1. INTRODUCTION

1.1 The Rhondda Valleys

The Rhondda lies in 'the Valleys' area of south east Wales. It consists of two steep sided valleys, Rhondda Fawr (big Rhondda) and Rhondda Fach (small Rhondda).



Figure 1. The Rhondda Valleys, joining the Taff Valley at Pontypridd.

The Rhondda was a sparsely populated rural area until the start of the 19th century. Then, from the mid 19th century, coal-mines, tips and general urban sprawl spread to cover almost every available piece of building land along the valley bottoms and sides. The isolation imposed by the mountainous topography, the continuous urbanization from end to end of each valley and the omnipresence of coal-mining with its unique comradeship led to an unusual closeness of community in the Rhondda Valleys. This could be encountered in the communal activities centred around chapels, choirs, cooperative societies, Miners' Welfare Halls and Clubs, and in the wide followings attracted by sports like soccer, rugby and boxing. This closeness of community still survives in the Rhondda today, despite the economic catastrophe suffered through the extinction of the coal industry.

Unlike such cities as Liverpool, Cardiff and Bristol, the Rhondda has no focal area for dialect study analogous to the central districts of such cities. It has no principal town concentrating population, or containing the main administrative, educational, recreational etc facilities, but forms a continuous strand of urban development in which only the local people can tell where one township ends and another one begins.

Up to about 1850, the population of the Rhondda Valleys was tiny, perhaps not reaching one thousand.¹ Sixty years later (1911), with the Official List of Mines recording 53 large collieries at work and mass inwards migration, it had grown prodigiously to 152,781. After the war, the population reached an estimated peak of 169,000 in 1924, before gradually declining to its present-day level as the world-wide demand for Rhondda's high-grade smokeless steam coal fell. By January 1947, when only a dozen pits were still in production in the Rhondda, the population had fallen below 120,000. By 1991 it had shrunk to 78,344 (Figure 2).

Year	Total population	Can speak Welsh		
		Number	Percentage	
1881	54000	33000	61%	
1891	88000	50000	57%	
1901	112000	68000	61%	
1911	152000	76000	50%	
1921	165000	70000	42%	
1931	142000	67000	47%	
1941	126000	62000	50%	
1951	112000	35000	31%	
1961	100000	21000	21%	
1971	88000	10000	11%	
1981	81000	9000	11%	
1991	78000	6100	8%	

POPULATION OF THE RHONDDA & WELSH SPEAKERS 1881-1991



Census Figures (1881-199)

Figure 2. Population of the Rhondda Valleys and percentage of Welsh speakers (1881-1999).

Until the turn of the century, the great bulk of the population influx came from elsewhere in Wales: in the beginning mainly from south-east Wales (including the older industrial areas of Merthyr and Aberdare), but later, with the improvement of the railway system from about 1881, large numbers came from south-west Wales (Carmarthenshire, Pembrokeshire and Cardiganshire) and smaller numbers from more distant areas such as Montgomeryshire and the depressed lead and slate mining areas of North Wales. Migrants had started to come from outside Wales, too. The 1891 Census reveals, for example, that a considerable number of Rhondda inhabitants had been born in the West of England, particularly Somerset and Gloucestershire, including the Forest of Dean with its own coal-mining industry. Migration also took place from the West Midlands (including neighbouring Herefordshire), from wider afield in England, from Scotland, from Ireland and even from outside Britain as Italian restaurant /cafe-keepers and Chinese laundrymen joined the throng of newcomers.

The population up to 1851 was Welsh-speaking. According to the traveller Wood (1813, quoted in Lewis, C. 1975: 180)

The Ronda Vawr and the Ronda Vechan ...take their origin in the wildest region of Glamorgan, where the English Language is scarcely heard

The large majority of the early influx of migrants themselves spoke Welsh, but the course of the 20th century saw a fall in the Welsh-speaking population of the Rhondda to levels far lower than in the 'Welsh heartlands' of the West and North of Wales. Figure 2, above, reveals this as a steady fall up to the time of the Second World War, at which time (in 1941) still 50% of the population of Rhondda could speak Welsh, and a sharp decline after then, so that by the 1991 census it had dropped to 8%.

In general, the percentage of Welsh speakers increases as one progresses upwards towards the heads of the two Valleys. In the locations selected for survey, Treherbert, Maerdy and Cymmer, Porth, the percentages were 11.2%, 8.4% and 5.6% respectively at the time of the 1991 Census.

1.2 Influences on Rhondda Valleys English

Three main sources of influence on Rhondda Valleys English (RVE) may be identified. The first has been the dialects of the south-west Midlands and the West Country of England, throughout many centuries of contact with south-east Wales. Another has been RP, learnt from school-teachers by those for whom English was a foreign language, and continuing to exercise its influence as the 'correct' form. A third is the Welsh language itself, spoken by half the Rhondda population as recently as the mid 20th century. A further possible source of influence is Cardiff English, described by Coupland (1988: 18, 24-40) as containing features not only from the West Country and the West Midlands but also possibly from Merseyside and London.

1.3 References to Welsh English

The principal studies of Welsh English referred to are as follows:

1) West Glamorgan English / Port Talbot English

In two articles, Connolly (1981, 1990) examines the pronunciation of working-class speech in Port Talbot. The variety of English found there is claimed by him to be similar to that in neighbouring Neath and Swansea (see map, Figure 3) and broadly representative of West Glamorgan English. The Port-Talbot, Neath and Swansea area is geographically adjacent to the south-east Wales 'Valleys' region and shares its history of rapid industrial and population growth and anglicization.

2) Abercrave English

Tench (1990) studies the segmental and supra-segmental phonology of the small town of Abercrave in the upper Swansea Valley, at the edge of the south-east Wales region. The area has a stronger Welsh-language influence than the Swansea-Neath-



Figure 3. Map of Wales. (The dotted line shows the line of Offa's Dyke.)

Port-Talbot region. According to Tench (1990: 130), Abercrave was entirely Welsh speaking until the Second World War.

3) Cardiff English

Cardiff English is relatively well researched, for example by Mees (1983), Lediard (1977), Coupland (1988) and Collins & Mees (1990).² Cardiff grew rapidly as a city with the industrialization of the Valleys in the 19th century, but differs from them in having a well-established English speech community before the industrial era. A further difference revealed by the 1911 census returns for Cardiff is that a clear majority of those not born in Cardiff had migrated from outside Wales, contributing towards a considerably greater anglicization of population than occurred in the Valleys. Collins and Mees (1990: 87-8) report that for many people encountering the accent for the first time, Cardiff English does not seem to resemble a 'proper Welsh accent' at all, citing in particular the absence of the so-called "lilting" intonation tunes.

4) The Survey of Anglo-Welsh Dialects

The fourth main study of Welsh English consulted was the survey of Anglo-Welsh Dialects (SAWD) (Parry 1977, 1979; Penhallurick 1991). This followed a similar methodology to the Survey of English Dialects (SED) (Orton et al 1962-71). It sets out to record conservative forms of pronunciation, lexis, syntax and morphology in the speech of informants in the over-60s age group, "ideally ... from rural locations". It covers south-east, south-west and North Wales. The volume on south-east Wales covers forty-seven localities, extending from Gower to Gwent, and from Brecon and Radnor to the coast.

1.4 References to Welsh

Little is known about the variety of Welsh spoken in the Rhondda Valleys prior to the coal boom, which was a branch of south-east Welsh known as 'tafodiath gwyr y Gloran', the 'Gloran Dialect' (Lewis, C. 1975: 180). With the large-scale immigration into the Valleys at the time of the coal boom, this south-eastern dialect became mixed with Welsh dialects from other parts of Wales, particularly the south west.

For descriptions of the phonology of Welsh, the sources referred to are:

1) The Welsh Dialect of Nantgarw

Nantgarw lies only 5 km from the Lower Rhondda. An account of its Welsh dialect has been written by Thomas, C. (1961).

2) Welsh Phonology (M. Ball and G. Jones, eds. 1984)

Reference is made to four articles in this volume:

• The Distinctive Vowels and Consonants of Welsh (Jones, G.)

This gives an account of the auditory and articulatory features of the consonants and vowels of Welsh. It is based on an analysis of the dialect in the Llanwrtyd area of South Powys, but makes reference to southern and northern Welsh in general.

• Phonotactic Constraints in Welsh (Awberry)

This is of particular value in its discussion of the relations between 'vowel length' and succeeding consonants.

• Phonetics for Phonology (Ball)

This reports on a range of instrumental analyses, including measurements of voiceonset time in initial plosive consonants and of the force of frication in initial fricative consonants.

• Intonation and the Discourse (Rhys)

This gives an account of the intonational forms and functions of Welsh following a broadly Hallidayan approach (Halliday 1967). It is based primarily on an analysis of a dialect of Welsh spoken in south-east Dyfed.

3) Stress in Modern Welsh (Williams 1983;1985;1986)

Williams examines the rhythmic and phonetic cues to stress in the Welsh language.

1.5 Collecting the data

1.5.1 Locations of survey

Recordings were taken at three locations in the Rhondda: (see map, Figure 1):

- (1) Treherbert, at the top of the Rhondda Fawr
- (2) Maerdy, at the top of the Rhondda Fach
- (3) Cymmer adjoining Porth, in the Lower Rhondda.

Treherbert and Maerdy, being at the top of their respective valleys, are furthest away from Cardiff. They are also physically remote from each other due to the mountainous topography. They had 11.2% and 8.4% of Welsh speakers, respectively in 1991.

Cymmer, Porth lies further down the Valleys at the confluence of the Rhondda Fawr and Rhondda Fach. It had 5.6% of Welsh speakers in 1991.

1.5.2 Informants

Informants were chosen at Workmen's Clubs in each location, twenty males from each location, and sixty in all.³ The Workmen's Clubs cooperating with the survey were: Tynewydd Workmen's Club & the Conservative Workmen's Club ('The Con') in Treherbert, the Maerdy Workmen's Club in Maerdy and the Cymmer Pioneer Workmen's Club & Cymmer Workmen's Hall in Porth. The researcher met with officials of the Clubs to outline the nature of the survey and criteria for recruitment of informants. Each club readily agreed to cooperate in return for a modest donation of funds. All the informants were to be permanent residents of the Rhondda Valleys, having been born there and having spent no extensive period (longer than 2 years) away during the first twenty years of their lives. They were to be broadly 'working-class' in socio-economic status: their occupations, and of their fathers before them fell loosely into the category of 'working class', they had received no schooling or other full-time college education beyond the age of 16 and they were all members of a Workmen's Club and so, presumably, not entirely unhappy with the social status this implied. They were divided into two age-groups, approximately a generation apart:

- 1) 'The over 60s', being informants aged over 60 years old who had been raised in the Rhondda in the 1930s or earlier, at a time when approximately 50% of the population still spoke Welsh.
- 2) 'The 30s', being informants in their 30s and early 40s, who had been raised in the 1960s, when the number of Welsh-speakers was slumping, when communal institutions such as Workmen's Halls and chapels were in steep decline and when people were increasingly being exposed to outside influence and travelling further afield for work and holidays.

No attempt was made to obtain a quota of Welsh speakers for each age group, corresponding to the overall percentage of Welsh speakers in the Rhondda. In the event, three of the informants (2 from the over 60s, and 1 from the 30s age group) were Welsh speakers, representing 5% of the sample – compared with 8% of the population as a whole in the 1991 census. A further twelve (20%) of the informants were informants who spoke some Welsh and whose parents had both been fluent in Welsh. It was found that ten of these were from the over 60s and only two from the 30s (Appendix 1), the difference between age groups reflecting the steep decline of Welsh in the Valleys in the second half of the 20th century.

The informants are referred to by serial number of interview (T1 = Treherbert interview no. 1; M6 = Maerdy interview no. 6 etc). Their essential bio-details

(including age, schooling, occupations and knowledge if any of Welsh) and the place of birth of their parents can be seen in Appendix 1.

1.5.3 The recordings

The interviews with informants took place in the Workmen's Clubs listed above in the early months of 1995. They consisted of two parts:

- 1) *responses to a questionnaire*: to investigate segmental variables (consonants and vowels)
- 2) *spontaneous conversations*: to investigate prosodic variables (stress, rhythm, intonation) and to provide supplementary data on segmental variables.

The interviews took half an hour per pair of informants, time for both of them to do the questionnaire and for at least ten minutes' free conversation. Before starting, each informant filled out a bio-details form and an interview-consent form. The purpose of the interview was presented to the informants in terms of a Valleys accent being part of 'local heritage', and their attention was drawn briefly to the recording equipment, which consisted of a small walkman -sized recorder (Sony WM D6C) with freestanding stereo-microphone, the recorder being placed out of sight on the floor and the microphone being concealed on one of the tables pushed together for the purpose of the interview. The speech styles elicited from the interviews tend towards the informal end of the speech style spectrum in both the questionnaire responses and conversations. This was helped by the setting being that of a Workman's Club, where people 'take visitors readily into their company', and by the interviewer (the researcher) being himself from the Valleys, able to share many of the interests and memories of the informants.

Recording quality turned out to be variable. Although a quiet area was sought in each Workman's Club away from the bar area or street, most recordings were subject to varying degrees of sound disturbance, resulting in recording quality which, although for the most part satisfactory for the purpose of auditory analysis, was often inadequate for acoustic analysis.

1.5.4 Questionnaire data

The questionnaire was designed to elicit single words that would illustrate the vowel and consonant sounds of RVE. Elicits were carried out indirectly in the manner of a quiz – a common type of entertainment in clubs and pubs. For example, to elicit the response "*pets*" the interviewer's prompt was usually "*dogs and cats are household*". Where the informant could not think of an answer, further clues were given and if the informant still could not find 'a right answer', a flash card with it was displayed. The procedure worked reasonably smoothly. Only on a few occasions was it necessary to resort to the flash card. When this happened, the informants usually read 'the answer' off quickly, indicating that their attention was more on the answer than on monitoring their pronunciation. Evidence that this general procedure was working was supplied by interjections such as 'aven't got a clue', 'now what are you thinking of there', and 'Christ, that's an 'ard un'.

The words chosen for the questionnaire relate to the lists of words contained in the 'standard lexical sets' of Wells (1982) (Appendix 3). The words can be seen in Figure 4, and the full text of the questionnaire in Appendix 2.

WORDS USED FOR	VOWEL	INVESTIGATION IN	THE RVE
	QUESTI	ONNAIRE.	

Lexical Sets	Vowel	RVE Questionnaire		
(Wells 1982)	in RP	Item	Word(s)	
KIT	/I/	1	PIT	
DRESS	/e/	2; 59	PET; FERRY	
TRAP	/æ/	3; 10; 16	BAT; DANCE; EXAMPLE	
LOT / CLOTH*	\α\	4; 14; 30; 32	ROD; BROTH; SALT; FALSE	
STRUT	///	6; 8;	BLOOD; BUTTER	
FOOT	/ʊ/	9; 11; 12	SOOT; TOOTH; FOOTBALL	
BATH	/α:/	7; 10; 15; 16	GRASS; DANCE; LAUGHING; EXAMPLE	
NURSE	/3:/	18; 56	NURSE; EAR	
FLEECE	/i:/	19; 21; 55	MEAT; WHEEL; PERIOD	
FACE	/eɪ/	20; 22; 24; 26; 27: 29: 31	'A' & 'K'; WASTE; WAIST; WAITING;	
		- 7 - 7 -	STALE; TAIL; BEHAVE	
PALM / START*	/a:/	23; 25; 60	CALM; FATHER; START	
THOUGHT	/ɔː/	28	CAUGHT	
NORTH	/ɔː/	17	NORTH	
FORCE	/ɔː/	61	SWORD	
GOAT	/ʊʊ/	20; 33; 35; 37; 39: 41: 43: 45: 47	'O'; SOLE; SOUL; TOES; TOWS; NOSE; KNOW; CLOTHES; SOFA	
GOOSE	/uː/	20; 34; 36; 38; 40; 42; 44	'U'; THROUGH; THREW; BLUE; BLEW; MOOD; BEAUTY	
PRICE	/aɪ/	46; 48	WHITE; FIRE	
CHOICE	/ɔɪ/	49	VOICE	
MOUTH	/aʊ/	50; 51; 52	SOUTH; SHOWER; HOUSE	
NEAR	/I9/	53; 54; 55; 56	BEER; BEARD; PERIOD; EAR	
SQUARE	/eə/	57; 58	PAIR; FAIRY	
CURE	/ʊə/	62; 63; 64; 65; 66	POOR; SURE; TOUR; CURES; JURY	
HappY	/1/	44; 58; 59; 66	BEAUTY; FAIRY; FERRY; JURY	
LettER / comma	/ə/	8; 13; 25; 47; 48; 51; 53; 54; 63; 64; 65; 66	BUTTER; HEADMASTER; FATHER; SOFA; FIRE; SHOWER; BEER; BEARD; POOR; SURE; TOUR; CURES	

Figure 4. Words used to elicit the vowels of RVE.

1.5.5 Spontaneous conversation data

For the conversations, informants were paired and given an array of blown-up photos of Rhondda scenes and personalities, past and present, to talk about. The pictures were generally successful in triggering topics of conversation. The informants usually began by quizzing each other about which picture they should start with, where it was, who was in it etc. At least one of the pictures in every interview then served as a basis for a conversation to develop. Some pairs needed to sort through several pictures before they found something to 'start them off'. Some immediately launched into a conversation - a couple of pairs without looking at any pictures at all. Although the interviewer instructed the informants to 'talk together' during the conversation, the habit of Rhondda people in 'taking people into their company' meant that the interviewer was inevitably brought into the discussions. He kept, however, as much in the background as possible. Even in the cases where a lot of intervention was needed, the interview succeeded in capturing some stretches of natural – sometimes animated – speech.

The resulting data can be characterised as cooperative adult speech without, on the whole, scaling any great heights of emotion. In some interviews there are lengthy stretches of monologue, but even these episodes are essentially interactional in character, the speaker's discourse being filled with appeals to the listeners' agreement, understanding etc. The conversations are of sociological as well as linguistic interest, since they range widely over Rhondda Valleys life at a time of drastic change in economic fortunes and community life, but when memories of the days when the Valleys were in their prime were still strong. Synopses and partial transcriptions of the conversations can be seen in Appendices 26-28.

1.6 Analysing the data

The data consists of thirty, half-hour cassette recordings of variable recording quality. The questionnaire responses take up approximately the first 20 minutes of each half hour, and the conversation the remaining 10 minutes. The recordings have been digitised and can be listened to in the sound clips that are provided throughout the text, and in the sound-archive.

1.6.1 auditory analysis (segmental)

The researcher listened to the questionnaire responses and carried out a first transcription. A second transcription was carried out a month later without referring to the first, and where there were discrepancies, items were listened to a third time to resolve the differences.

A third of the questionnaire responses (20) were then taken to a 'Second Listener', Michael Childs, a postgraduate student of phonetics at Cardiff University at the time, who made his own transcriptions without at any time seeing those of the researcher. A small number of the twenty (4) were taken to a Third Listener, David Parry, author of SAWD (1977, 1979), who produced his own independent transcriptions. Where there were discrepancies between the First Listener and Second Listener, these were resolved by further listenings and by consulting, where available, the Third Listener's transcriptions. Of the types of discrepancy occurring between First and Second Listener, the following were the most common:

- different transcriptions of /r/in *pre-vocalic* position (e.g. in '*rod*',' grass') and in *intervocalic* position (e.g. in '*period*',' *ferry*') generally with one listener putting tapped /r/and the other approximant /r/
- difference transcriptions of lengthened consonants; the second listener often marking them as *glottally reinforced*, e.g. [⁹t], and the first listener as merely lengthened [t[,]]
- differences on whether to transcribe the vowel in words from the FACE and GOAT lexical sets (Appendix 3.11 & 3.14) as *monophthongs* or *diphthongs*, particularly when with a following /1/, e.g. in '*tail*' & '*stale*', '*soul* & *sole*'.

The remaining two thirds of the questionnaire responses (40) were then listened to again by the researcher, paying particular attention to what had been learnt in the moderation of discrepancies between the First and Second Listeners.

Analysis of the questionnaire responses thus finished, the conversations were listened to in order obtain further data on segmental variables. This proved to be extensive, including (for instance):

- many occurrences of words of the FACE and GOAT lexical sets, yielding fresh information on when speakers tended to use a monophthong and when a diphthong
- a large number of occurrences of words of the BATH lexical set (Appendix 3.7), providing the primary information on how speakers pronounced them (with *a short* or *a long vowel*)
- incidence of /h/-dropping, which could be compared with that in the questionnaire data

1.6.2 Acoustic analysis (segmental))

Spectographic analysis of vowels was then carried out by Sally Bates, of the speech phonetics department, St Marks & St Johns College Plymouth. F1 and F2 readings were obtained for the responses of 10 informants to the Questionnaire items seen in Figure 5 below, using 'Dr Speech, Real Speech for Windows' (Huang et al 1995).

Vowel	RVE Questionnaire		Vowel	RVE Questionnaire	
	Items	WORD]	Items	WORD
/i:/	19, 21	MEAT, WHEEL	/ei/	29	TAIL*
/I /	1	PIT	/ʌi/	46	WHITE
/eː/	22, 27	WASTE*, STALE*	/pi/	49	VOICE
/ɛ/	2, 59	PETS, FERRY	/IU/	36, 40	THREW*, BLEW*
/13/	57, 58	PAIR*, FAIRY*	/ʌu/	50, 52	SOUTH, HOUSE
/a /	3, 10	BAT, DANCE*	/ou/	39, 43	TOWS*, KNOWS*
/aː/	23, 60	CALM, START	/ei/	29	TAIL*
\ α\	4, 14	ROD, BROTH	/ʌi/	46	WHITE
/ɔː/	17, 28	NORTH, CAUGHT	/ia/	49	VOICE
/oː/	33, 37,	SOLE*, TOES*,	/ɪu/	36, 40	THREW*, BLEW*
/ʊ/	9, 11	SOOT, TOOTH	/ʌu/	50, 52	SOUTH, HOUSE
/u:/	38, 42	BLUE, MOOD	/ou/	39, 43	TOWS*, KNOWS*
// /	6, 8	BLOOD, BUTTER			
/3:/	18, 56	NURSE, EAR*			

Acoustic Analysis : Vowels

Figure 5. The words used for vowel acoustic analysis. (Auditory analysis had found that the words with an asterisk* were pronounced with the vowel indicated.)

Monophthong values were averaged out across the central 'steady-state' portion of the vowel, and diphthong values over the initial and final parts of the vowel. The *F1* and *F2 formant* values obtained are tentative, in view of the imperfection of the recordings, the varying *co-articulatory* environments in which target vowels appeared and the well recognised problems of acoustic measurements (Wells 1962; Henton 1983: 353-9, et al). They are to be regarded, therefore, as at best supportive of the auditory findings. Where given, they are compared to the RP values in Gimson's Pronunciation of English revised by Cruttenden (2001: 98-99).

1.6.3 Analysis (prosodic)

Prosodic analysis and transcription were carried out of six passages of optimum quality – referred to henceforth as *'the prosodic data'*. The passages selected are from interviews Treherbert 1 (T1), Treherbert 5 (T5), Maerdy 1 (M1), Maerdy 8 (M8) and Porth 10 (P10). Since the analysis entailed decisions as to what would be the most appropriate theoretical framework to employ, brief discussion of this takes place in Chapter 4.

Finally, *acoustic records* were obtained for extracts from each of the six passages by Ineke Mennen, Department of Linguistics, Edinburgh University, in consultation with D. Robert Ladd.⁴