And can I have (..) the black hair Kira?” reads “and can I have the black haired Kira?” in the Chat transcript (see line 938).
84. Age 3;11;5: “Oh you can have (..) this if you want?” reads “you can have these if you want” in the Chat transcript (see line 1047).
85. Age 4;0;4: “can can you make it into a fish?” reads “can you make it into a fish?” in the Chat transcript (see line 636).
86. 4;0;4: “You can say “that train’s been long time”” reads “you can say <that train's been a long time>” in the Chat transcript (see line 772).
87. Age 4;0;7: “You can go down and then down” reads “you can go down and down” in the Chat transcript (see line 1505).

4.15. Frequency Counts for Can and Can't at Ages Three and Four

Table 53. Frequencies of *Can* and *Can't* at age 3;0

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
3;0;0	1	6
3;0;1	5	6
3;0;2	0	2
3;0;3	6	3
3;0;7	0	1
Total frequency	12	18

Table 54. Frequencies of *Can* and *Can't* at age 3;1

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
3;1;0	2	2
3;1;1	3	1
3;1;2	4	3
3;1;3	4	3
3;1;4	1	6
Total frequency	14	15

Table 55. Frequencies of *Can* and *Can't* at age 3;2

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
3;2;2	10	4
3;2;3	3	4
3;2;4	3	6
3;2;5	9	11
3;2;6	8	12
Total frequency	33	37

Table 56. Frequencies of *Can* and *Can't* at Age 3;3

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
3;3;2	10	3
3;3;3	6	5
3;3;4	32	8
3;3;6	18	3
3;3;7	13	0
Total Frequency	79	19

Table 57. Frequencies of *Can* and *Can't* at age 3;4

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
3;4;0	16	5
3;4;1	9	8
3;4;2	21	3
3;4;3	25	5
3;4;4	6	1
Total frequency	77	22

Table 58. Frequencies of *Can* and *Can't* at age 3;5

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
3;5;2	17	8
3;5;3	2	0
3;5;4	10	11
3;5;5	33	10
Total frequency	62	29

Table 59. Frequencies of *Can* and *Can't* at age 3;6

Age	<i>Can</i> frequency	<i>Can't</i> Frequency
3;6;0	31	12
3;6;1	16	5
3;6;2	32	5
3;6;3	44	13
3;6;4	49	9
Total frequency	172	44

Table 60. Frequencies of *Can* and *Can't* at Age 3;7

Age	<i>Can</i> frequency	<i>Can't</i> Frequency
3;7;1	46	15
3;7;2	51	20
3;7;3	15	5
3;7;4	36	1
3;7;5	34	3
Total frequency	182	44

Table 61. Frequencies of *Can* and *Can't* at Age 3;8

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
3;8;1	7	4
3;8;2	1	0
3;8;3	27	4
3;8;4	26	5
3;8;5	10	0
Total frequency	71	13

Table 62. Frequencies of *Can* and *Can't* at age 3;9

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
3;9;1	11	5
3;9;2	23	9
3;9;3	12	3
3;9;4	15	5
3;9;5	19	0
Total Frequency	80	22

Table 63. Frequencies of *Can* and *Can't* at Age 3;10

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
3;10;0	17	3
3;10;1	9	11
3;10;2	26	14
3;10;3	40	12
3;10;4	10	8
Total Frequency	102	48

Table 64. Frequencies of *Can* and *Can't* at Age 3;11

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
3;11;2	28	4
3;11;4	26	16
3;11;5	28	1
3;11;6	0	0
Total Frequency	82	21

Table 65. Frequencies of *Can* and *Can't* at Age 4;0

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
4;0;2	3	1
4;0;4	17	5
4;0;7	18	4
4;0;9	5	3
Total Frequency	43	13

4.16. Summary of Frequency Counts for Can and Can't at Ages Three and Four

Table 66. Frequencies of *Can* and *Can't* at ages Three and Four: Summary

Age	<i>Can</i> Frequency	<i>Can't</i> Frequency
3;0	12	18
3;1	14	15
3;2	33	37
3;3	79	19
3;4	77	22
3;5	62	29
3;6	172	44
3;7	182	44
3;8	71	13
3;9	80	22
3;10	102	48
3;11	82	21
4;0	43	13

Appendix Five.

M's Realisations of *Can* and *Can't* at Potential Assimilation Sites

5.1. M's Realisations of Can and Can't at Potential Assimilation Sites at T1 (Thomas aged 2;6)

Table 1. Data Session for Thomas Aged 2;6;16

Utterance	Realisation	Description of Phenomena
1. * "I've opened the bag of chocolate buttons, so you <u>can put</u> some Smarties and some chocolate buttons (4) onto the little plate please"	[k ^h m 'pʊʔ]	Weak form. Bilabial assimilation
2. "And you <u>can put</u> some chocolate buttons on as well, if you like"	[k ^h m p ^h ʊʔ]	Weak form. Bilabial assimilation
3. * "But decorate these, and then we <u>can put</u> them on the plate with the finished ones"	[k ^h n p ^h ʊʔ]	Weak form. Open juncture
4. "They <u>can be</u> used to decorate, can't they?"	[kɱ bi]	Weak form. Bilabial assimilation
5. "And you <u>can't put</u> the box on"	[ˈxãmʔ [p ^h ʊʔ]	Stressed. Bilabial assimilation
6. "Which one <u>can Mummy</u> have?"	[k ^h ãm 'mãmi]	Weak form. Bilabial assimilation
7. * "We <u>can mix</u> them"	--	Inaudible

Table 2. Data Session for Thomas Aged 2;6;17

Utterance	Realisation	Description of Phenomena
1. * "I <u>can't</u> quite tell what you're saying properly now"	[k ^h ãnʔ kwɑʔ]	Stressed. Non-assimilation close juncture
2. "It's better if we <u>can go</u> " and see a fire-engine at a fire-station"	[kŋ 'geuw]	Weak form. Velar assimilation

Table 3. Data session for Thomas Aged 2;6;18

Utterance	Realisation	Description of Phenomena
1. “She’s going to have to either tell the taxi driver (.) she <u>can’t come</u> or she’s going to have to say to her brother, “please look after the house,(.) until the fire’s put out” ”	[^h kʰãnʔ ^h kʰõm]	Stressed. Non-assimilation close juncture
2. “So it <u>can go</u> in that one can’t it?”	[^h kʰŋ ^h gəʊw]	Weak form. Velar assimilation
3. “And now Auntie Mabel’s cancelled, the other lady <u>can go</u> ”	[^h kʰãnʔ ^h gəʊ]	Weak form. Open juncture
4. “He <u>can’t get</u> past”	[^h kʰãnʔ gɛʔ]	Stressed. Non-assimilation close juncture
5. “Liz <u>can’t get</u> out of the house at the moment”	[^h kʰãnʔ gɛt]	Unstressed. Non-assimilation close juncture
6. “Oh perhaps Po <u>can go</u> back in the box”	[^h kʰŋ gəʊɪ]	Weak form. Open juncture

Table 4. Data Session for Thomas Aged 2;6;19

Utterance	Realisation	Description of Phenomena
1. “And he <u>can put</u> them on his wall, can’t he?”	[k ^h ʔm p ^h ʊʔ]	Weak form. Bilabial assimilation
2. “We <u>can make</u> nice cards”	[kɪ meɪʔ]	Weak form. Bilabial assimilation
3. “Well, let’s just do this first, and then you <u>can put</u> your hand-print on, and then you can open it when it’s dry”	[k ^h ʔm pʊʔ]	Weak form. Bilabial assimilation
4. “Because that shows you, you <u>can put</u> paint on and go (noise) with your hands”	[xɪ p ^h ʊʔ]	Weak form. Bilabial assimilation
5. “We’ll have to see if we <u>can buy</u> some more stamps, won’t we?”	[kɪ 'baɪ]	Weak form. Open juncture
6. * We’ll see if we <u>can buy</u> some more stamps, and we can cut some potatoes and carrots and things, can’t we, to make...”	[k ^x ʔm 'b(V)	Weak form. Bilabial assimilation. Recording distorted
7. * “We’ll see if we can buy some more stamps, and we <u>can cut</u> some potatoes and carrots and things, can’t we, to make...”	[çɪ 'k ^h ʊʔ]	Weak form. Open juncture
8. * “And we <u>can</u> (.) and we <u>can</u> <u>maybe</u> put this on the fridge”	[xɪ] [k ^h ɪm] 'meɪb'ɪ]	Weak form. Open juncture false start, with bilabial assimilation in revision
9. “And Peggy who’s been in hospital for (.) months and months is finally coming home next week on Wednesday (..) if she <u>can manage</u> ”	[k ^h ɪm 'mæɪnɪdʒ]	Weak form. Bilabial assimilation
10. “So we <u>can give</u> (.) Peggy one of the pictures can’t we?”	[k ^h ɪ 'gɪv]	Weak form. Open juncture

Table 5. Data Session for Thomas Aged 2;6;20]

Utterance	Realisation	Description of Phenomena
1. “You <u>can</u> <u>manage</u> ?”	[k ^h m̩ ˈmæniɔ̃ʒ]	Weak form. Bilabial assimilation
2. “That <u>can</u> ’t <u>be</u> right”	[ˈkʰãnʔ bɪ]	Stressed. Non-assimilation close juncture
3. “You <u>can</u> <u>pull</u> it out”	[x̩m̩ p ^h ʊl]	Weak form. Bilabial assimilation
4. * “Well you <u>can</u> ’t <u>put</u> your shoe in the bread-maker”	[ˈkʰãmʔ pʊʔ]	Stressed. Bilabial assimilation
5. “You <u>can</u> <u>go</u> in and ask for some sweets”	[k ^h ŋ̩ gəʊw]	Weak form. Open juncture
6. * “If we <u>can</u> <u>get</u> one out, we’ll probably manage to get the rest out”	[çŋ̩ ˈgɛʔ]	Weak form. Velar assimilation
7. “ <u>Can</u> ’t <u>get</u> it out”	[ˈKʰãnʔ gɛt]	Stressed. Non-assimilation close juncture

5.2. M's Realisations of Can and Can't at Potential Assimilation Sites at T2 (Thomas Aged 3;3)

Table 6. Data Session for Thomas aged 3;3;2

Utterance	Realisation	Description of Phenomena
1. "Well you <u>can</u> be a plane-spotter as well as a car-spotter"	[k ^h ɪ bɪ]	Weak form. Bilabial assimilation
2. "And the trains <u>can go</u> (...) straight into the engine shed can't they"	--	Inaudible
3. "But I <u>can't</u> move it Thomas, when you're sitting there"	[k ^h ɔ̃m? 'mʊv]	Unstressed. Bilabial assimilation
4. * "There <u>can't</u> be any naughty boys round here"	[k ^h ɔ̃m? bɪj]	Stressed. Bilabial assimilation
5. "Because then if you get fed up at the table, (..) you <u>can</u> (0.25) <u>play</u> with your train while you're waiting for us all to finish our meal and have a chat"	[k ^h ɔ̃n (0.25) pleɪ]	Weak form. Open juncture with very brief pause
6. "You <u>can</u> <u>play</u> with your tractor when you come down"	[kɪ 'pleɪ]	Weak form. Bilabial assimilation
7. * "Well we <u>can't</u> <u>put</u> these on again"	[k ^h ɔ̃m? pʊ?]	Stressed. Bilabial assimilation
8. "We'll have to see if we <u>can</u> <u>get</u> something like that"	[kɪ 'gɛ?]	Weak form. Open juncture
9. "A bulldozer <u>can</u> <u>push</u> very heavy loads with its strong blade"	[k ^h ɔ̃n pʊʃ]	Strong form. Open juncture. Reading from a book

Table 7. Data Session for Thomas Aged 3;3;3

Utterance	Realisation	Description of Phenomena
1. “You <u>can build</u> a house”	[k ^h m bɪd]	Weak form. Bilabial assimilation
2. “This <u>can go</u> in the bin now, Thomas please that packet”	[k ^h ŋ ˈgəʊw]	Weak form. Velar assimilation
3. * “So (.) all the little storage boxes <u>can go</u> on the tray”	[k ^h ŋ ˈgəʊw]	Weak form. Open juncture.
4. “Now that’s nothing to do with food, so that <u>can go</u> on the tray, can’t it?”	[k ^h ŋ gəʊw]	Weak form. Velar assimilation
5. * “The food’s on the worktop and the rubbish <u>can go</u> in the bin”	[kɔ̃ŋ gəʊw]	Weak form. Velar assimilation
6. “That <u>can go</u> in the dustbin, Mr Rubbish-Man please”	[k ^h ɔ̃n ɡəʊw]	Weak form. Open juncture
7. “Well you <u>can put</u> them in the bin if you like”	[kɪ ˈp ^h ʊʔ]	Weak form. Bilabial assimilation
8. “You <u>can make</u> (.) Thomas the Tank-Engine biscuits”	[k ^h m [meɪʔk]	Weak form. Bilabial assimilation
9. “It says “Now you <u>can make</u> , bake and decorate your own Thomas and James cookies”	[k ^h m ˈmeɪʔk]	Weak form. Bilabial assimilation
10. “You’re trying to eat something, but you <u>can’t</u> (be)cause you’re a little boy”	[ˈk ^h ɔ̃nʔ kɔ̃ʒ]	Stressed. Non-assimilation close juncture
11. “That we <u>can put</u> that with the (..) rice and the pasta”	[kɪ ˈp ^h ʊʔ]	Weak form. Bilabial assimilation
12. “So that nobody <u>can get</u> to it unless you really need to use it”	[çŋ ˈgɛʔ]	Weak form. Velar assimilation
13. “And then we <u>can (0.5) put</u> it back in the cupboard”	[k ^h ɔ̃n (0.5) p ^h ʊt ^h]	Weak form. Open juncture with pause
14. “You <u>can get</u> the cloths and things”	[xŋ gɛʔ]	Weak form. Velar assimilation
15. “Ah well I <u>can’t get</u> down at the moment, love”	[ˈk ^h ɔ̃nʔ gɛʔ]	Stressed. Non-assimilation close juncture
16. “And they’re handing the salt to the pig, so that he <u>can give</u> Lizzy or Issy ...”	--	No linking between chat and audio files

Table 8. Data Session for Thomas Aged 3;3;4

Utterance	Realisation	Description of Phenomena
1. * “And when they’re very cool, (.). you <u>can</u> (0.5) <u>move</u> them from the top (..) the work-surface (.) into the fridge”	[kɪ (0.5) 'muv]	Weak form. Open juncture with pause
2. “I’ll have to leave it there until it’s really cold, and then I’ll pop it in the fridge (..) and then we <u>can</u> <u>probably</u> eat it”	[kɪ }p.rɒbəblij]	Weak form. Bilabial assimilation
3. “You <u>can</u> <u>pretend</u> it’s a birthday present”	[kʰɪ̃ (.) (C)r'tɛnd]	Weak form. Open juncture with pause. Recording very distorted
4. “You <u>can</u> <u>go</u> back on your chair now, if you like”	[(Fr, Vls)ŋ gəʊ]	Weak form. Velar assimilation
5. “You <u>can</u> <u>put</u> the wa(ter), the flowers in the water, but you can’t cut the flowers”	[kʰɪ̃ 'pʊʔ]	Weak form. Bilabial assimilation
6. “You <u>can</u> <u>put</u> the wa(ter), the flowers in the water, but you <u>can</u> ’t <u>cut</u> the flowers”	[kʰɪ̃nʔ kʊʔ]	Stressed. Non-assimilation close juncture
7. “The rubbish-men <u>can</u> <u>collect</u> it, can they”	[kʰɪ̃ kə'lekʰt]	Weak form. Open juncture
8. “Oh you no, I don’t think you <u>can</u> <u>go</u> out with my shoes on”	[xŋ gəʊ]	Weak form. Velar assimilation
9. “You <u>can</u> , <u>can</u> ’t you”	[kʰɪ̃æŋ kʰɪ̃nʔ]	Stressed. Velar assimilation
10. * “You <u>can</u> <u>be</u> a postman pretending that it’s lunchtime”	[kʰɪ̃m bɪ]	Weak form. Bilabial assimilation

Table 9. Data Session for Thomas Aged 3;3;6

Utterance	Realisation	Description of Phenomena
1. “Just (be)cause I say you’re not bouncing on the settee, doesn’t mean you <u>can bounce on me</u> ”	[k ^h ɔ̃...m 'baũ...nts]	Weak form. Bilabial assimilation
2. “You <u>can pop...</u> ”	[kɪ̃ 'p ^h ɒpʰ]	Weak form. Bilabial assimilation
3. “The marbles <u>can go</u> in this side”	[k ^h ɔ̃ŋ 'gəʊw]	Weak form. Velar assimilation
4. “But we <u>can’t</u> because we’re going to damage the pan”	[k ^h ɔ̃mʔ bɪxəz]	Stressed. Bilabial assimilation
5. * “Well, this <u>can go</u> in the rubbish-lorry”	[k ^h ɪŋ 'gəʊ]	Vowel alteration. Unstressed. Velar assimilation
6. * “I <u>can be</u> a girl fast asleep”	[k ^h ɪ̃ bɪ]	Weak form. Bilabial assimilation

Table 10. Data Session for Thomas Aged 3;3;7

Utterance	Realisation	Description of Phenomena
1. “If not, I <u>can make</u> some more”	[k ^h ɪ̃ 'meɪkʰ]	Weak form. Bilabial assimilation
2. “You <u>can keep</u> that”	[k ^h ɪ̃ 'kɪpʰ]	Weak form. Velar assimilation

5.3. M's Realisations of Can and Can't at Potential Assimilation Sites at T3 (Thomas aged 4;0)

Table 11. Data Session for Thomas aged 4;0;2

Utterance	Realisation	Description of Phenomena
1. "It <u>can't</u> (0.5) <u>go</u> away in that"	[^h kʰã...nʔ ^h gəʊ]	Stressed. Non-assimilation close juncture with pause

Table 12. Data Session for Thomas Aged 4;0;4

Utterance	Realisation	Description of Phenomena
1. * "No, you <u>can't</u> <u>go</u> without me"	[^h kʰãnʔ gəʊ]	Stressed. Close juncture with glottal stop
2. "You <u>can't</u> <u>go</u> with Apple"	[^h kʰãnʔ gəʊ]	Stressed. Close juncture with glottal stop

Table 13. Data Session for Thomas Aged 4;0;4

Utterance	Realisation	Description of Phenomena
1. “So we <u>can put</u> cheese quavers in our cheese house, Thomas”	[xə 'pʊʔ]	Weak form. Non-assimilation close juncture. May be either <i>can</i> or <i>could</i>
2. “The ones we buy usually have all different coloured icing, but you <u>can buy</u> packets with just (.) chocolate icing”	['k ^h æm baɪ]	Stressed. Bilabial assimilation
3. “I <u>can't believe</u> they'd ripen up so quickly, but perhaps...”	['k ^h æmʔ bə'liv]	Stressed. Bilabial assimilation
4. “We <u>can keep</u> this little packet actually”	[k ^x ŋ 'kɪpʔ]	Weak form. Open juncture
5. “And then we <u>can (0.5) perhaps</u> do some playing later on if that would (.) suit you better, would it?”	[k ^x ðn (0.5) p ^h ə'hæps]	Weak form. Open juncture with pause
6. “There's a tune that we <u>can play</u> on the piano called ‘Chopsticks’ as well”	[çæm pleɪ]	Weak form. Bilabial assimilation
7. “If you've got to pick it up and throw it, you <u>can't make</u> it so big”	['k ^h æmʔ meɪk]	Stressed. Bilabial assimilation
8. “You <u>can pop</u> it in there if you like, then we'll hang it back on the ironing board”	[xɪŋ 'pɒp]	Weak form. Bilabial assimilation
9. “Then I <u>can put</u> the ironing board up in the room, so I can watch telly”	[k ^h ɪŋ 'p ^h ʊʔ]	Weak form. Bilabial assimilation
10. “That just extends the lead a little bit, so I <u>can put</u> the iron plug in there...”	[k ^h ɪŋ p ^h ʊʔ]	Weak form. Bilabial assimilation
11. “It <u>can, can't</u> it?”	['k ^h æŋ 'k ^h ænt ^h]	Stressed. Velar assimilation

Table 14. Data Session for Thomas Aged 4;0;9

Utterance	Realisation	Description of Phenomena
1. “When I <u>can get</u> hold of these headphones”	[k ^h ŋ gɛʔ]	Weak form. Velar assimilation
2. “When we go out later on, we <u>can get</u> some yoghurt”	[xŋ ˈgɛʔ]	Weak form. Velar assimilation
3. “And you <u>can go</u> in and see all the men working”	[k ^h ŋ gəʊ]	Weak form. Velar assimilation
4. * “I’ll just have a look in the fridge; I think we’ve got a yoghurt, but I think it’s out of date, so I <u>can’t</u> <u>give you</u> that”	[ˈk ^h ʔŋʔ grɪv]	Stressed. Velar assimilation
5. “I am the music man, I come from far away and I <u>can play</u> ”	[k ^h ə̃m ˈpleɪj]	Weak form. Bilabial assimilation. Singing
6. “And I <u>can play</u> ”	--	No linking between chat and audio files

Appendix Six

Adjacent and Near-Adjacent Pairs of Utterances Occurring in Interactions between Thomas and M

6.1. Thomas's Repetitions of M

6.1.1. Pairs Non-Matched for Segmental Realisation of the Potential Assimilation Sites, but Matched for all Prosodic Phenomena

Pair 1. Age 2;8;28

Speaker	Utterance	Realisation	Description of Phenomena
M	“You <u>can get</u> it 'out”	[^h kʰæŋ get]	Velar assimilation
Thomas	“ <u>Can get</u> it 'out”	[^h tʰæn ɖet]	Possible progressive alveolar assimilation

6.1.2. Pairs Matched for Assimilation and all Prosodic Phenomena

Pair 2. Age 3;4;2

Note: This portion of interaction is unlike any other sampled, in that it contains an instance in which Thomas repeats after M, followed by a further repetition from M. The current focus is on M's first utterance and Thomas's repetition.

Speaker	Utterance	Realisation	Description of Phenomena
M	* “On <u>Bob</u> the Builder, they say things like, “ ‘I <u>can</u> roll it”, “ ‘I <u>can</u> mix it” (high falling), “ ‘I <u>can</u> dig it (low falling)” ”	[^h kʰæ...m 'mɪks]	Assimilation. Rhythmic and formulaic
Thomas	“ ‘I <u>can</u> mix it”	[^h kʰæm 'mɪks]	Assimilation. Less rhythmic, more like natural speech
M	“ ‘I <u>can</u> mix it”	[^h kʰæn 'mɪks]	Open juncture. Less rhythmic, more like natural speech

6.1.3. Pairs Non-Matched for all Segmental and Prosodic Phenomena

Pair 3. Age 3;4;3

Speaker	Utterance	Realisation	Description of Phenomena
M	“You <u>can</u> (0.5) collect it now, can't you”	[xɪ (0.5) kʰə'lek't]	Open juncture
Thomas	“ ‘I <u>can</u> collect it, now”	[^h kʰæn kʰl'leɪt]	Strong form. Velar assimilation

6.2. M's Repetitions of Thomas

6.2.1. Pairs Matched for all Segmental and Prosodic Phenomena

Pair 1. Age 3;3;6

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“Erm 'you <u>can</u> 'be a 'girl (.) 'fast a ^sleep”	[k ^h æmi]	Assimilation
M	“'I <u>can</u> be a 'girl 'fast a ^sleep”	[k ^h m bi]	Assimilation

6.2.2. Pairs Matched for all Phenomena, Except for Overall Stress Pattern

Pair 2. Age 3;1;3

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“'I <u>can</u> (.) , <u>make</u> some ~room 'now”	[ʼaɪ k ^h æm (.) meɪ]	Assimilation with pause
M	“You <u>can</u> , <u>make</u> some ~room 'now?”	[k ^h m 'meɪ?kʰ]	Assimilation

Pair 3. Age 3;4;3

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“~Mummy, 'you <u>can</u> , <u>be</u> a ^xxx (one syllable), to set off, with ,my ^hat on”	[k ^h æm 'bij]	Assimilation
M	“~Sorry? ,I <u>can</u> (0.5) <u>be</u> ^what love?”	[k ^h m (0.5) bi]	Assimilation

Pair 4. Age 3;7;3

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“~Mummy, (hiccup) (..) 'I <u>can be</u> a ^postman (.) 'can't (.) (hiccup) ^I?”	[kxæm bij]	Assimilation
M	“,You <u>can be</u> a ^postman?”	[k ^h m bij]	Assimilation

Pair 5. Age 3;7;4

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“'You <u>can 'be</u> a ^lady-'man”	[kæ̃n 'bij]	Open juncture. Falling tone
Thomas	“I <u>can ,be</u> a ^big/bin man”	[k ^h lɪm 'bij]	Assimilation.
M	“'I <u>can be</u> a ^lady- 'man? 'What's a ^lady-'man?” (Chuckling)	[k ^h ɛ̃n bɪj]	Open juncture

6.2.3. Pairs Matched for all Phenomena Except Nuclear Tone

Pair 6. Age 2;9;28

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“ <u>Can't ^close</u> it 'properly”	[kɑ̃n? 'kləʊz]	Non-assimilation close juncture
M	“You , <u>can'ʔclose</u> it 'properly?”	[k ^h ɑ̃n? 'kləʊz]	Non-assimilation close juncture

Pair 7. Age 2;9;28

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“I <u>can't</u> get ^through, ~now”	[kʰǎn? gɛʔ]	Non-assimilation close juncture
M	“You <u>can't</u> get ^through?”	[kʰǎn? gɛʔ]	Non-assimilation close juncture

Pair 8. Age 3;10;2

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“,It's (.) ~Springtime, and (.) er Aunty ,Mabels (.) is ^on at 'Springtime, and 'Mrs. 'Plattford ^said, (.) “You <u>can play</u> ^out at 'Springtime” ”	[gʰǎm pleij]	Assimilation
M	“^Right”		
M	“ ~Xxx (one syllable)”		
M	“,Aunty ^Mabel? You're 'talking about something on the ^television, at ^Springtime, but 'Mrs. ^Plattford”		
Thomas	“'no 'no 'no 'no 'no ^no		
M	“'Don't be ^silly 'Thomas 'please”		
M	“Mrs. 'Plattford is the (..) 'nursery ^Teacher, from the 'nursery in the 'after ^noon 'isn't she, and she said ,she said you <u>can play</u> ^out in Springtime”	[kʰm pleij]	Assimilation

6.2.4. Pairs Matched for Segmental Realisation of the Potential Assimilation Sites and Stress Pattern, but Non-Matched for Locus of Tonic Syllable and Nuclear Tone

Pair 9. Age 3;3;4

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“You <u>can be</u> a 'postman ^changing it.”	[ʏæm bij]	Assimilation
M	“Alright. Yes”		
Thomas	“‘I <u>can</u> 'be a ^parcel”	[k ^h æm bij]	Assimilation
M	* “You <u>can be</u> a 'postman pre'tending (.) that 'it's ^lunchtime”	[k ^h ɔ̃m bɪ]	Assimilation

Pair 10. Age 3;7;2

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“ ~Mummy, I <u>can't go</u> to ^sleep~Mum” (falsetto, creaky voice, whinging)	[k ^h ʌn? gəʊ]	Non-assimilation close juncture
M	“What do you ^mean you <u>can't go</u> to 'sleep?”	[k ^h ʌn gəʊ]	Non-assimilation close juncture

Pair 11.

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“When I finished 'doing this ^printings, 'we <u>can</u> (0.5) 'play ~fire-engines”	[k ^h ɔ̃m (0.5) 'pleɪ]	Assimilation
M	* “Oh when we've 'finished the ~printing we <u>can</u> 'play 'fire-'engines. ^Yes. We `can”	[k ^h m 'pleɪ]	Assimilation

6.2.5. Pairs Matched for Segmental Realisation of the Potential Assimilation Sites, but Non-Matched for Prosodic Phenomena

Pair 12. Age 2;9;23

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“I <u>can't</u> <u>get</u> it ^open”	[^h kʌn? (C,Vd)et]	Non-assimilation close juncture
M	* “no and I I <u>can't</u> <u>get</u> it ^open”	[^h kʌn? get]	Non-assimilation close juncture

Pair 13. Age 3;4;2

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“Then you <u>can</u> <u>put</u> it ^in here”	[kæm }put]	Assimilation
M	“That's right. From that pot”		
M	“And we <u>can</u> <u>put</u> it in^ there ^like that”	[k ^h m 'put]	Assimilation

Pair 14. Age 3;7;2

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“You <u>can't</u> <u>catch</u> ^me (be)cause I'm a ^sausage-^man”	[^h kʌn? kætʃ]	Assimilation
M	(Laughs)		
Thomas	(Laughs)		
M	“You <u>can't</u> <u>catch</u> ^me (be)cause I'm a ^sausage ^roll”	[^h kʌn? k ^h ætʃ]	Assimilation

Pair 15. Age 3;7;4

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“I <u>can</u> 'be a 'big ^grabber, ^couldn't 'I?”	[kæm 'mij]	Assimilation
M	“You ~ <u>can</u> be. ^Yes”	[kʰæm bi]	Assimilation

6.2.6. Pairs Non-Matched for all Segmental and Prosodic Phenomena

Pair 16. Age 3;2;6

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“^Hey! 'We ~ <u>can</u> , <u>make</u> stickers 'now. ^Stickers”	[kʰæ(Nas) meɪʔk]	Unclassifiable.
M	“We <u>can</u> <u>make</u> ~stickers now 'can we?”	[kʰm 'meɪʔ]	Assimilation

6.2.7. Pairs Matched Only for Stress Pattern

Pair 17. Age 3;3;2

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“And ~then, we <u>can</u> <u>play</u> with a ^tractor”	[kʰæn 'pleɪ]	Open juncture
M	“No don't touch! Don't touch anything now Thomas please! Don't touch anything”		
M	“Yes You <u>can</u> 'play with your 'tractor, when you come 'down”	[kʰm 'pleɪ]	Assimilation

Pair 18. Age 3;7;1

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“Ah you <u>can't</u> <u>get</u> <u>me</u> ”	[^l kǎŋ gɛʔ]	Assimilation
M	“ [˜] Tho ^ˈ mas!”		
Thomas	(laughs)		
M	“ ^ˆ Why? Are _ˌ you the _˜ gingerbread-man?”		
Thomas	“ ^ˆ Yeah” (laughs)		
M	“Is _˜ that ^ˈ why I <u>can't</u> <u>get</u> <u>you</u> ?”	[^l k ^h ǎnʔ gɛʔ]	Non-assimilation close juncture

6.2.8. Pairs Matched Only for Locus of Tonic Syllable

Pair 19. Age 3;3;2

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“ ^ˈ This <u>can</u> ^ˈ be a _˜ train-spotter. ^ˆ And ^ˈ this”	[^l k ^h ǎŋ bɪj]	Non-assimilation close juncture
M	“Well you <u>can</u> <u>be</u> a _ˆ plane-spotter, as _ˌ well as a _˜ car-spotter”	[^l k ^h m bɪ]	Assimilation

Pair 20. Age 3;6;0

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“I ^ˈ can ^ˈ be ^ˈ one, and _ˌ you can ^ˈ sit ^ˆ next to me, I <u>can</u> (0.5) ^ˈ be a ^ˆ driver”	[^l k ^h ǎn (0.5) ^ˈ bɪj]	Strong form. Open juncture. Falling tone
M	* “Oh but _ˌ you <u>can</u> <u>be</u> a _˜ driver, and _ˌ I'll look ^ˆ out, and ^ˈ tell you what we ^ˈ have to lift ^ˆ up”	[xɱ bɪj]	Assimilation

6.2.9. Pairs Matched for Stress Pattern and Locus of Tonic Syllable, but Non-Matched for Segmental Realisation of Potential Assimilation Site and Nuclear Tone

Pair 21. Age 3;4;0

Speaker	Utterance	Realisation	Description of Phenomena
Thomas	“I <u>can</u> <u>mess</u> <u>hair</u> ”	[k ^h æ̃n mɛs]	Open juncture
M	“I <u>can</u> <u>mess</u> <u>hair</u> ”	[k ^h m̩ mɛs]	Assimilation

6.2.10. Pairs Matched for all Prosodic Phenomena, but Non-Matched for Segmental Realisation of Potential Assimilation Site

Pair 22. Age 3;4;2

Note: this pair comes from the same portion of interaction as pair 1 of Thomas’s repetitions of M. The current focus is on Thomas’s utterance and M’s repetition.

Speaker	Utterance	Realisation	Description of Phenomena
M	* “On <u>Bob</u> the <u>Builder</u> , they <u>say</u> things like, “ ‘I <u>can</u> <u>roll</u> it”, “ ‘I <u>can</u> <u>mix</u> it” (high falling), “ ‘I <u>can</u> <u>dig</u> it (low falling)” ”	[^h kæ̃...m ^h mɪks]	Bilabial assimilation. Rhythmic and formulaic
Thomas	“ ‘I <u>can</u> <u>mix</u> it”	[k ^h æ̃m ^h mɪks]	Bilabial assimilation. Less rhythmic, more like natural speech
M	“ ‘I <u>can</u> <u>mix</u> it”	[k ^h æ̃n ^h mɪks]	Open juncture. Less rhythmic, more like natural speech