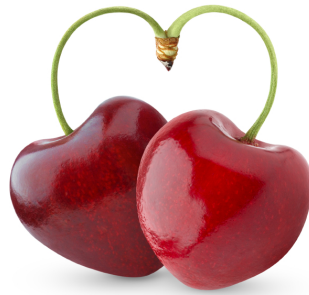


What can Pronunciation Teachers Learn from Spontaneous Speech?

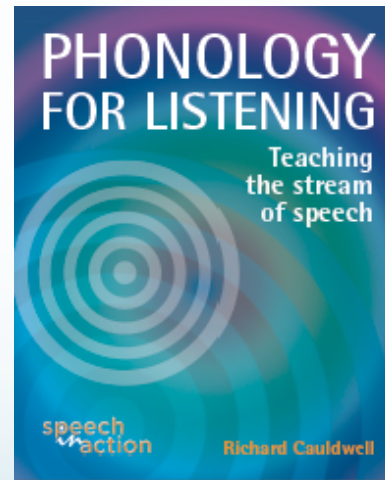
Richard Cauldwell

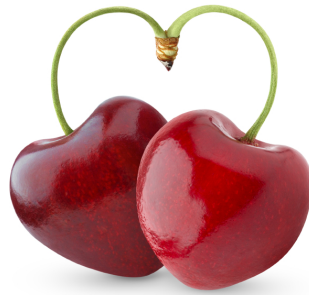
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richardcauldwell@me.com

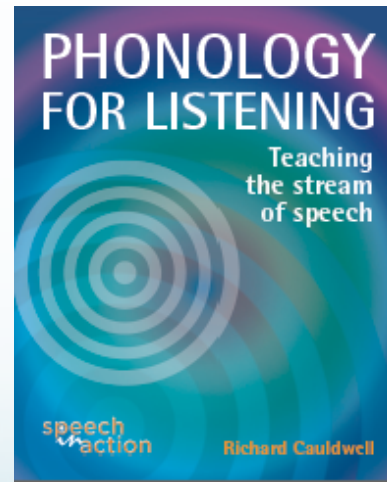


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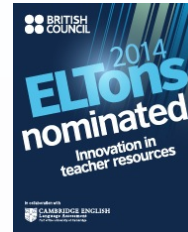
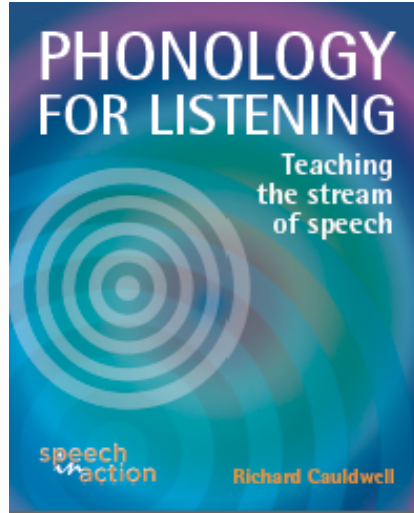
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Richard Cauldwell

Teacher, freelance author, publisher, teacher trainer,
spontaneous speech enthusiast

- ELT teacher since 1979
- PhD supervised by David Brazil
- Discourse Intonation
- Not a phonetician
- Expertise in turning recordings of fast spontaneous speech into learning materials

Phonology for Listening



Part 1 – The window on speech

Part 2 – Describing spontaneous speech

Part 3 – Accents, identity and emotion in speech

Part 4 – Teaching Listening

Greenhouse



So then I could not play any more

My parents would not let me have one

Garden



So then I couldn't play any more

My parents wouldn't let me have one

Jungle



So then I couldn't play any more

My parents wouldn't let me have one

Greenhouse & Garden	Jungle
<p>Acted speech Rule-governed, tidy Useful, but 'wrong'</p>	<p>Spontaneous speech Unruly, messy Unpredictable, but 'true'</p>
<p>Careful Speech Model</p>	<p>Spontaneous Speech Model</p>

CSM

The model of speech which dominates ELT is

- Careful Speech Model
 - an emulation model
 - suitable for clear pronunciation
 - dominates the 'speech model space' in ELT
 - CSM guidance is inappropriately turned into rules which are believed to be true of spontaneous speech
 - these 'rules' are hypotheses either waiting to be falsified, or already falsified

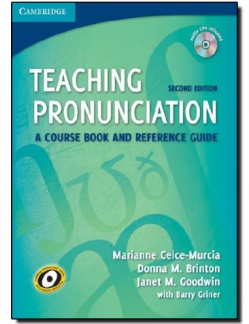
Connected speech rules

Garden rules

Definitions for connected speech range from non-mechanical speech (Roach, 2009), to 'the fluent continuous speech performance of everyday life' (Nolan & Kerswill, 1990: 295)

- Linking - you are - 'you wah'
- Assimilation - did you - 'di jew'
- Deletion - East coast counties - 'East coast counties'
- Question intonation - 'Do you live in London?'
- Stress-timing - 'he RAN all the WAY to the STAtion'
- Emotion and attitude - 'High fall means surprise'

Genteel handshakes



Linking

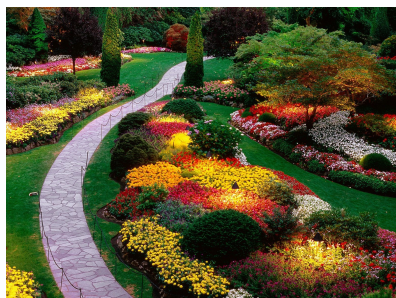
- Insertion of /y/glides
 - be able, stay up, try out
 - ‘be yay bull’, ‘stay yup’, ‘try yout’
- Insertion /w/ glides
 - do it, go away
 - ‘doo wit’, ‘go wah way’

Walk to the jungle



Greenhouse	Garden
be able	be yay bull
stay up	stay yup
try out	try yout
do it	doo wit
go away	go wa way

Walk to the jungle



Greenhouse	Garden	Jungle
be able	be yay bull	baybull
stay up	stay yup	stape
try out	try yout	trout
do it	doo wit	doot
go away	go wa way	gway

Singing in the rain

Connected speech rules such as linking are best contemplated in the garden, at leisure ...



You are my lucky star
0.73 syllables per second 36 words per minute

Singing in the rain



Connected speech rules such as linking are best contemplated in the garden, at leisure ...

You are my lucky star

I saw you from afar

Two lovely eyes, at me they were gleamin', beamin'

I was star-struck

You're all my lucky charms

I'm lucky in your arms

You've opened heaven's portal here on earth for this poor mortal

You are my lucky star

You are my lucky star

0.73 syllables per second 36 words per minute

Speed

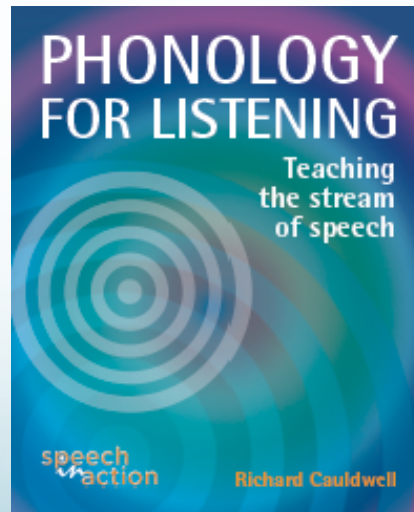
SLOW	AVERAGE	FAST
90 wpm	180 wpm	240 wpm
2.0 sps	4.0 sps	5.3 sps

You are my lucky star - 0.73 syllables per second

SSM

Where is the Spontaneous Speech Model?

- in the evidence of recordings
- in everyday normal speech
- in our key texts (e.g. Gimson/Cruttenden)
- but 'hidden'
- in Part II of 'The Book'



Why bother? Different goals

Listening and Pronunciation

‘the goals for mastery are different’

...

‘... our **goal** as teachers of listening is to help our learners understand **fast, messy, authentic speech** ... [which] ... is **much more varied and unpredictable** than what they need to produce in order to be intelligible’

Celce-Murcia et al 2010

**we therefore need
a model of spontaneous speech**

Greenhouse & Garden	Jungle
<p>Acted speech Rule-governed, tidy Useful, but 'wrong'</p>	<p>Spontaneous speech Unruly, messy Unpredictable, but 'true'</p>
<p>Careful Speech Model</p>	<p>Spontaneous Speech Model</p>
<p>Pronunciation/ Intelligibility</p>	<p>Listening</p>

The more tidy the rule, the more wrong it is likely to be

Drafting Phenomena I

Jess and Toby

01 || AHM ||

02 || AH ||

03 || AHM ||

04 || ERM ||

05 || ER ||

06 || ERM ||

‘The Book’ Chapter 6



Drafting phenomena II

Speaker roles

	it's NOT like you JUST kind of	
	you KNOW just	
	you know	
	SIT there	
	huh huh huh	

|| i mean LIFE is too SHORT ||
|| PROBABly to READ ||



‘The Book’ Chapter 6

Drafting phenomena III

01 || UM ||

02 || **it STARTed** ||

03 || when i was the ROSE seller ||

04 || in OLiver ||



‘The Book’ Chapter 6

Drafting phenomena IV



```
01 || MOST people GO there || 240
02 || for THE || 190
03 || for HOLLYwood and for THE || 190
04 || LIGHTS || 70
05 || and THE || 120
06 || enterTAINment || 160
```

‘The Book’ Chapter 6

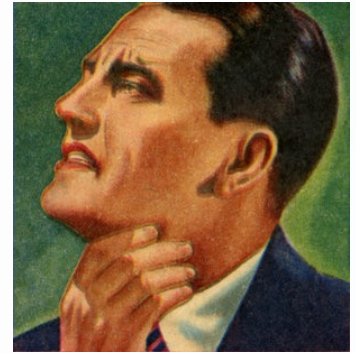
Careful Speech
Rule-governed and tidy

Function words have a
few weak forms and
are rarely prominent

Spontaneous Speech
Unruly and messy

Function words have
many weak forms and
are often prominent

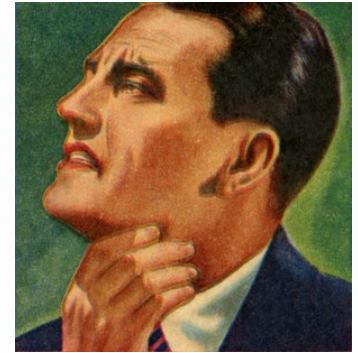
Dan's *ands*



01 || and I just STARTed ||
02 || and my VOICE just went [creak] ||
03 || and NOTHING came OUT ||
04 || and Everyone just WENT ||
05 || [SIGH] ||
06 || oh POOR YOU ||
07 || and then THAT was THAT ||
08 || and WE ||
08 || didn't get THROUGH ||
and ... and ... and ... and ... and ... and

‘The Book’ Chapter 8

Dan's *ands*



| | and and and and and and | |

an em im on an um

‘The Book’ Chapter 8

Sound cloud

1	2	3
an	en	in
	and	
on	un	um

Sound file matching

1	2	3
an	an	em
an	em	an
em	n	on
n	on	n
on	an	um
um	um	an

The six *and*'s are all non-prominent. They occur before the first prominence in their respective speech units and sound close to *an*, *em*, *n*, *on*, *an* and *um*. The first *and* has a vowel close to læl, as does the fifth, but the others approach |e| |ɒ| and |ʌ|.

Careful Speech
Rule-governed and tidy

Spontaneous Speech
Unruly and messy

Content words have one
or two soundshapes

Content words have
many soundshapes

Content words



A || STUdents ||

B || STUdents who'd WEAR ||

C || i THINK about TEN STUdents ||

D || a COUNcil called the student FASHion council ||

E || WHAT the students at their SCHOOL were WEARing ||

Careful Speech
Rule-governed and tidy

Spontaneous Speech
Unruly and messy

People speak in clauses
and phrases

People speak in
rhythmic bursts

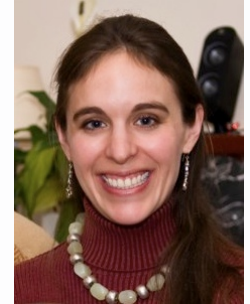
Rhythmic bursts



01 || UM || 1.9
02 || FOR || 1.7
03 || aBOUT || 2.6
04 || two YEARS || 2.9
05 || mmHMM || 7.2
06 || and then they FInally bought a BIG house || 7.5
07 || a Bigger house for US || 6.5
08 || to be Able to LIVE in || 8.8
09 || so we MOVED || 4.6
10 || for THAT REASON || 7.6

‘The Book’ Chapter 2

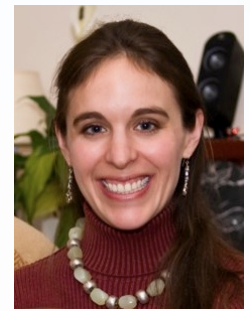
‘Stress timing’



|| a a CERTain proPORTion of THAT ||

‘The Book’ Chapter 10

Irrhythmicality



01 || it's PRObably ||
02 || i MEAN ||
[creak]
03 || MILEagewise ||
04 ||...square mile ... || (it's where my)
05 ||...i mean ... ||
06 || it's PRObaBLY ||
07 || the COUNty is like maybe ||
08 || FIFty SEventy five MILES wide ||
09 || AND ||
10 || the City is ONLY ||
[pause]
11 || a a CERTain proPORTion of THAT ||

‘The Book’ Chapter 10

Speed

SLOW	AVERAGE	FAST
90 wpm	180 wpm	240 wpm
2.0 sps	4.0 sps	5.3 sps

‘The Book’ Chapter 7

You are my lucky star - 0.73 syllables per second

Extreme squeezing



5	4	3	2	1	speed
this is	ONE	i'm going to be looking at in slightly more	DE	tail in fact	9.3 - 400

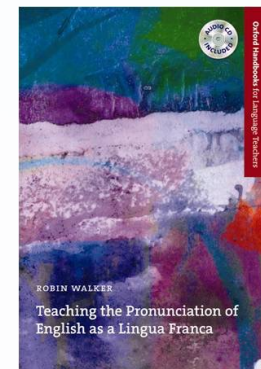
Extreme squeezing



5	4	3	2	1	speed
and then they	FI	nally bought a	BIG	house	7.5-340

and then they 14.3 sps

Extreme squeezing



5	4	3	2	1	
and then we were	AL	so	TALK	ing about	8.0 - 330
		the	AC	ent	4.1 - 160

Hungarian L1

and then we were 9.5

were also 98.0

Extreme squeezing



3	2	1	
we don't have	AN	y technology teachers	7.1

The first three syllables 'we don't have' go at 10.5 spa

'The App' Emily

Speed

Roach (2009:111)

In rapid, casual speech the t will become p before a bilabial consonant, as in: 'that person' ..

|| that person || 4.0 sps

|| ten girls || 2.1 sps

Careful Speech
Rule-governed and tidy

Spontaneous Speech
Unruly and messy

Genteel contact
words shake hands
Linking rules

Violent contact
Consonants and
syllables are murdered

Consonant death

[wei ə mɪ:ɪ ʃɪz ɡeɪŋ ɪ fɔr yu]

James Kirchner

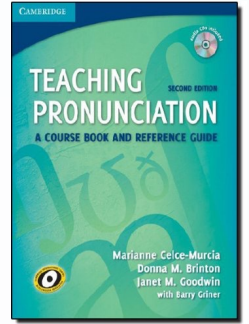
Consonant death

[wei ə mɪːɪ ʃɪz ɡeɪŋ ɪ fɔr yu]

(wait a minute, she's getting it for you).

James Kirchner

Genteel handshakes



Linking

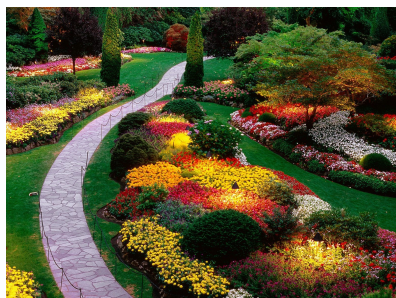
- Insertion of /y/glides
 - be able, stay up, try out
 - 'be yay bull', 'stay yup', 'try yout'
- Insertion /w/ glides
 - do it, go away
 - 'doo wit', 'go wah way'

Walk to the jungle



Greenhouse	Garden
be able	be yay bull
stay up	stay yup
try out	try yout
do it	doo wit
go away	go wa way

Walk to the jungle



Greenhouse	Garden	Jungle
be able	be yay bull	baybull
stay up	stay yup	stape
try out	try yout	trout
do it	doo wit	doot
go away	go wa way	gway

Linking: Singing in the rain

Connected speech rules can only be heard in special circumstances because...



You are my lucky star
0.73 syllables per second 36 words per minute

Linking: singing in the rain



Connected speech rules can only be heard in special circumstances because...

You are my lucky star

I saw you from afar

Two lovely eyes, at me they were gleamin', beamin'

I was star-struck

You're all my lucky charms

I'm lucky in your arms

You've opened heaven's portal here on earth for this poor mortal

You are my lucky star

You are my lucky star

0.73 syllables per second 36 words per minute

Speed

SLOW	AVERAGE	FAST
90 wpm	180 wpm	240 wpm
2.0 sps	4.0 sps	5.3 sps

You are my lucky star - 0.73 syllables per second

Linking

these are /r/ enormous sums of money
for people to /w/ actually /j/ invest in cough cold remedies

```
01 || these are eNORMous || 6.9
02 || SUMS of MONEy || 7.7
03 || for PEOPLE to actually inVEST in || 5.8
04 || in COUGH cold Remedies || 3.7
```


Linking

these are /r/ enormous sums of money for people to /w/
actually /j/ invest in cough cold remedies

| | ... are eNORMous SUMS ... | |

| | ... to actually ... | |

| | to ACTually inVEST | |

Oakey & Treece (n.d.)

Where is the SSM?

Cruttenden (2014: 333)

... there are some
uncommon reduced forms which are heard
only in rapid speech and
these should not be imitated
by foreign learners. The use of |jə| or |mə| in such phrases as
your mother, my father will sound slangy and, if employed
inappropriately by a learner, could appear comically incongruous.

SSM - translation needed

Cruttenden 2014 13.3.3

... there are some
uncommon reduced forms which are heard
only in rapid speech and
these should not be imitated
by foreign learners. The use of |jə| or |mə| in such phrases as
your mother, my father will sound slangy and , if employed
inappropriately by a learner, could appear comically incongruous.

uncommon = very likely to happen

only in rapid speech = very commonly in normal speech

these should not be imitated = these need to be learned for listening

by foreign learners = by learners

SSM - translation needed

‘It must be pointed out ... that the evidence for the existence of truly stress-timed rhythm is not strong’
Roach (2009 p.110)

translation:

All the evidence points to the fact that stress-timing does not exist.

SSM - translation needed

‘It must be pointed out ... that the evidence for the existence of truly stress-timed rhythm is not strong’
Roach (2009 p.110)

translation:

WTF???!!!!???

SSM - they do tell us

Cruttenden (2014: 322)

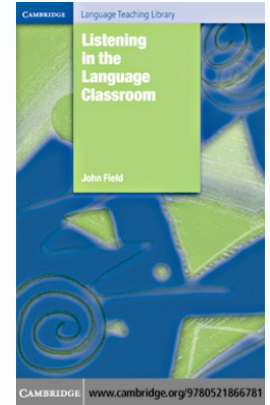
The foreign learner is recommended to aim at a *relatively* careful pronunciation of English in his own speech but to be aware of the features which characterise more casual pronunciation, particularly by native speakers.

	I	can	try	and	book	some	seats	round	the	corner
(1)	aɪ	kən	ˈtraɪ	ən	ˈbʊk	səm	ˌsiːts/	ˈraʊnd	ðə	ˈkɔːnə
(2)	a(ɪ)	kɪ	ˈtraɪ	m	ˈbʊk	sm	ˌsiːts/	raʊn	ðə	ˈkɔːnə

‘relatively’ is not in the 2nd Edition



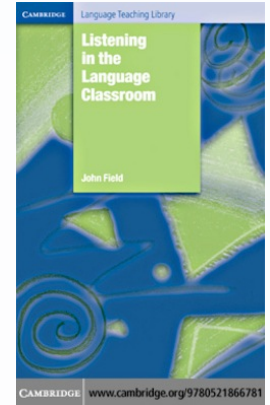
SSM - they do tell us



- It is important for teachers to achieve a greater understanding of the nature of the speech signal (Field, 2008: 140-141)
- The purpose is ... To equip teachers of listening with sufficient information for them to be able to identify the areas which are most likely to give rise to decoding problems (Field, 2008: 141)



SSM - they do tell us



- The same words in a wide range of context and voices (Field, 2008: 166)
- Words take their shapes from the intonation group as a whole and may not be identifiable until the whole group has been heard (Field, 2008: 196)

Experts mention

- Experts do mention the truth, but
 - (a) they present cookie rules first
 - (b) it takes careful reading to find the truth (footnotes, last paragraph of section)
 - (c) their comments have to be translated
 - (d) you have to resist the temptation of the cookies

CSM - a reason to chastise

- The CSM is used (perhaps sometimes, perhaps a lot) to chastise and castigate those people who do not conform to the standards and rules of the CSM
- By these standards, most native and expert speakers would fail to match the standards of the CSM
- All hail the SSM for all will be forgiven.

ELT a cookie monster



ELT a cookie monster



- We like cookie rules which are
 - teachable
 - learnable
 - examinable

and which can be explained in writing
and inspected at leisure

Offer

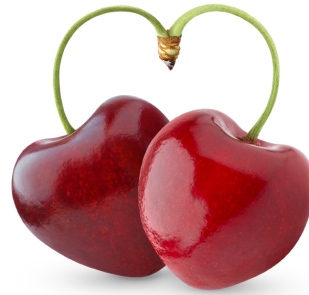
Thank you

**If you enjoyed this presentation, and/or found
it useful**

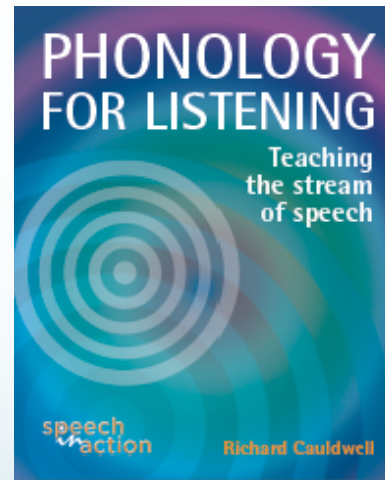
**Please invite me to speak!
(There's so much more to say)**

**If you did not enjoy this presentation, and/or
found it useless**

**Please recommend me to colleagues
in rival institutions**

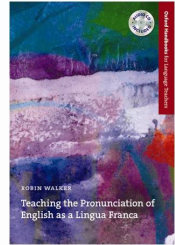


Thank you
www.speechinaction.com



ELF Examples

Turkish L1

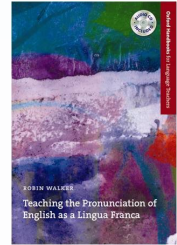


01 || YEAH || 3.3
02 || that's WHAT i'm TALKing about || 5.4
03 || that's THE || 2.9
04 || eh ACTually YOU'RE || 5.5
05 || YOU have a LOT of friends || 4.0 **hawwa**
[pause 0.435] ||
06 || MORE than (dan) || 2.9
07 || ... that ... || 2.5
08 || ... you could ... || 3.3
09 || HAVE withOUT THE || 3.6
10 || INTerNet || 5.0

In 05 the syllables 'you have a lot of' go at 6.7 sps

ELF Examples

Turkish L1



01 || ... it's it's ... || 2.0
02 || it's EASier || 5.7
03 || YEAH || 2.5
04 || i KNOW || 5.0
05 || BUT UH || 2.9
06 || [breath 0.272] ||
07 || we are TOO dependant on THAT || 4.2
08 || ... uh WE ... || 4.0
09 || [pause 0.320] ||
10 || we HAVE FRIENDS || 4.3
11 || on the INTerNet || 5.0 **onny**

SSM - they do tell us

The learner has not learned 'what it sounds like when said quickly, in an unemphasized position in a sentence and juxtaposed with other words ...'

(Ur, 1984: 17)

SSM - they do tell us

‘...the failure to to move beyond the basic elementary pronunciation of spoken English must be regarded as disastrous for any student who wants to be able to cope with a native English situation.’

(Brown 1990: 162)

Soundshapes

... kind of ... kind of ... (Toby and Jess)

... probably ... probably ... (Toby and Sylvia)

... and they were like ... and they were all...

... and they go ... (Toby, Dan, Walker).

Soundshapes

... kind of ... kind of .. . (Toby and Jess)

... probably ... probably ... (Toby and Sylvia)

... and they were like ... and they were all...

... and they go ... (Toby, Dan, Walker).

Soundshapes

... kind of ... kind of .. . (Toby and Jess)

... probably ... probably ... (Toby and Sylvia)

... and they were like ... and they were all...
... and they go ... (Toby, Dan, Walker).

ELF

01 II and they GO to celeBRATE II

02 II outSIDE the II

03 II BIG CITies II (Walker)

...

04 II i WON'T say it's a it's PRESent II
(Dorah)

...

05 II they HIRED a CAR FOR II

06 II a FEW II

07 II DAYS II

08 II probably a WEEK II (Sylvia)

ELF

01 || and they GO to celeBRATE ||

02 || outSIDE the ||

03 || BIG CITies || (Walker)

...

04 || i WON'T say it's a it's PRESent ||
(Dorah)

...

05 || they HIRED a CAR FOR ||

06 || a FEW ||

07 || DAYS ||

08 || probably a WEEK || (Sylvia)

ELF

01 II and they GO to celeBRATE II

02 II outSIDE the II

03 II BIG CITies II (Walker)

...

04 II i WON'T say it's a it's PRESent II
(Dorah)

...

05 II they HIRED a CAR FOR II

06 II a FEW II

07 II DAYS II

08 II probably a WEEK II (Sylvia)

Sound file matching

1	2	3
ebbler	able to	awol
evil	abler	abler
able to	awol	ebbler
awol	ebbler	able to
abler	evil	evil

Read down each column savouring each 'word' slowly and carefully, and then speed up saying them as fast and 'non-prominently' as possible
Listen to the soundfile: which column best represents the order of the 'word's'?

Sound file matching

1	2	3
ebbler	able to	awol
evil	abler	abler
able to	awol	ebbler
awol	ebbler	able to
abler	evil	evil

|| to be ABLe to LIVE in ||

|| we were ABLe to do LOTS of FUN things ||

|| i had the SKILLS || to be able to TEACH ||

|| our COACH is ABLe TO || GIVE us JOBS ||

|| ABLe TO ||

Jungle Listening - Soundshapes of *little*

- **littoo** (the final |l| sounds close to 'oo' 'too')
- **liddle** (the |t| sounds close to |d| as in the word 'middle')
- **lirrel** (the |t| sounds close to |r| as in the word 'mirror')
- **li?oo** (the |t| is replaced by a glottal stop)
- **lil** (the |t| is missing entirely)
- **likkul** (the |t| is like a |k|)

Jungle Listening - *little*

		little	liddle	littoo	lirrul	li?oo	likkul	lil
1	there was ONLY a little bit of FOOD		x					
2	there was ONLY a little bit of THIS							
3	there was ONLY a little bit of THAT							
4	there was ONLY a little bit of THIS							
5	there was ONLY a little bit of THIS							
6	there was ONLY a little bit of THIS							
7	there was ONLY a little bit of THIS							

Jungle Listening - *little*

		little	liddle	littoo	lirrul	li?oo	likkul	lil
1	there was ONLY a little bit of FOOD		X					
2	there was ONLY a little bit of THIS				X			
3	there was ONLY a little bit of THAT	X						
4	there was ONLY a little bit of THIS							X
5	there was ONLY a little bit of THIS						X	
6	there was ONLY a little bit of THIS				X			
7	there was ONLY a little bit of THIS					X		

Word clusters

a couple of

a lot of

and it was a

and that was the

and so they were

and they are

and it is

and so it

and at the

and like this

and i was

Squeeze zones

5	4	3	2	1
this is	ONE	i'm going to be looking at in slightly more	DE	tail in fact
and	I	just	START	ed
	I	realised that i'd left my purse at	HOME	

Squeeze zones

Guideline	Make 'past tense' t and d inaudible in front of both consonants and vowels
Non-prominent soundshapes	realised she > realise she realised it was > realise it was
Example speech units	HE realise she was GONE I realise it was HER

Squeeze zones

5	4	3	2	1
this is	ONE	i'm going to be looking at in slightly more	DE	tail in fact
and	I	just	START	ed
	I	realised that i'd left my purse at	HOME	

Squeeze zones

Guideline	Remove final t and d before consonants and vowels
Non-prominent soundshapes	left bank > leff bank left open > leff open against it > again sit kind of > kyne uv
Example speech units	it's ON the leff bank NOW it WAS leff open aGAIN HE'S again sit NOW HE'S kyne of NICE

Squeeze zones

5	4	3	2	1
this is	ONE	i'm going to be looking at in slightly more	DE	tail in fact
and	I	just	START	ed
	I	realised that i'd left my purse at	HOME	

Squeeze zones

Guidelines	Make the final t of <i>that</i> and <i>at</i> into glottal stops before consonants and vowels
Non-prominent soundshapes	that must > ðæʔ muss at our > æʔ our at about > æʔ about
Example speech units	i'm SURE tha'muss HURT SHE'S a'our house NOW i'll be THERE a'about TEN

Squeeze zones

5	4	3	2	1
this is	ONE	i'm going to be looking at in slightly more	DE	tail in fact
and	I	just	START	ed
	I	realised that i'd left my purse at	HOME	

Squeeze zones

Guidelines	Remove the initial consonant l of <i>that, this, the</i> after both consonants and vowels
Non-prominent soundshapes	realise that > realizat and then > annen in the > inner for this > for iss see that > see ut
Example speech units	I realizat i'd LEFT it he CAME annen WENT i SAW them inner GARden i've PLANS foriss EVEning can YOU see ut it's GOOD

Squeeze zones

5	4	3	2	1
this is	ONE	i'm going to be looking at in slightly more	DE	tail in fact
and	I	just	START	ed
	I	realised that i'd left my purse at	HOME	

Squeeze zones

Guidelines

Make every diphthong a monophthong based on its first element

Non-prominent soundshapes

realise > rill eyes
my time > ma tam
boy's a > bore's a
able > ebbles
out of > atta
south > saath

Example speech units

	I rill eyes it's LOST	
	he SAID ma tam's FINished	
	she SAID the bore's a FOOL	
	he's NOT ebbles to DO that	
	HE'S atta LUCK	

Squeeze zones

5	4	3	2	1
this is	ONE	i'm going to be looking at in slightly more	DE	tail in fact
and	I	just	START	ed
	I	realised that i'd left my purse at	HOME	

Squeeze zones

Guidelines	Avoid full closure for the stop consonants p,t,b,d
Non- prominent soundshapes	purse > furss cut it > currit kʊɾɪt a lot of > a lorruv produce > pro-use middle > mill able > ale total > toll
Example speech units	i LEFT my furss at HOME it's BETter to currit OPen he SPOKE a lorruv SENSE in ORder to pro-use COFFee NEAR the mill of the PAGE