Analysing Early Audio Recordings

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1.1 Introduction

The common thread running through all the chapters in the current volume is the analysis of early audio recordings for varieties about which much is known from present-day data. These early recordings have been examined in the hope that they would shed light on the origin and background of many sound changes and developments which have been studied by linguists for decades, often by the authors of the chapters themselves. The audio material investigated, supported by relevant social and demographic data, can help unearth new information on phonetic, phonological and prosodic developments in the recent history of varieties. Until now, sufficient audio data has not been available in large enough quantities to allow research on early pronunciation features across varieties of English. The systematic use made of the early recordings in the present volume has allowed the authors to go further back in time than has hitherto been possible. In a multifaceted manner, the studies in this book seek to provide a historical perspective on the present-day patterns of pronunciation by exploring the time depth made possible by early recordings. The authors have asked various research questions: for instance, 'How recent is a pronunciation feature?', 'Which attested changes should be regarded as innovations?' or 'Which are historical continuations?' A judicious use of early recordings can, despite all caveats (see below), help scholars reach conclusions solidly based on primary audio data.

1.2 Increasing the Time Depth for Varieties of English

The use of early recordings as research material is not unproblematic and it is important to show an awareness of the pitfalls that may make it difficult to assess such material and compare it to later and present-day data (Table 1.1).

Table 1.1 *Caveats when using data from early recordings*

1   The range of data for any one individual is limited. This is usually due to the length
    of the recording (normally only a few minutes at the most). Hence early recordings
    are practically only suitable for sound analysis; for grammatical analysis the recordings
    contain too little data.
2   Typical recordings consist of reading a set piece, as with the story of the prodigal
    son used by Wilhelm Doegen in his recordings of English prisoners of war in World
    War I. Free speech is rarely available in early recordings.
3   The quality of the recordings is generally not sufficiently good to carry out fully
    reliable acoustic analysis, although a certain amount is nearly always possible.
4   The available early recordings rarely show any social stratification so that a variationist
    analysis, in the modern sociolinguistic sense, is not possible.

1.3 Testing Hypotheses about the Development of Varieties

By examining earlier recordings, one can test different hypotheses about how key features of present-day varieties developed. Early recordings can also confirm overall trends in varieties of English. For instance, the rise of non-prevocalic /r/ is typical for supraregional varieties of American English in the course of the twentieth century, but a similar development is also found in Ireland. The two developments are not, of course, directly related. But in one sense there is a connection in that there was a distancing from English models of pronunciation in Ireland and of older models of pronunciation in the United States which, when broadly based on New England pronunciation, would have been non-rhotic. It is also significant that in both the United States and Ireland the increase in rhoticity in the twentieth century lead to the phonetic preference for a retroflex [ɻ] which, acoustically, results in a very salient rhotic pronunciation.

The insights reached from the examination of early audio recordings can be classified according to their significance for present-day varieties. The value of the insights can be organised as a scale of decreasing importance as shown in Table 1.2.

1.4 Available Early Audio Recordings

When determining what recordings are available for a language or dialect, one must distinguish between those which were made deliberately to record a specific variety and those which were made for some other purpose, e.g. to save for posterity the voice of a famous person – an author, politician or member of royalty. The latter type of recording may

Table 1.2 *Classification of insights from early recordings*

Level 1:	Early recordings reveal previously unattested features. This is not common, but an example would be the use of a rolled [r] attested in the recordings of Baroness Asquith and Virginia Woolf for earlier RP (Fabricius; Hickey, both this volume).
Level 2:	Early recordings display combinations of features not previously attested. For instance, in early twentieth-century Irish English non-rhoticity and a monophthong in the GOAT lexical set is found, a combination which does not occur anymore (Hickey, this volume).
Level 3:	Early recordings have combinations of features not continued in a variety. In early twentieth-century Australian English, a retracted START vowel and a fronted STRUT vowel co-occurred whereas these vowels converged later in the twentieth century in Australia (Cox and Palethorpe, this volume).
Level 4:	Early recordings display features which help one to decide between alternatives for the development of features in a variety. For instance, in early South African English the retracted START vowel is nothing like as prominent as it is today, suggesting that this was an internal development in South Africa after initial anglophone settlement (Bekker, this volume).
Level 5:	Early recordings confirm features known from later recordings and observations of present-day speakers. For instance, the early recordings of English from Tristan da Cunha document clearly the presence of non-etymological initial /h-/ which is known from studies of modern English on the island (Schreier, this volume).
Level 6:	Early recordings confirm general patterns assumed for the development of varieties. For example, the speech of older speakers from Ghana analysed by Huber (this volume) show that for four key variables, Ghanaian English moved away from RP and more towards endonormative realisations of the variables in question supporting the theoretical model of new variety development put forward in Schneider (2003, 2007).

incidentally capture a variety at a stage for which there are no other audio recordings. For varieties of English, virtually the only example of the first type of recording are those made by Wilhelm Albert Doegen (1877–1967) in the early twentieth century. Doegen was a German scholar who had an interest in recording dialects and minority languages. He studied phonetics in Berlin and later in Oxford under Henry Sweet where he increased his knowledge of English and the anglophone world. He also became a member of the International Phonetic Association. Doegen's original recordings of English dialect speakers were destroyed during World War II, but shellac copies survived and in the 1990s the Humboldt University in Berlin started a project to digitise this material. Das Berliner Lautarchiv (The Berlin Sound Archive) is a collection of early audio recordings, most from the beginning of the twentieth century, which documents many languages and dialects spoken at that time. The recordings come from the

Royal Prussian Phonographic Commission for which Doegen was a commissioner from 1915 onwards. Along with the Austro-German professor of English and renowned Shakespeare scholar Alois Brandl (1855–1940), he recorded prisoners during World War I (Robinson, this volume), many of whom were speakers of English dialects.[1] Several of these recordings have been analysed for chapters in the present volume (Stuart-Smith and Lawson; Watt and Foulkes).

The second type – incidental recordings – are not always useful when studying dialects because the individuals recorded are generally standard speakers of their native language, or at least of supraregional varieties of that language. This is true of the incidental recordings for English in England (Fabricius, this volume) and for English in Ireland (Hickey, this volume). However, the investigation of non-vernacular varieties is of value in itself as these are subject to similar types of sociolinguistically motivated change, as are vernaculars. Furthermore, these are the more standard forms of language to which vernacular varieties were related on a vertical social scale at the time of recording. The extant recordings of non-vernacular southern British English can provide insights into its form at the beginning of the twentieth century and hence help scholars track developments in standard British English over the past hundred years or so.

1.5   Structure of the Current Volume

The surveys of the early recordings presented here show a geographical range from Scotland to New Zealand, from Canada to South Africa, from Newfoundland to Tristan da Cunha. Certain varieties have been accorded greater attention than others, such as those in Britain and North America, but this is simply due to the attestational situation for them and their position in the overall arena of varieties of English.

The volume opens with a study by Jonathan Robinson in which he looks at the recordings of English prisoners of war made by the German scholar Wilhelm Doegen during World War I and housed at the British Library. These recordings were made exactly one hundred years before the present book was printed and constitute a valuable record of English dialects at the beginning of the twentieth century. Robinson compares

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[1] Many of Doegen's recordings were acquired by the British Library and can be heard on its website in the section 'Early Spoken Word Recordings'; see the information accessible at: http://sounds.bl.uk/Accents-and-dialects/Early-spoken-word-recordings. There is also a double CD set entitled *Voices of the UK: Accents and Dialects of English* which has been published by the British Library utilising many of Doegen's recordings.

the dialect features captured in Doegen's recordings with what is known of these dialects today and compares the features then and now in view of continuous developments in vernaculars of British English.

The pronunciation norm of present-day England, Received Pronunciation (RP), is the subject of the two following chapters. In the first, Anne Fabricius looks at the development of prevocalic /r/ and examines the evidence for a rolled /r/ among aristocratic speakers of early twenty-century RP. In the next chapter Raymond Hickey considers the increase in aspiration for voiceless stops throughout the twentieth century by examining values in the earliest recordings of RP and by comparing these with successive recordings of English monarchs during the century.

The situation of Cockney English in the multicultural East End of London in the early twentieth century is the subject of the chapter by Paul Kerswill and Eivind Torgersen. Specifically, they consider the possible influence of Jewish varieties of English on syllable timing and voice onset time in forms of Cockney. This situation is essentially different from that in present-day Cockney areas of London where many more languages are spoken and young language learners can choose from a feature pool frequently determined by various second-language speakers of English.

In their chapter on Merseyside, Kevin Watson and Lynn Clark consider the origins of Liverpool English and examine recordings from the early twentieth century which are noticeably closer to the mid-nineteenth century when modern Liverpool English arose. They conclude that there was an Irish input for TH-stopping and probably for plosive lenition as well, though the latter is a complex issue and by no means a case of simple transfer. Additionally, the role of Lancashire English in the formative period of modern Liverpool English needs to be acknowledged.

Early recordings of speakers from Tyneside form the backbone of the chapter by Dominic Watt and Paul Foulkes. They use three sources, the Berliner Lautarchiv, the Tyneside Linguistic Survey and the Survey of English Dialects to compare the development of key features of Tyneside English throughout the twentieth century, notably the liquids /r/ and /l/, syllable-initial /h/ as well as the vowels of the standard lexical sets of Wells.

Vernacular speech in Glasgow and the Central Belt as revealed in early recordings by Wilhelm Doegen (see above) is the topic of the chapter by Jane Stuart-Smith and Eleanor Lawson. They find confirmation of patterns of T-glottaling which are present in later recordings and in contemporary forms of speech in this central area of Scotland. The authors furthermore regard derhoticisation, in the light of the early twentieth-century recordings,

as a change which has been progressing for a longer period of time than previously assumed.

The salient features of Irish English as spoken by individuals born in the nineteenth century and who grew up before the south of Ireland became independent in 1922 form the focus of the chapter by Raymond Hickey. These persons show accents of Irish English which exhibit significant influence from British pronunciation models, e.g. in non-rhoticity and a low, open STRUT vowel, traits no longer found widely in varieties of Irish English given that these became increasingly independent of British English in the course of the twentieth century.

Evidence of American regional dialects in early recordings is considered by Matthew J. Gordon and Christopher Strelluf in their chapter, in particular the North/Midland divide as attested by speakers born well over a century ago. The picture which emerges is, as the authors insist, mixed. There is, on the one hand, evidence of a distinction between DEW and GOOSE among some Northerners, but, on the other hand, this contrast is also heard in the early recordings with some Midlanders, an unexpected finding. The authors conclude that key phonological distinctions now separating the North and the Midlands arose during the course of the twentieth century, though their roots go back further.

Vernacular speech in New England as evidenced by early twentieth-century recordings is scrutinised in the chapter by Daniel Ezra Johnson and David Durian. In particular, parts of the vowel system found with educated speakers from the Hanley Recordings have been given close attention. The authors found that certain vocalic features, such as short *a*, were not dealt with accurately by later dialectologists, though the remaining low vowels were better discussed. Johnson and Durian also confirm that the *Linguistic Atlas of New England* was comprehensive in the range of speakers it encompassed and so provided a valid picture of variation among early speakers in the region. Their study also confirms the split pattern for short *a* which is still found within the broader New England area. Furthermore, the typical mergers of PALM and LOT in Western New England or LOT and THOUGHT in eastern New England had not yet emerged in the areas studied by the authors.

Early twentieth-century English spoken in the Upper Midwest of the United States is the subject of the chapter by Thomas Purnell, Eric Raimy and Joseph Salmons. The authors look in detail at the realisations of the GOAT, LOT, THOUGHT and TRAP vowels in Upper Midwestern English, drawing on transcriptions and recordings present in archival sources.

These resources support some recent views and add further nuances to our picture of Upper Midwestern English. Above all, the available archival data shows widespread variation from early on, contrary to assumptions about linear geographical spread. Upper Midwestern English is emerging less by areal diffusion of features but rather by consolidation of particular patterns introduced as variants during settlement.

Forms of English spoken throughout the twentieth century in the western United States are examined by Valerie Fridland and Tyler Kendall. The authors consider when and how the modern western system began. They conclude that, based on its historical roots and modern similarity across the region, the dialect of the western US can be appropriately viewed as a koiné, a variety brought about through contact-induced change by speakers of a wide range of mutually intelligible dialects. The speech of those archival speakers examined by the authors can be interpreted as anticipating some major features of the vowel system of the modern western United States without showing these features to any large degree, a finding common to many of the chapters of this volume. Although archival speakers show only isolated variants that hint at what was to come, DeCamp's work in the 1950s in San Francisco indicates that speakers born in the early part of the twentieth century were engaged a bit farther along in the journey towards a more cohesive western system, particularly in the low back system.

The ex-slave recordings form the focus of the chapter by Erik R. Thomas, who shows that a great deal of acoustic analysis can be performed on these recordings. Other researchers have demonstrated over twenty years ago how important these recordings are for morphosyntactic variants. The ex-slave recordings are clearly valuable for exploring some kinds of phonetic variables as well. Thomas shows in his chapter that analyses of vowel quality and prosody are quite feasible. He concludes that the methods used in his chapter for analysing phonetic variables can be applied to early recordings of other dialects and languages as well. Thomas maintains that early recordings are indeed suitable for the techniques of acoustic analysis, despite their usually inferior quality compared to modern recordings.

Archival data on Earlier Canadian English provide the basis for the chapter by Charles Boberg in which he examines the speech of seven World War I veterans, these affording a remarkable glimpse at what Canadian English may have sounded like at the end of the nineteenth century, a window on the past made possible by the availability and analysis of archival data. While direct evidence of this crucial period in the process

of consolidation and diffusion that spread Canadian English across the country is not available, Boberg's analysis nonetheless shows that some key features of modern Canadian English have a long history: Canadian Raising, for instance, has been well established for over a century now. Other modern features appear to have arisen later, or have only recently become uniform across the country: the fronting of /uw/ and the Canadian Shift, together with the reversal of /uw/ and /æ/ in F2 space that they bring about, appear to be late twentieth-century innovations. More surprisingly, the low-back merger of /o/ and /oh/ and even the modern phonemic status and allophonic distribution of /æ/ were not always the way they are today: these defining features of modern Canadian English seem to have evolved gradually, from a dialect landscape that was once much more varied. This process may partly reflect the strong British influence, including not just common war experiences, but heavy British immigration to Canada throughout the nineteenth century.

Whether Canadian Raising can be ascertained in early recordings of English in Newfoundland is the question which Sandra Clarke, Paul De Decker and Gerard Van Herk address in their chapter. Through acoustic analysis of early audio recordings, their chapter shows that Canadian Raising was variably present, for both /ai/ and /au/, in a small sample of traditional Newfoundland English speakers born between 1898 and *c.* 1935. The authors maintain that the origins of this feature cannot be claimed to be historical: regional dialect evidence suggests that the Canadian Raising pattern is unlikely to have been inherited from the ancestors of these Newfoundland English speakers, who migrated to the island from southwest England and southeast Ireland between the late seventeenth and early nineteenth centuries. They conclude that, while their acoustic analysis is grounded in samples of traditional Newfoundland English speech recorded in the 1970s and 1980s, these recordings have provided new insights into Canadian Raising as used by Newfoundland speakers born near the turn of the twentieth century. Their study indicates that Canadian Raising has existed within Newfoundland for a considerable period of time – perhaps subject to the type of 'ebb and flow' described by Hickey (2002) for a number of changes in the English language. As such, their study demonstrates the value to contemporary local linguistic endeavours of access to archived real-time language data.

Prosodic aspects of early recordings of English in Trinidad and Jamaica form the focus of the chapter by Shelome Gooden and Kathy-Ann Drayton. They maintain that the period between the late 1890s and the 1940s brought some changes to Caribbean creoles: Trinidadian shows changes in

prosody, mainly in the marking of prominent syllables and in phrasing in the speech of Afro/Mixed speakers. Using the oldest speakers in the data sets from both Trinidad and Jamaica, the prosodic changes can be dated to a period between 1890 and 1947, so that speakers born after that period would have prosodic features that are similar to those used by contemporary speakers. The changes in Trinidadian creole are postulated by the authors as possibly a marker of a new 'Trinidadian' identity among younger Trinidadians. The authors maintain that as speakers redefine themselves in their changing ecologies and create new sociopolitically driven identities, the linguistic shifts become a reflection of the associated changing identities (Schneider 2003). The combined results from Gooden's and Drayton's research and that on vowel variation suggests that both Trinidadian and Jamaican are probably located between the last two stages of emergence, i.e. between the fourth (endonormative stabilization) and the fifth (differentiation) (Schneider 2003), with the differences being determined by the local ecologies in which each variety exists.

Early twentieth-century recordings from Ghana are examined by Magnus Huber in his chapter. While confirming that there is frequently a lack of data documenting the actual structural development of postcolonial Englishes, Huber confirms that the recordings from the Ghana Broadcasting Company Sound Archive, which he evaluated sociophonetically, represent invaluable data from the period just after Ghana's independence in 1957. His analysis shows that the four variables he examined have been replaced by newer, more native Ghanaian ones: the RP realisations have receded over time (1) (ing): [-ɪŋ] by 42 per cent, (2) (wh): [w] by 20 per cent, (3) (NURSE): [ɜ] by 17 per cent and (4) (STRUT): [ʌ] by 23 per cent. Huber postulates that if this is representative of the development of the Ghanaian English phonological system as a whole, then it suggests that spoken educated Ghanaian English was closer (but not identical) to RP at the time of Ghana's independence and that Ghanaian variants have gradually been replacing the British ones since the 1950s. He concludes that diachronic phonological studies of early recordings of postcolonial Englishes can provide much-needed data to test and refine evolutionary models that so far have been based mainly on external language history and synchronic structural data.

Earlier South African English, especially that in the region of Johannesburg, are the subject of Ian Bekker's chapter in which he examines the speech of early recordings to gain a window on the varieties of English prevalent during the second half of the nineteenth century (Bekker 2012) and considers the wider question of whether there are any broader

generalizations or conclusions that can be drawn from his analysis. Bekker finds that the speakers in the early recordings reflect the original British input and that they contain features that were eventually 'ironed' out once South African English become a fully focused variety. Assuming that a koiné developed in the Eastern Cape during the mid-nineteenth century and given Trudgill's (2004: 23) fifty-year yardstick for the focusing of such a new dialect, it would have come into its own around about 1870. He sees clear evidence for this in the retraction of the START vowel, an endogenous development, which is typical of South African English today but not of English in Australia or New Zealand. Other features of South African English, such as the centralised KIT vowel, are seen by Bekker as resulting from internal pressure in the phonological space of the raised short vowel present in the historical input to South Africa, reflecting the view expressed earlier in Lass and Wright (1985). Indeed, Bekker considers it perhaps possible that the South African English KIT-Split was perhaps a direct inheritance and, in fact, the initiator of the relevant chain-shift of short front vowels.

The earliest recordings of English in Tristan da Cunha form the basis for Daniel Schreier's investigation of specific features of the dialect of this small and very remote community. In particular, he looks at the occurrence of a non-etymological initial /h-/, a feature only attested robustly within the anglophone world in Newfoundland. In his chapter, Schreier considers the use of corpora from varieties of English for the analysis of earlier stages (Schreier and Trudgill 2006) and discusses different approaches and agendas (Krug and Schlüter 2013). His investigation confirms the style-sensitive nature of interviews of dialect speakers, here the relative use of non-etymological /h/ during informal conversations in familiar settings.

The development of vowels in Australian English is the centre of attention in the chapter by Felicity Cox and Sallyanne Palethorpe. Here they examine various hypotheses about the development of the open vowels in Australian English, comparing data from their Australian Ancestors corpus, which contains speech data from eight men and four women born in Australia in the period 1880 to 1899. The authors show that, in contrast to modern data, speakers in the historical database produced significant horizontal separation between START and STRUT, with STRUT more fronted but not more raised than START. They also mention the possibility that START fronted and STRUT retracted during the twentieth century, i.e. that this development was not part of the historical input to Australia. However, the comparison of reports from historical New Zealand English data with their own historical Australian English data suggested to Cox and