

END NOTES

- 1) Information concerning the population of the Rhondda comes from Lewis E.D. in *Rhondda Past and Present* (ed. K. Hopkins, 1975). Since the Rhondda Borough Council only came into being in 1879, information before that has to be gleaned from the returns for the three parishes of Ystradyfodwg, Llantrisant and Llanwynno. The parish of Ystradyfodwg (statistics below) included most of the area of modern Rhondda and can be taken as a fair approximation of Rhondda Valleys population in the early 19th century.

POPULATION OF YSTRADYFODWG PARISH			
Year	Males	Females	Total
1801	265	277	542
1811	283	293	576
1821	309	338	647
1831	277	265	542

(Lewis E.D. in "Rhondda Past and Present", ed. K. Hopkins, 1975, Page 111)

- 2) Collins and Mees (1990: 87-8) describe Cardiff English as being found in 'the low-lying coastal region of south-east Glamorgan and south-west Gwent'. According to Coupland (1988: 5), 'informal observation suggests that the principal features of Cardiff English extend to the other urban centres around the capital along the south-east coastal belt – Barry and Penarth to the south-west of Cardiff, and Newport to the east.'
- 3) Males only were selected because the aim was to capture samples of speech towards the broader end of the dialect spectrum. Studies have found females to be more 'speech conscious' than males, including Labov (1972), Shuy (1970) and Trudgill (1974, 1975). Wells (1982: 18-22) comments:
- It has been repeatedly been found that women achieved a score significantly closer to the prestige norm than menusually the tendency is... for women's average scores on phonological variables to differ from men's average scores in the same direction ... as the middle class average scores differ from those of the working class.
- 4) Recordings were digitised at a 16kHz sampling rate with appropriate low pass pre-filtering and analysed using ESPS Waves on a Sun SPARC work-station. Fundamental frequencies were extracted using the pitch-tracking facility of Waves, with a 49ms cos window moving in 10ms steps. Durational measurements were made from waveforms in combination with wide-band spectrograms, following standard criteria of segmentation (Peterson and Lehiste 1960).
- 5) Coupland (1988: 29) describes /ɛ/ and /ɣ/ as 'very rare borrowings from Welsh' in Cardiff English. He says that 'Cardiff speakers go to great lengths to avoid them in their pronunciation', for instance anglicising the lateral fricative /ɛ/ as [l] when rendering the name of the city's Anglican cathedral *Llandaff* [landaf], or producing at best [çl~xlandaf].

- 6) Wells (1982: 322) observes that /p, t, k/ in Cockney are often associated with a degree of aspiration greater than in RP.
- 7) Measurements were taken of /p, t, k/ in the following samples from the conversational data:

Informant	Appendix	plosive	context
M1A	21	/k/	in the <u>col</u> liery
M1A	21	/k/	in the <u>col</u> liery
M1A	21	/p/	in the <u>pit</u>
P10A	22	/p/	when I . lived in <u>Pen</u> -rhys
P10A	22	/p/	on a <u>part</u> time basis
P10A	22	/t/	your <u>typical</u> r~real Welshman
T1A	20	/k/	a good supporter of <u>Cardiff</u>
T1A	20	/p/	and . it <u>depended</u>
T1A	20	/p/	but it <u>depended</u>
T1A	20	/p/	it <u>depended</u>
T1A	20	/t/	would be the <u>top</u> dog
T5B	20	/p/	and the <u>Parry</u> brothers
T5A	20	/t/	from <u>Blaina Terrace</u>
T5B	20	/t/	but I just <u>told</u> you
T2B	20	/k/	I don't <u>recall</u> him
M8B	21	/t/	before <u>tax</u>
M8B	21	/k/	got to have a <u>car</u>

- 8) Wells (1982: 344) observes that 'butter' with [d] is recorded by the LAE (Orton et al 1978) everywhere in the West Country southwest of a line from Weston-super-Mare to Portsmouth, and that intervocalic voiced /t/ in 'butter', 'beautiful', 'hospital' etc is common in urban areas such as Bristol.
- 9) Measurements were taken of fricatives in the following samples from the RVE conversational data :

Informant	Appendix	Fricative	Context	Frication length
M1	18	/f/	and my <u>f</u> ather	100ms
M1	18	/f/	and my <u>f</u> ather	90ms
M9	18	/f/	to hear the <u>f</u> ight	100ms
M9	18	/f/	to hear the <u>f</u> ight	120ms
M9	18	/f/	to hear the <u>f</u> ight	115ms
M9	18	/f/	only the <u>f</u> ight mind	90ms
P10	19	/f/	on <u>official</u> functions	100ms

- 10) Thomas, C. (1961: 66) states that /z/ is of limited distribution in the local Welsh dialect in Nantgarw.

- 11) The incidence of trilled [r] realizations in the speech of the different age-groups of informants (i.e. at least one occurrence) was as follows:

Trilled /r/ occurrence	
All informants	63%
over 60's	80%
30's-40's	47%

- 12) Cennard Davies, lecturer in the Welsh language at the University of Glamorgan and life-long resident of the Rhondda, observes (personal communication 1999) that Welsh-language speakers in the Rhondda Valleys pronounce words in two distinct ways, depending on whether they are speaking Welsh or English. 'Cwmparc', for example, is /kum'par k/ when speaking Welsh, but /kum'pa : k/ when speaking in English. Similarly, the word 'storm' (a borrowing into Welsh from English) is /stɔrm/ when speaking Welsh but /stɔ : m/ when speaking English. In other words, the feature of rhoticity in Welsh is not generally transferred by Welsh-language speakers into their pronunciation of English.
- 13) Thomas, A. (1958) reported by Jones (1984: 49) describes /l/ in South Wales Welsh as 'unilateral and clear'. Thomas, C. (1961: 72) describes it for Nantgarw Welsh as being clear when adjacent to front vowels and neutral when adjacent to back ones.
- 14) Ball (1989: 89) claims that in Welsh there is less vowel and consonant reduction in connected speech than in English. Wells (1982: 388) states that in 'typically Welsh' English accents – he excludes Cardiff and Newport in this respect – there is typically release of the first of a pair of plosives in words such as 'actor' [ak^h t^h ə], whereas in RP there is an 'overlapping' assimilation [æk¹ tə].
- 15) In the RVE conversational data it was found that /t, d/ could be strikingly retained in slow speech. Examples include the clear retention and release of /t/ in 'next thing' and 'just from', and of /d/ in 'mend them'.
- 16) Further examples of <th> (/ð/) elisions in the speech sampled are: 'besides (th)at'; 'booing (th)em'; 'what (th)ey learn'; '(th)ere's nothing';
- 17) Such /i/ realizations are reported to be increasing in RP too. Gimson, revised Cruttenden, (2001: 107) observes a trend in RP for /ɪ/ to be replaced by a short variety of /i : /, while Wells (1982, Vol. I: 165-6) notes that "consistent final [i] is found in much of the south of England" as well as with some RP speakers.
- 18) In the West Country, Wells (1982: 345) observes that /a/ and /a : / are the same in quality, with the phonemic distinction between them being obscured if the short vowel, e.g. in *gas*, *bad*, is lengthened. Marked lengthening of /a/ can occur in RP, too, particularly before voiced consonants, e.g. 'cab', 'bad', 'bag', 'badge', 'man' (Gimson, revised Cruttenden, 2001: 111).

19) The 'BATH set' came into being approximately at the end of the seventeenth century, through a split in pronunciations of /æ/ in the South of England (but not the North) involving:

- pre-fricative lengthening of the vowel in words like 'pass', 'staff', 'bath',
- lengthening of the vowel in the environment of a nasal plus obstruent e.g. 'aunt', 'answer', 'demand'.

These changes took place by a process of lexical diffusion and did not spread to all words meeting the structural description, for instance 'gas', 'amass', 'maths', 'romance', 'expand', 'trample'. The 'TRAP-BATH split' was completed in the case of RP by the lengthened vowel becoming backed in quality. Wells (1982: 203-5, 232-4).

20) An unrounded [ɑ] also occurs in the West Country (Wells 1982: 347).

21) Wells (1982: 348) questions whether [ʌ] and [ə] contrast in much of West Country English. The Welsh language has a single central vowel (Jones, G. 1984: 56).

22) The far north of England and East Anglia are other examples of places where traces of the pre-merger position can be found (Wells 1982: 192-4).

23) Cardiff English, is also reported to have diphthongs only, Collins and Mees observing that 'unlike most other Welsh accents of English ... FACE is nowadays clearly a full diphthong' (1990: 96-7).

24) The following table shows the number of informants that distinguished between STALE (using /e:/) and TAIL (/eɪ/) in the Questionnaire responses.

% of informants distinguishing STALE / TAIL			
Location	Over 60s	30s	All
Treherbert	90% 9/10	100% 10/10	95% 19/20
Maerdy	100% 10/10	80% 8/10	90% 18/20
Porth	90% 9/10	100% 10/10	95% 19/20
All	93.3% 28/30	93.3% 28/30	93.3% 56/60

25) In RP, Gimson, revised Cruttenden, (2001: 144) states that 'nowadays a long monophthong is a completely acceptable alternative'.

26) In Cardiff English (Collins & Mees 1990: 95), a raised variant nearer Cardinal 2 is reported - presumably pushed upwards to maintain contrast with the frequently raised long [æ:] of PALM, START words in that dialect.

27) SAWD (Parry 1977) finds that [ɛ:] is the normal realization of 'daren't', 'hare' and 'mare' throughout south-east Wales, but that rhotic versions and glides towards schwa occasionally occur.

28) Those informants that did sometimes produce such open realizations were mainly from the older group of informants (the 'over 60s'). Examples include:

Informant	Example	Realization
T1	Born	[ɔ̣:]
	Talking	[ɔ̣:]
T2	Morning	[ɔ̣:]
T4	Draw	[ɔ̣:]
T5	(Cliff) Morgan	[ɔ̣:]
T6	George	[ɔ̣:]
	Fought	[ɔ̣:]
T9	Treorchy	[ɔ̣:]
	Awful	[ɔ̣:]
T10	(three) quarters	[ɔ̣:]
T16	Brought	[ɔ̣:]

29) Realizations of this diphthong would probably have approximated to the polite norm of the time, but may not have involved the RP early 20th century innovation of centralizing the start point from [ou] to [əu] (Wells 1982: 105).

30) The Cardiff English diphthong is observed by Collins & Mees (1990: 97) to have an unrounded start [ɥ̥ü].

31) The Welsh language /o:/ occurs in both free and checked syllables, as in /glo:/ (coal) and /bo:d/ (to be). A diphthong /əu/ with a [öu] variant also exists, but is rarer and 'mostly confined to the penultima and pre-penultima, being rare in monosyllables and stressed ultima' (Jones, G. 1984: 58).

32) The following table shows the number of informants distinguishing in Questionnaire responses between TOES (using /o:/) and TOWS (/ou/).

% of informants distinguishing TOES / TOWS			
Location	Over 60s	30s	All
Treherbert	100% 10/10	80% 8/10	90% 18/20
Maerdy	90% 9/10	90% 9/10	90% 18/20
Porth	80% 8/10	80% 8/10	80% 16/20
All	90% 27/30	83.30% 25/30	86.70% 52/60

- 33) Unrounded /ɜː/ is similar in quality to the Welsh Language /ə/ which, according to Thomas, C. (1961: 23), is 'between half-open and half-close central' and 'frequently pronounced with degrees of length'.
- 34) The Welsh language, in fact, contains both /əi/ and /aɪ/, the latter of which is said to be mostly confined to monosyllables and stressed ultima (Jones, G. 1984: 58). An alternative hypothesis for the presence of [aɪ] in Welsh-speaking areas is that in such areas English was a taught language and pronunciations derive from 'schoolmaster influence'.
- 35) t'Hart, Collier & Cohen claim that listeners can sort out significant from non-significant pitch changes – because they are 'sensitive to a highly restrictive class of Fo changes only: viz. those that have been intentionally produced by the speaker' (1990: 69).
- 36) Pike (1945), Wells (1945) and Trager & Smith (1951) have maintained that the building blocks of intonational contours are pitch levels. Pike (1945: 25) proposes that all contours can be described by means of four such pitch levels: 4 = 'low'; 3 = 'mid'; 2 = 'high'; and 1 = 'extra high'. Contours are a combination of these levels, as in the example below.

(Pike, K. 1945, "Intonation of American English", page 28)

He "wanted to buy it but 'couldn't.
⁰2 - - 4 -3 4 ⁰2 - - 4

Trager & Smith (1951: 42) and Wells (1945) have the levels in the reverse order to Pike.

- 37) It may be noted here that the term *tone* will be used to refer to pitch movements (as in tone-unit theory), rather than to pitch levels or pitch targets (as in Autosegmental-Metrical Phonology).
- 38) The need for a symbol of some kind to denote zero pitch movement is also assumed by Hirst and Di Cristo in the INSTINT transcription system, which states that pitch points are to be defined as 'relatively higher, lower or *the same* (the author's italics) as the immediately preceding pitch point' (1998: 15).
- 39) The smallest detectable duration of silent pause is found by Goldman-Eisler to be 0.25 sec (1961b: 220-9) and by Boomer and Dittman to be 0.20 sec (1962: 215-220); Goldman-Eisler (1961a: 22) describes the duration of a filled pause as being between 0.2 to 0.8 seconds.
- 40) Two types of *tone* are described in this account of RVE prosody:
 (1) pitch movement from the stressed syllable in an accent contour (see *****)
 (2) *terminal tone* - final pitch movement of an IP (see ***)
- 41) With regard to intensity, Williams (1983: 28-29) distinguishes in the wave form between *peak amplitude*, straightforwardly identified from the narrow-band amplitude display, and *envelope amplitude*, an integral of mean amplitude and duration. In Welsh, the stressed penult may have the greater peak amplitude but the final syllable the greater envelope amplitude.

- 42) Instrumental evidence, in fact, shows that the last prominence / accent of a tone unit - unless it is contrastive - is rarely 'the most salient' in terms of pitch height and degree of intensity. Instead, these phonetic maxima are characteristically located at the start of the tone-unit and there is a *declination* of pitch level and decrease in intensity towards the end (see note 55). Ladd (1996: 73) observes that during declination there is a lowering of the top and bottom lines and thus a reduction of the 'tonal space' within which accents are realized. Brown et al (1980: 71) find no examples in their data of the pitch height of the final accent being higher than the first.
- 43) Typical median fundamental frequency levels for men have been found to be 134 to 146 Hz (Lehiste 1970: 58), lying in the bottom third of the actual pitch range exploited in normal speech.
- 44) The following table shows the number of tone-units identified by the six intonationalists in the three extracts sent them for analysis, and the number of times the tone-units corresponded with one or more clause. (V1, V2 etc refer to the serial numbers of the intonationalists):

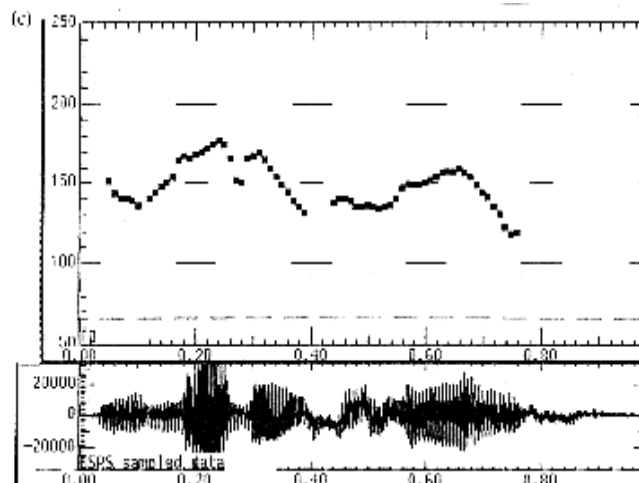
V	No of tone units identified	2 or more clauses	1 clause	% correspondence
V1	25	8	14	88
V2	37	3	26	78
V3	39	3	24	69
V4	43	2	22	56
V5	65	2	18	31
V6	52	2	17	37

'V1' and 'V2' were likely to relate their 'tone-units / groups' to clauses; 'V5' and 'V6' were much less likely to do so.

- 45) Brown et al (1980: 42) similarly comment, with their corpus of Edinburgh English, that with such phrases as '*you know*', '*you see*', '*in fact*' the listener is often unsure whether they belong to the end of one tone-unit or the beginning of the next.
- 46) '*cymysgiad*' is Welsh. It means 'mixing together', 'confusion'.
- 47) The grammatical model of description and terms used are those of Quirk et al in '*A Grammar of Contemporary English*' (1972).
- 48) Auxiliary verb tags, and other tags in the speech sampled such as: '*you know*', '*you see*', '*see*', '*mind*', '*like*'.
- 49) In Welsh English, the most detailed account of consonant lengthening is given in the description of Port Talbot English by Connolly, (1981: 59-60). He links the phenomenon mainly with obstruents following stressed short vowels. The consonants concerned may be intervocalic as the /k/ in *lucky* and /s/ in *gassy*, or may be pre-pausal, closing stressed monosyllables, as the /t/ in *light* or

/f/ in *grief*. The long vowels /i:/, /u:/ and all diphthongs can also be subject to shortening, and lenis as well as fortis obstruents may be shortened, e.g. the /d/ in *ladder* and /z/ in *fizz*. He observes that when lengthening applies to clusters, it affects the first fortis consonant if there is one, i.e. the /p/ of *lipstick* but /t/ of *shunting*, and the first consonant if there is not.

- 50) Almost any consonant may be lengthened: voiced plosives ('*typical*', '*Twickenham*' etc); voiceless plosives ('*dabbling*', '*rugby*' etc); voiceless fricatives ('*deathly*', '*hospital*' etc), voiced fricatives ('*houses*', '*provisions*' etc); voiceless affricates ('*satchel*', '*touch*' etc); voiced affricates ('*religious*', '*sledge*'); nasals ('*depended*', '*Ponty*' etc); laterals ('*children*', '*brilliant*' etc); semi-vowels ('*boyo*', '*Tower*' etc). Only with /r/ are there no clear examples of lengthening in the speech sampled.
- 51) Another example can be seen on the strong final syllable of '*Councillors*' in '*local Councillors*' (Acoustic Record in Appendix 25).
- 52) Alternatively, words in which there are normally two stresses in RP, but one is clearly secondary, may be pronounced in RVE with two strong stresses: for example '*nationalistic*', '*nationalization*', '*education*', '*architectural*', '*locomotive*', '*Marciano*', '*ornamental*'.
- 53) Buxton (1983: 111-121) has found that results are slightly more in favour of actual isochrony if measurements are taken from the onset of the stressed vowel rather than from the beginning of the syllable.
- 54) In Autosegmental-metrical phonology (AM), all pitch accents are 'single tone' (e.g. H*) or 'bitonal' (e.g. H*+L), at least in the original version of Pierrehumbert (1980). The RVE analysis does not recognize such a restriction – an accent contour is made up of as many contour-points as are joined into it: for example it may contain three contour points (in AM terminology '*tritonal*') e.g. H*+H+L.
- 55) 'Declination' is when there is a gradual lowering of pitch from beginning to end of an IP, which can be seen in a lowering of the top and bottom lines in the acoustic record (Ladd 1996: 73, 107), as in the following acoustic record:



Example of pitch declination, during the phrase '*their mother's a lawyer*' (Ladd 1996: 107).

- 56) Brown et al (1980: 25-7) associate end of topic with lexical tail-away on prefabricated phrases ('and so on', 'and things like that' etc), dropping low in pitch range, fading away in loudness and leaving long pauses.
- 57) Of the 556 terminal tones in the prosodic transcriptions, 83.5% were conflated with the final accent and 16.5% separated :

Terminal Tone					
Conflated	%	Separated	%	Total	%
464	83.5%	92	16.5%	556	100.0%

Terminal Tones : proportions conflated with or separated from final accent.

- 58) Several linguists link level tones functionally with rising tones. Among those that do so, to a greater or lesser extent, are Sweet (1890: 32), Crystal (1969: 216), Cruttenden (1997: 87-110) and Tench (1996: 81).
- 59) Coupland (1988 : 36) hypothesizes that the '*isn't it*' / '*is it*' tag fulfils a different function from agreement tags. It is possible that the '*it*' of non-standard '*isn't it*'? refers anaphorically to the whole preceding utterance rather than specifically to the previous noun-phrase subject. It may be functionally equivalent, then, to '*isn't that so*'? or French '*n'est-ce pas*'?.