DyViS Database README

Welcome to the DyViS Database. The DyViS Database is an output of the DyViS project, ‘Dynamic Variability in Speech: a Forensic Phonetic Study of British English’, which took place at the Department of Linguistics, University of Cambridge, between October 2005 and December 2009, and was funded by the UK Economic and Social Research Council [Award no. RES-000–23–1248]. The participating researchers were Gea de Jong, Toby Hudson, Kirsty McDougall and Francis Nolan (Principal Investigator). Information about the DyViS Project and a list of publications resulting from the project is available at:

http://www.ling.cam.ac.uk/dyvis/

The DyViS Database is a large-scale database of speech recordings available for research purposes. The database comprises recordings of 100 male speakers of Standard Southern British English, aged 18-25, undertaking four tasks involving different speaking styles:

Task 1: a simulated police interview  
Task 2: a telephone call with an ‘accomplice’  
Task 3: a reading passage  
Task 4: a set of read sentences

20 of the 100 speakers recorded were called back for a second recording session at which Tasks 3 and 4 were repeated 10-14 weeks after the initial recording session. All tasks were recorded in a sound-treated studio; Task 2 was also simultaneously recorded over a BT landline. Users will notice some variation in recording quality due to factors such as subjects moving, varying their distance from the microphone, touching the experiment materials, etc.

In the folders containing the data for each Task, the files are labelled according to the following format:

###-T-YYMMDD

where ### = subject number, T = task number, YYMMDD = date of recording (year, month, day).

Note that although there are 100 speakers in the database, speaker numbers are not completely consecutive. Speakers are numbered from 1 to 121, with certain numbers not included due to the deselection of certain problematic speakers according to quality control (e.g. inappropriate accent features emerging during the recording session).

For Task 4, files are labelled according to the word receiving nuclear stress in each read sentence (capitalised in the materials), e.g.

###-4-heed
includes six repetitions of ‘It’s a warning we’d better HEED today’ produced by
speaker ###. Note that these files have been edited to include normally six examples
of each sentence produced by a given subject.

Referring to the DyViS Database

Please refer to the following journal article, for a description of the motivation for
developing the DyViS Database and a detailed outline of its structure, including a
description of the novel techniques developed for eliciting spontaneous yet
phonetically controlled speech under simulated forensic conditions:

style-controlled recordings of 100 homogeneous speakers for forensic phonetic

This article is available from the International Journal of Speech, Language and the
Law website via this link:


The authors request that this article be referenced in any future work or publications
that arise from research using the DyViS Database.

Notes about the Database

Please note that the Database is not supported, that is, the Department of Linguistics
at the University of Cambridge cannot offer an ‘after-sales service’ for technical or
phonetic questions or problems concerning the database.

The orthographic transcripts were undertaken by a number of researchers and cannot
be guaranteed to be completely consistent across the database. They were prepared
with the main aim of enabling future researchers efficiently to locate the target words
elicited. While the authors will not be available to address any minor discrepancies
you may notice in the transcripts, they would appreciate being informed of any
serious errors you may discover such as an incorrect file name or wrong recording
quality.

The authors would be interested to hear from researchers who undertake more
elaborate transcriptions of the DyViS data, e.g. phonetic transcriptions or
transcriptions of intonation, with a view to including these as possible subsequent
enhancements to the database for future reissues.

Acknowledgements

The DyViS project, ‘Dynamic Variability in Speech: a Forensic Phonetic Study
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000–23–1248]. The telephone aspect of the project was made possible by a donation from BT (formerly British Telecom). The authors are grateful to the large number of speakers who participated in the recordings for the DyViS database. Thanks are due to Geoffrey Potter for technical assistance and to Mark J. Jones for his initial involvement in the design of the project and for ongoing feedback.

Thanks are also due to Claire Nance, Jana Dankovičová and Matthew Cole who contributed to some of the transcripts, to Helen Hudson and Hannah Hudson who assisted with the checking of Task 4, and to Sophie Lawrence who helped with the above as well as the recruitment of speakers. The authors are also grateful to Philip Harrison for advice regarding the telephone intercept in the experimental set-up.
### Target items elicited in DyViS Tasks 1, 2 and 3

<table>
<thead>
<tr>
<th>/iː/</th>
<th>/ɪ/</th>
<th>/æ/</th>
<th>/ɑː/</th>
<th>/ʊ/</th>
<th>/ʊə/</th>
</tr>
</thead>
<tbody>
<tr>
<td>beetle deacon peter teacher</td>
<td>city dickie dixon kit ticket</td>
<td>detman dexter petrol</td>
<td>badger baxter hatfield passage pat</td>
<td>apartments barbera barber carter footpath harper park pass path</td>
<td>doctor hobbs scott shop</td>
</tr>
<tr>
<td>/ʌ/</td>
<td>/ɜː/</td>
<td>/æː/</td>
<td>/ʊ/</td>
<td>/ɔʊ/</td>
<td>/wɪː/</td>
</tr>
<tr>
<td>buckley butler pub</td>
<td>burgess burke church curtis</td>
<td>causeway court sports</td>
<td>bookshop butcher cook footpath</td>
<td>cooper coot hooper puddles scooter supervisor</td>
<td>house tout boathouse cow pub dowdy</td>
</tr>
<tr>
<td>/eɪ/</td>
<td>/ei/</td>
<td>/ɑː/</td>
<td>/ai/</td>
<td>/ʊ/</td>
<td>/wɪː/</td>
</tr>
<tr>
<td>baker cables capers gate station steak</td>
<td>baker boyd street boyd theatre toytown</td>
<td>bike heights hike hypermarket kite pignty</td>
<td>pike pipeworks sky-coloured skype tightrope tyke</td>
<td>/wɪː/ courgette tour guide tour bus</td>
<td></td>
</tr>
<tr>
<td>/uː/</td>
<td>/uː/</td>
<td>/eʊ/</td>
<td>/ɜː/</td>
<td>/eʊ/</td>
<td>/riː/</td>
</tr>
<tr>
<td>/wɪː/ weekes weasley weadon</td>
<td>/juː/ yewtree eustace eugene</td>
<td>/riː/ reeve reed reef</td>
<td>peartree fairfield hairdresser bear pub</td>
<td>/riː/ weekes weasley weadon</td>
<td></td>
</tr>
</tbody>
</table>

In Task 4, the target vowels /iː, i, æ, ɑː, ʊ, u, ɪ, e, æ, aɪ, ɔɪ, əʊ, ʌ/ are elicited in /hVd/ contexts and the same items in the list above are elicited for /wɪː/, /juː/ and /riː/.
DyViS Task 1 (Simulated Police Interview)
EXPERIMENTER’S INSTRUCTIONS

Initial things to say to subject:

- Thank you for participating
- Session involves 4 tasks:
  * mock police interview
  * telephone call with Toby who is your friend and accomplice Robert Freeman
  * reading passage
  * reading a set of sentences
- Help yourself to a drink
- Feel free to stop for a break at any time.

Start recording.
(Adjust microphone and check levels.)
Note subject number.
DyViS Task 1: Simulated Police Interview

Interviewer’s Framework

I’m playing the part of the police officer and you’re the suspect being interviewed.

The reason that you’re here is that we’re investigating the trafficking of heroin at the Parkville petrol station last Thursday. Your instructions will now appear on the screen. Say yes when you are ready for the next slide.

[show slides 1-4]

(at end of Instructions 3) – you don’t need to memorise every name here – the information you need at any time will always be on the screen.

[show slide 5]

On the screen you can see a map which shows your home in Hatfield [point out], your workplace in Carter Town, your sister's house in Dixon, and the petrol station at Parkville, where the crime took place.

Everything that’s shown in black you can mention. Things shown in red, such as this car, you must deny knowledge of, or not mention.

[8] When did you get home?

[9] What time did you arrive at your sister’s?

[10] When did you set off from home?


Did you do anything else?

Is it possible that you made a phonecall?

Didn't you ring a mate sometime in the evening?

[12] OK, so all you did was watch TV. What did you watch?

[13] Back to the journey to your sister's. Which route did you take?

You're sure you didn't take a longer route?

[14] Your colleagues. Who else works at the salon that you'd count as mates? Eugene Burke you said?

Can you spell that for me please?

Can you tell me a bit about these three friends of yours?

[15] And what about friends outside work? We were wondering whether you knew anyone called Robert?

The name Freeman doesn't ring any bells?

Weren't you at school with a Robert Freeman?

Which school did you go to?

Have you kept in touch with anyone from school?

(= Scott Weadon)

And what does he do for a living?
Do you see much of him?

[16] Is there anyone else you'd like to tell us about? Any friends from home? (= Pat Weasley...)

[17] So that's Peter, Barbara, Eugene, Scott and Pat. And just to confirm, you don't know a Robert Freeman?

[18] You say that you drive to work. What sort of car do you drive?

[19] And the registration number is?

[20] Is it fully functioning at the moment?

[21] Nothing wrong at the front?

[19] On the Thursday in question, did you give someone a lift after work?

We think you might have a travelling companion. A camera shows you with someone else in the car last Thursday evening.

(Do you always travel alone?)

(Do you deny having anyone else in your car last Thursday night?)

[22] What's the road off Reeve Causeway which runs past the window?

Is that where you park your car?

Isn't there a big car park on Butler Passage?

[23] So where do you park?

[24] OK... Now what other shops and amenities are in the area?

[25] [include street names]

[26] Tell us more about this DIY shop. Do you know the owner?

We've heard reports that you know him quite well - do you deny this?

[27] I see. After work on Thursday – which route did you take in the car?

Where does Pighty Road take you?

[28] Thank you. Let's move on to the scene of the crime. The bypass which you claim not to have taken last Thursday...

[info only – no question]

[29] Imagine you're travelling north on the bypass. What's the big set of buildings on your right?

Do you ever go there?

[30] Don't you know someone who works there?

Your sister's husband works in a local hotel. Could that be the Reef?

[30] Let's picture ourselves driving north. Which places do we pass?
At the petrol station there is a public phone booth. Have you ever used this phone? Did you make a call here last Thursday?

Moving on... What do you see as you pass the steak house? (Are there any buildings on the park?)

Finally, we'd like to ask about your sister. Could you tell us first of all where she lives and which road she lives on?

Suppose we're making the journey to her house, as you did last Thursday. We turn onto Dexter Road and the village lies ahead. What can you see?

The big lake on the right - do you know it well?

We think you might have spent the evening there last Wednesday. What were you up to?

Come on, sir - we have been reliably informed that you were doing something there last Wednesday...

OK. Further down the lane, isn't there a private practice of some description?

How do you get there?

And does anyone else live down that road?

Which shops are near your sister’s house?

Where does the road take you?

And what does your sister do?

Thank you - we understand that she works in a school some four miles away. How does she get to work?

She always cycles?

Does she have a car?

Does anyone in the household keep a car?

We understand that on the Friday – having spent the previous night at your sister’s – you started work at midday. Where were you in the morning?

Where did you go then?

And did you have lunch in Dexter?

Were you alone?

Are you sure about that?

OK. Thank you for your cooperation.

Interview terminated at ----.
Task 1

Police Interview

Interview about drug trafficking
Instructions

• You have taken part in the trafficking of heroin with another man, Robert Freeman. You are being interviewed by the police. Your memory and knowledge is represented in the maps and schemas you will see.
Instructions 2

• Your task is to be as co-operative as possible in answering the police questions by using all information offered in black, but to avoid mentioning, or to deny, incriminating facts. All such facts will be shown in red. For instance, you must deny knowledge of your accomplice, Robert Freeman.

• It’s OK to say ‘I don’t know’ or ‘I can’t remember’ when being interrogated about such information.
Instructions 3

- You live in Hatfield.

- You have a sister who lives in Dixon.

- You are a barber, and work at Eugene’s Hairdressers in Carter Town.

- The trafficking took place at a petrol station at Parkville last Thursday evening.
working hours
at home in the evening

working hours
working hours → arrival time at sister's → at home in the evening
arrival time at sister’s home in the evening

working hours

arrival time at sister’s
you pass through Parkville

petrol station

PARKVILLE

Westlake Bypass

A 40

DIXON

sister’s house

Hatfield Avenue

Boyd Street
Peter Beard
barber
visit steak house together

Barbara Detman
hairdresser
keeps poodles
drives a scooter

Eugene Burke
barber
supervisor
lives in Dexter
play sports together
Robert Freeman

owner of DIY shop

old friend from school

see regularly in the pub

Scott Weadon

tour guide

friend from secondary school: Buckley School

regularly chat on Skype
Pat Weasley

typesetter (Butler Press)
lives on same street
(Hatfield Avenue)
meet for drink after work
(Hobbs Passage Inn)
Peter Beard: barber; visit steak house together.

Barbara Detman: hairdresser; keeps poodles; drives a scooter.

Eugene Burke: barber; supervisor; lives in Dexter; play sports together.

Robert Freeman: owner of DIY shop; old friend from school; see regularly in the pub.

Scott Weadon: tour guide; friend from secondary school: Buckley School; regularly chat on Skype.

Pat Weasley: typesetter (Butler Press); lives on same street (Hatfield Avenue); meet for drink after work (Hobbs Passage Inn).
UZ02 BWD

VW Beetle (new type)
sky-coloured

broken headlight
owner is your friend / accomplice: Robert Freeman
The town of PARKVILLE

scene of the crime

Westlake Bypass
Westlake Bypass

Reef Hotel
(you often go to the bar)
Westlake Bypass

Reef Hotel

receptionist: brother-in-law
Westlake Bypass

petrol station

telephone booth

you made a phonecall here
last Thursday evening
Dexter Road

The village of DIXON

sister's house
you met Robert Freeman here last Wednesday
sister's house

baker's
Kit Burgess

butcher's
Pat Hobbs

pub: Pike and Eel

road leads to the Heights Hotel in Dexter
Friday morning…

The town of

DEXTER

Hooper’s Bike Shop
Hooper’s Bike Shop

Ticket tout (Dickie Reed)
Hooper's Bike Shop

Ticket tout (Dickie Reed)

Lunch at
The Cow Pub
Hooper's Bike Shop

Ticket tout (Dickie Reed)

Lunch at
The Cow Pub

with Eugene Burke
Say to subject:

Okay, so we’re no longer in the interview room, and I am no longer in the role of police officer here.

You will now have a phone call with your friend and accomplice Robert Freeman to update him on the interview you have just had.

Robert Freeman wants to get his story straight in case he is called in for questioning (the police are not monitoring this call).

You have the maps and information from the interview to refer to here. ***SLIDES PRINT-OUT***

Again use all the information offered in black. However it is no longer important to conceal the information in red.

When you’re talking on the phone, please be careful to make sure you’re still facing the microphone.

- Plug phone in.
- Ring Toby on internal line.
- Toby rings back on external line.
work: Eugene’s Hairdressers on Reeve Causeway

Carter Road

CARTER TOWN

last Thursday

working hours

at home in the evening

82 Hatfield Avenue

Dexter Road

HATFIELD

home

last Thursday

A 40

petrol station

Carter Road

pencil drawing of a town

PARKVILLE

Westlake Bypass

you pass through Parkville

Boyd Street

DIXON

sister’s house

Dixon Road

arrival time in the evening
friends

Peter Beard  
barber  
visit steak house  
together

Barbara Detman  
hairdresser  
keeps poodles  
drives a scooter

Eugene Burke  
barber  
supervisor  
lives in Dexter  
play sports together

Robert Freeman  
owner of DIY shop  
old friend from school  
see regularly in the pub

Scott Weadon  
tour guide  
friend from secondary school: Buckley School  
regularly chat on Skype

Pat Weasley  
typesetter (Butler Press)  
lives on same street  
(Hatfield Avenue)  
meet for drink after work  
(Hobbs Passage Inn)
Robert Freeman

yourself

VW Beetle (new type)
sky-coloured

broken headlight
Reeve Causeway

Owner is your friend / accomplice: Robert Freeman

High Street

Hope Avenue

Butler Passage

Eugene's Hairdressers

city tour bus leaves here

Pipeworks

DIY shop

Pighty Road

leads to hypermarket on Carter Road

Cooper's kite shop

Hogan's Bookshop

Shop: Peter's Cables

The Bear Pub

Harper Passage

Butler Passage

Curtis Avenue
The town of PARKVILLE

Deacon's Steak House

Weekes Toytown

Boyd Theatre

Peartree Court Apartments

River Hike

Baxter's sports ground

Reef Hotel
(you often go to the bar)

Courgette Capers
(vegetarian restaurant)

telephone booth

petrol station

dear park

Weekes Toytown

Peartree Court Apartments

Boyd Theatre

Westlake bypass

receptionist: brother-in-law

the scene of the crime

you made a phonecall here last Thursday evening
Yewtree Reservoir

you met Robert Freeman here last Wednesday

Badger Pass

Dexter Road

The village of DIXON

Yewtree Footpath

Church of St Eustace

sister: teacher
sister's house

Dr Tyke (private doctor)

Mrs Dowdy the cook

Yewtree Avenue

Coot Avenue

baker’s
Pat Hobbs

butcher’s
Kit Burgess

pub: Pike and Eel
road leads to the Heights Hotel in Dexter
Friday morning

The town of DEXTER

Hooper's Bike Shop

Ticket tout (Dickie Reed)

Lunch at The Cow Pub

with Eugene Burke
DyViS Task 3 (Reading Passage)
EXPERIMENTER’S INSTRUCTIONS

- Take cards from subject.
- Unplug phone.

Say to subject:

There are 3 screens of text to be read.

Please read aloud the reading passage at a normal speed in a normal relaxed speaking style.

If you make a mistake, please go back to the beginning of that sentence and read on from there.

- Click to first text screen.
Police announced last night that they have arrested one of two men believed to be responsible for selling large quantities of heroin at the Parkville petrol station at 10:15 pm last Thursday.

The suspect, who cannot be named, works as a hairdresser in Carter Town. He is employed by Mr Eugene Burke at Eugene’s Hairdressers on Reeve Causeway, opposite the city tour bus stop. Reeve Causeway is north of the hypermarket on Pighty Road. This part of town is known for Cooper’s kite shop, Hogan’s Bookshop, a DIY shop and the Bear Pub on Harper Passage, between the High Street and Curtis Avenue. The Pipeworks on Hope Avenue provides work for many residents of Carter Town. Eugene’s Hairdressers has a fine reputation due to the long-standing service of Peter Beard and Barbara Detman. Beard is a friend of the suspect: they go to Deacon Steak House together. Barbara Detman is well known in the community for her poodles and for driving a scooter. Eugene Burke is also a friend of the suspect: it is understood that they play sports together.

The man in question went to Buckley School, where he became acquainted with a certain Scott Weadon, a tour guide; they have been in touch since schooldays thanks to ‘Skype’. Our suspect is also known to be a good friend of Miss Pat Weasley, a typesetter at Butler Press. They live on the same street (Hatfield Avenue in Hatfield) and often meet at Hobbs Passage Inn.

On normal weekdays our suspect drives to work, taking Boyd Street, the A40 and then Carter Road. Last Thursday however, he spent the night at his sister’s house in Dixon, though he has no solid alibi for the time of the crime. He is suspected to have left the house around 8:30, and driven to Parkville on the Westlake Bypass, where he made an untraceable phone call and waited for forty minutes before meeting up with his accomplice to deal out the class A drug. He drives a sky-coloured VW Beetle of the new type, which the police have identified, though he denies that one of the headlights is damaged. CCTV footage from the Tightrope Services on the A40 shows him driving with his accomplice last Thursday.

That night he would have passed the Peartree Court Apartments, Weekes Toytown, the Boyd Theatre, ‘Courgette Capers’ restaurant and Reef Hotel. The suspected accomplice was sighted soon afterwards in the deer park, near Baxter’s sports ground and the boathouse on the River Hike. The suspect’s sister (a teacher) lives in a house on Dexter Road, opposite Pat Hobbs’ butchery, Kit Burgess’ bakery and the Pike and Eel pub, on the way to the Heights Hotel. Dexter Road is known to many as the way to visit Dr Tyke and Mrs Dowdy the cook, on Badger Pass. It was in this area that our man had met with his accomplice the day before the crime at Yewtree Reservoir (there is a footpath opposite Coot Avenue and the Church of St Eustace). Police also believe that the suspect’s brother-in-law might have been involved.

The day after the crime, the suspect drove on to Dexter, where he apparently visited Hooper’s Bike Shop and Dickie Reed the ticket tout, before taking lunch in The Cow Pub with his colleague, Eugene Burke. However, it is not certain what role, if any, Burke played in the crime.
DyViS Task 4 (Read Sentences)
EXPERIMENTER’S INSTRUCTIONS

Say to subject:

Please read aloud each sentence at a normal speed in a normal relaxed speaking style.

In each sentence, please emphasise the word in CAPITALS.

Go at your own pace. Take your time between each sentence.

If you make a mistake, please read the sentence a second time.

Do practice slides – click mouse to move onto next slide.

Remind subjects not to share details of experiment with others.
That plaster ADHERED today.
There was no wine; it was a very BEERY party we had.
The solicitor gave her the BRIEF yesterday.
She really is the most CHEERY person I know.
That driver was a CREEP yesterday.
It came to me in a DREAM yesterday.
Perhaps you should ask EUGENE to check.
We’ll meet at the Church of St EUSTACE today.
It won’t be King’s Cross; we’ll meet at EUSTON next time.
They were waiting to be FREED from it all.
I’ve never seen such GREED in a child.
It’s only one loaf, but it’s all Peter HAD today.
She was red-stockinged and ginger-HAIRED today.
We worked rather HARD today.
It’s a warning we’d better HEED today.
I asked why Lisa HID today.
We decided to HIDE today.
We built up quite a HOARD today.
In his uncle’s garden, Peter HOED today.
He insisted on wearing a HOOD today.
I saw Mr HOWDE today.
We were chasing Mr HOYDE today.
You should talk to the PRIEST about it.
If the cat climbs up on the chair, she REACHES it again.
She has no time to watch TV, but she READS throughout the week.
She didn’t water it; she REAPED the second field.
He doesn’t read the Guardian; SHE reads that newspaper.
He used to reap it, but now SHE reaps the cotton field.
David never became superintendent, but SHE reached that position.
She let out a SHRIEK at the time.
It’s not a history; we’re developing a THEORY of advertising.
We were asked to work in THREES for a while.
He gave us a TREAT yesterday.
My bike is not much USE this morning.
You’d need to ask Pat WEASLEY I fear.
You’ll have to clear it with Matt WEADON I think.
He wants to know which WEAVE was chosen.
The problem is going to be that WEED I reckon.
That will take WEEKS to finish.
I’m sure Miss WEEKES can tell you.
He hates contracting words, but he said a ‘WHO’D’ today.
They look like YEWTREES to me.
He had a difficult YOUTH I reckon.
We don’t want YOU doing that.
We don’t want you doing THAT.
WE don’t want you doing that.

We don’t like YOU driving there.
We don’t like you driving THERE.
WE don’t like you driving there.

You don’t know what WE dealt them.
You don’t know what we dealt THEM.
YOU don’t know what we dealt them.

You don’t know what WE did there.
You don’t know what we did THERE.
YOU don’t know what we did there.

We don’t want YOU going there.
We don’t want you going THERE.
WE don’t want you going there.