This volume brings together a team of key players in discourse variation research to offer original analyses of a wide range of discourse-pragmatic variables, such as *like*, *innit*, *you get me* and *at the end of the day*. The authors introduce a range of new methods specifically tailored to the study of discourse-pragmatic variation and change in synchronic and longitudinal dialect data, and provide new empirical and theoretical insights into discourse-pragmatic variation and change in contemporary varieties of English. The volume thus enhances our understanding of the complexities of discourse-pragmatic variation and change, and encourages new ways of thinking about variability in discourse-pragmatics. With its dual focus on presenting innovative methods as well as new results, the volume will provide an important resource for both newcomers and veterans in the field of discourse variation analysis alike, and spark discussions that will set new directions for future work in the field.

Heike Pichler is Lecturer in Sociolinguistics at Newcastle University (UK). She is the author of *The Structure of Discourse-Pragmatic Variation* (2013) and has published in *English Language and Linguistics, Journal of Sociolinguistics* and *Intercultural Pragmatics*. She is the founder of the *Discourse-Pragmatic Variation & Change* (DiPVaC) conference series, which serves to provide a forum for exploring methodological, empirical and theoretical advancements in the quantitative, variationist analysis of discourse-pragmatic features; she is also the chair of the DiPVaC research network (www.dipvac.org).
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<td>AmE</td>
<td>American English</td>
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<tr>
<td>AusE</td>
<td>Australian English</td>
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<td>BNC</td>
<td>British National Corpus</td>
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<tr>
<td>BrE</td>
<td>British English</td>
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<tr>
<td>COCA</td>
<td>Corpus of Contemporary American English</td>
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<td>COLT</td>
<td>Bergen Corpus of London Teenage Language</td>
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<tr>
<td>DM</td>
<td>discourse marker</td>
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<td>DP</td>
<td>discourse particle</td>
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<td>eGE</td>
<td>extending/referential general extender</td>
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<td>GE</td>
<td>general extender</td>
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<tr>
<td>ICE</td>
<td>International Corpus of English</td>
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<td>ICE-GB</td>
<td>International Corpus of English – Great Britain</td>
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<td>ICE-IND</td>
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<td>ICE-PHI</td>
<td>International Corpus of English – Philippines</td>
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<td>ICE-SIN</td>
<td>International Corpus of English – Singapore</td>
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<td>IndE</td>
<td>Indian English</td>
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<td>IRR</td>
<td>incidence rate ratio</td>
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<td>LCS</td>
<td>Language Change and Stabilisation corpus</td>
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<td>LD</td>
<td>left-dislocation, left-dislocated</td>
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<td>LIC</td>
<td>Linguistic Innovators Corpus</td>
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<td>LP</td>
<td>left periphery</td>
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<td>LS fit</td>
<td>least squares fit</td>
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<td>MLE</td>
<td>Multicultural London English</td>
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<td>neg-tag</td>
<td>reduced negative-polarity interrogative tag</td>
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<td>nGE</td>
<td>non-referential general extender</td>
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<td>NP</td>
<td>noun phrase</td>
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<td>NZ</td>
<td>New Zealand</td>
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<td>Ottawa-Hull Spoken Language Archives</td>
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<td>Abbreviation</td>
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<td>PhiE</td>
<td>Philippine English</td>
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<td>PM</td>
<td>pragmatic marker</td>
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<td>pmw</td>
<td>per million words</td>
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<td>prepositional phrase</td>
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<td>RP</td>
<td>right periphery</td>
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<td>Singapore English</td>
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<td>Toronto English Archive</td>
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<td>TP</td>
<td>tense phrase</td>
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<td>UD</td>
<td>Urban Dictionary</td>
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<td>UFT</td>
<td>utterance-final tag</td>
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<td>UWA</td>
<td>University of Western Australia</td>
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<td>VP</td>
<td>verb phrase</td>
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<td>ZIP</td>
<td>zero-inflated Poisson</td>
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Introduction: discourse-pragmatic variation and change

Heike Pichler

Background

Following Macaulay’s (2002, 2005) repeated calls for a fuller integration of discourse-pragmatic features into the variationist research agenda, the last decade or so has seen an unprecedented upsurge in quantitative research investigating patterns of variation and change in the use of conventionalised, polyfunctional linguistic items and constructions such as *innit, you know, as I say, and stuff like that, you get what I mean, at the end of the day*. The growing scholarly fascination with these features is reflected in an expanding number of journal articles exploring their variability and trajectories of change (see later pages for selected references), the recent and forthcoming publication of several book-length treatments investigating their structured heterogeneity in synchronic dialect data (see, for example, Aijmer 2013; Andersen 2001; Buchstaller 2014; D’Arcy in prep.; Macaulay 2005; Pichler 2013; Tagliamonte 2016) as well as a flourishing international conference series dedicated specifically to their quantitative analysis ([www.dipvac.org](http://www.dipvac.org)). In her analysis of the state of the field, Pichler (2013: 6–9) has attributed the international surge in variationist studies of discourse-pragmatic features to two factors: their recent theoretical reconceptualisation as integral elements of the linguistic system (see, *inter alia*, Brinton 2006; Diewald 2006; Kaltenböck et al. 2011; Traugott 2003; and contributions in Degand and Simon-Vandenbergen 2011); and recent methodological advancements in accountably quantifying their variability (see, *inter alia*, Buchstaller 2009, 2011; Cheshire 2007; D’Arcy 2005; Pichler 2010, 2013; Pichler and Levey 2011; Wagner et al. 2015).

Because of the myriad complexities involved in defining discourse-pragmatic features as linguistic variables (see Buchstaller [2009]; Pichler [2010, 2013: Ch. 2]; Tagliamonte [2012: Ch. 9] for details), early variationist discourse studies have tended to focus on individual items or constructions (e.g., *don’t you think, eh, I mean, I think, presumably, you know, you see*) and compared their frequency and functionality across social groups, without acknowledging that these features are embedded within a broader variable
system (see, for example, Erman 1992; Holmes 1986, 1990, 1995; Macaulay 1995; Stubbe and Holmes 1995; Woods 1991; but see Cheshire 1981; Dines 1980; Ferrara 1997). Nonetheless, by demonstrating that the use of discourse-pragmatic features – like that of features at other levels of the linguistic system – is variable, changeable and socially indexical, these studies have laid the groundwork for subsequent work which has developed methods for quantifying discourse-pragmatic variation in maximally accountable ways. These more recent studies have generally analysed individual discourse-pragmatic features in the context of their functionally-, positionally- and/or derivationally-equivalent co-variants, and extended the focus of analysis to the intra-linguistic conditioning of discourse-pragmatic variation and change (see, inter alia, Andersen 2001; Buchstaller 2006a, 2008, 2014; Buchstaller and D’Arcy 2009; Cheshire 2007; D’Arcy 2005, 2007; Denis 2011, 2015; Drager 2010, 2011; Fox 2012; Ito and Tagliamonte 2003; Levey 2006a; Levey et al. 2013; Macaulay 2001, 2006; Pichler 2009, 2013; Pichler and Levey 2011; Rodriguez Louro 2013; Tagliamonte and D’Arcy 2004, 2009; Tagliamonte and Denis 2010; Waters 2013). The methodological advancements have inspired an increasing number of studies that provide important insights into the sociolinguistic mechanisms underlying discourse-pragmatic variation and change, and thus make important contributions to current theories of language variation and change. Yet despite having ‘progressed substantially in recent years’ (Macaulay 2013: 230) and having contributed important theoretical insights, quantitative variationist research of discourse-pragmatic features continues to be dwarfed by studies of phonological and morpho-syntactic variables in terms of number, scope and impact.

This volume brings together a group of scholars widely recognised for their contributions to discourse-pragmatic variation and change research, with the purpose of stimulating the vitality and growth of this line of research. To meet this objective, the volume assembles an authoritative and original collection of articles which: (i) introduce a range of contrasting yet complementary new methods specifically tailored to the requirements of studying discourse-pragmatic variation and change; and (ii) provide new empirical and theoretical insights into the sociolinguistic dimensions of discourse-pragmatic variation and change in contemporary varieties of English. With its dual focus on presenting innovative methods as well as new results, the volume will provide an important resource for both newcomers and veterans in the field of discourse variation analysis alike, and spark discussions that will set new directions for future work in the field.

In the remainder of this introduction, I will first set out the terminology and define the scope of the volume (‘Terminology and scope’). I will then outline in more detail the overarching aims of the volume (‘Overarching aims’).
Following a brief description of the general structure of the volume (‘Organisation’), I will offer a brief overview of individual contributions (‘Overview’) before sketching out the general themes to emerge from the collection of contributions (‘Implications’). In doing so, I will evaluate the strengths of the approaches advocated by the volume contributors, and indicate why and where they should be reapplied. I will also discuss how the findings presented in this volume refine current models of discourse-pragmatic variation and change, and what implications this may have for future research (design).

**Terminology and scope**

At the outset, it is important to clarify the contributors’ use of terminology and delimit the empirical scope of the volume. The linguistic features examined in the following chapters include a heterogeneous category of items and constructions such as *so*, *in he*, *as I say*, *and what have you*, *you get what I mean* which share neither a common set of formal linguistic properties nor an agreed upon macro-label (see, *inter alia*, Brinton [1996: Ch. 2, 2008: Ch. 1]; Fischer [2006b]; Jucker and Ziv [1998]; Schourup [1999] for overviews of relevant debates). Moreover, they perform vastly different micro-functions such as modifying propositions (*so*), seeking corroboration of propositions (*in he*), marking continuation (*as I say*), extending sets (*and what have you*), seeking hearer involvement (*you get what I mean*) etc. Many researchers indiscriminately label such features ‘discourse markers’ (DMs), ‘pragmatic markers’ (PMs) or ‘discourse particles’ (DPs). Others, by contrast, make a typological distinction among DMs which perform a structural role, PMs which signal speaker stance, and DPs which have scalar or modal meaning (Fraser 1990; Schourup 1999; but see also Blakemore 1987; Schiffrin 1987; and contributions in Abraham 1991). Because these conceptual distinctions are not consistently applied in the literature and because individual features can function across the macro-functions ascribed to DMs, PMs and DPs (see, for example, Kärkkäinen [2003] on *I think*), this volume has adopted the alternative, conceptually more neutral label ‘discourse-pragmatic features’ to refer to the category of linguistic items and constructions studied by its contributors. What unites this super-category of formally, functionally and syntactically heterogeneous features is that (i) they perform a range of interpersonal and/or textual functions in discourse; (ii) their use is motivated first and foremost by their functionality. (For a more detailed definition of the category of ‘discourse-pragmatic features’, see, for example, Pichler [2013: 4–6].) Based on these properties, the contributors conceptualise the features studied in this volume as *discourse-pragmatic* variables rather than lexical or morpho-syntactic variables, two alternative classifications applied, for example, to quotatives
(see Buchstaller [2014: 251–2] for details). In addition to the macro-label ‘discourse-pragmatic features’, the contributors employ micro-labels such as ‘quotatives’, ‘utterance-final tags’ or ‘discourse like’ to refer to the specific (set of) item(s) or construction(s) that they analyse and discuss. (The micro-labels used are generally a telling indicator of how the variable (context) or scope of analysis was defined, for example, in terms of function, position or form.) When contributors do adopt the labels DM, PM or DP, they do so in full knowledge of their underlying conceptual bases.

The discourse-pragmatic variables examined in the volume include both under-explored and well-researched variables: interjections (e.g., So duh), vocatives (e.g., Trust me, bruv), text-organising features (e.g., Er as I say like), response elicitors (e.g., I will concentrate more and focus when I’m by myself. Do you get what I’m saying?) (Andersen); adverb-like features (e.g., Now, food was rationed) (Waters); question tags (e.g., It’s a sin, innit) (Pichler); utterance-final tags (e.g., I had a class with her, right) (Denis and Tagliamonte); general extenders (e.g., I had a couple of colds or whatever) (Tagliamonte; Wagner et al.); quotatives (e.g., I was like, ‘Oh my god’) (Rodríguez Louro; Levey); intensifiers (e.g., I know who really matters in my life) (Fuchs and Gut); and discourse like (e.g., She’s like skinny) (Drager). The use of these variables is examined in dialects of the following inner- and outer-circle Englishes: UK English (Andersen; Waters; Pichler; Tagliamonte; Fuchs and Gut); Canadian English (Waters; Denis and Tagliamonte; Levey); Australian English (Rodríguez Louro); Indian, Philippine and Singapore English (Fuchs and Gut); American English (Wagner et al.); and New Zealand English (Drager). The volume thus covers a wide spectrum of variables and varieties, and generates a broad knowledge base on which future work can build.

**Overarching aims**

The volume was developed to showcase and promote the variationist analysis of discourse-pragmatic features in synchronic and longitudinal English dialect data. Some of the key players in the field were invited to contribute chapters which explore original and variegated avenues in discourse-pragmatic variation and change research, and which address the two overarching aims of the volume. They are: (i) to offer new empirical and theoretical insights into the mechanisms underlying discourse-pragmatic variation and change; and (ii) to provide new methodological and theoretical suggestions for approaching the complexities of analysing variation and change in this component of language.

The contributors readily and enthusiastically heeded the invitation to design studies that would allow them to demonstrate the richness and diversity of discourse variation research, and advance current understanding of the social and system-internal dimensions of discourse-pragmatic
variation and change. Thus, the analyses of the well-researched quotative, general extender, intensifier and discourse like variables were designed to examine their variable use in new data sources, varieties and populations (Tagliamonte; Rodríguez Louro; Levey); probe new dimensions of their variability (Fuchs and Gut; Drager); and test long-standing, conflicting claims in the literature about their sociolinguistic conditioning (Wagner et al.). The analyses and discussions of the less widely studied interjection, vocative, tag and adverb variables were configured to identify and document innovations in their repertoires and usage patterns (Andersen; Pichler); probe the mechanisms underlying their innovation (Denis and Tagliamonte); and evaluate different approaches to systematically studying patterns of variation and change in their use (Waters). To maximise the impact of their studies, the contributors were asked to situate their findings in the broader context of the variationist literature and point out potential implications of their findings for future work in the field. The contributions in this volume thus broaden and deepen our understanding of the details of discourse-pragmatic variation and change, and encourage new ways of thinking about variability at this level of linguistic structure.

In order to explore the research avenues outlined, the contributors chose to refine and reassess established ways of approaching the analysis of discourse-pragmatic features within a variationist framework (Labov 1972b). As a result, the volume introduces alternative ways of identifying discourse-pragmatic innovations and analysing them in mega-corpora (Andersen; Pichler; Fuchs and Gut); coding discourse-pragmatic features for their semantic-pragmatic variability and mutability (Denis and Tagliamonte; Wagner et al.); elucidating the nature, trajectory and acquisition of discourse-pragmatic change (Denis and Tagliamonte; Tagliamonte; Rodríguez Louro; Levey); and exploring how discourse-pragmatic features are manipulated in the construction of stances and styles (Drager). Moreover, several contributors address an issue that remains contentious for some: whether (all) discourse-pragmatic features should be conceptualised as linguistic variables, and how much flexibility is required and/or acceptable to define them as variables (Waters; Pichler; Denis and Tagliamonte; Cheshire). The great value of the methods and approaches advocated in the volume is demonstrated in the results they reveal (see ‘Overview’ for details). To facilitate future replication (see Macaulay [2003] on the value of replication), contributors were asked to describe their methods in some detail, outline their rationale, and discuss how they could be applied to the analysis of other discourse-pragmatic variables and/or the pursuit of different research objectives. By presenting contrasting but complementary methods and approaches to analysing the complexities of discourse-pragmatic variation and change, the volume constitutes an important resource for scholars new to
the field as well as those keen to expand their approach to studying variation and change in the use of discourse-pragmatic features.

**Organisation**

The chapters in this volume deal with multiple, overlapping issues pertinent to discourse variation research. As a result, any attempt to partition the volume into narrowly thematic sections risks distracting from the combined strength of the contributions. Notwithstanding the fact that all chapters address key methodological issues in the study of discourse-pragmatic variation and change, I have structured the volume into four parts that reflect the range of issues covered. What serves to unify the four parts and all contributions is their fundamental concern with providing new empirical results and advancing methodological approaches.

• **I: Methods.** The two chapters in this part by Andersen and Waters set out methods for identifying innovative discourse-pragmatic forms and for conceptualising both new and old forms as discourse-pragmatic variables.

• **II: Innovations.** This part of the volume features two chapters, one by Pichler and the other by Denis and Tagliamonte, which detail methods for uncovering innovations in the use of well-established discourse-pragmatic forms and for elucidating the nature of discourse-pragmatic innovations.

• **III: Change: In this part of the volume, Tagliamonte, Rodríguez Louro and Levey provide longitudinal perspectives on discourse-pragmatic change and explore children’s participation in discourse-pragmatic changes in progress.

• **IV: Variation: Fuchs and Gut’s, Wagner et al.’s and Drager’s chapters in the final part of the volume examine the effect of register (formality, familiarity) on discourse-pragmatic variation and demonstrate the role of discourse-pragmatic variables in signalling speaker stance.

The volume concludes with an epilogue by Jenny Cheshire, one of the first scholars to investigate discourse-pragmatic variation (see Cheshire 1981) and the scholar whose foundational work in the field has inspired this volume.

**Overview**

To help readers locate the chapters that are most relevant to their interests and needs, I will provide a brief overview of the volume. My descriptions will focus on detailing which variables and varieties were studied in each chapter, which goals were pursued and what results were produced. Because research themes cut across chapters, I will evaluate their collective implications and impact in the next section.

The volume begins with two chapters focusing on methods in discourse variation research. In the first chapter (‘Using the corpus-driven method to
Andersen advocates combining corpus-based and corpus-driven methods for identifying discourse-pragmatic innovations. Andersen argues that a major drawback of the corpus-based approach (the standard approach in discourse variation studies) is that data extraction is determined by researchers’ prior knowledge of variant forms; this risks inclusion in the analysis of only a sub-set of relevant variants and not accounting for previously undocumented ones. The corpus-driven method overcomes these limitations by calculating the frequency of individual words and word sequences in corpora; subsequent comparison of these frequency and co-occurrence patterns across corpora recorded at different time points facilitates the identification of potentially innovative variants. In addition to outlining the key steps of this approach, Andersen illustrates its value by applying it to an analysis of discourse-pragmatic innovations in contemporary London English. His analysis reveals a number of forms and constructions that are strong candidates for innovation, such as *duh, blood, at the end of the day* and *you get what I’m saying*. As such, it provides a useful addition to recent studies exploring discourse-pragmatic change in this variety (see, *inter alia*, Andersen 2001; Cheshire et al. 2008, 2011; Fox 2012; Pichler Chapter 3; Torgersen et al. 2011).

Chapter 2 by Waters (‘Practical strategies for elucidating discourse-pragmatic variation’) addresses the two fundamental questions underpinning any variationist analysis (of discourse-pragmatic features): how to define the variable, and how to circumscribe the variable context? Waters’s review of previous discourse variation studies demonstrates that scholars have variously defined discourse-pragmatic variables on the basis of semantic, functional or derivational equivalence between variants, and that they have variously appealed to form, function and/or position to circumscribe the envelope of variation. Waters does not challenge this lack of conceptual uniformity but argues that it is a necessary reflection of the heterogeneous nature of the category of discourse-pragmatic features which have been examined. She supports this view in her detailed discussion of how to quantify the variable use of adverbs with discourse-pragmatic functions (e.g., *actually, really, now*). The use of these features is notoriously difficult to quantify because of their positional mobility, inherent multifunctionality and lack of semantic bleaching. Waters concludes that there is no one-size-fits-all approach to studying discourse-pragmatic variables; accountable variationist analyses of discourse-pragmatic features must be designed to accommodate the specific characteristics of the feature studied as well as the specific goals of the study conducted.

The second part of the volume on innovations opens with a chapter by Pichler (Chapter 3) (‘Uncovering discourse-pragmatic innovations: *innit* in Multicultural London English’) which investigates the use of *innit* and other
negative-polarity interrogative tags in a socially stratified corpus of contemporary London English. By closely investigating variants’ positional, scopal, functional and social properties, Pichler uncovers that innit and a small number of its derivationally-equivalent co-variants are rapidly innovating in this variety. Their use is no longer restricted to right-periphery, clause-final positions but extends to the clausal left periphery and positions adjacent to left-dislocated and lone noun phrases. In these positions, innit and other variants broadly function to secure hearer involvement (e.g., Innit, I don’t like trains.) and to facilitate referent activation (e.g., The sister, innit, she’s about five times bigger than me.). These innovations had gone unnoticed in two previous analyses of innit in the same dataset which had paid insufficient attention to the form’s variable position and scope (Palacios Martínez 2015; Torgersen et al. 2011). Pichler argues that identification of these innovations and exploration of how they become embedded in any pre-existing system is made possible by adopting an empirically- and theoretically-grounded but flexible approach to defining the variable (context), thus supporting Waters’ proposal in Chapter 2.

In the next chapter (Chapter 4) (‘Innovation, right? Change, you know? Utterance-final tags in Canadian English’), Denis and Tagliamonte draw on a socially stratified corpus of Toronto English to explore innovations in the system of utterance-final tags (UFTs), i.e., ‘any utterance-final discourse feature [such as you know, right, yeah, eh] that primarily communicates to a hearer that the preceding proposition contains shared knowledge’. Their analysis reveals that the UFT system is dominated by right and you know, with the former increasing and the latter decreasing in frequency in apparent time. To assess whether this pattern reflects ongoing grammaticalisation, whereby right is gradually expanding into the discourse contexts of you know, or lexical replacement, whereby right simply replaces you know, Denis and Tagliamonte code UFTs for the discourse contexts in which they occur. Distributional results suggest that as the status of right changes from innovative to majority variant, it is expanding in use across discourse contexts. However, a grammaticalisation hypothesis is rejected by the results of sophisticated statistical tests which show a lack of differences in the number of discourse contexts in which different generations of Torontonians use right, suggesting that right was available across contexts from the outset. Denis and Tagliamonte thus conclude that the rise of right in Toronto English is a case of lexical replacement.

Part III on change opens with two chapters offering a diachronic perspective on contemporary discourse-pragmatic variation patterns. Tagliamonte’s chapter (Chapter 5) (‘Antecedents of innovation: exploring general extenders in conservative dialects’) draws on a database of four relic dialects spoken in peripheral communities in the north of United Kingdom in order to explore the
use of general extenders (GEs), i.e., constructions such as *and stuff, or something like that* which prototypically serve a set-extending function but also frequently perform interpersonal and textual functions. Because relic dialects tend to preserve earlier stages of language development longer than mainstream dialects, they can serve as a proxy for diachronic data from which an earlier stage of GE development can be deduced. Analysis of these data thus allows Tagliamonte to test conflicting claims in the literature that synchronic patterns of GE variability are a product of grammaticalisation (Aijmer 2002; Cheshire 2007 vs. Pichler and Levey 2011; Tagliamonte and Denis 2010). Tagliamonte’s analysis of two measures of grammaticalisation, syntagmatic length and co-occurrence with other discourse-pragmatic features, demonstrates that short GE variants such as *and (all) (that)* dominate the GE system in the relic data and that co-occurrence rates are higher with shorter than with longer GEs. Thus, Tagliamonte argues, the predominance of short GEs in synchronic dialect data is not a reflex of grammaticalisation but the retention of a conservative pattern of GE use in northern UK Englishes.

Chapter 6 by Rodríguez Louro (‘Quotatives across time: West Australian English then and now’) investigates quotative variation (e.g., *And he says, 'Well, that’s her thing. She’s like, ‘Oh.’*) in spontaneous narratives of personal experience collected from Western Australian adults born between 1870 and 1980. The diachronic perspective afforded by these data enables Rodríguez Louro to establish dramatic changes in the choice of quotative variants as well as the performance of narratives between the late nineteenth and early twentieth centuries. Although *say* constitutes the majority variant throughout the time-frame covered by the data, it is gradually being replaced by other variants, including *zero, think, go* and, negligibly, *be like*. The ingress of non-*say* quotative variants is accompanied by an increase in self-revelations through reports of inner thoughts, feelings and attitudes. This observation leads Rodríguez Louro to posit that the changes affecting the constitution of the quotative variant pool and the linguistic conditioning of the *say* variant are inseparably intertwined with changes to how quoted content is used in narratives (see D’Arcy [2012] for similar developments in New Zealand English). According to Rodríguez Louro, it is the increase in internal thought-encoding that ultimately gives rise to the incursion of *be like* into late twentieth-century Australian English.

The third and final chapter on change by Levey (Chapter 7) (‘The role of children in the propagation of discourse-pragmatic change: insights from the acquisition of quotative variation’) explores how preadolescents acquire the innovating quotative variant *be like* (e.g., *She was like, ‘Don’t do this to me.’*). Levey examines the formal constitution of the quotative system and its underlying variable grammar in three complementary datasets of Ottawa English: recent recordings of children aged eight to nine and eleven to twelve (to probe
fine-grained age differences in the acquisition process); recent recordings of adults (to incorporate an apparent-time component and situate children’s usage patterns in relation to community norms); and recordings of children and adults made in the early 1980s (to introduce a diachronic control and verify the existence of change). Levey’s analysis of these datasets reveals that preadolescents participate in and advance changes affecting the quotative system: the children have acquired the form *be like* and its linguistic constraints. However, subtle differences between younger and older children’s variable grammars for *be like* show that younger children’s variable grammar is less closely aligned with that of adults in the community than older children’s. Based on these results, Levey proposes that the acquisition of adult-like patterns of discourse-pragmatic variation is a more prolonged process than that of phonological variation.

The final part of the volume on variation begins with two chapters on register variation. Fuchs and Gut’s chapter (Chapter 8) (‘Register variation in intensifier usage across Asian Englishes’) introduces two complementary methods for the semi-automatic analysis of discourse-pragmatic variation: cluster analysis, used to uncover variation patterns across independent variables; and phenograms, used to visualise these patterns and facilitate their interpretation. Following a very detailed outline of these methods, Fuchs and Gut apply them to their investigation of the combined effect of register and variety on variation in the use of intensifiers, i.e., items such as *very* and *hardly* which are used to modify the following word. Their analysis of intensifier use in twelve registers of three Asian Englishes recorded in the *International Corpus of English* (Indian, Philippine and Singapore English) confirms Aijmer’s (2013) recent findings that register and variety dramatically affect discourse-pragmatic variation patterns. It reveals: (i) variety-consistent effects of formality on intensifier frequency (higher frequency in spoken/less formal than written/more formal registers); and (ii) more marked cross-variety intensifier frequency differentials in informal than formal registers. Moreover, the authors find that the three Asian varieties do not share a uniform pattern of intensifier use; they differ in terms of intensifier frequency and variant distribution. Fuchs and Gut explain these differences with reference to the varieties’ differential socio-political development.

While Fuchs and Gut’s study focuses on comparing variable and variant frequencies across registers, Wagner et al.’s study in Chapter 9 (‘The use of referential general extenders across registers’) is concerned with comparing variable frequencies and functions across registers. The comparison is of GE use in two corpora of US English which are comparable in terms of speaker demographics but differentiated by register: talk between familiars vs. talk between non-familiars. The analysis challenges the reliability of previous work which has relied on GE frequency comparisons to propose that register exerts
an important effect on GE variability. Wagner et al. demonstrate how frequency results can be affected by cross-corpora differences in transcription methods as well as failure to remove outliers from frequency counts. They try to overcome these limitations by developing innovative coding methods to test whether register affects how speakers use GEs. Although Wagner et al.’s analysis is, by their own admission, limited to contrasting the frequency of set-extending vs. non-set-extending GEs and ignores any potential variation in the distribution of interpersonal/textual GE functions, the results demonstrate that the functionality of GEs (broadly conceived as set-extending vs. non-set-extending) is fairly consistent across registers as well as styles (personal vs. non-personal).

The penultimate chapter (Chapter 10) of the volume by Drager (‘Constructing style: phonetic variation in quotative and discourse particle like’) combines variationist methods and insights with acoustic phonetic analysis to investigate New Zealand adolescent girls’ use of discourse particle like (e.g., I was just like singing) and quotative like (e.g., She was like, ‘Whoa!’). Drager demonstrates how the girls exploit both the frequency and variable phonetic realisation of discourse like depending on a combination of their social group membership and their shifting interactional stances. Thus, degrees of monophthongisation and /k/-reduction in discourse like were found to vary not just in accordance with speakers’ membership in a Common Room vs. non-Common Room social group but also in accordance with the stance they take towards the content of their narratives or the people they discuss and quote. For example, girls used quotative like realisations associated with their own social group when reporting their own past speech; and they used quotative like realisations associated with other social groups when introducing the speech of others from whom they wanted to distance themselves. Based on these findings, Drager argues in favour of combining different methods and perspectives (variationist techniques and acoustic analyses; style and stance criteria) to advance current understanding of how speakers manipulate the phonetic realisation of discourse-pragmatic features to construct their styles and stances.

In her Epilogue to the volume (‘The future of discourse-pragmatic variation and change research’), Cheshire identifies four new directions for discourse variation research that she derived from findings reported in the volume: (1) investigation of whether different discourse-pragmatic variables and variants are involved in different types of linguistic change (e.g., lexical replacement vs. grammaticalisation), and to what extent such changes may be localised; (2) exploration of how the migration of discourse-pragmatic features to new positions affects their functionality, and what the social triggers are that motivate such positional and functional changes; (3) increased analysis
of the acquisition of discourse-pragmatic variation patterns, specifically the
order of children’s and second language learners’ acquisition of pragmatic vs.
syntactic constraints on variation, and the effect of frequency and salience on
the acquisition of individual features; (4) closer attention to the phonetic
realisation of socially salient discourse-pragmatic variables and variants, and
how this relates to the expression of stance. Beyond detailing what insights can
be gained from pursuing these directions for future research, Cheshire also
explores to what extent the analysis of discourse-pragmatic features can be
accommodated within the variationist framework. While she acknowledges the
benefits of using variationist methods in the analysis of discourse-pragmatic
variation and change, Cheshire – unlike other contributors to the volume –
remains unconvinced that such analyses must, by definition, use the linguistic
variable as an analytical concept.

Implications

To conclude this introduction, I will sketch out what I see as the major themes
that emerge from the volume, focusing on methods. (The implications of the
findings reported in the volume for future work in the field are discussed in
Cheshire’s Epilogue.) I will review the methodological and analytical
approaches advocated by the contributors and highlight what new insights
into the mechanisms underlying discourse-pragmatic variation and change
their rigorous application affords us. Where applicable, I will also comment
on how the field will benefit from future replication of the approaches advok-
cated in the volume as well as from further testing of the hypotheses and
theories developed by its contributors.

Andersen’s, Fuchs and Gut’s, and Denis and Tagliamonte’s contributions
showcase the great value of employing sophisticated computational and
statistical tools in discourse variation research. Andersen (Chapter 1) de-
monstrates how his inductive and exploratory corpus-driven analysis of two London
English corpora uncovered previously undocumented discourse-pragmatic
features, including response elicitor variants which were not reported in
Torgersen et al.’s (2011) top-down corpus-based analysis of this variable in the
same datasets. Andersen’s findings suggest that the former approach is better
equipped than the latter to uncover innovative discourse-pragmatic forms as well
as the full set of available co-variants of a targeted variable. Consequently, the
application of corpus-driven methods in the analysis of discourse-pragmatic
variation and change promises to yield more accountable and reliable results.
With its potential to uncover previously undocumented forms and constructions,
the corpus-driven approach will also support endeavours to broaden the scope of
discourse variation research to a wider range of variables than have been studied
to date (see Pichler 2013: 234–5).
Like Andersen’s corpus-driven method, the mathematically-based computational tools adopted by Fuchs and Gut (Chapter 8) will facilitate the analysis of discourse-pragmatic variation and change in mega-corpora of several million words (see Poplack 1989), which – due to their size – do not lend themselves to manual data analysis. Not only can these tools handle multi-million word corpora but they can also compute the operation of multiple factor groups with multiple factors on discourse-pragmatic variation. Moreover, they neatly visualise the results obtained. The potential of cluster analysis and phenograms to be extended to the analysis of diverse variables and contextual constraints makes them a welcome addition to the variationist toolkit, especially at a time when the number of available mega-corpora is steadily increasing.

Equally welcome is the introduction of new statistical techniques to the analysis of discourse-pragmatic variables. To establish whether the apparent-time frequency increase in the use of right is accompanied by its expansion across discourse contexts, Denis and Tagliamonte (Chapter 4) employ a zero-inflated Poisson regression model. Application of this model makes it possible to disentangle the interaction between variant form, its frequency differential across generations and its associated contexts of use. It reveals that the distributional patterns suggestive of right’s apparent-time semantic-pragmatic context expansion are in fact an artefact of how right is used relative to its co-variants. Denis and Tagliamonte’s study thus cautions scholars against uncritically interpreting distributional patterns suggestive of apparent-time context expansion as conclusive evidence of ongoing grammaticalisation. It also challenges dominant views in the literature regarding the gradualness of semantic-pragmatic change and the role of grammaticalisation (or pragma-ticalisation) in these developments (see also D’Arcy 2015; Denis 2015; Margerie 2014; Tagliamonte and Denis 2010).

Although corpus-driven methods, cluster analyses and Poisson regressions have been used in other areas of linguistic enquiry (see the authors’ contributions for details), these tools do not at present have a wide currency in discourse variation research. Andersen, Fuchs and Gut, and Denis and Tagliamonte provide compelling evidence of their respective merits for discourse variation research. The full articulation and illustration of the methods in Chapters 1, 4 and 8 provide models for replication in future studies.

The volume also convincingly illustrates the great hermeneutic and explanatory value of qualitative data analysis, i.e., of closely examining discourse-pragmatic variables in their interactional contexts of use and/or of quantifying their functionality across independent variables. In her analysis of innit and other negative-polarity interrogative tags in Multicultural London English, Pichler (Chapter 3) appeals to function in order to establish whether
the previously undocumented non-clause-final occurrence of some interrogative tag variants is indicative of an interactionally-motivated linguistic innovation. By closely investigating every token of *innit* and its co-variants in non-canonical positions, she establishes that, far from being random or idiosyncratic performance errors, these tokens perform clearly identifiable discourse functions related to those performed by interrogative tags in their canonical, clause-final position. Pichler’s analysis thus demonstrates that qualitative data analysis is a compelling means of determining the discourse status of unconventional and unexpected uses of otherwise well-established discourse-pragmatic variables and variants.

In her attempt to elucidate the role of stance in discourse-pragmatic variation, Drager (Chapter 10) closely examines the interactional contexts in which quotative and particle *like* occur and what stances speakers take in these contexts (e.g., an adversarial vs. non-adversarial stance towards the person whose reported speech is introduced by *be like*). By correlating speakers’ shifting stances with their variable frequency of particle *like* and their variable phonetic realisations of quotative *like*, Drager demonstrates how the use of discourse *like* is subtly affected by factors that would go undetected in more abstract analyses. Drager’s contribution is an exemplary demonstration of how a more nuanced understanding of discourse-pragmatic variation can be gained by studying variables in their interactional contexts of use.

Finally, Wagner et al. (Chapter 9) also include function in their study of GE register variation. Broadly differentiating between GEs that perform *at least* a set-extending function vs. those that perform interpersonal/textual functions without simultaneously implicating a larger set, they demonstrate that *how* GEs are used is not significantly different across registers; GEs are used with set-extending functions at roughly similar rates across talk between familiars vs. talk between non-familiars. These findings challenge previous reports that have drawn attention to the register-sensitivity of GEs based on register-specific frequency differentials in GE use (see Wagner et al.’s chapter for references). Wagner et al.’s study thus suggests that endeavours to improve our understanding of register effects on discourse-pragmatic variation may need to be based on more in-depth analyses and results than frequency comparisons alone can afford (see also Fuchs and Gut Chapter 8). Collectively, then, Chapters 3, 9 and 10 support Pichler’s (2010: 597) call for a fuller integration of qualitative data analysis in variationist discourse studies.

Yet the contributions in this volume go beyond highlighting the general importance of functional analyses; two contributions introduce **new reliable ways of coding variables for function and pragmatic shift.** Wagner et al. (Chapter 9) present a function coding scheme which sets out a series of objective criteria (i.e., number of referents in the syntactic/discourse context;
syntactic ambiguity) for differentiating GEs with set-extending functions from those GEs with only interpersonal/textual functions. In their study of UFTs, Denis and Tagliamonte (Chapter 4) operationalise the number of discourse contexts in which right appears (e.g., statement of opinion, statement of fact, command, narrative etc.) as a proxy of pragmatic shift. These coding methods address concerns in the literature about the subjectivity of coding discourse-pragmatic variables for pragmatic function/shift and of confidently replicating coding criteria across studies (see, inter alia, Cameron et al. 1988; Cheshire 2007: 182–4; Labov 1994: 549–50; Macaulay 2013: 227). Wagner et al.’s and Denis and Tagliamonte’s coding schemes are based on objective criteria which can be consistently applied by trained coders without recourse to subjective decisions. As a result, they promise to improve coder reliability. Moreover, they can be faithfully replicated across studies as well as, potentially, extended to the analysis of other discourse-pragmatic variables. The studies reported in Chapters 4 and 9, then, provide important models for future work investigating the variable functionality and potential grammaticalisation of discourse-pragmatic features.

Several of the chapters in this volume demonstrate the empirical and theoretical value of extending the analysis of discourse-pragmatic variation and change patterns to relic, longitudinal and real-time dialect data. Recent studies of GE variation have attracted criticism for inferring evidence of the variable’s grammaticalisation from synchronic variation patterns without accessing an appropriate real-time benchmark (see Pichler and Levey [2011] for details). In the absence of comparable diachronic data sources, Tagliamonte (Chapter 5) draws on contemporary recordings of elderly speakers of relic dialects to increase the time-depth of data analysed and test a grammaticalisation scenario for GEs in data assumed to retain earlier stages of language use. Tagliamonte’s exploitation of relic dialect data proves to be an ingenious way of expanding the synchronic database into the past and testing hypotheses that contemporary discourse-pragmatic variation patterns are a result of ongoing grammaticalisation.

Rodríguez Louro’s contribution (Chapter 6) is another compelling illustration of how unconventional datasets can be exploited to elucidate the development of synchronic discourse variation patterns. Rodríguez Louro draws on oral history recordings of four generations of Australians born as early as 1870 in order to establish changes in the formal composition, variable grammar and type of content introduced by quotatives, before the influx of *be like* in the late twentieth century. The results allow for a meaningful, longitudinal perspective on the nature of quotative change in Australian English, and help elucidate the sociolinguistic dynamics of quotative innovation.
Levey’s (Chapter 7) rigorous analysis of children’s acquisition of ongoing discourse-pragmatic changes provides a useful model for any future study of the acquisition of variation as well as the investigation of discourse-pragmatic change more generally. Levey exploits complementary datasets, i.e., synchronic corpora of child and adult speech as well as comparable real-time data, to probe the existence and directionality of ongoing changes in the quotative system as well as the acquisition of these changes by children. His analysis of multiple datasets overcomes the limitations of studies that infer evidence of change from synchronic data without verifying this scenario with reference or access to a diachronic benchmark. With the increasing availability of real-time vernacular datasets, Levey’s approach can be replicated in future studies of discourse-pragmatic change.

The analyses of discourse-pragmatic variation and change patterns in unconventional datasets and under-researched populations reported in Chapters 5–7 will inspire scholars to increase the time-depth of their data, and explore patterns of discourse-pragmatic variation and change in complementary datasets (see also Denis 2015). Discourse-pragmatic changes do not (of necessity) unfold quickly and, as a result, they are not always easily observable in the relatively shallow time-span covered by synchronic corpora (see, for example, Pichler and Levey 2011; Raumolin-Brunberg and Nurmi 2011). Analysing them in relic dialect data, oral history archives and real-time corpora will therefore help explore unanswered questions surrounding the nature and mechanisms of discourse-pragmatic change.

The chapters gathered together here share a view of discourse variation research that is characterised by going beyond frequency comparisons of variables and/or variants across social groups or functional categories (see ‘Background’). For example, Pichler (Chapter 3) argues that she would not have discovered dramatic innovations in the use of *innit* if she had relied on comparing the form’s frequency across the age groups represented in the apparent-time data she analysed. It was her close attention to the positional distribution and scopal properties of *innit* that made possible the discovery of these innovations. Denis and Tagliamonte’s (Chapter 4) comparison of UFT variants’ frequency across three generations of Torontonians revealed a generational change from *you know* to *right*. Consideration of the discourse contexts in which *you know* and *right* occurred enabled them to clarify what type of change is underway: abrupt lexical replacement. The analysis of *be like* by Levey (Chapter 7) illustrates that while a comparison of different age cohorts’ variant frequencies can uncover children’s participation in ongoing linguistic changes, the nature and details of the acquisition process can only be elucidated through careful analysis of the sociolinguistic conditioning of competing variants. Wagner et al. (Chapter 9) show that while registers might be differentiated by overall GE frequencies, they are not significantly
differentiated by GE functionality (broadly defined). Drager (Chapter 10) demonstrates that it is not only speakers’ fluctuating frequencies of discourse *like* but also their phonetic realisations of the variable that tie in with speakers’ shifting stance during an interaction. Thus, the contributions in this volume consistently show that what is key to elucidating the nature of discourse-pragmatic variation and change is not necessarily *how often* a discourse-pragmatic feature is used but *how* it is used.

The central claim made by this collection is that a **diversity of conceptual and methodological approaches are required** to offer a maximally comprehensive view of how and why the use of discourse-pragmatic features varies and changes. This key observation is most clearly articulated in Waters’s contribution (Chapter 2), but is integral to most chapters collected here. Discourse-pragmatic variables, including those studied in this volume, constitute a heterogeneous set of linguistic items and constructions which differ in their functional repertoires, formal structures and degrees of syntactic integratedness. Therefore, accountable results cannot be produced if scholars apply identical methods of data analysis across the range of variables studied or across the range of research questions pursued (see further Waters’s Chapter 2). Moreover, some flexibility in defining discourse-pragmatic variables and their variable contexts is required to accommodate the emergence of innovative uses of established variables in our accountable analyses, and to examine how these innovations fit in the larger linguistic sub-systems in which they become embedded (see further Pichler’s Chapter 3). (See, however, Cheshire [Epilogue] who expresses strong concerns about conceptualising (all) discourse-pragmatic features as linguistic variables and about changing the definition of the discourse-pragmatic variable across analyses.) While some uniformity in research design and execution is, of course, required to ensure reliability, intersubjectivity and comparability (see Pichler 2010), the methods employed must accommodate the specific characteristics of the variables studied as well as any potential changes in their use, and they must be tailored to the research objectives set.

Recognition of the requirement for ‘bespoke analyses’ (Waters Chapter 2) of discourse-pragmatic variation and change will challenge the continued preoccupation with a rather limited set of discourse-pragmatic features that can be defined as variables on the basis of Dines’s (1980) foundational criterion of functional equivalence between variants (see also Lavandera 1978; Sankoff and Thibault 1981), and whose variable contexts can be circumscribed by positional criteria (e.g., quotatives, intensifiers, GEs). Thus, by demonstrating that different approaches to quantifying discourse-pragmatic variation and change are possible, desirable and in fact necessary in order to advance the current state of the field, this volume encourages scholars to investigate a wider and more diverse range of variables, and to
examine new and unexplored dimensions of discourse-pragmatic variability. This volume provides readers with complementary methodological and theoretical insights for approaching the complexities of discourse-pragmatic variation and change in order to ensure continued progress in the exciting arena of discourse variation research.
Part I

Methods
Using the corpus-driven method to chart discourse-pragmatic change

Gisle Andersen

1.1 Introduction
Two trends have characterised the study of language variation and change in the last few decades: (i) an increased interest in discourse-pragmatic features, i.e., features such as discourse markers, hedges, interjections, response signals etc. whose primary functions are attitudinal, interactional and textual; and (ii) a growing number of studies that use spoken corpora, i.e., large bodies of transcribed speech stored as computer files, as the basis for describing various aspects of socially significant discourse-pragmatic variation (see, for example, Andersen 2001; Buchstaller and van Alphen 2012; Cheshire et al. 2008; Pichler 2013; Tagliamonte and Denis 2010; Torgersen et al. 2011; Tottie 2011; see further Andersen 2010b; Baker 2010 for overviews). Corpora have been used to study patterns of sociolinguistic variation within a single corpus as well as across multiple corpora representing different regional varieties or different points in time. Investigations of comparable corpora which are collected at different times and which together span a shorter period of time than is usual for historical linguistics have come to be termed ‘short-term diachronic comparable corpus linguistics’ (Leech et al. 2009: 24). This is the approach which will be taken in the current chapter.

In this chapter, I draw attention to two different but nevertheless coherent and complementary ways of using corpora for the study of language variation and change: the corpus-based and the corpus-driven methods (Biber 2009a; Tognini-Bonelli 2001). In corpus-based studies, researchers have an a priori assumption of a particular word form or set of forms which are known to or likely to be found in a corpus. This assumption is usually based on preliminary observations of the data or hypotheses about a form’s occurrence in a particular

I am indebted to the sociolinguistic research groups led by Paul Kerswill and Jenny Cheshire for giving me access to the LIC/MLE data, and to my colleague Knut Hofland at Uni Computing, Bergen, for carrying out parts of the statistical analysis. I am also grateful to the editor and two anonymous reviewers for very detailed and constructive comments on an earlier version of this chapter.
language variety. Researchers use the corpus to search for this form and to analyse its use and distribution in the corpus (see, for example, Andersen 2001; Torgersen et al. 2011). Corpus-driven research, by contrast, is a more inductive and exploratory approach that makes no or minimal assumptions as to which word forms and categories a corpus contains and therefore ‘differs from the standard practice of linguistics’ (Biber 2009a: 276). It generally involves calculating frequencies of individual word forms and sequences of words within and across different corpora, thus inductively ‘exploiting the potential of a corpus to identify linguistic categories and units that have not been previously recognised’ (Biber 2009a: 278).

This chapter has a methodological focus and two major goals. The first goal is to introduce some of the technicalities and benefits of corpus-driven methods, and to argue for the relevance of the corpus-driven approach for discourse-pragmatic variation and change research. To this end, Section 1.2 elaborates on the relation between corpus-based and corpus-driven approaches, and (with reference to some earlier studies) gives an overview of the central concepts of the corpus-driven methodology. The second goal of the chapter is to illustrate how the corpus-driven approach can be applied to identify potential innovations in contemporary London teenage speech. To this end, Section 1.3 presents a corpus-driven comparison of two London corpora, one recorded in the 1990s and the other in the 2000s (see further Section 1.3.1). The comparison demonstrates the value of complementing corpus-based with corpus-driven approaches for the study of discourse-pragmatic variation and change. Finally, Section 1.4 briefly reiterates the main findings of this study, highlights the insights gained from combining corpus-driven and corpus-based methods in the analysis of the two London corpora, and suggests some directions for future research.

In this chapter, I adopt a broad approach to delimiting the category of word forms and word sequences studied in this volume under the label ‘discourse-pragmatic features’. I include in it the set of features which Biber et al. (1999) subsume under their notion of ‘inserts’: interjections (e.g., wow), greetings and farewells (e.g., hi), discourse markers (DMs) (e.g., well), attention signals (e.g., hey), response elicitors (e.g., eh?), response forms (e.g., yeah, really), hesitators (e.g., erm), polite formulae (e.g., sorry) and expletives (e.g., shit). Moreover, I include in my analysis of discourse-pragmatic features hedges (e.g., kind of; see, for example, Ajmer 1984; Fetzer 2010), general extenders (GEs) (e.g., and stuff like that; see, for example, Cheshire 2007; Pichler and Levey 2011; Tagliamonte Chapter 5; Wagner et al. Chapter 9) and vocatives (e.g., mate; see, for example, Luckmann de Lopez 2013). Like Biber et al.’s (1999) inserts, hedges, GEs and vocatives are structurally peripheral and perform a range of attitudinal, interactional and textual functions (see Andersen 2001). Focusing on this diverse set of discourse-pragmatic features,
I will demonstrate in this chapter how potential discourse-pragmatic innovations can be identified through a corpus-driven comparison of two corpora.

1.2 Corpus-based and corpus-driven methods in studies of discourse-pragmatic variation and change

1.2.1 The corpus-based and corpus-driven methods compared

Even though the use of corpus methods in variationist sociolinguistics has been relatively limited to date, there is considerable methodological overlap between variationist sociolinguistics and corpus linguistics, both being concerned with natural language use (Andersen 2010b; Baker 2010). There are different ways for variationist sociolinguists to apply corpus methods. One is to use existing corpora and their metadata to explore social or contextual variation in them (see, for example, Deutschmann’s [2006] study of politeness in the British National Corpus). Another is to apply the tools and methods of corpus linguistics (e.g., concordance tools) to a dataset collected for a specific sociolinguistic research project (see, for example, Torgersen et al.’s [2011] study of response elicitors in London English). As McEnery and Hardie (2012: 117) point out, ‘it is not uncommon for the dataset in a sociolinguistic study to be referred to as a “corpus”‘. In this chapter, I therefore use the term ‘corpus studies’ to refer to either of these ways of exploring empirical language data.

In corpus studies, several options are available for retrieving relevant tokens of the targeted word form. At the most basic level, the method of ‘one-to-one searching’ (Ådel and Reppen 2008: 2) is applied in cases where a specific search term will yield only relevant hits (see, for example, Murphy’s [2009] study of the expletive fuck in a corpus of Irish English). However, only rarely does a corpus search like this yield only relevant hits. Therefore, corpus searches often need to be followed by ‘sifting’ (Ådel and Reppen 2008: 3) of the data, i.e., manual extraction of relevant tokens and discarding of irrelevant tokens from corpus concordances. This is particularly true in studies of discourse-pragmatic variation and change where searches may yield tokens that do not have attitudinal, interactional or textual functions (see, for example, Deutschmann [2006: 207], whose search for ‘explicit apologies which appeared in the form of “illocutionary force indicating devices”’ yielded not just tokens where ‘regret’ was part of the politeness formula I regret but also tokens where it was part of an NP (e.g., He shows no regret)). These methods exemplify the corpus-based approach where specific linguistic forms are searched for in corpora based on researchers’ a priori knowledge of their occurrence in the data and their relevance for the research questions pursued. This has been the mainstream approach in studies of discourse-pragmatic variation and change to date. It is valuable and appropriate for a number of
research purposes and has been applied successfully to the study of a range of discourse-pragmatic features (see Andersen [2001] and Rühlemann [2011] for overviews).

However, the main problem with the corpus-based approach is that researchers need to know in advance which word forms or word sequences to search for, on the assumption that these are the relevant category members (i.e., variants of the variable) and thereby candidates for inclusion in the analysis (i.e., the envelope of variation). In cases where the focus is not on the use of individual word forms (e.g., the expletive fuck) but on functional or formal categories (e.g., hedges, GEs), the corpus-based approach may compromise full accountability of the data. An accountable analysis of, for example, expletive or response elicitor variation requires knowledge, extraction and inclusion in the analysis of all relevant forms, i.e., of the whole canon of expletive and response elicitor variants in the data. Strict adherence to the corpus-based approach risks exclusion from the analysis of forms (variants) not known to researchers a priori and production of results that are potentially unreliable.

The objective of this chapter is to demonstrate how corpus-driven methods overcome these limitations and benefit the study of discourse-pragmatic variation and change. In its broadest and most commonly applied sense, the term ‘corpus-driven’ is used to refer to ‘any inductive, bottom-up research using raw corpus data’ (McEnery and Hardie 2012: 150); the corpus ‘is seen as more than a repository of examples to back pre-existing categories or a probabilistic extension to an already well defined system’ (Tognini-Bonelli 2001: 84). Unlike the corpus-based approach, the corpus-driven approach avoids the intuition-based selection of category members as candidates for inclusion in the analysis. It may therefore yield more accountable results which are derived from analysis of the full inventory of category members found in the corpus. However, I do not conceive of corpus-driven and corpus-based methods as mutually exclusive but rather as complementary: the two approaches may be used successfully in combination; also, in practice, no corpus study is exclusively inductive since linguists’ intuitions are generally brought to bear in the inspection of data even in corpus-driven studies (see further Section 1.3).

1.2.2 Basic concepts of the corpus-driven approach

Word frequency and co-occurrence patterns are core concepts of corpus-driven studies. Most studies involve the comparison of individual word (or word combination) frequencies within or between corpora. In comparative studies, such statistics are used to identify linguistic features that are salient in one variety or speaker group. Thus, the first step in corpus-driven studies is often to
make frequency lists of all the words in a corpus. These lists may then be used for the analysis of keywords or keyness, i.e., words that are particularly frequent in one corpus and much less frequent or non-existent in another (see further Section 1.3).

In order to trace changes in the use of linguistic features, two comparative corpus methods are available. One is to compare language use in one corpus with that in a comparable corpus recorded at a different point in time (see, for example, Leech et al. 2009). Applying this approach to Norwegian corpus data, Andersen (2010a) uncovered the emergence of new variants and changing preferences in the use of GEs and DMs that contain the nouns ting, sak and greie (all corresponding to English ‘thing’), such as the Norwegian equivalents of and things like that and the thing is that. The other method is to chart the language of different stages of monitor corpora, i.e., corpora that are continuously growing (see, for example, Andersen and Hofland 2012; Davies 2009). Both comparative methods can be used to study innovations as they unfold, for instance by identifying and noting all word forms that occur in the more recent (section of a) corpus but not in earlier ones.

However, many discourse-pragmatic features are multi-word sequences which cannot be identified by looking at lists of individual words but require comparison of longer N-grams. An N-gram is a word form or a combination of N word forms in a corpus. For instance, a sequence such as and stuff like that consists of a set of N-grams of varying lengths: the 1-grams (unigrams) and, stuff, like and that; the 2-grams (bigrams) and stuff, stuff like and like that; the 3-grams (trigrams) and stuff like and stuff like that; and the 4-gram (tetragram) and stuff like that. A study which successfully explored N-gram differences in a corpus-driven manner is Walsh et al.’s (2008) comparison of GE use in academic vs. casual discourse. It used the WordSmith tool (Scott 2004) to produce frequency-sorted lists of N-grams of varying lengths. The study also illustrates well the point made earlier that corpus-driven studies are rarely completely inductive. The frequency-sorted lists of N-grams had to be subjected to subsequent manual inspection with a view to identifying individual high-frequency combinations which were candidates for membership in the GE category.

Closely tied to N-grams is the notion of collocation. Word A and word B are said to collocate if they occur in combination more often than would be expected given their individual frequencies (see, for example, Lyse and Andersen 2012; Sag et al. 2002; Sinclair 1991). Collocations are identified by means of a statistical measure of association between words such as the Mutual Information score which reflects the collocational strength of two

---

1 Walsh et al. (2008) use the term ‘vague category markers’, but for consistency with the other contributions in this volume (Tagliamonte Chapter 5; Wagner et al. Chapter 9) I refer to these as GEs.
words seen from their position in a ranked list of collocations (see further Lyse and Andersen 2012). For instance, in informal spoken conversation, the word *know* tends to collocate strongly to the left with the word *you* while *mean* tends to collocate with *I* in the left position. These collocation strengths reflect the frequency of the sequences *you know* and *I mean* relative to the individual words’ frequencies. The notion of collocation is useful to identify phraseological units in the language, such as DMs that consist of more than one word (e.g., *you know what I mean*). Collocations are considered to capture the prime candidates for analysis in discourse-pragmatic studies better than raw frequencies of *N*-grams (Biber 2009a: 286). The former involves word co-occurrences that are unlikely to be due to chance while the latter involves word co-occurrences which may be frequent but which could be due to chance and are therefore less likely to constitute phraseological units. Collocation analysis has been applied, for instance, by Biber et al. (2004) whose comparison of classroom teaching and textbooks revealed register variation in the use of stance expressions and items with discourse-organising functions (e.g., *on the other hand, as we have seen, it is clear that*).

To date, discourse-pragmatic variation and change research has, by and large, been corpus-based rather than corpus-driven (Aarts 2011; Andersen 2010b; Sanford 2008). I will argue in this chapter that increased application of corpus-driven methods would greatly benefit the field. As shown in Section 1.3, complementing the use of corpus-based methods with a corpus-driven bottom-up collocation analysis has the potential to uncover previously unreported discourse-pragmatic features, pointing to potential innovations in discourse-pragmatics and ultimately producing more accountable results. Further, collocational analyses may help explore an under-researched aspect of discourse-pragmatic variation and change research: the ‘clustering’ of discourse-pragmatic features (Aijmer 2002: 31). Investigation of such co-occurrence patterns is important because they affect the functionality of individual features, as demonstrated in Aijmer’s (2002) work on the DM *now* and its co-occurrence with *well*, and in Norrick’s (2011) work on interjections such as *hell* and *shit*. The next section illustrates the benefits of combining the corpus-based with the corpus-driven approach through analysis of discourse-pragmatic variation and change in contemporary London English.

### 1.3 A corpus-driven study of selected discourse-pragmatic features in London teenage speech

This section introduces in more detail the corpus-driven approach by applying it to the analysis of discourse-pragmatic features in two corpora of
London adolescent speech, one recorded in the 1990s and the other in the 2000s. The analysis is based on the premise underlying ‘short-term diachronic comparable corpus linguistics’ (Leech et al. 2009: 24), i.e., the assumption that differences in the inventory and frequency of individual word forms and word combination patterns between corpora recorded at different points in time may be indicative of linguistic innovation and change. I will show that a corpus-driven comparison of the two corpora assists researchers in identifying features which might be difficult to observe without listening to all recordings or reading all transcriptions of the recorded data. Before embarking on the comparative analysis, we need to first acknowledge any limitations that may affect its validity.

1.3.1 Comparability of the COLT and LIC/MLE corpora

The following analysis draws on two recent corpora of London teenage speech: the Bergen Corpus of London Teenage Language (COLT) and the Linguistic Innovators (LIC) and Multicultural London English (MLE) corpora. COLT was collected in 1993 in accordance with the established practice for spoken corpus construction (for details, see Stenström et al. 2002). LIC and MLE were collected in 2005–2008 for two sociolinguistic research projects investigating London English (for details, see Cheshire et al. 2008, 2011).²

1.3.1.1 Design features of COLT and LIC/MLE The design features of the different corpora, COLT vs. LIC and MLE, are compared in Table 1.1. The crucial difference between the corpora is the date of data collection (1993 vs. 2005–2008), making them ideal test-sites for an analysis of rapid discourse-pragmatic innovations. This analysis is made possible by the fact that both corpora include speech data from working-class teenagers of different ethnic backgrounds in inner and outer London. (COLT also contains speech data from middle-class London teenagers and teenagers in Hertfordshire; LIC/MLE also contain speech data from other age groups, as shown in Table 1.1. To ensure comparability, only data from teenagers are reported in Section 1.3.3.) However, COLT and LIC/MLE differ in terms of data collection method used (self-recordings vs. sociolinguistic interviews) and speaker roles/relationships. Because the main concern of the following analysis is on illustrating the corpus-based method and generating initial

² LIC and MLE are two separate corpora collected for two distinct but related research projects with somewhat different sampling strategies and research goals. They have recently been combined into one corpus that is searchable via the SketchEngine infrastructure at: www.sketchengine.co.uk/documentation/wiki/Corpora/LondonEnglish.
hypotheses about any ongoing discourse-pragmatic changes in London teenage speech, I will assume in Section 1.3.3 that any differences emerging from comparison of the corpora are primarily a reflex of ongoing language change. I will leave it to more in-depth, future studies to disentangle the effect of contextual factors and that of time on any linguistic differences between the corpora. In comparing these datasets, I follow the practice of Torgersen et al. (2011: 97) who argue that ‘by comparing the young speakers of the two corpora we can also study change in real time’.

1.3.1.2 Transcription conventions Another important issue to consider in comparative corpus-driven analyses of discourse-pragmatic variation and change is the fact that rather than reflecting actual differences in language use, differences in frequency-lists between corpora may reflect cross-corpora differences in transcription conventions and strategies (Pichler 2010: 594–6), or even inconsistent transcription within a corpus (Andersen 2016). For example, the following are among the word forms that occur in the LIC/MLE data

### Table 1.1. Comparison of the design features of COLT vs. LIC/MLE

<table>
<thead>
<tr>
<th></th>
<th>COLT</th>
<th>LIC/MLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Collection Date</td>
<td>1993</td>
<td>2005–2008</td>
</tr>
<tr>
<td>Method</td>
<td>Self-recordings</td>
<td>Self-recordings &amp; sociolinguistic interviews</td>
</tr>
<tr>
<td>Location</td>
<td>Inner/Outer London boroughs (Barnet, Brent, Camden, Enfield, Hackney, Islington, Richmond, Tower Hamlets, Westminster) and Hertfordshire</td>
<td>Inner/Outer London boroughs (Hackney, Havering, Haringey, Islington)</td>
</tr>
<tr>
<td>Co-participant relationships/roles</td>
<td>Adult parents, teachers, relatives, neighbours</td>
<td>Adult fieldworker</td>
</tr>
<tr>
<td>Informants</td>
<td>Age</td>
<td>Age</td>
</tr>
<tr>
<td></td>
<td>12–17</td>
<td>17–19, 70–86 (LIC); 4–5, 8–9, 12–13, 16–19, c. 25, c. 40 (MLE)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Anglo/non-Anglo</td>
<td>Anglo/non-Anglo</td>
</tr>
<tr>
<td>Socio-economic background</td>
<td>Working class, middle class</td>
<td>Working class</td>
</tr>
<tr>
<td>Corpus size (in words)</td>
<td>472,000</td>
<td>2,391,040</td>
</tr>
</tbody>
</table>
but not in the COLT data: *yea, yeh, ye; kinda, sorta*. Close inspection of word forms in context as well as of transcription protocols and audio data was required to establish that *yea, yeh, ye* (and *yeah*) in LIC/MLE are variants of the same variable, i.e., the response token or elicitor consistently transcribed as *yeah* in COLT, and that *kinda, sorta* are variants of the hedges usually transcribed as *kind of, sort of*.

1.3.2 *Steps in the corpus-driven analysis of discourse-pragmatic features in COLT and LIC/MLE*

My bottom-up comparison of discourse-pragmatic features in the COLT and LIC/MLE corpora uses the techniques of frequency list and N-gram comparison introduced in Section 1.2. Several computational and analytical procedures were adopted for the corpus-driven comparison, which proceeded in the following steps:

1. compute N-gram statistics for each corpus
2. produce ranked lists of N-grams using different association measures
3. produce ranked keyness statistics, indicating the differences and similarities between N-grams in the two corpora
4. post-process (filter) keyness lists
5. inspect keyness lists manually (top 1,000 tokens)
6. search for and concordance of interesting patterns
7. study individual tokens qualitatively
8. consult other corpora/dictionaries where necessary

Steps 1–4 were fully automatic and involved the use of in-house computational tools; steps 5–8 were analytic in nature and involved identification and manual inspection of individual word forms and word combinations.

Step 1 involved the computation of N-gram statistics by means of a computer program that counts all individual word forms and combinations of word forms in the two corpora, including N-grams of varying lengths from 1 to 5. In accordance with customary practice in corpus linguistics, a span of up to five words was considered sufficient to identify recurrent patterns in discourse-pragmatics; longer N-grams were therefore not calculated. The N-gram measure counts how often words co-occur without considering collocation strength.

In step 2, the N-gram frequency lists were used as input in the computation of collocation statistics. The lists of strong collocations were used as the basis for assessing differences between the two corpora in terms of words which co-occur more often than expected by chance.

Step 3 involved the application of a keyness measure of all the N-grams that occur in the two corpora. Keyness was computed with a relatively simple score labelled DIFF according to the following formula:
The **DIFF** score shows the frequency difference of an \( N \)-gram across the two corpora, relative to how often the \( N \)-gram occurs in the two corpora combined. Given that the two corpora are different in size (see Table 1.1 in Section 1.3.1), the comparison of frequency across corpora must rely on relative frequencies of a given \( N \)-gram. In the formula, \( \text{rf-colt} \) stands for the relative frequency of an \( N \)-gram in COLT; \( \text{rf-mle} \) stands for the relative frequency of the \( N \)-gram in LIC/MLE. By way of illustration, the unigram \( \text{you} \) occurs 15,019 times in COLT and 81,716 times in LIC/MLE; its relative frequency is 31,820 tokens per million words (pmw) in COLT and 34,176 tokens pmw in LIC/MLE. This difference in relative frequency yields the following **DIFF** score for \( \text{you} \):

\[
\text{DIFF} = \frac{(31,820 - 34,176)}{(31,820 + 34,176)} = 0.035
\]

The tetragram \( \text{end of the day} \) has an absolute frequency of 4 in COLT and 155 in LIC/MLE. Its relative frequency is 8 and 64 tokens pmw respectively, which gives a **DIFF** score of \(-0.768\). **DIFF** scores can range from \(-1\) to \(1\). Extreme values mean that \( N \)-grams occur only in one corpus and not in the other; a **DIFF** score of zero means no cross-corpora differences in relative \( N \)-gram frequency. With a **DIFF** score close to zero, \( \text{you} \) occurs with similar frequency across the corpora while \( \text{end of the day} \) has a **DIFF** score skewed towards the negative end of the scale, signalling that it is much more frequent in LIC/MLE than in COLT.

**Table 1.2** gives examples of unigrams sorted by **DIFF** scores. For each \( N \)-gram (column 2), the list shows the **DIFF** score (column 1) and relative frequency in COLT vs. LIC/MLE (columns 3 and 4). At the top of the table, we find words with the extreme **DIFF** score of \(-1.00\), i.e., words which occur only in LIC/MLE. In the middle, we find forms with a **DIFF** score of \(0.00\), i.e., forms that have only a minimal difference in relative frequency across the corpora. At the bottom, we find words with the extreme **DIFF** score of \(1.00\), i.e., words which occur only in COLT. (**Table 1.2** shows unigram statistics; example lists for longer \( N \)-grams are shown in **Table 1.3**.)

In this strictly data-driven approach, transcription conventions that are used to indicate, for example, filled and unfilled pauses, utterance boundaries or paralinguistic features are included in the \( N \)-gram statistics because they are potentially insightful for discourse variation research. For example, the symbol ‘\(|\)’ represents utterance boundaries in COLT, and thus the trigram ‘\(|\) yeah \(|\)’ isolates those tokens of \( \text{yeah} \) that function as backchannels. A bottom-up survey of all trigrams beginning and ending with ‘\(|\)’ could
reveal the range of one-word backchannel variants in COLT. However, this approach may also yield tokens irrelevant to analysing discourse-pragmatic features such as \textit{N}-grams that contain only digits, punctuation marks, other non-words or unintelligible speech. Therefore, in step 4, the \texttt{DIFF} lists were filtered to facilitate manual data processing. This was done by means of a purpose-built computer program designed to detect and remove irrelevant \textit{N}-grams of the kind described earlier.

The remaining analytical steps 5–8 constitute the qualitative part of this study. While the four computational steps 1–4 were only performed once on the corpus data as a whole, the analytical steps 5–8 were reiterated several times for individual word forms. Step 5 involved the manual inspection of ranked keyness lists, as exemplified in Tables 1.2 and 1.3.

Table 1.2 gives examples of the set of \texttt{DIFF}-lists that were manually inspected. For each of the five \textit{N}-gram categories, I checked at least the 1000 most highly ranked keywords. The inspection resulted in a sub-set of \textit{N}-grams

<table>
<thead>
<tr>
<th>\textbf{DIFF score}</th>
<th>\textbf{N-gram}</th>
<th>\textbf{Relative frequency}</th>
<th>\textbf{Relative frequency}</th>
</tr>
</thead>
<tbody>
<tr>
<td>−1.00</td>
<td>terror</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>−1.00</td>
<td>terrorise</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>−1.00</td>
<td>terrorist</td>
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<tr>
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<td>0</td>
<td>61</td>
</tr>
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<td>...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00</td>
<td>the</td>
<td>108538</td>
<td>109543</td>
</tr>
<tr>
<td>0.00</td>
<td>through</td>
<td>1707</td>
<td>1716</td>
</tr>
<tr>
<td>0.00</td>
<td>twenty</td>
<td>2895</td>
<td>2872</td>
</tr>
<tr>
<td>0.00</td>
<td>two</td>
<td>8875</td>
<td>8841</td>
</tr>
<tr>
<td>0.00</td>
<td>waiting</td>
<td>399</td>
<td>399</td>
</tr>
<tr>
<td>0.00</td>
<td>walking</td>
<td>1038</td>
<td>1037</td>
</tr>
<tr>
<td>0.00</td>
<td>wasn’t</td>
<td>2256</td>
<td>2246</td>
</tr>
<tr>
<td>0.00</td>
<td>you</td>
<td>150678</td>
<td>150641</td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.00</td>
<td>amiga</td>
<td>150</td>
<td>0</td>
</tr>
<tr>
<td>1.00</td>
<td>gladiators</td>
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<td>0</td>
</tr>
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<td>1.00</td>
<td>hagar</td>
<td>110</td>
<td>0</td>
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<tr>
<td>1.00</td>
<td>matrix</td>
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<td>0</td>
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<tr>
<td>1.00</td>
<td>raga</td>
<td>170</td>
<td>0</td>
</tr>
<tr>
<td>1.00</td>
<td>ragas</td>
<td>60</td>
<td>0</td>
</tr>
<tr>
<td>1.00</td>
<td>thelma</td>
<td>90</td>
<td>0</td>
</tr>
</tbody>
</table>
which I deemed relevant to the analysis of discourse-pragmatic innovation and change based on my hermeneutical judgements, linguistic knowledge and intuitions (see Section 1.2). For instance, scanning the ranked N-gram lists revealed that the occurrence of the form *kinda* and N-grams containing *kind of*

<table>
<thead>
<tr>
<th>DIFF score</th>
<th>N-gram</th>
<th>Relative frequency COLT</th>
<th>Relative frequency LIC/MLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N=2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ngram2.diff.srt (7143): −1.00</td>
<td>kinda</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>ngram2.diff.srt (7144): −1.00</td>
<td>kinda</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>ngram2.diff.srt (7145): −1.00</td>
<td>kinda</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>ngram2.diff.srt (7146): −1.00</td>
<td>kinda like</td>
<td>0</td>
<td>26</td>
</tr>
<tr>
<td>ngram2.diff.srt (7147): −1.00</td>
<td>kinda stuff</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>ngram2.diff.srt (7148): −1.00</td>
<td>kinda thing</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>ngram2.diff.srt (7530): −1.00</td>
<td>like kinda</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>ngram2.diff.srt (13099): −1.00</td>
<td>that’s kinda</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>ngram2.diff.srt (15263): −1.00</td>
<td>was kinda</td>
<td>0</td>
<td>41</td>
</tr>
<tr>
<td><strong>N=3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ngram3.diff.srt (20993): −1.00</td>
<td>they kind of</td>
<td>0</td>
<td>34</td>
</tr>
<tr>
<td>ngram3.diff.srt (21632): −1.00</td>
<td>those kind of</td>
<td>0</td>
<td>47</td>
</tr>
<tr>
<td>ngram3.diff.srt (23891): −1.00</td>
<td>we kind of</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>ngram3.diff.srt (23958): −1.00</td>
<td>well kind of</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>ngram3.diff.srt (24157): −1.00</td>
<td>we’re kind of</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>ngram3.diff.srt (26200): −1.00</td>
<td>yeah kind of</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>ngram3.diff.srt (28284): −0.86</td>
<td>kind of things</td>
<td>20</td>
<td>273</td>
</tr>
<tr>
<td>ngram3.diff.srt (35170): −0.34</td>
<td>end of the</td>
<td>240</td>
<td>484</td>
</tr>
<tr>
<td><strong>N=4</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ngram4.diff.srt (17547): −0.78</td>
<td>end of the day</td>
<td>40</td>
<td>318</td>
</tr>
<tr>
<td>ngram4.diff.srt (20043): −0.33</td>
<td>the end of the</td>
<td>220</td>
<td>435</td>
</tr>
<tr>
<td>ngram4.diff.srt (20185): −0.29</td>
<td>end of the road</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>ngram4.diff.srt (23705): −0.01</td>
<td>end of the week</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>ngram4.diff.srt (25730): 0.17</td>
<td>end of the month</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>ngram4.diff.srt (26216): 0.24</td>
<td>end of the year</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td><strong>N=5</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ngram5.diff.srt (1109): −1.00</td>
<td>end of the day</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>ngram5.diff.srt (1110): −1.00</td>
<td>end of the day i</td>
<td>0</td>
<td>26</td>
</tr>
<tr>
<td>ngram5.diff.srt (1111): −1.00</td>
<td>end of the day if</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>ngram5.diff.srt (1113): −1.00</td>
<td>end of the day it’s</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>ngram5.diff.srt (6952): −0.76</td>
<td>the end of the day</td>
<td>40</td>
<td>298</td>
</tr>
<tr>
<td>ngram5.diff.srt (7739): −0.24</td>
<td>the end of the road</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>ngram5.diff.srt (8529): −0.01</td>
<td>the end of the week</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>ngram5.diff.srt (9021): 0.24</td>
<td>the end of the year</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>ngram5.diff.srt (9184): 0.33</td>
<td>the end of the month</td>
<td>20</td>
<td>10</td>
</tr>
</tbody>
</table>
(e.g., *kind of like*) was strongly biased towards the LIC/MLE data (see the 2- and 3-grams in Table 1.3). Knowing that this form is used as a hedge in several varieties of English (see, for example, Fetzer 2010), the salience of *N*-grams with *kind of/kinda* in LIC/MLE led me to hypothesise that *kind of/kinda* is on the increase in London adolescent speech and that the category of hedges is undergoing formal innovation. The ranked lists of *N*-grams also showed that the construction *end of the day* is far more frequent in LIC/MLE than in COLT (see the 4- and 5-grams in Table 1.3). The tetragrams *end of the month/week/year*, by contrast, are very similar in relative frequency in the two corpora. Thus, the frequency difference of *end of the day* between the data recorded in the 1990s and those recorded in the 2000s may be indicative of linguistic innovation.

Step 5 resulted in a sub-set of ranked *N*-gram lists that were hypothesised to be involved in discourse-pragmatic change or innovation. To test the hypothesis that change or innovation is underway in London adolescents’ use of discourse-pragmatic features, more analytical steps were required. In step 6, I searched the corpus for those patterns that differentiate the corpora (e.g., *kinda/kind of; end of the day*) and inspected the concordances from the corpus searches. However, the manual inspection of concordance lists can only partially reveal how particular forms are used. Therefore, step 7 involved the inspection of individual tokens in their interactional context to establish their attitudinal, interactional and/or textual functions. On this basis, the forms could be classified into the formal and functional categories introduced in Section 1.1 (see further Section 1.3.3, Table 1.4).

Finally, even a large corpus such as LIC/MLE may provide insufficient tokens of individual discourse-pragmatic features to establish with confidence their functional versatility. Therefore, in step 8, I searched two other corpora, the *Corpus of Contemporary American English* (COCA, Davies 2009) and the *British National Corpus* (BNC, Burnard 2007) for some features (especially interjections and vocatives) in order to illuminate their discourse functionality. For the same reason, two dictionaries were consulted: the *Oxford English Dictionary* (OED [2015]) and the *Urban Dictionary* (UD, Peckham 2009). The UD is not a scientific or scholarly source and it may not be a valid source of information about linguistic usage and distribution. Nevertheless, it has value in that it may shed light on the items studied since definitions tend to be provided by the actual users of the forms in question.

Having outlined the procedural steps of this corpus-driven analysis, I now turn to an overview of the discourse-pragmatic features that – based on the

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3 COCA and the BNC are not strictly comparable to LIC/MLE in terms of corpus design; also, COCA presents a different variety of English than LIC/MLE. However, for the exploratory analysis presented in Section 1.3.3, I will ignore the potential effect of such differences on variable/variant use.
Table 1.4. Survey of candidates for discourse-pragmatic innovation in London adolescent speech (identified through corpus-driven data analysis)

<table>
<thead>
<tr>
<th>Category</th>
<th>Word forms/combinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interjections</td>
<td>duh, rah</td>
</tr>
<tr>
<td>Vocatives</td>
<td>blud, bruv, bro</td>
</tr>
<tr>
<td>Text-organising DMs</td>
<td>at the end of the day</td>
</tr>
<tr>
<td></td>
<td>as I say</td>
</tr>
<tr>
<td>Response elicitors</td>
<td>do you get what I mean</td>
</tr>
<tr>
<td></td>
<td>do you get what I’m saying</td>
</tr>
<tr>
<td></td>
<td>if you get what I mean</td>
</tr>
<tr>
<td></td>
<td>if you get what I’m saying</td>
</tr>
<tr>
<td></td>
<td>you get what I mean</td>
</tr>
<tr>
<td></td>
<td>you get what I’m saying</td>
</tr>
<tr>
<td>Hedges</td>
<td>kind of / kinda</td>
</tr>
<tr>
<td>GEs</td>
<td>an’ all / and all (that)</td>
</tr>
</tbody>
</table>

bottom-up method employed – are hypothesised to be involved in change or innovation.

1.3.3 Overview of candidates for discourse-pragmatic change or innovation

Table 1.4 provides an overview of the word forms and word combinations that – based on the results of the computational and analytical procedures described in Section 1.3.2 – are hypothesised to be the most salient candidates for discourse-pragmatic change or innovation in the speech of London adolescents. (The overview makes no claims to being exhaustive.) Although some current London-based discourse-pragmatic changes and innovations have been discussed in the literature (see, for example, Cheshire et al. [2008] on quotative this is + speaker; Pichler [Chapter 3] on innovative uses of the tag form innit; Torgersen et al. [2011] on response elicitor you get me), most of the features in Table 1.4 have not previously been accounted for. The following sections are a first step towards addressing this gap by offering a brief overview of what appear to be innovative variants of interjections, vocatives, text-organising DMs and response elicitors. Due to lack of space, hedges and GEs are not discussed further.

1.3.3.1 Interjections Among the forms identified through the corpus-driven analysis were duh and rah; both are exclusively found in LIC/MLE. An example of duh is given in (1).
he don’t like him so I started asking him what’s there when he lo. when he’s drunk and when you’re sober (.) and what’s not there when you’re sober (.) he said, ‘I dunno’ so *duh* I was like thinking, ‘What?’ (Tina, 18-F-N-Hk)\(^4\)

*Duḥ* is not a very frequent feature in LIC/MLE; there are only four tokens of it. Nevertheless, I would argue that it represents an innovation in the category of interjections. The qualitative analysis suggests that *duh* functions to signal a negative evaluation towards some aspect of an utterance or a state of affairs. Andersen’s (2015) more detailed COCA-based study suggests that *duh* marks a negative attitude towards an assumption held to be true by someone and usually stated explicitly as a proposition in the previous discourse, or as a reaction towards one expressed by the hearer. The role of *duh* may also be to belittle or patronise someone for stating the obvious, or to reveal their ignorance by bringing to bear something they (should) already know.

With eleven tokens, the use of *rah* as an interjection is slightly more frequent in LIC/MLE. Its use is exemplified in (2)–(3) below.

(2) mates’ house (.) to do their hair (.) and I was like, ‘*Rah* you’re brave’ (.) and we have to get up early (Esther, 16-F-A-NL)

(3) Esther: oh please don’t tell me you’re coming in here people
Aileen: Listen
Esther: alright that’s right they’re just walking past phew (..) yes (..)
Aileen: {phone number}
Esther: what day is it today?
SF: Seventh
Esther: *rah* where has time gone
Aileen: {phone number}
(Esther, 16-F-A-NL; Aileen, 16-F-A-NL; SF = interviewer)

The exact attitudinal function of this interjection may be hard to pin down. The examples suggest that it can mark both positive and negative evaluative attitudes:

\(^4\) All examples are reproduced from the LIC/MLE dataset. To preserve participants’ anonymity, all names have been changed to pseudonyms, and any identifiable information (e.g., phone numbers) has been replaced with {phone number} or similar. The corpus references in bracket signal the following information: speaker pseudonym, speaker age (in years), speaker sex (F = female, M = male), ethnicity (A = Anglo, N = Non-Anglo) and locality (Hk = Hackney, Hv = Havering, NL = North London = Islington, Haringey, Hackney). A key to the transcription conventions is provided here.
in (2), it is the bravery of the referent (you) that is positively commented on; in (3), the interjection seems to express a (mild) frustration that time has flown. The definitions offered for rah in the UD support my own interpretations of its variable use: it is described as ‘a sound made when something is cool or exciting’ or ‘an expression of frustration, anger, joy or excitement’ (UD: rah).

1.3.3.2 Vocatives Other forms that emerged from the corpus-driven analysis of keyness are bruv, blud and bro. The forms occur with a respective frequency of 390, 172 and 10 tokens in LIC/MLE and are non-existent in COLT. The qualitative analysis of concordances and tokens in context suggests that these forms are used consistently as vocatives, as shown in (4)–(6).

(4) Omar: David (.) are you thinking (.) logically like? David: bruv (.) what do you mean am I thinking logically? the environmental health shut the shop down because they’re selling monkey meat (.) rotten monkey meat (... on {road name} (.) just just there bruv Omar: mo- (.) you’re saying monkey? David: monkey meat bruv Omar: who on earth eats monkey? David: Africans bruv @ they must do bruv Omar: @ nah nah no [you’re (?) nah (?) that is just bullshit] man David: [trust me (.) trust me bruv] trust me bruv why am I gonna lie to you bruv? (Omar, 17-M-N-NL; David, 17-M-A-NL)

(5) ah the way he licks his lips blud (.) fucking hell (Aimee, 16-F-N-NL)

(6) Christopher: Sue have you got a five pound note? SF: have I got a five poun- no Christopher: Oh SF: why? Christopher: so I can ch- change you up Darren: ((closes door)) alright let’s get back to work ((pulls blinds)) Christopher: just leave it bro Darren: no cos people will start coming in SF: that’s alright don’t worry (?) (Christopher, 12-M-N-NL; Darren, 12-M-N-NL; SF = interviewer)

These innovative forms function similar to other vocatives such as man and mate. The prime function of such vocatives is usually not to summon the hearer’s attention but to establish, maintain and reinforce social relations with the hearer (Luckmann de Lopez 2013). This interactional and positive politeness function is reflected in the origin of these vocatives: bro and bruv are shortened versions of brother, the latter also being (th)-fronted; blud is related
to blood, suggesting an interpersonal relation as close as family. The entries in the UD attribute blud to Jamaican English origin, and blud and bruv are viewed as Britishisms/Londonisms. More thorough quantitative analyses are needed to determine whether their use is constrained by the sex of the speaker and/or referent.

1.3.3.3 Text-organising DMs I now turn to the analysis of N-grams that span more than one word. LIC/MLE-specific N-grams also suggest innovation in the pool of discourse-pragmatic features that have text-organising functions. The trigrams as I say and as I said are more frequent in LIC/MLE than in COLT (30 and 37 tokens pmw in LIC/MLE vs. 8 and 16 tokens pmw in COLT). The phrases as I say/said can only rarely be interpreted literally as the speaker restating or paraphrasing some earlier utterance. Sometimes the phrase indicates that the impending discourse somehow revisits an earlier topic or marks a continuation. Most commonly, though, it has primarily text-structuring and sometimes also time-stalling functions, as illustrated in (7). Such uses in LIC/MLE may be indicative of the emergence of new text-organising DMs.

(7) yeah (.) yeah no has it’s just (..) er as I say like it’s the who is the who is the bigger person and that (..) starts getting more serious (Kevin, 16-M-A-Hv)

Moreover, there are 128 tokens of at the end of the day in LIC/MLE but none in COLT. Like as I say/said, this is an expression whose literal meaning seems to be getting replaced by a non-referential meaning far removed from its original meaning. It is possible that some tokens could be metaphorically motivated by the speaker’s need to introduce a summary of previous discourse, akin to expressions like that being said, in conclusion or the like. However, most tokens in LIC/MLE are similar to that in (8) where the following discourse does not contain a concluding or summarising statement. That being said, more qualitative work is needed in order to clarify the expression’s functionality.

(8) th- (.) they are like they’re corrupted most muslim girls like as you can see in this college are really loud really stupid cos at the end of the day like I was saying to him innit they’re gonna get (?) they’re gonna obviously get married off anyway to a arranged marriage to a foreign guy or something @ they’re gonna get married off(.) but that’s why they come to college they do this they do that mess around they go out with that boy they do a lot of stupid things (Amjad, 16-M-N-Hk)

1.3.3.4 Response elicitors Among the salient patterns from the keyness analysis were a number of trigrams and longer N-grams that contain the sequence you get, as illustrated in Table 1.5. Data extracts containing two of
these forms, \textit{do you get what I mean} and \textit{do you get what I’m saying}, are given in (9)–(10).

(9) at the end of the day I’m not having no one taking the mick out of my mum (.) and if your kid don’t do the same for you then all I’ve got to say is your kid don’t really give (.) that’s how I see is if you can’t stick up for your mum (.) then you’re worth nothing (.) \textit{do you get what I mean}? that’s how I see it (.) my mum’s got an illness she’s my mother (.) she’s nobody else’s mother no one else has to live with her (.) no one else has to do nothing yeah (Jess, 18-F-A-Hk)

(10) if I’m gonna (.) if I’m going to buy stuff I don’t know I don’t like people with me they just get in my way I like to (. ) cos I like to try them on in the mi and look see if it looks nice and all this (.) other people with me say oh just ooh (.) you get me I (.) I will concentrate more and focus if I’m by myself (.) \textit{do you get what I’m saying}? (.) that’s only when I’m buying stuff (Kelly, 16-F-A-Hv)

Table 1.5 also shows that the LIC/MLE data contain a variety of pentagrams with \textit{you get} that do not occur in COLT. These include \textit{do you get what I mean}, \textit{do you get what I’m saying}, \textit{if you get what I mean}, \textit{if you get what I’m saying}, \textit{you get what I mean} and \textit{you get what I’m saying}. The importance of these corpus-driven findings becomes clear when viewed in the context of Torgersen et al.’s (2011) corpus-based analysis of response elicitors in COLT and LIC.\footnote{Torgersen et al. (2011) only investigated LIC, not MLE. Tokens of the get-variants identified in my study were found in LIC as well as in MLE.}

Table 1.5. \textit{Examples from DIFF score lists (5-grams) that contain the sequence you get}

<table>
<thead>
<tr>
<th>DIFF score</th>
<th>N-gram</th>
<th>Relative frequency COLT</th>
<th>Relative frequency LIC/MLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>−1.00</td>
<td>. do you get me</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>−1.00</td>
<td>do you get me ?</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>−1.00</td>
<td>if you get what i</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>−1.00</td>
<td>like. you get me</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>−1.00</td>
<td>you get me ?.</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>−1.00</td>
<td></td>
<td>you get me</td>
<td></td>
</tr>
<tr>
<td>−1.00</td>
<td>. you get me.</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>−1.00</td>
<td>you get me.</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>−1.00</td>
<td>. you get me ?</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>−1.00</td>
<td>you get me ?.</td>
<td>0</td>
<td>38</td>
</tr>
<tr>
<td>−1.00</td>
<td>you get me ?</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>−1.00</td>
<td>you get what i mean</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>−1.00</td>
<td>you get what i’m saying</td>
<td>0</td>
<td>14</td>
</tr>
</tbody>
</table>
Torgersen et al. (2011: 96) included in their analysis forms whose ‘overarching function [. . .] is to (appear to) involve the interlocutor by (appearing to be) eliciting responses indicating that the interlocutor agrees with, remembers, understands or follows the thread’. These forms were: right, innit, ok, yeah, you know, you know what I mean, if you know what I mean, do you know what I’m saying and you get me. Torgersen et al.’s comparative analysis of these forms in COLT and LIC revealed that innit and if you know what I mean occur with similar frequencies in both corpora; ok, right, yeah and you know are more frequent in COLT; you get me, (do) (you) know what I mean and (do) (you) know what I’m saying are significantly more frequent in LIC. However, the findings presented at the beginning of this section suggest that Torgersen et al.’s corpus-based analysis is not fully accountable. They have not included in their analysis the full set of variants of the functionally-circumscribed variable of response elicitors; the six pentagrams with you get listed at the beginning of this paragraph did not feature in their analysis (see also Pichler [Chapter 3] for criticisms of Torgersen et al. [2011]). Thus, in order to produce fully accountable results, it is necessary to combine corpus-based with corpus-driven methods. Reliance on the corpus-based approach alone risks overlooking variants not previously documented in the literature and failing to uncover recent additions to the pool of available variants.

1.4 Conclusion

The main claim of this chapter has been that the corpus-driven approach is a valuable asset in studies of discourse-pragmatic variation and change. Such an approach must be seen as complementary to, but cannot replace, mainstream corpus-based approaches, which involve searching for forms that are known a priori. The main advantage of combining corpus-based and corpus-driven methods is that it avoids the intuition-based selection of members of a certain category as candidates for analysis, thereby providing a more accurate picture of variants and variables that may be undergoing change, and allowing for better accountability of the data, as seen in the preceding discussion of response elicitors.

Applying the technique of keyness analysis of N-grams of different lengths to a comparative analysis of two London corpora (COLT and LIC/MLE), I have presented an exploratory overview of innovative discourse-pragmatic variants in contemporary London teenage speech. These forms include previously undocumented variants functioning as interjections, vocatives, text-organising DMs and response elicitors. Importantly, the study uncovered response elicitor variants that have not been accounted for in Torgersen et al.’s (2011) recent study of response elicitor variation in the COLT and LIC data. My corpus-driven analysis
thus showed that formal variation in response elicitation is greater than originally proposed.

However, we must acknowledge the limitations of comparing two corpora with a narrow time-span. More longitudinal data are needed to establish whether the innovations documented in Section 1.3.3 have a long-standing effect on the London English system of discourse-pragmatic features, or whether some of them are short-lived or age-graded phenomena. We should also take care not to commit the ‘recency fallacy’ (Denison 2011): previously unseen does not by necessity mean previously non-existent. A case in point is the interjection duh; the OED records its first attestation as dating from 1943 (see further Andersen 2015). Until more longitudinal data become available, the emerging patterns of discourse-pragmatic variation reported in Section 1.3.3 must remain indicative of change and innovation.

The innovative discourse-pragmatic variants discussed in Section 1.3.3 merit further, more in-depth investigation than was possible within the constraints of this chapter. For example, we would need to investigate how the increase in the use of kind of, reported earlier, affects the distribution of other hedging variants (e.g., sort of), i.e., whether kind of is replacing or is used alongside other hedging variants. Thus, much work remains to be done to yield a comprehensive picture of discourse-pragmatic innovations in contemporary London English and to establish how such innovations affect the system of discourse-pragmatic variation as a whole. In addition to identifying innovative discourse-pragmatic forms, it will be necessary to investigate potential innovations in the use of well-established forms. In her chapter on innit in MLE, Pichler (Chapter 3) illustrates the methodological imperatives required for successfully identifying such innovations.
Practical strategies for elucidating discourse-pragmatic variation

Cathleen Waters

2.1 Introduction

The term discourse-pragmatic features describes a wide variety of forms cross-linguistically as earlier work illustrates (see, for example, Aijmer 2002; Brinton 1996; Lutzky 2012; Schiffrin 1987; and contributions in Degand et al. 2013; Fischer 2006a). There are also thorough descriptions elsewhere of both the ideological foundations of variationist sociolinguistics (see, for example, Chambers 2002; Labov 1966; Weinreich et al. 1968) and its quantitative methodology (see, for example, Bayley 2002; Labov 1966, 2005; Tagliamonte 2006a). Drawing on concepts from previous work in these fields, this chapter provides a synthesis of the approaches that have been implemented in the past to the variationist analysis of discourse-pragmatic features, and it outlines how such a synthesis might advance future discourse variation analyses.

The discussion centres on the key tools in variationist analysis: the linguistic variable and the variable context. The traditional definition of the linguistic variable was based on semantic equivalence (i.e., two ways of saying the same thing, Labov 1972b), but some subsequent approaches instead employed the notion of functional equivalence (i.e., performing the same function, Sankoff and Thibault 1981). With discourse-pragmatic variation, however, the practicalities of implementing either semantic or functional equivalence can be problematic and a derivational approach (i.e., examining forms derived from the same linear string of components, Pichler 2013) has also been employed. My discussion draws on a range of studies of discourse-pragmatic variation in English; using the diversity of strategies adopted in those studies, I demonstrate the importance of a bespoke approach to the quantitative analysis of discourse-pragmatic features. I then apply this approach to an area where the complexities of defining the variable and the variable context are particularly clearly manifested: adverbial forms with discourse-pragmatic functions (e.g., actually). These adverbs (or adverb-like discourse-pragmatic features) often have an inherent semantic meaning but they also serve discourse-pragmatic functions. Actually, for instance, has an inherent semantic meaning of realness and often
marks information as surprising (Greenbaum 1969). In addition, actually may be used by speakers for discourse-organisational functions such as reopening a previously closed topic (Clift 2001). Although the focus of my discussion in Section 2.3 is on adverb-like discourse-pragmatic features, the recommendations made throughout the chapter regarding the sociolinguistic variable and the variable context are applicable to discourse-pragmatic features generally.

The chapter is organised as follows. First, in Section 2.2.1, I review the concepts of equivalence and accountability with respect to discourse-pragmatic variation. I then show in Section 2.2.2 how function, form and position have all been used in previous analyses of discourse-pragmatic features to delimit the variable context. Turning then to adverbs, I briefly outline in Section 2.3.1 qualitative strategies used to examine their discourse-pragmatic uses and discuss why the qualitative strategy of looking at a single item in isolation is problematic for variationist study. In Section 2.3.2, I discuss how form, function and position can be employed in studying patterns of variation in the use of adverbs with discourse-pragmatic functions, focusing primarily on actually. The review in Section 2.2 and discussion in Section 2.3 will lead me to conclude in Section 2.4 that: (i) while the construction of an analysis should always be informed by the feature under study, a bespoke approach to quantitative analysis is particularly crucial for discourse-pragmatic features in general and for adverbs with discourse-pragmatic functions especially; and (ii) the approach taken to circumscribing the variable context must be informed by the particular goals of the study as well as the type of feature under investigation and its specific characteristics.

2.2 Variationist approaches to discourse-pragmatic features

2.2.1 Discourse-pragmatic variables and the principle of accountability

Central to quantitative studies of language variation and change is the (dependent) linguistic variable. Originally conceived by Labov (1966) for the study of phonetic or phonological features, the linguistic variable was extended to studying variation in other areas of the grammar, including syntax (see, for example, Rickford 1975; D. Sankoff 1988; G. Sankoff 1973) and lexical choice/semantics (see, for example, Sankoff et al. 1978). Although this expansion beyond phonology met with criticism almost immediately (see, inter alia, Cheshire 1987; Lavandera 1978; Romaine 1984b), the linguistic variable remains essential to the variationist enterprise and has seen an increasing use by sociolinguists to examine discourse-pragmatic features in recent years (Tagliamonte 2012: 276). The difficulties in conceptualising discourse-pragmatic features as linguistic variables have been discussed in detail in
previous work (see, for example, Buchstaller 2009; Pichler 2010, 2013; Terkouraﬁ 2011) and stem chiefly from what Tottie (1991: 90) calls the ‘fundamental’ issue in the original definition of the linguistic variable, namely the determination of some type of equivalence between variants. Satisfying a requirement of semantic equivalence for discourse-pragmatic features proves problematic because of the intrinsic characteristics generally associated with these features such as their polysemy and multifunctionality (see further Brinton 1996; Fischer 2006b; Pichler 2013; Schourup 1999). The alternative to semantic equivalence has generally been a demonstration of functional equivalence between variants (discussed extensively in Sankoff and Thibault 1981; Tagliamonte 2006a; Terkouraﬁ 2011). However, critics including Cheshire (2007: 158) and Pichler (2013: 28–32) have argued that individual discourse-pragmatic features tend to perform multiple, often divergent functions, and prioritising one function over others in deﬁning the discourse-pragmatic variable may be inappropriate in some cases; thus ‘derivational equivalence’ (Pichler 2013: 31) arising from forms’ underlying structure may be a better tool for deﬁning a discourse-pragmatic variable. A closer examination of recent quantitative variationist work, however, demonstrates that the putative need to choose between function and form, i.e., to only consider one or the other, is not reﬂected in all studies, and that the consideration of both function and form in deﬁning discourse-pragmatic variables is not only common in most variationist analyses but is in fact necessary for some analyses (see also Pichler Chapter 3; Denis and Tagliamonte Chapter 4). I will explore this point further in Section 2.2.2.

Following on from the deﬁnition of the linguistic variable is Labov’s (1972b: 72) ‘principle of accountability’ which requires analyses to include not only all instances where the variable feature did occur but also those instances where it could have occurred but did not. As one of the deﬁning characteristics of discourse-pragmatic features is their optionality (Brinton 1996: 34) and as discourse-pragmatic features are not a closed set of items (Lewis 2006: 44; Schiffrin 1987: 71), it is immediately apparent that adherence to this principle can be a problematic requirement in quantitative studies of discourse-pragmatic variation (Pichler 2013: 28). Although some studies of discourse-pragmatic features use a normalised frequency count in order to facilitate comparisons (see, for example, Aijmer 2002; Andersen 2001; Cheshire 2007), this approach has been criticised by variationist scholars on the basis that frequency alone is an unreliable basis of comparison because it ignores context (see, for example, D’Arcy 2005: 26). For instance, consider D’Arcy’s (2005) study of discourse like. Although the count of occurrences of like with and was over double the number of occurrences of like with but, D’Arcy (2005: 92) demonstrated that this apparent difference could be explained by the greater number of times that and occurred overall. That is, and + like occurred more
often than *but + like* because *and* was a far more frequent context than *but*. By calculating the proportion of *and + like* out of the overall uses of *and* and the same proportion for *but + like*, the apparent difference between the two environments was a matter of 1%. In addition, with discourse-pragmatic features in particular, frequency differences across two corpora may be a result of speakers’ social characteristics, the interlocutor or the corpus under study (Cheshire 2007: 161), and frequencies may rise and fall based on the topic under discussion or other ‘features of the situation’ (Poplack and Tagliamonte 1991: 318). Moreover, while cross-generational frequency variation may signal change over time such as increasing grammaticalisation (Traugott and Heine 1991: 9), an increase in frequency alone is not sufficient evidence of change (Mair 2004: 123–5). Therefore, although normalised frequencies allow some means of comparison across studies undertaken with different methodologies, and thus may be useful as a starting point, they are insufficient in quantitative analyses for fully elucidating variation in context.

### 2.2.2 Defining the envelope of variation in studies of discourse-pragmatic variation

In defining a sociolinguistic variable and in circumscribing its variable context, variationist studies of discourse-pragmatic features have generally considered some combination of three characteristics of the particular feature(s) under study: function, (underlying) form and position, all of which I will discuss further in a moment. My intention in using these somewhat abstract terms is to facilitate generalisations across disparate studies, and thus provide a more general view on how other discourse-pragmatic variables might be examined in the future. For instance, I draw parallels between Pichler’s (2013) examination of *I don’t know* and D’Arcy’s (2005) analysis of discourse *like* by demonstrating how they both began with a consideration of form, despite the notable differences in what those forms are. I begin by grouping the strategies used in variationist studies for defining the variable and the envelope of variation into two types, based on their starting point: function or form.

In the first type of approach, the analysis begins by defining the variable as an overarching function but acknowledges that features that serve this function might simultaneously perform other functions. Function here is conceived of quite broadly and thus includes Sankoff and Thibault’s (1981: 207–8) description of function as ‘weak complementarity’ or more recent definitions such as Terkourafi’s (2011: 248) ‘sameness of representational function’. Examples of this approach include the functions of boosting meaning (intensification; see, for example, Barnfield and Buchstaller 2010; Ito and Tagliamonte 2003;
Tagliamonte 2006b), marking direct quotation/mimesis (quotatives; see, for example, Buchstaller and D’Arcy 2009; Levey Chapter 7; Rodríguez Louro Chapter 6; Tagliamonte and D’Arcy 2004), and some studies of extension from a named item to other members of the associated set (general extenders; see, for example, Cheshire 2007; Tagliamonte and Denis 2010). These studies appeal to variants’ shared function to meet the equivalence requirement for linguistic variables. However, though the analyses of these variables all begin with an a priori identified function, the implementation and execution beyond that initial point are not identical across variables. Consider first the case of general extenders, i.e., items such as and everything like that or or something (see Tagliamonte Chapter 5; Wagner et al. Chapter 9). In most studies, they are defined as variables on the basis of their function of set-extension (see, however, Pichler and Levey 2011), and the variable context is then defined by their form, which generally comprises a connector (and/or) followed by a quantifier (e.g., all, every), a generic noun/pro-form (e.g., thing, stuff) and a comparative (e.g., like that), though descriptions of their compositionality vary (Cheshire 2007: 156; Tagliamonte and Denis 2010: 337). By contrast, studies of intensifiers and quotatives generally do not impose compositional constraints on the identification of potential co-variants. Thus single-word intensifiers such as very and really as well as multi-word intensifiers such as just so have been included as variants in some intensifier studies (Tagliamonte 2008: 368).

Similarly, both single-word verbs (e.g., say, go) and compound forms (e.g., be like) have been considered together in examining quotative variation (see, inter alia, Levey Chapter 7; Rodriguez Louro Chapter 6; Tagliamonte and D’Arcy 2004: 498–500). Instead of compositional restrictions, variationist studies of intensification and quotatives usually delimit the variable context in terms of position. In the case of quotatives, the quotative introducer is juxtaposed with a direct quotation or mimesis. Arguably, that is the only possible point of occurrence of quotatives and thus, for quotatives, position (determining the variable context) could be seen as inextricable from function (defining the variable). With intensification, however, the envelope of variation is usually clearly delimited in terms of intensifier position, and analyses only include contexts where modification of an adjective occurs or is possible (see, for example, Ito and Tagliamonte 2003: 263). That is, although other grammatical elements such as adverbs and some verbs can be intensified, only one context of modification, i.e., the modification of adjectives, is included in the variable context. The focus on adjectival heads allows delimitation of the context in such a way that a zero variant in intensification can be examined (Ito and Tagliamonte 2003: 263), thus ensuring the principle of accountability is respected, and including contexts where a form both did and could have occurred, as discussed earlier. Like the use of the term function earlier, the term position is used here in a broad sense; it is specified by grammatical or
collocational criteria such as occurring with direct speech, being on the periphery of a clause or modifying an adjective.

The second type of variationist approach to defining discourse-pragmatic variables and the variable context starts with form: either an individual lexical item or an underlying multi-word construction. Pichler and Levey (2011) examined general extenders but unlike the studies mentioned before, Pichler and Levey began with form. Using a structure similar to that outlined earlier for previous studies (connector – modifier – generic noun/pro-form – simulative – deictic), they defined both the variable and the variable context. Pichler (2013) also began from form in her derivational approach to I don’t know, I don’t think and negative polarity interrogative tags. For instance, to examine I don’t think, she extracted all items with the underlying form ‘first person singular subject-negative-opinion predicate’, including verbs such as think and suppose (Pichler 2013: 131), thus meeting the criterion of accountability. In both Pichler (2013) and Pichler and Levey (2011), function was also considered, though not as a means to define the variable or the variable context. Instead, Pichler (2013) and Pichler and Levey (2011) operationalised function as an independent variable in order to test its effect on variant choice, thus recognising the multifunctional nature of discourse-pragmatic features in a way that using function as a point of departure does not allow. In Pichler (2013), both broad discourse-pragmatic functions such as interpersonal, textual or interpersonal-textual were considered as well as more detailed sub-categories, with categorisation being determined by more than one rater to mitigate the subjectivity of allocating individual tokens of the variable to functional categories (Pichler 2013: 45–8).

Derivational approaches are inherently form-based as they examine constructions derived from the same linear string of components. Yet form has also been used as a starting point in other analyses of discourse-pragmatic variation. D’Arcy’s (2005) study of discourse like started with the selection of a single form: like. As the goal of her study was elucidation of the discourse-pragmatic uses of like, form alone was insufficient to define the variable or the variable context; therefore, she further defined them using both function and position. She excluded, for example, instances of like where it functioned as a verb or a preposition (D’Arcy 2005: 2–3). Although uses of like as a quotative or as an approximator could be considered discourse-pragmatic, D’Arcy (2005: 63) treated instances with those functions as separate variables on historical grounds (see further D’Arcy 2006; Tagliamonte and D’Arcy 2004). Having thus excluded functions such as quotative and preposition from the definition of the variable (discourse like), D’Arcy (2005: 52) used position to define the variable context. Instances ‘on the left periphery (LP) of the sentence’ were labelled as ‘discourse markers’ (DMs); instances in all other positions were categorised as ‘discourse
particles’ (DPs) without any further specification of function. Thus, instances of DM like as in Like, the week had already gone by were examined in variation with a random selection of clauses from the same speakers in which like could have occurred at the LP but did not (D’Arcy 2005: 29). For tokens of DP like, D’Arcy (2005: 116–203) examined their position in relation to syntactic heads to circumscribe a series of variable contexts (e.g., determiner phrases or verb phrases). Defining the variable context of DP like in terms of these syntactic positions allowed D’Arcy (2005:123) to examine instances of DP like as in I remember there being like a solar eclipse in variation with a selection of clauses in which DP like could have occurred in the specified positions but did not. This approach, i.e., examining where discourse like occurred and where it could have occurred but did not, ensured an accountable analysis for both DM and DP instances of discourse like.

D’Arcy (2005) used position to circumscribe (accountably) the variable context after she had defined the variable based on form and function. However, position has also been used as the starting point in examining discourse-pragmatic variation and change over apparent time. Tagliamonte (2014, 2016) investigated the use of different discourse-pragmatic features which she called ‘sentence starters’ by different age groups, focusing in particular on the language of adolescents. As she was interested in a diversity of forms and functions, Tagliamonte therefore used position, i.e., occurrence in the LP of the clause, both to define the variable and to circumscribe the variable context.

2.2.3 Summary

What can this typology of previous studies tell us about studying discourse-pragmatic variation more generally? First, the decision of which approach to use (e.g., derivational, functional, etc.) depends on the particular feature under study. Second, a discourse-pragmatic study can begin either with function, form or position although, as I have shown, all three characteristics can play a role both in the definition of a discourse-pragmatic variable and in accountably circumscribing its variable context. Third, and most importantly, the approach taken for analysing patterns of variation in the use of any particular feature must be determined by the specifics of that particular discourse-pragmatic feature and the goals of the particular study. That is, the roles of form, function and position in delimiting the variable context are not (and cannot be) uniform across the range of discourse-pragmatic features being studied. Rather, a clear understanding of the nature of the item or construction being examined should lead to a bespoke analysis of said item or construction. In the next section, I will
illustrate how a consideration of form, function and position can inform a bespoke analysis for adverb variability.

2.3 Adverbs

Adverbs in English are said to occur ‘at the crossroads of morphology, syntax, lexis and semantics’ (Opdahl 2000: 50), a list to which discourse-pragmatics can clearly be added as demonstrated in previous work on items such as actually, now, really and anyway (Aijmer 2002; Brinton 1996; Schourup 1999). Not all adverbs have discourse-pragmatic uses, of course, and not all discourse-pragmatic features are adverbs. In fact, items categorised as discourse-pragmatic features may be described in traditional grammatical classification systems as belonging to a diversity of grammatical categories (Lewis 2006: 44), raising the question of whether there should be a grammatical category for discourse-pragmatic features separate from, say, adverbs (Traugott and Dasher 2002: 159). In this chapter, however, I will use the term ‘adverbs’ for the features under study here as I consider the items in both their discourse-pragmatic and (more canonically) adverbial uses.

I examine adverbs for two reasons. First, they very clearly illustrate the challenges of applying variationist methodology to quantifying the distribution of discourse-pragmatic features, and thus they are a good locus for teasing out strategies for the bespoke analysis argued for in Section 2.2. Second, other than in their intensifier function (see Fuchs and Gut Chapter 8), they have received little variationist attention despite the extensive work on their discourse-pragmatic functions in other frameworks (see Section 2.3.1).

Consider actually, which has been regularly included in lists of discourse-pragmatic features (Aijmer 2002; Brinton 1996; Schourup 1999). Consistent with the items and constructions discussed in Section 2.2, actually displays a number of Brinton’s (1996: 32–5) ‘characteristics’ of discourse-pragmatic features, including a greater association with speech than writing, limited contribution to propositional truth, generally negative prescriptive evaluations (Waters 2011: 112), and multifunctionality (e.g., reopening a topic [Clift 2001: 267] while also linking the particular utterance more generally to the previous discourse [Oh 2000: 254]). As adverbs such as actually share these characteristics with other discourse-pragmatic features that are more prototypically conceptualised as variables, the same methodological complexities that apply to the variationist study of the discourse-pragmatic features discussed in Section 2.2 also apply to adverbs. Unfortunately, adverbs such as actually are not amenable to a straightforward application of any of the approaches discussed in Section 2.2. Unlike with quotatives or intensifiers, identifying a single, narrow function with which to define the variable or variable context
for the discourse-pragmatic uses of adverbs is problematic due to their inherent multifunctionality (see earlier discussion on actually). The single-word nature of most discourse-pragmatic adverbials also makes the derivational approach impractical. Therefore, the most practical starting point for the quantitative examination of most adverbs with discourse-pragmatic uses is likely to be form, similar to the approach described earlier for discourse like and in keeping with most non-variationist studies of these adverbs (see Section 2.3.1). However, as with discourse like, form alone is unlikely to be a sufficient criterion for defining the variable (context) for adverb-like discourse-pragmatic features. In contrast to discourse-pragmatic features such as discourse like, many adverbs, including actually, retain a residual semantic meaning even in their discourse-pragmatic uses (Simon-Vandenbergen and Aijmer 2007: 62–3). In the case of actually, this meaning is an indication of realness or reality (Biber and Finegan 1988; Greenbaum 1969; Jacobson 1978), though its use may also have an associated implication that the reality is in some way unexpected (Biber and Finegan 1988; Clift 2001; Greenbaum 1969; Hickey 1991; Jacobson 1978; Oh 2000; Tognini-Bonelli 1993; see, however, Lenk 1998: 157). As a result, circumscribing the variable context of adverbs by examining their alternation with a null variant may not be appropriate in all cases. To illustrate these complexities, I begin in Section 2.3.1 with a review of how adverbs with discourse-pragmatic functions have been examined qualitatively, noting both limitations and opportunities for future variationist work. I then discuss actually in more detail in Section 2.3.2 in order to illustrate how aspects of bespoke variationist studies could be implemented.

2.3.1 Qualitative studies of adverbs with discourse-pragmatic functions

The starting point for qualitative analyses of adverbs as discourse-pragmatic features has usually been the identification of a particular form. In both older and more recent studies, the form examined is generally a single lexical item. For instance, now (see, inter alia, Schiffrin 1987; Schourup 2011), actually (see, inter alia, Aijmer 1986, 2002) and well (see, inter alia, Schourup 2001; Svartvik 1980) have been examined using a ‘lexico-grammar’ approach (Tottie 2009: 342) in which all instances of the particular form in a dataset are reviewed, and the function(s) of each instance are elucidated and/or categorised. In rarer cases, multiple forms are considered contrastively either in a single variety/register or across different varieties/registers. Examples include actually and in fact (Oh 2000; Simon-Vandenbergen and Willems 2011; Traugott and Dasher 2002), well and now (Aijmer 2002), and actually and really (Gray 2012). However, as noted in Section 2.2.1, central to the variationist enterprise is the determination of when a feature could
have occurred but did not, meaning this approach of examining only one or two forms of interest is inadequate for variationist study.

Although qualitative analyses of these features have more commonly started with form, Tottie’s (1986) study of focusing adverbs (e.g., just), Biber and Finegan’s (1988) examination of a selection of stance adverbs (e.g., actually, basically), Watts’s (1988) analysis of three commentary pragmatic features (actually, really, basically) and Simon-Vandenbergen and Aijmer’s (2007) exploration of adverbs of modal certainty (e.g., certainly, surely) all began with function rather than a single form. These studies in particular are likely to be useful as a starting point for future variationist analyses. For example, Biber and Finegan (1988) grouped adverbs by the broad function of stance, including actually and other stance adverbs such as basically. Simon-Vandenbergen and Aijmer’s (2007) examination of adverbs of modal certainty in British English began with a grouping that comprised certainly, of course, indeed, obviously, clearly, definitely, surely, naturally, no doubt, definitely, necessarily, surely, undoubtedly, inevitably, plainly, evidently, arguably, for sure, admittedly, for certain, decidedly, undeniably and unquestionably. They subsequently examined sub-sets of these adverbs based on narrower functions such as epistemic vs. evidential certainty. This approach seems like a practical candidate for a variationist study in which the variable is defined by the broad macro-function of modal certainty, with the more specific micro-functions (e.g., epistemic vs. evidential) operationalised as independent variables. (As the variable context is ‘only approached through a long series of exploratory manoeuvres’ that arise as the analysis progresses [Labov 1969: 728], I will not attempt to delineate it here.)

In sum, qualitative studies of adverbs have generally focused on form regardless of the feature under study. However, the cases of actually and now (examined in the next section) demonstrate that multiple approaches to defining the variable and the variable context, and to operationalising independent linguistic variables, are possible, and a bespoke design based on the characteristics of the particular discourse-pragmatic feature under study is necessary. In what follows, I will therefore illustrate some possible approaches to the quantitative study of adverbs with discourse-pragmatic functions and discuss what contexts would call for one approach over another.

2.3.2 Quantitative approaches to studying variation of adverbs with discourse-pragmatic functions

I begin with a discussion of the roles of form, function and position in defining the variable and circumscribing the variable context, before discussing the use of position as an explanatory variable. Given the diversity of adverbs, a section
discussing them in generalisations would be unacceptably vague. Therefore, in this section, I examine more general strategies for the quantitative analysis of adverbs chiefly with reference to an adverb with well-studied discourse-pragmatic functions: actually.

One possible approach to conceptualising actually would be to define the variable on the basis of one of the discourse-pragmatic functions that have been identified in the numerous, largely corpus-based, studies elucidating the discourse-pragmatic functions of actually in context (see, inter alia, Aijmer 1986; Clift 2001, 2003; Lenk 1998; Oh 2000; Taglicht 2001). These previously identified functions of actually include linking utterances (Oh 2000: 254; Traugott and Dasher 2002: 171), marking self-correction (Lenk 1998: 156; Tognini-Bonelli 1993: 209), reopening a previously closed topic (Clift 2001: 267), emphasising (Quirk et al. 1985: 1415), and signalling disagreement (Oh 2000: 256; Taglicht 2001: 2). However, Traugott and Dasher (2002: 174–5) note that actually performs multiple discourse-pragmatic functions simultaneously. Therefore, any attempt to allocate individual instances of actually to single functional categories is in danger of giving one function priority over any other(s) that might also be at work (see also Cheshire 2007).

Waters’s (2011) study of actually addressed the issue of these multiple functions by beginning with form (actually) to define the variable. Circumscribing the variable context for this definition of the variable required careful consideration. One conceivable approach to the variable context for actually would have been one similar to D’Arcy’s (2005) approach to discourse like (see Section 2.2.2), i.e., to consider actually as having only one co-variant, namely the zero variant (non-occurrence). However, the process of semantic bleaching that has taken place for the discourse-pragmatic uses of like has not progressed as far for actually. As discussed earlier, the general consensus from previous studies indicates that actually maintains a core meaning of indicating reality (Biber and Finegan 1988; Greenbaum 1969; Jacobson 1978). Based on these previous studies of actually, Waters (2011) circumscribed the variable context by using a definition of actually that incorporated both its semantic and broad functional aspects: an adverb with a semantic meaning of realness that performs the discourse-pragmatic functions described in the previous paragraph. Given this definition of the variable context, the identification of co-variants was possible. Again using previous studies, it was possible to identify a set of generally synonymous adverbials (i.e., of adverbials with a meaning of realness) that can also perform discourse-pragmatic functions: primarily the adverb really (Aijmer 1986; Andersen 2001; Biber and Finegan 1988; Greenbaum 1969; Jacobson 1978; Lenk 1998; Quirk et al. 1985; Watts 1988) but also the adverbials in fact (Aijmer 1986; Clift 2003; Lenk 1998; Oh 2000; Traugott and Dasher 2002), as a matter of fact (Aijmer 1986), and
indeed (Quirk et al. 1985; Traugott and Dasher 2002). Thus, really, in fact, as a matter of fact and indeed were included in the analysis as co-variants of actually. This approach to defining the variable context for actually satisfies the principle of accountability described in Section 2.2.1 because the variable context includes all instances where actually did occur as well as all instances where it could have occurred but did not because one of its co-variants occurred in its place. Unlike the strategy adopted for some other discourse-pragmatic features, which is to include non-occurrences in the variable context as a null variant, non-occurrences were not included in the variable context for actually and its co-variants because the adverbs overtly indicate realness and/or perform discourse-pragmatic functions, and non-occurrences were therefore not functional equivalents of actually as defined here. Clearly, however, a blanket inclusion of all instances of actually, really, in fact, as a matter of fact and indeed regardless of context would have been simplistic as it would have resulted in the erroneous inclusion of cases where, for example, really functioned as an intensifier and thus had a substantially different function to the other co-variants (e.g., really good vs. actually good) (Gray 2012; Oh 2000; Waters 2011). Therefore, each token of the listed co-variants was methodically reviewed to eliminate cases where they performed intensification (Waters 2011: 119–22).

Having thus delimitated the variable context on the grounds of shared semantic meaning and shared discourse-pragmatic use, Waters (2011) included a more granular conceptualisation of discourse-pragmatic function as an explanatory variable. Similar to the position-based distinction between the left-periphery and clause-internal uses of like operationalised by D’Arcy (2005) (see Section 2.2.2), the functionality of actually and its co-variants depends, at least in part, on their position in a sentence/utterance. Regardless of what particular discourse-pragmatic function(s) a particular analysis focuses on, distinctions in function for actually, as for its co-variants, usually begin from whether the adverb occurs within or adjacent to a clause. Greenbaum (1969: 142) made this distinction clear for actually by contrasting (1) with (2), though similar position-based distinctions have also been demonstrated for its co-variants (see Waters 2011: 117).

(1) Actually, he volunteered.
(2) He actually volunteered.

In (1), actually asserts that some element of what follows is in some way ‘incompatible with some other proposition which has been expressed or implied’ (Taglicht 2001: 2). The implication of incompatibility with previous discourse is also present in (2), but the positioning before the verb contrasts reality with ‘what is only pretended or imagined’ (Taglicht 2001: 2) or indicates
additional focus on the verb (Greenbaum 1969: 142). Comparing (1) and (2) demonstrates two important characteristics of actually. First, both (1) and (2) can be interpreted as performing at least one discourse-pragmatic function, and thus they are part of the same variable context as defined earlier. Second, although the precise definition of the function is open to subjective interpretation, positions within the clause are distinguished from those on the periphery of the clause (see further Aijmer 1986; Greenbaum 1969; Lenk 1998; Taglicht 2001). This second observation both raised the question of how to capture differences in function without introducing an element of subjectivity to the analysis, but also provided a solution to capturing those differences. The study of actually in Waters (2011: 114–26) used syntactic position as a proxy for narrower discourse-pragmatic function(s), and position was included as an explanatory variable for choice of variant in the statistical analyses. Using position in this way minimised the subjectivity of categorisation by function and acknowledged that multiple functions may be at work simultaneously, while maintaining the generally agreed upon distinction between peripheral and clause-internal functions for the co-variants. In addition, as one of the goals of Waters (2011) was to examine two different communities (one in Britain and one in Canada), the data analysis was better served by using a position-based conceptualisation of function. Given a potential interaction between discourse-pragmatic strategies and (regional) variety (Schneider and Barron 2008: 14), and because individual discourse-pragmatic functions may be present in one variety but not in others (Clancy and Vaughn 2012), imposing a single subjective schema for categorising function on both communities would have been inappropriate even if the drawbacks of prioritising one function over another could have been overcome.

In short, an analysis of adverb-like discourse-pragmatic features which defines the variable context based on broad discourse-pragmatic function and uses position as a means to operationalise narrower discourse-pragmatic functions has the following benefits: (i) it acknowledges the residual semantic meaning the adverbs may contain; (ii) it allows an accountable means of circumscribing the envelope of variation; and (iii) it acknowledges forms’ multifunctionality without prioritising one function over any other(s). Under different circumstances, however, a different approach to the variable and variable context might make more sense. For instance, if the sole focus of the analysis had been to explore variation patterns in the functionality of clause-initial contexts (see Tagliamonte 2014), then the variable might have been defined by position; some contexts such as those in (2) would have been excluded from the variable context, and a different set of variants would have been selected for inclusion irrespective of semantic content (e.g., well).

The functional and positional characteristics that were demonstrated for actually (e.g., functional diversity and multifunctionality) are true of many
adverb features (Hasselgård 2010: 302). Even so, the approach detailed for actually earlier would not be appropriate for all adverbs with discourse-pragmatic functions, even when there is some apparent similarity between their positional distribution and that of actually. Thus, it would not be appropriate for all adverb studies to operationalise function through position and to include all positions in a single analysis. Consider the case of now, which shows many similarities to actually. Now performs multiple functions, sometimes simultaneously (Clancy and Vaughn 2012), and can occur in positions similar to actually; it can occur in the LP (Brinton 1996: 33), as in (3), as well as other clause positions, as in (4) where it has a temporal function (see Aijmer 2002; Clancy and Vaughn 2012; Schourup 2011).

(3) Now, food was rationed. (Waters 2011: 54)

(4) I’m now working on a PhD. (Schourup 2011: 2118)

Although Aijmer (2002: 59, 62) observed a link between the position of now and its function as well as ‘a close relationship between the temporal meaning of now’ in (4) and its discourse-pragmatic functions in (3), it is not immediately clear what definition of the variable or variable context other than form would include instances of now in both (3) and (4) in the same analysis. Despite the possible semantic overlap in the uses of now in (3) and (4), unlike actually, there does not appear to be a discourse-pragmatic function that is present in both contexts and that could be used to determine the envelope of variation (though I do not rule out the possibility that one could be identified). Instead, now appears to be a better candidate for being studied by defining the variable (or variable context) by function (e.g., a connective function) as employed in qualitative studies that have discussed now in relation to other adverbs such as well and so (Aijmer 2002; Schourup 2011). As this brief discussion of now has shown, variationist analyses of adverbs – and other, more prototypical discourse-pragmatic variables – must be constructed on a bespoke basis for the particular item(s) under study.

2.4 Conclusion

In this chapter, I have demonstrated that variationist studies of discourse-pragmatic features have defined the variable and the envelope of variation through considerations of form, function and position. I have argued that the analysis undertaken for any particular function or feature should arise from the characteristics of that function or feature itself, and is further dependent on the goals of individual examinations (see also Pichler Chapter 3). Thus, I have posited that a bespoke analysis is required for the accountable variationist study of discourse-pragmatic features. In addition, I have
extended the previous variationist approaches for the quantitative analysis of discourse-pragmatic features to the understudied area of adverb variability. I have demonstrated that the discourse-pragmatic uses of some adverbs can also be conceptualised as discourse-pragmatic variables on the grounds of their shared characteristics with more prototypical discourse-pragmatic variables. The flexibility I propose for constructing a variationist analysis of these features is consistent with other changes taking place in (discourse-pragmatic) research within and outside the variationist framework. For instance, scholars considering grammaticalisation such as Aaron (2010) and Schwenter and Torres-Cacoullos (2008) have argued for a broadening of how the variable context is conceptualised to reflect simultaneous changes to form and function. Similarly, the recent development of variational pragmatics (Schneider 2010; Schneider and Barron 2008) brings together dialectology and pragmatics into an approach where ‘no one method is the only “right” method’ (Schneider 2010: 253), and both ‘onomasiological (i.e., function-to-form mapping)’ and ‘semasiological (i.e., form-to-function mapping)’ are useful in elucidating variation (Schneider and Barron 2008: 15). In addition, there are other areas that I have not considered here that are likely to contribute to future work in the field. These include the role of prosody in contributing to pragmatic meaning (see, for example, the contributions in Barth-Weingarten et al. 2009), an exploration of discourse-pragmatic features in language contact situations (Levey et al. 2013), and examination of their acquisition (Andersen 2001; Levey Chapter 7). As scholars continue to explore a wider set of discourse-pragmatic features, additional methods will no doubt be developed for their quantitative analysis.
Part II

Innovations
3 Uncovering discourse-pragmatic innovations: 
\textit{innit} in Multicultural London English

Heike Pichler

3.1 Introduction

Recent variationist studies of language use in London have observed a range of linguistic innovations at different levels of the grammar, including among others: radical diphthong changes in \textit{face}, \textit{price}, \textit{goat} and \textit{mouth} (Cheshire et al. 2008, 2011; Fox 2010, 2015); the development of topic-marking \textit{who} (Cheshire et al. 2013); the recruitment of \textit{man} as a pronoun (Cheshire 2013); the acquisition of the new quotative variant \textit{this is + speaker} (Cheshire et al. 2008, 2011; Fox 2012); and new additions to the pool of response elicitor variants such as (\textit{do/if} you get \textit{what I mean/I’m saying} and \textit{you get me} (Andersen Chapter 1; Torgersen et al. 2011). The emergence and spread of these innovations has been attributed to the complex sociolinguistic landscape of inner-city London, notably the effects of group second language acquisition and multiple language contact as well as the widespread existence of multi-ethnic friendship groups (Cheshire et al. 2008, 2011). Together, the aforementioned innovations constitute core features of Multicultural London English (MLE), an ethnically-neutral variable repertoire of language forms (Cheshire et al. 2011). This chapter continues the investigation of linguistic innovations in MLE with an analysis of reduced negative-polarity interrogative

I am indebted to Jenny Cheshire, Paul Kerswill and their research team for allowing me to use the \textit{Linguistic Innovators Corpus} (LIC) for multiple investigations of \textit{neg-tag} use and for sharing with me the accompanying audio files without which these analyses would not have been possible. A big thank you to Eivind Torgersen for patiently answering numerous corpus queries and for double- (and sometimes triple-) checking the form of a large number of \textit{neg-tag} tokens. Sebastian Hoffmann kindly devised a Perl script for semi-automated data extraction for which I am grateful. Some of the findings discussed here were presented at IPrA 13 (New Delhi, 2013), DiPVaC2 (Newcastle upon Tyne, 2014) and Michigan State University (East Lansing, 2014). I would like to thank the audience members, in particular Kate Beeching, Liesbeth Degand, Elizabeth Traugott and Suzanne Evans Wagner, for comments and observations that helped me develop the description of innovative \textit{innit} uses presented here. Finally, I would like to thank Claire Childs for constructive comments on an earlier version of this chapter. Of course, the ultimate responsibility for the chapter rests with me.
tags (neg-tags), specifically innit, the variant at the forefront of the innovations described in this chapter.

Though by no means a new feature of London or British English (see, *inter alia*, Andersen 2001; Cheshire *et al.* 2005; Erman 1998; Krug 1998; Pichler 2013 for previous accounts of innit usage across varieties of British English), *innit* is rapidly innovating in contemporary London English. Andersen’s (2001) analysis of *innit* in COLT, the Bergen *Corpus of London Teenage Language* recorded in the mid-1990s, has shown that *innit* is not limited in use to the syntactic-semantic context and discourse-pragmatic functions associated with its claimed source form *isn’t it*; its sociolinguistic distribution in COLT and a comparable adult corpus was shown to be consistent with a change in progress whereby *innit* is gradually levelling across the inflectional paradigm and developing new discourse-pragmatic functions. Pichler’s (2014) and Pichler and Torgersen’s (2013) more recent analyses of the canon of neg-tag variants in LIC, the *Linguistic Innovators Corpus* recorded in London in the mid-2000s (see further Section 3.2), reveal ongoing, rapid changes in the use of *innit*; clause-final *innit* continues to level across the paradigm and, together with a small number of other neg-tag variants, is developing new functions not reported in Andersen (2001) or elsewhere. Moreover, in LIC, the occurrence of *innit* and, to a far lesser extent, that of other neg-tag variants is not restricted to the canonical position of neg-tags. As shown in the examples in (1), it extends to positions beyond the right periphery (RP) of main clause anchors and beyond the ‘follow-up’ position described in Andersen (2001) (see further Section 3.3).

(1) a. That’s how it was. Now, if you got beef, *innit*, take it to the yard. (Alan, 16-F-N-Hk)¹

b. Whatever, *innit*. (Kelly, 16-F-N-Hk)

¹ All examples are reproduced verbatim from the LIC corpus. To preserve participants’ anonymity, all names have been changed to pseudonyms and any non-generic place names referred to in the data extracts have been replaced with {place name}, {pub name} or similar. The information provided in brackets after each extract gives the speaker pseudonym, speaker age (in years), speaker sex (F = female, M = male), ethnicity (A = Anglo, N = Non-Anglo) and locality (Hk = Hackney, Hv = Havering). In examples (8), (12)–(17), (20)–(21) and the examples in footnote 4, the following transcription conventions are used:

<table>
<thead>
<tr>
<th>[]</th>
<th>overlap</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>turn continuation</td>
</tr>
<tr>
<td>-</td>
<td>false start, truncation</td>
</tr>
<tr>
<td>(h)</td>
<td>audible in-breath</td>
</tr>
<tr>
<td>@</td>
<td>laughter</td>
</tr>
<tr>
<td>underlining</td>
<td>emphatic stress</td>
</tr>
<tr>
<td>(.), (..)</td>
<td>short, medium pause</td>
</tr>
<tr>
<td>?</td>
<td>continuing intonation contour</td>
</tr>
<tr>
<td>!</td>
<td>increase in volume</td>
</tr>
<tr>
<td>(?)</td>
<td>indecipherable transcription</td>
</tr>
<tr>
<td>**</td>
<td>highlights the token(s) discussed</td>
</tr>
<tr>
<td>[. . .]</td>
<td>conversation continues on this topic</td>
</tr>
<tr>
<td>&quot;&quot;</td>
<td>quoted speech</td>
</tr>
<tr>
<td>(.)</td>
<td>audible outbreath</td>
</tr>
<tr>
<td>&lt;text&gt;</td>
<td>increased tempo</td>
</tr>
<tr>
<td>:</td>
<td>syllable lengthening</td>
</tr>
<tr>
<td>.</td>
<td>final intonation contour</td>
</tr>
<tr>
<td>?</td>
<td>rising intonation contour</td>
</tr>
<tr>
<td>(text)</td>
<td>uncertain transcription</td>
</tr>
<tr>
<td>(text)</td>
<td>non-verbal sounds</td>
</tr>
</tbody>
</table>
In what follows, I will examine in detail the occurrence of **innit** and, where applicable, other **neg-tag** variants in the non-canonical positions illustrated in (1), with a view to: (i) continuing Andersen’s (Chapter 1) discussion of methodological imperatives for identifying discourse-pragmatic innovations at an early stage of their development; (ii) supporting Waters’s (Chapter 2) call for an empirically- and theoretically-grounded but flexible approach to defining discourse-pragmatic variables and their variable contexts. Unlike Andersen (Chapter 1) who is concerned with identifying innovative discourse **forms**, the focus of this chapter is on capturing innovative **uses** of well-established forms. The **neg-tag** variable at the centre of the analysis and its variants, including **innit**, are introduced together with the data in Section 3.2. Section 3.3 outlines the range of positions **neg-tags** and in particular the variant **innit** occupy in the LIC data. The outline demonstrates that attention to **neg-tag** variants’ positional distribution and scopal domain is crucial to identifying potential innovations in their use. The following description in Section 3.4 of the discourse functionality of **neg-tags** in non-canonical positions shows that qualitative data analysis is a compelling means to gauge the status of previously unreported **neg-tag** uses as an interactionally-motivated practice rather than a series of random performance errors. Section 3.5 provides real- and apparent-time evidence to support the hypothesis that the **innit** uses illustrated in (1c)–(1f) represent a discourse-pragmatic innovation at an early stage of its development. The discussion in Section 3.6 begins with a comparison of the results presented in Sections 3.3–3.5 with those presented in two previous studies of **innit** in the same dataset (Palacios Martínez 2015; Torgersen et al. 2011). I will argue that these studies failed to uncover the most dramatic recent innovation in **innit** (or **neg-tag**) use because they paid insufficient attention to the methodological imperatives outlined in this chapter. The discussion then moves on to underscoring the value of Waters’s (Chapter 2) call for bespoke variationist analyses of discourse-pragmatic features. I will argue that rigid adherence to previously postulated definitions of the **neg-tag** variable and variable context would have hampered, if not altogether foiled, attempts to identify ongoing changes in **neg-tag** use; it would also complicate attempts to
situate these innovations in relation to the larger linguistic sub-system of which they become a part. Section 3.7 concludes the chapter.

3.2 Data

The analysis is based on the 1.4-million-word Linguistic Innovators Corpus (LIC) collected in 2005–2006 for a large-scale research project investigating linguistic innovation and change in contemporary London English (Kerswill et al. 2007). The corpus comprises recordings of ninety-eight adolescent and sixteen elderly speakers from: Hackney, a multi-ethnic and multi-cultural inner-city borough of London; and Havering, a less diverse and more affluent outer-city borough of London. In addition to locality, the adolescent speaker sample is stratified by ethnicity, with speakers broadly divided into Anglo and non-Anglo, i.e., a relatively homogeneous group of speakers of white British heritage and a more heterogeneous group of speakers from ethnic minority backgrounds. All older speakers are white British. Adolescent recordings were made in local community colleges with friendship groups of two or three speakers; older speakers were recorded in their homes, usually in pairs. In both contexts, fieldworker input was minimal and, as far as possible, interactions were left to develop naturally.

The analysis presented here developed from an investigation by Pichler and Torgersen (2013) into the syntactic-semantic distribution in LIC of the canon of neg-tags which they defined – on the basis of their prototypical position and shared derivation – as the set of constructions ‘appended to main clause anchors and derived from the following linear string of components: (auxiliary) + (negative clitic) + (pronominal subject)’ (see also Pichler 2013: 179).2 In addition to the clause-final neg-tag tokens relevant to Pichler and Torgersen’s analysis of paradigm levelling, the semi-automated data extraction of neg-tags from LIC yielded tokens that, though derived from the linear string of components schematised earlier, fall outside the variable context; they are not appended to main clause anchors but occur in the positions illustrated in (1) which have not traditionally been associated with neg-tags. The occurrence of these tokens in LIC must not be ignored since it may be indicative of ongoing change (see Himmelmann’s [2004: 32] ‘syntactic context expansion’). However, testing this hypothesis requires ‘pushing the envelope’ of variation (Aaron 2010) and relaxing the positional criteria previously used for defining the neg-tag variable and variable context. I therefore include in the present analysis all constructions derived from the string (auxiliary) + (negative clitic) +

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2 The term ‘construction’ is used in a pre-theoretical way to refer to syntagmatic strings and does not reflect a construction grammar view of the data (Goldberg 1995; Kay and Fillmore 1999).
irrespective of their position of occurrence. Inclusion in the analysis of all neg-tag tokens in LIC makes it possible to identify the locus of any innovations in their use and to situate any such innovations in the context of established neg-tag uses. Hereafter, neg-tags that are appended to main clause anchors will be referred to as neg-tags in canonical position; turn-initial neg-tags with scope over a previous speaker's turn will be referred to as follow-up neg-tags; all other neg-tags will be referred to as neg-tags in non-canonical positions.

To establish whether it is only innit or indeed a wider range of neg-tag variants that are undergoing change, the variant inventory will be broadly divided into the following categories: canonical neg-tags such as doesn't she, can't you, haven't we; canonically-derived and phonetically-reduced neg-tags such as ain't it, in't they, dunnit; and the variant form innit which, according to Andersen (2001: 197), derived through phonetic attrition from the canonical tag variant isn't it. At times, neg-tag variants from the latter two categories will be jointly subsumed under the label phonetically-reduced neg-tags.

3.3 Positional and scopal properties of MLE neg-tags

English neg-tags typically occur at the right clausal periphery and typically take wide leftward scope over their preceding anchor clause, as shown in the examples from LIC in (2). Although Ziv (1985: 198) argues that neg-tags are 'restricted to sentence-final position', neg-tags are also, on occasion, parenthetically inserted in clause-medial post-finite position, as illustrated in (3). When they occur either between or within syntactic constituents, medial neg-tags may take narrow scope over the immediately preceding phrasal constituent (Cullicover 1992: 206; Dehé and Braun 2013: 136; McGregor 1995: 110; Quirk et al. 1985: 811). Moreover, neg-tags may be appended to elliptical anchors whose ellipted subject and finite verb can be fairly straightforwardly inferred from the surrounding linguistic context. For example in (4), the words in strikethrough font were ellipted but are recoverable from the shared co-text to produce complete propositions. Beyond the limited flexibility illustrated in (2)–(4), however, English neg-tag usage is generally characterised as lacking positional and scopal variability. There is strong consensus in the literature that the occurrence of neg-tags is restricted to post-finite position and that their scope always extends leftwards over the preceding clause or, occasionally, over one of its phrasal constituents (Biber et al. 1999: 208; Knowles 1980: 382).

(2) a. You have to have nice shoes, don't you. (Lewis, 16-M-A-Hv)
b. He was gonna post it to him, weren't he. (Mark, 18-M-N-Hk)
c. And you already started it at the beginning of the year, din you. (Jake, 16-M-A-Hk)
d. You take it out to the street, innit. (Alan, 16-M-N-Hk)

(3)
a. I mean, I’m a glutton, aren’t I, for historical programmes on the television. (Elsa, >65-F-A-Hv)
b. We had a book, didn’t we, once on rhyming slang. (Joe, >65-M-A-Hk)
c. Cos the boys made carts, didn’t they, out of wood. (Joan, >65-M-A-Hk)
d. It’s a sin, innit, in front of God. (Bisa, 17-F-N-Hv)

(4)
a. How old is she? She’s two years older than me, in’t she. She’s seventy-two now, in’t she. (Frances, >65-F-A-Hk)
b. It’s not this week. It’s next week, innit. (Jake, 16-M-A-Hk)
c. SF: What have you done?
Rufus: I dunno. I’ve done bare things, innit. (Rufus, 19-M-N-Hv)

Although about 93.9% (\(N = 2501/2663\)) of all positionally and scopally unambiguous neg-tag tokens in LIC occupy the canonical neg-tag positions illustrated in (2)–(4), the LIC data do not fully support the positional and scopal restrictions in neg-tag use postulated in the literature. Firstly, we find in the LIC data neg-tag tokens that fit Andersen’s (2001: 139–50) description of follow-ups (see also Quirk et al. 1985: 812). As shown in (5), these neg-tags occur turn-initially, constitute stand-alone utterances, and scope not over the current but over the previous speaker’s proposition. They generally signal either surprise at or alignment with previous speakers’ propositions. According to Andersen (2001: 204–5), follow-up uses of innit have developed from innit uses in canonical position.

(5)
a. Isabella: Yeah, she weren’t meant to go out.
Bisa: Weren’t she!
(Isabella, 17-F-N-Hv; Bisa, 17-F-N-Hv)
b. Sophie: Shayne. He’s got to win!
Charlotte: In he!
(Sophie, 16-F-A-Hv; Charlotte, 16-F-N-Hv)
c. Maria: It’s like me and my sister go back to kids again.
Emily: Innit! It’s like Christmas day, it’s like your child-childhood.
(Maria, 16-F-A-Hv; Emily, 16-F-A-Hv)

In addition, the LIC data contain innit tokens that occur in positions previously only associated with invariant lexical tags, i.e., tags such as yeah and

3 Included in the count of neg-tags in canonical position are those clause-final neg-tags that are followed by other discourse-pragmatic features or vocatives (e.g., It’s a bit dumb, innit, like, I’ve got a blind date, in I, Joanne?). Seventeen neg-tag tokens had to be excluded from the tabulations presented in this chapter because their positional and scopal properties could not be disambiguated (see further footnote 4).
which, unlike *innit*, are not derived from the linear string of components characterising neg-tags (see Section 3.2). In (6), for example, *innit* occurs after and has scope over a subordinate (rather than main) clause, a position shared by *yeah* in Welsh English (Jones 1990: 187–8). In (7), *innit* occurs after the formulaic construction *I know* which is used to signal agreement with the preceding speaker’s proposition. While the use of the lexical invariant tag *right* sounds grammatical when *I know* is used as a non-compositional agreement marker in this context (*I know, right;* see also Stenström et al. 2002: 176), the use of canonical neg-tag variants would seem grammatical only when *I know* is used compositionally to signal familiarity with a following NP (e.g., *I know her mother, don’t I*).

(6) Like, when you’re going yard, *innit*, it’s like you don’t wanna say nothing.  
(Alex, 16-M-N-Hk)

(7) Katie: Every time her phone rings, ‘Hello mum.’  
Laura: *I know*, *innit*.  
(Katie, 18-F-A-Hk; Laura, 18-F-A-Hk)

Moreover, close auditory analysis of every neg-tag token in LIC revealed that some phonetically-reduced tokens are positioned at the left periphery (LP) of the clause that they scope over. As crudely indicated by the typographical means employed to replicate prosodic features from the audio files (‘.’ for syllable lengthening; ‘(.)’ for a short pause; ‘<text>’ for increase in speech tempo; ‘,’ for continuing intonation contour; ‘.’ for final intonation contour), the LP *innit* tokens in the examples in (8) are preceded rather than followed by a marked tone unit boundary (see Cruttenden 1997: 33–5). Thus, because they are prosodically bound to the *right*, they take rightward scope over the following proposition. (This is in contrast to the RP tokens in (2) which are prosodically bound to the *left* and hence take leftward scope over preceding propositions.) The occurrence in LIC of *innit* and other variants at the LP contradicts the syntactic descriptions of neg-tags in the literature reviewed at the beginning of this section, and it refutes Izutsu and Izutsu’s (2013: 230) recent claim that *innit* does ‘not tolerate the initial position’.

(8) a. I’ve e:h <*innit*, they’re> supposed to give you a fine or something. Like, eighty pound or a hundred pound or something. (Ahmed, 19-M-N-Hk)

b. Cos they’re such pricks. Overreacting idiots. *Innit*, that’s a waste of police time. *Innit*, they should be out catching real criminals. (Tina, 18-F-N-Hk)

Finally, the LIC data contain (largely phonetically-reduced) neg-tags which are appended to and take narrow scope over: lone noun phrases (NPs) or lone prepositional phrases (PPs), as in (9); left-dislocated (LD) NPs, as in (10); and subject NPs, as in (11). These neg-tag uses are different from those in (4) where the NPs are constituents of elliptical anchors whose missing
elements can be recovered from the surrounding context. In (9), the anchor of *innit* is an independent phrasal unit that cannot easily be extended to a full clause; in (10), the anchor of *in he* is a detached lexical constituent of the clause following *in he*; in (11), the anchor of *innit* is the subject NP of the clause in which *innit* is parenthetically inserted. Thus, because the _NEG-TAGS_ illustrated in (9)—(11) occur after lone NPs/PPs, between LD NPs and their co-referential pronouns, or between subject NPs and verb phrases (VPs), they categorically have phrasal rather than clausal scope. They will henceforth be referred to as ‘phrasal _NEG-TAGS_’. The positions between LD NPs and their co-referential pronouns and between subject NPs and VPs have previously been associated with the use of the invariant lexical tags _yeah_ and _right_ (Jones 1990: 188; Stenström et al. 2002: Ch. 7). The occurrence in LIC of *innit* (and other phonetically-reduced _NEG-TAG_ variants) after lone NPs/PPs refutes Stenström et al.’s (2002: 173) proposal that *innit* – due to its assumed derivation from _isn’t it_ – ‘always has to follow material that constitutes a complete [clause] [...] or that can be enriched to a [clause]’.

(9) a. And his head though as well, *innit*. (Dale, 17-M-A-Hv)
   b. What about the other time? Down {road name}, *innit*, where two woman drivers pulled out (?), didn’t they? (Dale, 17-M-A-Hv)

(10) And now this step dad, *in he*, he’s like proper strict. (Lewis, 16-M-A-Hv)

(11) So obviously one person, *innit*, was a bit weak, yeah. (Rufus, 19-M-N-Hv)

The preceding outline of the range of positions occupied by _NEG-TAGS_ in LIC reveals that the use of at least some _NEG-TAG_ variants extends beyond the canonical position of _NEG-TAGS_ at the RP of main clause anchors or the follow-up position illustrated in (5). As shown in the examples from LIC in (6)—(11), some _NEG-TAG_ variants occur in positions not previously reported for _NEG-TAGS_ in the literature, i.e., after subordinate clauses and formulaic constructions; at the LP of clausal anchors; after lone NPs/PPs; and after LD or subject NPs. The frequency of _NEG-TAGS_ in these non-canonical positions is relatively low; they account for only 2.8% ($N = 74/2663$) of all positionally and scopally unambiguous _NEG-TAGS_ in LIC.\(^4\) Moreover, almost 85.1% ($N = 63/74$) of all

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\(^4\) This figure is probably an underestimation. In coding _NEG-TAG_ tokens for positional distribution and semantic-pragmatic scope, I erred on the side of caution and excluded from the analysis any tokens with potentially ambiguous position and scope ($N=17$). For example, in (a), the NP *a high tone* could be interpreted as constituting a phrasal constituent of the anchor clause they got like a (.) *a high tone* which is followed by *innit* and the relative clause *that comes out of their mouth*; in this analysis, *innit* occurs in its canonical RP position. Alternatively, *a high tone* could be interpreted as constituting the subject NP of the clause *a high tone [...] comes out of their mouth*; in this analysis, *innit* occurs in post-subject NP position. Because the prosodic evidence does not help to disambiguate the possible interpretations, the token was excluded from the analysis.
NEG-TAGS in non-canonical positions have the form *innit* (see further Section 3.5). Yet despite their relative infrequency and bias towards one variant form, the NEG-TAGS in non-canonical positions deserve closer investigation since their occurrence may be a reflex of ‘syntactic context expansion’ whereby constructions come to be used in positions where they could not be used previously (Himmelmann 2004: 32). Before I present real- and apparent-time evidence to test the hypothesis that what we are witnessing here is an incipient stage of a language change, it is important to examine the functionality of NEG-TAGS in non-canonical positions. Qualitative analysis of these tokens will establish whether they are random and meaningless insertions in discourse or whether they are systematically used to perform functions compatible with NEG-TAGS’ core function of seeking corroboration.

### 3.4 Functional properties of MLE NEG-TAGS in non-canonical positions

The following description of the functionality of NEG-TAGS in non-canonical positions focuses on LP NEG-TAGS and phrasal NEG-TAGS attached to lone or LD NPs/PPs (see (8)–(10)). These are the most frequently attested categories of NEG-TAGS in non-canonical positions in LIC (*N* = 30 respectively). The modest frequency with which LP and phrasal NEG-TAGS occur made it possible to analyse in detail every single instance of their use. At the same time, their

(a) Like, it’s just (.) the Rom- the Romford people they, they got like a (. ) a high tone, *innit*, comes out of their mouth. (Talal, 17-M-N-Hv)

In (b) and (c), it is not clear whether the NPs *nature reserve* and *{pub name}* constitute elements of an elliptical anchor clause (*It’s a nature reserve; {pub name} is expensive*) or lone NPs. As indicated, it is plausible to reconstruct potentially missing syntactic constituents from the surrounding context, which suggests that the NEG-TAGS occur in canonical position. At the same time, though, the NEG-TAGS in these examples perform the same function as those associated with phrasal NEG-TAGS (see Section 3.4.2), which suggests that they occur in non-canonical position. Because the status of these tagged NPs cannot be confidently disambiguated, they too were excluded from the analysis.

(b) SF: What did you do when you were there.
   (SF = interviewer; Dom, 17-M-N-Hk)

(c) SF: You know, it’s expensive to go out, drinking.
   Kevin: Yeah, things like we (?).
   Gary: *{pub name}*, *isn’t it*.
   Kevin: Yeah, *{pub name}* is. Like, they charge you three, three pound ( . ) three pound eighty-five a pint.
   (SF = interviewer; Kevin, 16-M-A-Hv; Gary, 17-M-A-Hk)

The figure, then, reports the number of NEG-TAG tokens with unambiguous scope and position, thus potentially underreporting the actual frequency in LIC of NEG-TAGS in non-canonical positions.
repeated occurrence helped establish the functional characteristics shared across all \texttt{neg-tag} tokens in each category which is an important requirement to produce faithful descriptions of each category’s respective functional profile. (\texttt{neg-tags} in other non-canonical positions are not considered here because their infrequency makes it impossible to determine which functional properties each of them share.)

### 3.4.1 \textit{LP neg-tags: seeking attention and corroboration}

As discussed in Section 3.3, the occurrence of \texttt{neg-tags} is generally associated with the \texttt{RP} where they regularly, though by no means exclusively, function to secure interlocutors’ involvement in the interaction and/or to seek interlocutors’ corroboration (or, in rarer cases, verification) of the following proposition (see, \textit{inter alia}, Algeo 1988, 1990; Holmes 1982; Pichler 2013; Tottie and Hoffmann 2006). In LIC, \textit{innit} and a handful of other \texttt{neg-tag} variants are occasionally recruited to the \texttt{LP} to perform functions closely related to their prototypical \texttt{RP} functions, the main difference being that agreement is invited in an anticipatory rather than retrospective manner. The interactional motivation and value of pre-posing \texttt{neg-tags} to the \texttt{LP} is illustrated in the following examples from LIC.

In (12), Ellie denies Leon’s commitment to their friendship group (\textit{he usually leaves us}). When Leon rejects the accusation in the following turn (\textit{I don’t usually leave you!}), Ellie repeats it, this time preceding it with \textit{innit} and following it with substantiating information (\textit{and goes off with these other girls}). The \texttt{LP \textit{innit}} token and the clause-final vocative Joanne serve to draw the attention of Joanne who has so far remained disengaged from the discussion; in addition, \textit{innit} serves to seek Joanne’s corroboration of the accusation made against Leon. Prompted by \textit{innit} (and the vocative), Joanne subsequently engages in the discussion to indirectly corroborate Ellie’s allegations (\textit{cos he fancies them}).

(12) \begin{tabular}{l} SF: \hspace{1cm} So, do the three of you (.) always hang around together? \\ Ellie: \hspace{1cm} Well yeah. But he usually leaves us. \\ Leon: \hspace{1cm} I don’t [usually] leave you! \\ Ellie: \hspace{1cm} [(.h)] \\ \textit{Innit}, he leaves us sometimes, Joanne? And goes off with these other girls. (.) \\ Joanne: \hspace{1cm} Cos he fancies them. \\ (SF = interviewer; Ellie, 17-F-A-Hk; Leon, 17-M-N-Hk; Joanne, 17-F-A-Hk) \end{tabular}

The effectiveness of LP \textit{innit} in securing interlocutors’ attention is confirmed in (13). When Tina first attempts to support Mark’s observation that people in their neighbourhood are commonly stopped and searched for no particular
reason, the beginning of her turn (*they always target*) overlaps with Mark’s laughter (@). Tina cuts off her proposition mid-utterance. When she re-launches (and eventually completes) the proposition (*they always target everyone around here*), she precedes it with *innit* to secure Mark’s (and possibly SF’s) listenership. Mark immediately signals his active listenership with the minimal response *yeah*, produced in overlap with the beginning of Tina’s relaunched proposition. Mark’s following proposition (*you have a hood up, they think you’re a criminal*), although a repetition of his earlier contribution, supports Tina’s point that the police target anyone in the area.

(13)  
Mark: But I’ve been searched about three or four times I think?  
Tina: [(kisses teeth) I’ve never been searched.]  
SF: [What? Just for sitting on a wall?]  
Mark: Yeah, you just sit there, hang around. If you’ve got your hood up or whatever they think, ‘Oh yeah. He’s a (.) criminal.’ [@]  
Tina: [They always target (.) *innit,*] [they always] target everyone around here.  
Mark: [yeah]  
You have a hood up, they think you’re a criminal. [...]

The strategic placement of *innit* at the LP rather than the RP is further confirmed in extract (14). Tina, Ahmed and Mark are arguing about the details of a recent trip to another part of London when Tina suddenly mentions her dislike of trains (*I don’t like trains*). Her turn overlaps with Ahmed’s, and Tina relaunches her proposition three times before she finally brings it to completion. Her third and final attempt at launching the proposition is preceded by *innit*. The LP NEG-TAG seeks – but ultimately fails – to secure Ahmed’s and Mark’s attention and listenership in an attempt to gain the conversational floor.

(14)  
Tina: We got back (just like that), innit. [Oh no! He brung us the wrong way.]  
Ahmed: [Oh, I tried to]  
Mark: [No! No! On the way back, we]  
went the wrong way. [[You took (?) we ended up (.) we ended up  
Ahmed: [[No, I I deliberately brung them the wrong  
Mark: = getting about ten trains.]]  
Ahmed: = way so that I could, we could]] stay on [cos he wanted to be home  
Tina: [I don’t cos I don’t. (.)  
Ahmed: = for eight o’clock, little geek.]  
Tina: = *innit,* I don’t like] trains.  
Mark: We didn’t leave there till nine so I don’t know how we can get there for eight. [...]

(Tina, 18-F-N-Hk; Ahmed, 17-M-N-HK; Mark, 18-M-N-Hk)
These examples demonstrate that the placement of innit at the LP rather than RP is not random but highly strategic. In LIC, it is consistently motivated by: (some) co-participants’ lack of active engagement in a discussion, as in (12); (some) co-participants’ (real or perceived) lack of active listenership, as in (13); or intense competition for the floor, as in (14). LP placement allows speakers to secure hearers’ attention and/or the conversational floor before the proposition to be confirmed is presented, thereby giving hearers advance warning that agreement is being invited or expected. The examples in (12)–(14), then, demonstrate that although requests for confirmation are generally associated with elements in RP position (see, for example, the contributions in Beeching and Detges 2014a), such requests are possible in LP position where they can additionally serve to draw the attention of inattentive hearers, and to contribute to successful turn-taking. The recruitment of tags to the LP has previously been reported for the following invariant tags: ugye in Hungarian (‘is it so?’; Kenesei et al. 1998: 3); e in Edinburgh Scots (Millar and Brown 1979: 35–8); and you know (what I mean) in British English varieties of Jamaican Creole as well as the London English of Caribbean and non-Caribbean adolescents (Sebba 1993; Sebba and Tate 1986). Moreover, forms similar to innit occur in LP position in varieties of English associated with North American indigenous communities (Matthew Gordon p.c.; Marianne Mithun p.c.). The LP NEG-TAG uses illustrated in (12)–(14) are therefore not unusual cross-linguistically.

3.4.2 Phrasal NEG-TAGS: marking information structure

The phrasal NEG-TAGS illustrated in (9) and (10) perform an important role in information structure management (Krifka 2007; Lambrecht 1994), specifically in how referents are introduced by speakers in accordance with their assumptions about hearers’ mental states at the moment of the utterance. According to Chafe (1976, 1987, 1996) and Lambrecht (1994), referents may be in any one of the following activation states: active (in participants’ short-term memory and current focus of consciousness); inactive (not currently at the forefront of participants’ attention because they have left/never entered their consciousness or short-term memory); or semi-active/accessible (not in participants’ focal consciousness but textually, inferentially or situationally accessible). The following examples from LIC illustrate the role of

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NEG-TAGS in the referring process which is primarily to request corroboration of referent activation (and identification) but also to guide the referent search process and to signal tagged referents’ discourse prominence.  

Extract (15) is part of a larger narrative sequence in which Alex tells Zack and SF about a friend’s experience of smuggling drugs in deodorant cans. Due to his repeated mention in the preceding discourse (not reproduced here), Alex’s friend is at the forefront of the participants’ consciousness when Alex attributes to him the act of spraying the marijuana-filled can: *one time he sprayed the (.) thing*. However, following a cut-off PP (*to*) and the continuation marker *cos*, Alex suddenly attributes the action to a different agent: *the export people*. While this NP referent is inferentially accessible to participants by virtue of the fact that the narrative is set in an international airport, it is not lit up in participants’ consciousness when the sentence *the export people [...] sprayed the spray* is spoken. Successful activation of the semi-active NP is promoted by its packaging as an LD NP that is immediately followed by *innit*: the LD NP *the export people* introduces the semi-active referent as a separate processing unit, thus facilitating Zack’s and SF’s cognitive task of activating the referent before Alex elaborates on it (see Lambrecht’s [1994: 166] ‘PRINCIPLE OF SEPARATION OF REFERENCE AND ROLE’); *innit* explicitly requests Zack’s and SF’s confirmation that they have successfully activated the referent, thus helping Alex closely monitor the acceptance process (see Clark and Krych’s [2004: 62] notion of speaking as a bilateral process). LD and *innit*, then, combine to present the unexpected but interactionally important referent *the export people* in such a way that will facilitate its successful activation. The absence of turn-exchange following the LD NP + *innit* construction signals Zack’s and SF’s tacit referent activation.

Referrer activation relates to consciousness and speakers’ assessment of a referent’s activation status in hearers’ minds; referent identification relates to knowledge and speakers’ assessment of a referent’s shared representation in speakers’ and hearers’ minds (Lambrecht 1994: 77ff).

LD constructions are widely associated with the introduction of inactive or semi-active topical referents (see, inter alia, Prince 1981; Ward and Birner 2001; Ziv 1994). They reflect the three-stage referring process outlined later: the LD NP introduces the referent; the following short pause constitutes the acknowledgment stage; the co-referential pronoun in the following clause establishes the referent (Geluykens 1992: Ch. 2).
Alex: But I see him come back, yeah, and he opened, one time he sprayed the (. ) thing, yeah. To [cos the] export people, *innit*, they sprayed the

Zack: [(punk)]

Alex: = spray yeah? Like just to check that it weren’t anything. Bruv.

SF: mhm

Alex: = When I say they were smelling weed, (listen). This is them. ‘What’s that smell that’s coming out?’ This is him. ‘Oh, I dunno like. It must be d-d- (h) thing.’ [. . .]

(Alex, 16-M-N-Hk; Zack, 16-M-A-Hk; SF = interviewer)

*Innit* performs a similar function when it occurs after lone NPs, as illustrated in (16). Alex and Zack are talking about a song performed by a group of boys at the recent *E2 party*, when Alex suddenly cuts short this account to introduce into the discourse a new referent, *the girl*, who had also performed at the party. Because Alex and Zack had attended the party together, Zack already has a mental representation of *the girl* in long-term memory. Therefore, *the girl* is not only inferentially accessible but also known and, as a result, uniquely identifiable to Zack. *Innit* functions to request Zack’s confirmation that he has activated and identified the lone NP referent *the girl* before Alex provides more information about her performance. Zack collaborates with this request and explicitly asserts his acceptance of the referent with *yeah*. (I will comment later on the function of Alex’s overlapping existential *there* construction.)

(16) Alex: No, that song they done at the E2 party. (. ) [In {street name}].] Zack: [I don’t know.]

Alex: = They done, some boys come on and they (h) and it goes, oh yeah, ‘Never aim low aim high.’ But they (. ) [done it]

Zack: [Oh, the aim] higher [[group

Alex: [[Yeah. Zack: = song. Yeah.]]]

Alex: = You heard them.]] *innit*. [Never aim low,] aim high. I- the girl,

Zack: [Target.]

Alex: = *innit*, [there was] a girl. [[But]] then she changed it. She goes,

Zack: [yeah] [[(??)]]

Alex: = ‘What have I got for you lot though? What you like? Grime?’ Like, cos that’s what they call it [grime, yeah] and then, we goes ‘yeah,

SF: [mhm]

Alex: = yeah, black black do (something say)’ and she was (. ) *(vocal noise)* when I say, yeah, she just ripped it, they just played a beat, yeah. (h) And she just ripped it. [. . .]

(Alex, 16-M-N-Hk; Zack, 16-M-A-Hk; SF = interviewer)
In addition to packaging accessible NP referents, *innit* also occurs with scene-setting lone PPs that introduce ‘the spatial and temporal framework for the event reported in the [following narrative]’ (Reinhart 1981: 173). In (17), Tina, Mark and Ahmed are talking about shoplifting and their experience with security guards. Tina overlaps one of Mark’s contributions with the floor-claiming move *like in Iceland, innit* which introduces the spatial context of the following narrative: a branch of the British supermarket chain of that name. Tina frames the introduction of the lone PP with the discourse-pragmatic features *like* and *innit*. Like signals Tina’s assumption that because one or both of her friends participated in the event to be recounted, they will share her mental representation of the setting; this should enable them to identify the spatial framework in which the following narrative is set and to activate the associated event (see Cheshire 2005: 486–7). *Innit* requests her friends’ confirmation of common ground before Tina launches the narrative. Mark cuts off his ongoing contribution mid-utterance (*I make them walk-*) to confirm recognition and activation of the setting with *oh yeah*; his following contribution *when I had a go at the man* marks the following narrative as a shared recollection (see Cheshire [2003] on lone *when*-clauses).

(17)  
Mark: If the shop’s empty, then I’ll say something to them, like, ‘I’m not a thief, you know.’ But [[if it’s packed. (.) If it’s packed, I make them]]
Tina: [[Yeah, I know. Like, in Iceland, *innit*?]]
Mark: = walk- oh yeah! [when I had a go at that man @]
Tina: [Iceland, they made us stop at the door, like. The door jammed.] Trying to act like we jacked something [[from Iceland.]]
Mark: [[‘What you got]] on you? You got something in your pockets? ‘Yeah.’ [‘What Ahmed:
Mark: = you got?’] ‘My hands.’ @ [[@]]
Ahmed: = day was this?] [[When was this?]]
Tina: [[@]] That was so funny. And the man [was still] trying to shake our, shake his hand and everything,
Mark: [[@]]
Tina: = you know. […]
(Mark, 18-M-N-Hk; Tina, 18-F-N-Hk; Ahmed, 17-M-N-Hk)

In LIC, then, phrasal *neg-tags* are an integral element of the collaborative referring process that typically unfolds in three stages (Clark and Wilkes-Gibbes 1986): (i) referent presentation (here in the form of semi-active LD or lone NPs/PPs tagged by *innit* or one of its co-variants); (ii) referent acceptance (tacitly or with minimal response tokens such as *yeah*); and (iii) referent

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8 It is the very short pause after *like* which indicates that *like* functions as an intersubjective marker rather than a preposition.
establishment (manifested, for example, in the use of co-referential pronouns in the following discourse). The use of **neg-tags** in the incremental referring process is consistently motivated by interactional factors, namely to help speakers monitor participants’ acceptance of unexpected or sudden but discursively important changes in referent or narrative setting. Further scrutiny of each individual phrasal **neg-tag** in LIC revealed similarities across the tagged referents to do with their retrievability and cataphoric topicality. These similarities provide additional insights into phrasal **neg-tags’** functionality and will be discussed next.

To illustrate tagged referents’ shared retrievability characteristics, I will draw on the examples already discussed. *The export people* in (15) is part of all participants’ common knowledge about airport security and is accessible from the narrative context of airport customs; *the girl* in (16) refers to a referent that Alex knows to be mutually known by Zack and that is accessible to him from the narrative context of the E2 party; *in Iceland* in (17) refers to a setting that is part of Tina and Mark’s shared experience and that is accessible to Mark from the discourse context of shoplifting. Thus, across examples (15)–(17) as well as all other tagged LD and lone NPs/PPs in the data, **neg-tags** mark referents that presumably are believed by the speaker to be: (i) identifiable by (some) co-participants against their common ground;\(^9\) and (ii) inferable by (some) co-participants from the surrounding discourse context. The suggestion that the use of phrasal *innit* is reserved for NPs/PPs of this kind is supported by closer scrutiny of example (16). The referent *the girl* is uniquely identifiable to and inferable by Zack because he had attended the E2 party with Alex; *the girl* is not identifiable or inferable by the interviewer SF because she had not partied with the interviewees. It is in this context that we find two presentations of the same referent: first as the tagged lone definite NP discussed earlier (*the girl, innit*); then as an indefinite NP in an existential *there* construction (*there was a girl*). The strong association of indefinite NPs and NPs in existential constructions with low degrees of accessibility and inactive discourse status (Cheshire 2005; Collins 2002; Gundel et al. 1993: 275) suggests that the second presentation of the referent may have been motivated by the presence of SF and its packaging modified to meet SF’s specific background knowledge and perceived interactional needs. The first presentation with *innit*, then, would seem to have been tailored to Zack and *his* knowledge background (see Fussell and Krauss [1989: 203]; Horton and Gerrig [2005: 128]; Prince [1981: 22] on recipient design). Thus, their strong association in LIC with specific types of referents suggests that phrasal **neg-tags** guide participants

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\(^9\) Referents can be either type identifiable, where hearers ‘are able to access a representation of the type of [referent] described by the [NP]’, or uniquely identifiable, where hearers ‘can identify the speaker’s intended referent on the basis of the [NP] alone’ based on previous familiarity with the NP referent (Gundel et al. 1993: 276–7, emphasis added).
to locate tagged referents in common ground and infer them from the discourse context (see also Keysar et al.’s [1998] ‘Restricted Search hypothesis’; Smith et al. 2005).

With topic being conceived as what a proposition ‘is about’ (Lambrecht 1994: 118), cataphoric topicality is ‘the importance of an NP [referent] in the following discourse’ (Myhill 1992: 36). It can be measured by counting how many times an NP referent recurs in the ten clauses following its initial presentation (Givón 1995). To illustrate this topic persistence measure, examples (18) and (19) re-examine clause-by-clause (and without consideration of non-clausal minimal responses or quantification of formulaic constructions such as when I say) the narratives in (16) and (17). As shown by the bolded she tokens in (18), the referent a girl recurs seven times in the ten clauses following its initial presentation. A girl thus has a topic persistence score of 0.7 ($N = 7/10$). (The clause there was a girl was not included in the topic persistence count since, as argued earlier, it is part of the referent presentation stage in the referring process. The girl’s quoted speech in lines 2 and 9 was also excluded from the count since the quotes (at least that in line 9) could be replaced with an object NP such as ‘a rhyme’.) In (19), I extend the topicality measure to gauge the persistence of the spatial framework in which Tina and Mark’s shoplifting narrative is set. The eight utterances in bold following in Iceland, innit refer to physical and verbal actions performed in the spatial framework introduced by the tagged PP referent. In Iceland thus has a spatial persistence score of 0.8 ($N = 8/10$). Consistent application of Givón’s (1995) topic persistence count to all 30 tagged lone NPs/PPs in LIC revealed that all but two of them recur in the ten clauses following their initial presentation; sixteen of them meet Givón’s (1995: 66) criteria for high topicality, i.e., they recur more than twice; the average topic persistence score of all tagged NPs/PPs is 0.37. These results suggest that phrasal neg-tags combine with syntactic structures (LD NPs, lone NPs/PPs) to mark referents that tend to be developed and have great importance in the following discourse.

(18) the girl, innit, there was a girl.
1 But then she changed it.
2 She goes, ‘What have I got for you lot though? What you like? Grime?’
3 Like, cos that’s what they call it grime, yeah,
4 and then, we goes, ‘Yeah, yeah, black black do (something say)’
5 and she was (. ) (sound)
6 when I say, yeah, she just ripped it,
7 they just played a beat, yeah.
8 And she just ripped it.
9 She started saying, ‘I don’t like boys who chit chat. They will get munched just like a kit kat.’
10 Like, she proper made it rhyme like.
In sum, phrasal neg-tags perform multiple roles in discourse: they seek corroboration of referent activation (and identification); they give participants cues to facilitate successful referent activation (and identification); and they mark referents that tend to become topicalised.\(^\text{10}\) On rare occasions, neg-tags attached to LD NPs can have dual scope and perform simultaneously the functions associated with phrasal neg-tags and those associated with LP neg-tags (see, for example, (10) in \textsection\ 3.3 where the neg-tag variant in he seeks interlocutors’ corroboration of referent activation (and identification) as well as their corroboration of the following proposition). The discussion in this section, then, has demonstrated that neg-tags in non-canonical positions perform clearly identifiable functions in discourse and that they are not random insertions or markers of dysfluency.

\subsection*{3.5 Social properties of MLE neg-tags in canonical, follow-up and non-canonical positions}

The close analyses in \textsection\ 3.3 and 3.4 of neg-tags in non-canonical positions showed that they are preferentially located at the LP of clausal anchors or appended to LD and lone NPs/PPs where they seek corroboration of following propositions or of referent activation (and identification). I argued earlier that these findings demonstrate that neg-tags in non-canonical positions are not idiosyncratic performance errors but strategically-employed interactional markers. The question remains whether these neg-tag uses are transient phenomena or early attestations of a discourse-pragmatic innovation. As pointed out in \textsection\ 3.3, the frequency of neg-tags in non-canonical positions in LIC is fairly modest. Out of the 2663 neg-tag tokens that could unambiguously be coded for position and scope (see \textit{footnote} 4), the vast

\(^\text{10}\) Together with Cheshire et al.’s (2013) findings that relative who is employed by inner-city London youth as a topic-marking strategy, the findings reported here suggest that features from different components of language are being recruited to mark information structure in MLE.
majority (93.9%, $N = 2501$) occurred in canonical position, 3.3% ($N = 88$) occurred in follow-up position, and only 2.8% ($N = 74$) occurred in the non-canonical positions illustrated in (1) and (6)–(11). The fairly low proportional frequency of neg-tags in non-canonical positions is in line with previous observations that linguistic changes start out slowly (Bailey 1973: 77; Kroch 1989: 202–3; Labov 1994: 65, 2001: 449). However, real- and apparent-time evidence is required to substantiate any inferences of ongoing change. In the following, I will provide such evidence.

LP and phrasal neg-tags, as illustrated in (8)–(10) and (12)–(17), have not been reported in previous studies of neg-tags in British English (see, inter alia, Algeo 1988, 1990; Allerton 2009; Cheshire 1981; Childs in prep.; Hoffmann 2006; Kimps et al. 2014a,b; Moore and Podesva 2009; Pichler 2013; Tottie and Hoffmann 2006). However, the non-mention in these studies of LP and phrasal neg-tags may not be convincing proof of their recency (see Denison 2011). The authors of these studies may have unwittingly circumscribed their analyses to neg-tags in the canonical positions postulated for them in the literature (see beginning of Section 3.3); and some of them have conducted their analyses without consideration of neg-tags’ prosodic phrasing (see, for example, Tottie and Hoffmann 2006) which is crucial to differentiating RP and LP neg-tag tokens (see Section 3.3). Crucially, though, recent studies of innit that specifically set out to uncover innovations in its use and paid close attention to its prosodic phrasing and positional distribution do not report its occurrence in non-canonical positions either. For example, Andersen’s (2001) systematic and comprehensive analysis of innit in the mid-1990s COLT data resulted in the discovery and description of many innovations in innit use and distribution, including those in the follow-up position illustrated in (5c) but not including those in the non-canonical positions illustrated in (6)–(11). Stenström et al.’s (2002: Ch. 7) detailed analysis of innit, yeah, right and okay in the same dataset identified tokens of yeah occurring after LD and subject NPs, but despite their attention to the syntactic distribution of these tag forms, the authors did not identify any tokens of innit in non-canonical positions. In fact, they argued that innit can only occur in post-clausal position (see Section 3.3). The non-mention in these studies of innit tokens in non-canonical positions therefore suggests that their occurrence is a very recent development in London English. This view is supported by the available apparent-time evidence.

The apparent-time framework hinges on the notion that the speech patterns recorded for different age groups at a single synchronic point in time represent different diachronic stages in language change (Bailey 2002). Hence, we may infer evidence of ongoing neg-tag change from fluctuations in the frequency of different neg-tag positions across the two age groups.
represented in LIC (see Section 3.2). Moreover, because previous research on London English has shown that it is young non-Anglo speakers who tend to be the frontrunners in the use of linguistic innovations (Andersen 2001; Cheshire 2013; Cheshire et al. 2008, 2011; Kerswill 2013; Kerswill et al. 2013), we may assume that their use reflects a slightly more advanced stage of neg-tag development than that of young Anglos. To establish changes in the positional distribution of neg-tags in the LIC data, Table 3.1 reports the frequency of neg-tags in each position listed on the left (canonical, follow-up, non-canonical) as a proportion of all neg-tags produced by the social group listed at the top (old Anglos, young Anglos, young non-Anglos). For example, of the 555 neg-tags produced by old Anglos, 98.9% occurred in canonical position, 0.7% in follow-up position, and 0.4% in non-canonical positions. (The numbers in the non-shaded columns are provided for comprehensiveness and transparency; for each age group, they give the raw, non-normalised frequency of neg-tag tokens across the three positions on the left.)

The results reveal that in all social groups, neg-tags in canonical position account for the vast majority of neg-tags used while neg-tags in non-canonical positions constitute only a minor part of the neg-tag system. However, comparison of older and younger speakers’ proportional rates of neg-tags in different positions also reveals a slight but steady apparent-time increase in the proportion of neg-tags in follow-up and non-canonical positions, with a concomitant apparent-time decrease in the proportion of neg-tags in canonical position. Moreover, young non-Anglos, the reported leaders of linguistic innovations in MLE, have slightly higher proportions of neg-tags in follow-up and non-canonical positions than young Anglos. In fact, the two most prolific users of neg-tags in non-canonical positions, Tina and Alex, share all the social characteristics previously associated with linguistic innovators in MLE: they are young non-Anglos from Hackney with highly multi-ethnic friendship groups (see Cheshire et al. 2008). Despite these speakers’ lead, neg-tags are used in non-canonical positions by both non-Anglo and Anglo adolescents from Hackney as well as Havering and with ethnically diverse and non-diverse friendship groups, suggesting that such neg-tag uses are not idiosyncratic uses but an emerging feature of MLE.

In sum, then, the real- and apparent-time evidence provided supports the view that neg-tags in non-canonical positions represent an incipient stage of

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11 Because the interest of this study is not in determining overall frequency changes in neg-tag or innit use and because such tabulations would not reveal what the social or internal mechanisms are that have triggered any such changes, no attempt was made to generate and compare normalised frequencies of neg-tag or innit use across social groups (see also Section 3.6).
a discourse-pragmatic change which has been in progress for a very short period of time.\footnote{Childs (\textit{in prep.}) analysed \textsc{neg}-\textsc{tags} in three corpora collected between 1997 and 2012 in Salford (north-west England), Newcastle upon Tyne (north-east England) and Glasgow (south-west Scotland). Her analysis of \textsc{neg}-\textsc{tags} in these corpora uncovered no \textsc{neg}-\textsc{tag} tokens in non-canonical, non-RP positions even though she paid specific attention to the positional distribution of \textsc{neg}-\textsc{tags} during the data extraction and analysis process. The fact that non-RP \textsc{neg}-\textsc{tag} uses are not found beyond London or southern England supports the recency hypothesis of these innovations in London English.} In the LIC data, \textit{innit}, canonically-derived and canonical \textsc{neg}-\textsc{tag} variants respectively account for 85.1\% ($N = 63$), 10.8\% ($N = 8$) and 4.1\% ($N = 3$) of \textsc{neg}-\textsc{tags} in non-canonical positions; two of the three canonical \textsc{neg}-\textsc{tag} variants that occurred in non-canonical positions were produced by old Anglos. These distributions demonstrate that not all \textsc{neg}-\textsc{tag} variants participate in the distributional changes to the same extent; among young Londoners, the positional flexibility of \textsc{neg}-\textsc{tags} is virtually limited to phonetically-reduced \textsc{neg}-\textsc{tag} variants. At the same time, though, the occurrence of variants other than \textit{innit} in non-canonical positions highlights the importance of analysing discourse-pragmatic variants in the larger context of their co-variants.

### Table 3.1. Proportion of different \textsc{neg}-\textsc{tag} positions by social group in LIC

<table>
<thead>
<tr>
<th></th>
<th>Old Anglo</th>
<th>Young Anglo</th>
<th>Young non-Anglo</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>$N$</td>
<td>%</td>
</tr>
<tr>
<td>Canonical position</td>
<td>98.9</td>
<td>549</td>
<td>94.0</td>
</tr>
<tr>
<td>Follow-up position</td>
<td>0.7</td>
<td>4</td>
<td>3.3</td>
</tr>
<tr>
<td>Non-canonical positions</td>
<td>0.4</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>TOTAL $N$</td>
<td></td>
<td>555</td>
<td></td>
</tr>
</tbody>
</table>

3.6 Discussion

The findings outlined in this chapter demonstrate that the use of \textit{innit} in MLE is characterised by positional and scopal flexibility which extends, to a limited degree, to its co-variants in the \textsc{neg}-\textsc{tag} system (as circumscribed in Section 3.2), particularly canonically-derived and phonetically-reduced variants such as \textit{in he} or \textit{din she}. London adolescents from diverse ethnic backgrounds use \textit{innit} and some of its derivationally-equivalent co-variants in small and fluctuating numbers in positions beyond the RP of main clause anchors, most notably at their LP and appended to LD and lone NPs/PPs. In these positions, \textsc{neg}-\textsc{tags} are consistently used by young Londoners to...
monitor hearer involvement: LP NEG-TAGS uniformly seek interlocutor attention and corroboration of following propositions; phrasal NEG-TAGS categorically invite confirmation of the activation (and identification) of preceding referents while also guiding referent retrievability and marking referent topicality. Real- and apparent-time evidence supports the view that these uses are very recent innovations in the NEG-TAG system of MLE. Crucially, these innovations could only be uncovered by scrutinising NEG-TAGS’ positional, scopal, functional and social properties. Scrutiny of each NEG-TAG token’s position and scope was required to detect the sudden innovations in their positional distribution; functional and social analyses of tokens in non-canonical positions were needed to dismiss the possibility that they are random or idiosyncratic discourse phenomena. The importance of scrutinising the full details of a variable’s or a variant’s use in analyses of discourse-pragmatic change and innovation is best illustrated by comparing the results presented in this chapter with those reported in two previous studies of innit in the same dataset. These studies paid insufficient attention to the form’s variable position and scope and, as a result, failed to uncover the most dramatic recent innovation in innit use.

In their corpus-based, comparative analysis of language use in two specially constructed and comparable sub-corpora of COLT (recorded in 1993) and LIC (recorded in 2005–2006), Torgersen et al. (2011: 96) examined the use of innit and other linguistic forms that ‘indicate speaker-sanctioned places in the discourse where the interlocutor can comment’. To uncover changes in the extent of use of innit and its functional co-variants right, ok, (if/do) you know (what I mean/I’m saying), you get me, they compared each variant’s normalised frequency (= N per million words) and spread (= proportion of speakers using a variant) across the two sub-corpora as well as across social factors in the more recent data. The analysis revealed that the popularity of innit was not affected by competition from its newly emerging, functionally comparable co-variant you get me; in contrast to most of its functional co-variants, the usage levels of innit were not significantly different across the two sub-corpora or across the social factors in the more recent data. Unlike Torgersen et al., the present analysis was not concerned with establishing changes in the frequency of use of innit (or its derivationally-equivalent co-variants),\(^\text{13}\) and it cannot therefore assess

\(^{13}\) The comparison of Torgersen et al. (2011) with the present analysis illustrates well the point made in Waters (Chapter 2) with reference to adverb-like discourse-pragmatic features: depending on the aims of the analysis, the same linguistic form can be differently conceptualised as a discourse-pragmatic variable, starting either from function (Torgersen et al. 2011) or from form (this chapter). (For arguments in favour of conceptualising innit as a derivation-based co-variant of NEG-TAGS rather than a functionally equivalent co-variant of invariant lexical tags, see Pichler [2013: 179].)
the reliability of Torgersen et al.’s results regarding the quantitative robustness of *innit* in London English. (The Ns reported in Table 3.1 are raw frequency scores (for all neg-tag variants) and are hence not reliable indicators of fluctuating frequencies in *innit* or neg-tag use across age and ethnic groups (see Pichler 2010: 593).) However, my analysis, which was designed to identify developments in how the form *innit* and other neg-tag variants are used, strongly rejects Torgersen et al.’s (2011: 107) conclusion that the ‘use [of *innit*] seems to have stabilised’. As demonstrated in the preceding sections, there is compelling evidence that *innit* and some of its derivation-based co-variants are undergoing changes in their positional distribution and, concomitantly, their discourse functionality. Thus, my in-depth analysis of the positional, scopal, functional and formal properties of the system of neg-tags in LIC has shown that the use of *innit*, while potentially robust in terms of its frequency and spread of use, is far from stable in terms of its positional distribution and interactional use. *Innit* is vigorously innovating in MLE.

In a more recent comparative analysis of *innit* (and *isn’t it*) in COLT and LIC, Palacios Martínez (2015) went beyond comparing frequencies and spreads of *innit* use to conduct a cross-corpora analysis of the form’s linguistic distribution and interactional use. However, because of its problematic framing and presentation, Palacios Martínez’s analysis and the claims he makes about the changing nature of *innit* use are unconvincing. This applies to his claims about changes affecting *innit* in its canonical position as well as his claims about its positional flexibility and occurrence in non-canonical positions. Palacios Martínez (2015: 383) posits in the abstract to his paper that *innit* ‘show[s] a high degree of flexibility in the sentence, occurring not only in final but also in initial and medial positions’. However, he does not elaborate on this point in the remainder of the paper nor cite any examples from LIC to confirm the occurrence of *innit* in these sentence positions. Where he explicitly addresses the positional flexibility of *innit* (e.g., in his Table 5), he describes its well-established variable turn-position rather than any of the newly emerging non-RP and non-follow-up positions  

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14 Palacios Martínez (2015) concludes that *innit*, in its canonical position, has undergone rapid syntactic-semantic and discourse-pragmatic changes in the years between the collection of COLT in the mid-1990s and that of LIC in the mid-2000s. However, his analysis does not fully support this conclusion. For example, he argues that *innit* performs a new ‘emphatic’ function in LIC. But the examples provided, including (35), resemble very closely those described by Andersen (2001) as alignment-signalling follow-ups. It is therefore not clear in what respect these ‘emphatic’ uses are new or innovative. Also, the overview and description of *innit*’s syntactic-semantic distribution in LIC lacks clarity as well as detail and is compared to its distribution in COLT only in passing, leaving unanswered many questions about the form’s ongoing decategorialisation.
illustrated in examples (6)–(11) in Section 3.3 of this chapter. Thus, despite his supposed focus on the form’s sentence distribution, Palacios Martínez failed to uncover such innovations even though they are clearly attested in LIC, as shown in this chapter. His failure to do so might at least in part be due to the fact that he analysed the orthographically transcribed speech data without consideration of tokens’ prosodic phrasing and intonational realisation (see Palacios Martínez 2015: 388). As pointed out in Section 3.3, consideration of such details is crucial to identifying individual tokens’ scopal and positional properties (see also Denis and Tagliamonte Chapter 4), which, in turn, is crucial to identifying potential changes in innit or NEG-TAG usage.

Comparison of my results with those reported in Torgersen et al.’s (2011) and Palacios Martínez’s (2015) studies of innit in the same dataset demonstrates that discourse variation analyses which focus on frequency alone or pay insufficient attention to variables’ or variants’ positional distribution are potentially highly inadequate for assessing their stability of use. As pointed out in Pichler (2013: 21), discourse-pragmatic features are variable and changeable on multiple levels. The preceding discussion is a useful reminder that multiple dimensions of discourse-pragmatic variables’ use need to be analysed to yield accurate accounts of their use, variability and change.

Crucially, identification of NEG-TAGS’ sudden positional flexibility and concomitant changes in their interactional use was only made possible by adopting the empirically- and theoretically-grounded but flexible approach to defining discourse-pragmatic variables advocated in Waters (Chapter 2). Previous variationist analyses have tended to define NEG-TAGS and their variable context in terms of their derivation from the string (auxiliary) + (negative clitic) + (pronominal subject) as well as their position at the RP of clausal anchors (see, for example, Pichler 2013: 179; Pichler and Torgersen 2013). Rigid and uncritical adherence to derivational and positional criteria in the extraction of NEG-TAGS from LIC would have left the NEG-TAGS in non-canonical positions illustrated in (1) and (6)–(11) unaccounted for. I was only able to uncover innovations in the position and function of innit and some of its co-variants because I relaxed the positional criteria stipulated elsewhere for defining NEG-TAGS and their variable context, and included in the analysis all tokens derived from the linear string of components schematised earlier irrespective of their position.

Adjustments to how the variable and the variable context is defined are also required to contextualise the NEG-TAG innovations described in this chapter in relation to the larger linguistic sub-system in which they become embedded, and establish how they interact with any co-variants in that system (see Weinreich et al. [1968] on the ‘embedding problem’). I will illustrate this point with reference to phrasal NEG-TAGS, described earlier
as: neg-tags seeking participants’ corroboration of the activation (and identification) of preceding LD NP or lone NP/PP referents, specifically ones that are topical, inferentially accessible and locatable in common ground (see examples (9)–(10) and (15)–(17)). Preliminary observations of the LIC data reveal that this description also fits some phrasal yeah tokens (see also Stenström et al. 2002: 173). In (20), for example, Rufus has just told the interviewer SF and his interview partner Talal that he thinks it is older rather than younger people who are racist. When he mentions his sixty-year-old father in this context, Rufus tags the LD NP referent my dad with yeah before providing more information about the referent in the following clauses. To Talal, Rufus’s dad might be inferentially accessible from the context of ‘older racist people’ and uniquely identifiable due to previous encounters. Thus, like the phrasal innit tokens discussed in Section 3.4.2, yeah in (20) could be argued to seek confirmation of SF’s and Talal’s activation (and identification) of the semi-active and topical referent my dad.

(20) Rufus: That’s one thing I’ve realised. (. ) Cos I know, my dad, yeah, he’s about sixty and I can tell he’s he’s racist. I know my dad is. [. . .]

(Rufus, 19-M-N-Hv)

In example (21), taken from a much earlier point in the same LIC interview, Rufus also tags the LD NP referent my dad with yeah. However, in this instance, the tagged referent my dad has a different activation status. Because it occurs in response to SF’s question What do your mum and dad do?, my dad is already activated and in focus when Rufus starts providing information about his occupation. In this example, then, yeah does not function to seek SF’s activation of a semi-active referent. Like other phrasal innit or yeah tokens, though, it marks the discourse prominence of the preceding NP referent.

(21) SF: What do your mum and dad do?
Rufus: My dad, yeah, he’s a thingy. (. ) My dad works thingy for (. ) {name of DIY store}, yeah, but (. ) what he does is like, he goes to every {name of DIY store} in England. Take thingy records whatever for some next thing like the things (. ) how much things they sold that year and everything. So he does like he goes to a different {name of DIY store} every week. [. . .]

(SF = interviewer; Rufus, 19-M-N-Hv)

This very preliminary analysis of phrasal yeah suggests that although innit and some of its neg-tag co-variants are making inroads into the positional space previously only associated with invariant lexical tags such as yeah (see Stenström et al. 2002: Ch. 7), their usage is subtly different. While both innit
and *yeah* signal high topicality of the phrasal referents they tag, the occurrence of *yeah* does not seem to be limited to LD or lone NP referents that are semi-active, accessible from the discourse context and locatable in common ground. Moreover, *innit* and *yeah* may be differentially distributed across NP referent types: in LIC, the former occurs most frequently with lone NPs, followed by LD NPs, and only rarely between subject NPs and VPs; the latter, by contrast, seems to occur most frequently between subject NPs and VPs, less often after LD NPs and never after lone NPs. And, of course, other tags such as *right* may occur in these positions and with similar functions too. Thus, in order to establish how the innovative, phrasal neg-tags discussed in this chapter become embedded in the existing system of post-NP referent tags, we would need to redefine the variable and variable context in terms of form, position and function to comprise all neg-tag variants and all invariant lexical tag variants that are appended to NP referents to signal their discourse prominence. Alternatively, we could follow the approach adopted by Cheshire (2005) in her analysis of discourse-new markers, i.e., take as the starting point of the analysis the specific function associated with phrasal neg-tags and investigate the range of other linguistic forms used by speakers to achieve this particular function. This analysis would include: the phrasal neg-tag tokens discussed in Section 3.4.2; some phrasal *yeah* tokens (e.g., that in (20)) but not others (e.g., that in (21)); and a range of other linguistic forms that occur in post-NP referent position, quite possibly including a zero variant. Whatever the starting point of the analysis, a new definition of the variable and the variable context is needed to answer the embedding question.

### 3.7 Conclusion

In this chapter, I have described recent positional and functional innovations in the use of *innit* and other neg-tag variants in MLE. Identification of these innovations required close scrutiny of the positional, scopal, functional and social properties of all neg-tag tokens in the LIC data, crucially including those that fall outside the canonical neg-tag variable context, defined in terms of variants’ derivational equivalence and positional restriction to the clausal RP. Albeit based on limited data, my thorough account of innovative neg-tag uses in MLE has the potential to improve our understanding of the life cycle of discourse-pragmatic change. I have caught the ongoing change at an early stage where neg-tags in non-canonical positions still retain the interrogative and corroboration-seeking meaning associated with neg-tags in canonical position (see Hopper’s [1991: 28–30] ‘persistence’ principle) and where the innovations have not yet spread across all members of the community.
(see Bailey’s [1973: 77] and Labov’s [1994: 65, 2001: 449] ‘S-curve model’). This makes it possible to trace their emergence from neg-tags in canonical positions and explore the sociolinguistic mechanisms that have triggered their positional mobility and functional shift (see Pichler [MS] for details). Moreover, the account given in this chapter provides a diachronic benchmark for future studies of neg-tags in MLE and British English more generally. If neg-tags, and in particular innit, continue to undergo context expansion, studies of innit in corpora yet to be collected will be able to trace any diachronic shifts in its use by comparison with its description in this chapter.
4 Innovation, *right?* Change, *you know?*
Utterance-final tags in Canadian English

*Derek Denis and Sali A. Tagliamonte*

### 4.1 Introduction

The diachronic literature has documented a multitude of discourse-pragmatic changes in many languages over several centuries (see, for example, Brinton [1996] on *hwæt, l gesse* and other Old and Middle English pragmatic markers; Diewald [2011] on *denn* and other German modal particles; Traugott [1995b] on the English discourse markers *indeed, in fact, besides*). However, to shed light on the interaction between social and linguistic factors in language change, and in particular in cases of linguistic innovation (the actuation of a change), it is necessary to closely examine consecutive generations in a single speech community (Janda 2001: 318). These relatively narrow time-spans are the type most often examined in variationist sociolinguistics (see, *inter alia*, Labov 2001b; Tagliamonte 2012). In recent years, several discourse-pragmatic features have come under intense investigation using this method, fuelling the recent surge of interest in discourse-pragmatic variation and change (see, for example, Cheshire 2007; D’Arcy 2005; Pichler 2013; Pichler and Levey 2011; Tagliamonte and D’Arcy 2007; Tagliamonte and Denis 2010).

A common thread to these variationist investigations is the examination of the role of grammaticalisation in the development of discourse-pragmatic features. This is particularly true of variationist work on general extenders (GEs). Some argue that the synchronic distribution of GEs is the result of phonetic reduction, decategorialisation and semantic-pragmatic shift, the most common mechanisms of grammaticalisation (Aijmer 2002; Cheshire 2007). However, these arguments are frequently based on data with no time dimension.

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(Cheshire 2007) or general comparisons of adolescents and adults across studies (see, for example, Cheshire 2007: 162, Table 2; Tagliamonte and Denis 2010: 349, Figure 2). When the apparent-time construct has been used, the development of GEs exhibits little or no evidence for ongoing grammaticalisation (Pichler and Levey 2011; Tagliamonte and Denis 2010; see Palacios Martínez 2011). Rather, Tagliamonte and Denis (2010) argue that the development of and stuff in Canadian English exhibits signs of relatively abrupt lexical replacement. Innovation in the GE system was not the result of gradual grammaticalisation. Instead when the new variant, and stuff, emerged, it competed with other variants wholesale: its frequency rose but there was no indication of increasing phonetic reduction, decategorialisation or semantic-pragmatic expansion according to speaker age (Tagliamonte and Denis 2010).

In this chapter, we expand the variationist investigation of discourse-pragmatic change and the role of grammaticalisation and lexical replacement in such change by focusing on what we will refer to as utterance-final tags (UFTs). UFTs are frequent, multifunctional discourse features that typically occur at the end of an utterance and include such forms as eh, you know, right, hey, huh, yeah, innit, okay, you see and others (see, inter alia, Andersen 2001; Columbus 2010; Lam et al. 2013; Östman 1981; Schiffrin 1987; Stenström and Andersen 1996; Stenström et al. 2002; Tagliamonte 2006b). The majority of previous studies have tended to focus on the pragmatic functions of the individual forms categorised here as UFTs. Among others, Östman (1981) and Schiffrin (1987) focus on the pragmatics of you know; and Andersen (2001) reports on the grammaticalisation of innit in London English. A handful of other studies compare the distribution of multiple forms in corpora. Stenström et al. (2002) compare the pragmatic and social distribution of eh, okay, right, yeah and innit in the Bergen Corpus of London Teenage Language, and Columbus (2010) considers the pragmatic (and syntactic) patterning of fifteen different forms (aacha, ah, ahn, eh, is it, isn’t it, na, no, okay, right, see, yeah, yes, you know, you see) in three varieties of English (British, Indian and New Zealand). These forms can also occur in non-utterance-final position and thus many studies have considered their distribution by syntactic position (see, for example, Lam et al. [2013] on the syntax of eh in Canadian English). Here, we define the variable context structurally and focus on the utterance-final position only, as indicated by the label UFTs (see further Section 4.2.2). In addition, we utilise the following two facts from the literature regarding these forms more generally: (i) they function in relation to the shared knowledge/common ground between speaker and hearer; (ii) they are multifunctional, serving different functions (in relation to shared knowledge/common ground) (Aijmer 2002: 3; Andersen 2001: 64).

Our approach diverges from this previous work by treating UFTs as a sociolinguistic variable. We focus on the robust variation between the two
major variants, *you know* and *right*, as in examples (1)–(2), in the *Toronto English Archive* (TEA), a corpus of contemporary Canadian English that provides an apparent-time perspective of approximately 100 years over the course of the twentieth century (Tagliamonte 2006b). The UFT *eh*, as in (3), is a veritable shibboleth of Canadian identity (Denis 2013; Gold and Tremblay 2006); however, its frequency is muted in the TEA. Other variants such as *yeah*, *okay* and *you see* also play only a peripheral role in the variation.\(^2\)

(1) I was like, ‘Come on, like look at them’ *you know*? (TEA/2j/M/18)\(^3\)
(2) I thought it would be nice to help her *right*? (TEA/2p/M/14)
(3) Two kilometers is pretty long *eh*? (TEA/4e/F/18)

Our results reveal a change in progress such that *right* is innovative in the system, increasing in frequency across apparent time and becoming the most frequent UFT among speakers born after 1970 (under thirty-year-olds). The full trajectory of this variant – from innovation to majority usage – provides a unique opportunity to probe the social and linguistic factors at play during a discourse-pragmatic change (see Denis [2011] on GEs in York and Denis [2015] on GEs in Toronto). We seek to discover who innovates in the selection of a new variant, who leads and what role, if any, grammaticalisation plays. Another goal for this chapter is to highlight the utility of the variationist approach in studying discourse-pragmatic variation and change. We will demonstrate that it is only by examining multiple individual variants in tandem that the driving mechanisms of discourse-pragmatic changes can be elucidated.

The chapter is organised as follows. In the next section, we introduce the TEA, delineate the variable context of UFTs and show how we operationalise

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1. The TEA was collected with the support of the Social Sciences and Humanities Standard Research Grant (Tagliamonte 2003–2006). Further information can be found at: http://individual.utoronto.ca/tagliamonte/.

2. Additional UFT variants, *so* and *but*, were considered but not included in this analysis. Although both can be found in utterance-final position and in some cases can function to mark common ground, they often function differently from the other variants. They frequently mark the end of a turn and often are not involved in the creation of common ground, as illustrated in (a) and (b).

(a) BK: Yeah. But then they broke up anyways, *so*.
   MK: Oh really?

(b) SC: How old were you when you were having those dreams?
   LN: Maybe I was like seven or eight or something. And I have no idea what it means *but*.
   SC: Do you usually remember your dreams?

3. The information in parentheses indicates the corpus, *Toronto English Archive* (TEA), as well as speaker code, sex and age of the individual.
discourse context to examine semantic-pragmatic expansion. In Section 4.3, we present the results of a series of statistical tests that suggest that over the twentieth century, right rose in frequency at the expense of you know and that this change was led by male speakers. Section 4.4 closely examines the innovative variant right, in comparison to you know, and we argue that while right rose in frequency, there was no concomitant semantic-pragmatic expansion. In Section 4.5, we discuss the implications of our findings and potential objections. We end the chapter in Section 4.6 by concluding that the rise of right is the result of lexical replacement.

4.2 Data and methodology

4.2.1 Canadian English

The data in this chapter come from eighty-seven speakers in the TEA balanced by age and sex. The TEA is a multi-million word corpus of more than 200 sociolinguistic interviews collected between 2002 and 2005 in Toronto, the largest city in Canada and the capital city of the province of Ontario (Tagliamonte 2006b). Interviews range in length from 1 to 3 hours and were conducted by community insiders. All individuals in the corpus were born and raised in Toronto and in most cases their parents were also born and raised in the city (Tagliamonte 2006b: 311). The data are conversational and informal with many discussions about childhood games, common experiences both mundane (e.g., fitting in at school) and extraordinary (e.g., the Northeast Blackout of 2003, Hurricane Hazel in 1954) (see further Tagliamonte 2006a). Although Pichler (2010: 584) suggests that the ‘context-sensitivity of discourse features hampers cross-corpora comparability and generalisability’, we argue that the data in these materials are at least comparable to other sociolinguistic corpora, particularly those collected using the same methods which aim for vernacular spoken data and utilise standard sociolinguistic fieldwork techniques (Schilling 2013; Tagliamonte 2006a). Further, we explicitly document our approach to the data, methods and analytic techniques, ensuring that the results presented here are replicable. As shown in Table 4.1, we consider three age groups that have been found to delimit many variables previously examined in the TEA (Tagliamonte and D’Arcy 2009; Tagliamonte and Denis 2010).

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4 This dataset was originally compiled for Tagliamonte (2006b) where the overall frequency of variants by age and sex was analysed. Data from additional individuals was added to the original file in preparation for Tagliamonte and Denis (2010). The sample of eighty-seven individuals examined in this chapter are the same as those examined in the latter.
The circumscription of the variable context is the ‘first and foremost challenge to be confronted’ when embarking upon a variationist study of discourse-pragmatic variation (Tagliamonte 2012: 269). The challenge is to adhere to Labov’s (1972b: 72) ‘principle of accountability’ while recognising that discourse-pragmatic variables do not fit the traditional mould of a linguistic variable, i.e., two or more ways of saying the same thing (Labov 1972b: 271). As variationist research evolved over the latter half of the twentieth century, significant methodological advancements ensued, particularly those related to the circumscription of the variable context (see also Waters Chapter 2). In a critique of variationist approaches to discourse-pragmatic variation, Pichler (2010, 2013) argues that it is often necessary to adhere to a notion of derivational, rather than semantic or functional, equivalence when circumscribing the variable context of a discourse-pragmatic variable. Given that discourse-pragmatic features can express multiple functions simultaneously, an appeal to derivational equivalence allows researchers to observe ‘diachronic meaning changes and synchronic polyvalence’ while anchoring each variant to a shared, delimiting characteristic (Pichler 2010: 590, 2013: 31–2; see also Aaron 2010; Dines 1980; Dubois 1992, Sankoff et al. 1978).

Following Tagliamonte and Denis (2010), we employ a hybrid approach to circumscribing the variable context by utilising both positional and functional criteria. We included in our envelope of variation any utterance-final discourse-pragmatic feature that primarily communicates to a hearer that the preceding proposition contains shared knowledge (see, for example, Andersen 2001: 69). When right, eh and you know appear independently or in utterance-initial position, they function differently. For example, Andersen (2001: 73)

5 This marking of shared knowledge (common ground/mutually manifest knowledge) is not the only function that UFTs can serve. For example, UFTs may additionally function to ‘focus on and strengthen […] shared, in-group values’ (Meyerhoff 1994: 377) or to invite revision of an assertion from the addressee (Johnson 1976: 155).

6 Whether or not the functional difference between the two positions is related to grammaticalisation is beyond the scope of this analysis, but see Aijmer (1997) and Thompson and Mulac (1991) on the development of the epistemic parentheticals from utterance-initial to utterance-final (see also Brinton 2008).
observes that utterance-initial *right* in (4) functions to ‘acknowledge mutual contextual assumptions’, i.e., it serves to acknowledge what has been stated in an earlier utterance. Stand-alone *eh* in (5) functions as a request for repetition. Contrast these with utterance-final *you know* in (6), which expresses what Andersen (2001: 73) labels a ‘presumption of assumptions’, i.e., shared knowledge.

(4) Jane: Hello Peter! What are you doing here?
   Peter: Maths course work. Tt.
   Jane: [Oh oh!]
   Peter: [Have to] hand it in.
   Jane: *Right* fair enough.
   (Andersen 2001: 72, ex. 16)

(5) FP: Do you know Ann Pearson?
    DM: No, I don’t.
    FP: *Eh?*
    DM: No, I don’t.
    FP: Don’t you?
    DM: No.
    (B75/032/F/96)

(6) Well she don’t like your auntie *you know*. That’s why she’s crying.
   (Andersen 2001: 73, ex. 17)

In Canadian English, one cannot substitute *you know* or *eh* for *right* in (4) and express the same function nor can one exchange *right* or *you know* for *eh* in (5). However, in (6), *eh* and *right* are functionally-equivalent substitutes for *you know*, as illustrated in (7) and (8), all ‘expressing a presumption of the interlocutors’ common ground’ (Stenström et al. 2002: 172).

(7) Sue lives in one of these renovated homes, *right*. And a lot of them are, you know, people that have roots here. (TEA/NX/M/46)

(8) PT: Hard on her too *eh*. She came through it though.
    SM: Yeah. And the baby’s getting better. Fairly healthy now?
    (TEA/Nh/F/55)

Often in the transcription of fluent discourse, it is difficult to determine whether or not a token modifies the previous utterance (making it utterance-final) or the following utterance (making it utterance-initial) (see also Pichler

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7 In this example and example (10), square brackets ([ ]) indicate speaker overlap. In (9) and (11)–(12), they are used to indicate different parsing options.

8 This example comes from a collection of oral histories from Belleville, Ontario, housed in the University of Toronto LVC Lab (see Tagliamonte and Denis 2014).
Figure 4.1a *Utterance-initial you know (tokens excluded)*
Chapter 3). For example, you know in (9a) could be either utterance-final (9b) or utterance-initial (9c).

(9) a. I see him on occasion and we reminisce about the old days you know so it’s good. (TEA/N¥/M/72)
   b. [[… we reminisce about the old days] you know] [so it’s good]
   c. […] we reminisce about the old] [you know [so it’s good]]

However, the intonational phrasing of an utterance correlates with its underlying structure. Whether or not a form is attached to the preceding utterance or the following utterance is perceptually salient and acoustically indicated by short periods of speaker silence. By example, consider the conversation in (10).

(10) AA: Well this is this is city homes in here.
    SM: [Uh-huh.]
    AA: [You know] it so it’s so it’s a uh city homes and uh the rent is geared towards your income.
    SM: Mm-hm.
    AA: Which is great for me [you know]. And it’s convenient
    SM: [Mm-hm]
    (TEA/N¥/M/72)

The waveform in Figure 4.1a shows that the first instance of you know in (10) is preceded by a short period of silence and is part of the same intonational phrase as the utterance that follows it. Tokens like this were considered utterance-initial, as illustrated in (11), and were excluded.

(11) a. _IP(… this is city homes in here)_IP(you know, it’s city home …)_IP
    b. [this is city homes in here] [you know [it’s city homes …]]

However, any examples like the second instance of you know in (10) were included. Here, we see a period of silence after you know in the waveform in Figure 4.1b, indicating that the form occurs at the end of the first utterance, as illustrated in (12).

(12) a. _IP(… which is great for me you know)_IP(IP (and it’s convenient)_IP
    b. [[… which is great for me] you know] [and it’s convenient]

---

9 The interplay between prosody, intonation, pragmatic function and the structural position of discourse-pragmatic features is a far more complex issue than discussed here (see, for example, Dehé and Wichmann [2010] on epistemic parentheticals). However, because we use intonational phrasing only as a tool for disambiguating linearly ambiguous tokens, as in (9), any further elaboration is beyond the present scope of investigation.

10 In this case, the silence is quite noisy as there is overlap from the interviewer and an audible breath from the speaker.
which is great for me you know and it's- convenient

mm-hm

Figure 4.1b Utterance-final you know (tokens included)
In this analysis, we extracted every unambiguously utterance-final discourse-pragmatic feature that could function as an indicator of shared knowledge. This yielded 1938 tokens of the variable for in-depth analysis.

4.2.3 Discourse context of UFTs

In this chapter, we test the hypothesis that UFTs developed through gradual semantic-pragmatic context expansion, the ‘core defining feature of grammaticalisation processes’ (Himmelmann 2004: 32). However, the quantitative analysis of such context expansion has proven difficult. Although circumscribing the variable context as we have done here leaves open the possibility of coding the pragmatic function(s) of each token (Pichler 2010), even with a well-defined envelope of variation, this is a task made difficult by: (i) its subjective nature; and (ii) a lack of agreed upon implementation in the literature.

Determining the pragmatic intention of a speaker is at the core of determining the function of a discourse-pragmatic feature. However, unlike coding the syntactic position or syntagmatic length of a discourse-pragmatic feature, this is rarely a straightforward endeavour when working with corpora. As Labov (1994: 549–50) observes:

There is no reason to think that our notions of what we intend or the intentions we attribute to others are very accurate, or that we have any way of knowing whether they are accurate.

It is possible to use contextual clues from the surrounding discourse to make hypotheses, but it is often the case that one linguist may have strong intuitions about the pragmatic functioning of a token that differ from another linguist’s analysis (Pichler 2010; Wagner et al. 2015, Chapter 9). Furthermore, it is our experience that these intuitions can vary dramatically depending on the analyst’s social cohort, age or native dialect.

As we have discussed earlier, discourse-pragmatic features often perform multiple simultaneous functions. Several strategies can be implemented to handle this scenario. One could attempt to tease apart the primary function of the feature for any given token (Holmes 1984). This approach has proven difficult and controversial (see discussion in Pichler 2010). Alternatives to assigning a primary function to each token include coding each token for every function it expresses as in Pichler (2013), or developing a theoretically-motivated taxonomy which reflects the successive and overlapping stages in a variable’s semantic-pragmatic development as in Pichler and Levey (2011). These methods, although preferred to assigning a single function, are still subjective. More objectively, Cheshire (2007), Tagliamonte and Denis (2010) and Palacios Martínez (2011) operationalise the presence of co-occurring discourse-pragmatic features to determine the extent of non-propositional
functioning of GEs. Wagner et al. (2015, Chapter 9) formulate an objective decision algorithm for determining if a GE expresses a set-extending function based on referents in the (local) preceding context and on syntactic ambiguity. The obvious advantages of these latter two methods are reliability and replicability. However, each method is constrained by its binary categorisation, making it difficult to analyse semantic-pragmatic expansion.

In what follows, we employ a method that is not only more objective than the assessment of the pragmatic function(s) of a token but also provides for fine-grained categorisation. Following Himmelmann’s (2004: 39) idea that grammaticalisation involves ‘a given construction [being] used in a larger set of contexts than it was used before’, we code each token for the discourse context in which it was used. We adopt the inventory of discourse contexts used in research on the perceived usage of and attitudes towards the Canadian marker *eh* (Gold and Tremblay 2006). The ten contexts are listed in Table 4.2.

Most of the contexts in Table 4.2 contain an utterance-final token of *eh* and thus are within our envelope of variation of UFTs. In the process of coding, the narrative function was partitioned into three distinct categories. Narrative fact represents the overlap of narration and fact reporting, as in (13). We also distinguished a category of strict narration, as in (14), which involves no fact reporting. Lastly, narrative tokens delimiting reported speech were coded as a quotative delimiter, as in (15).

(13) **Narrative fact: the overlap of narration and fact reporting**  
I had a crazy teacher in grade eight. Her name was Ms Goomber, she made me get three late slips in one day. [Interviewer: Three?] Yes after lunch I had a

Table 4.2. *Discourse contexts of *eh* in Canadian English* (Gold and Tremblay 2006)

<table>
<thead>
<tr>
<th>Discourse context</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement of opinion</td>
<td>Nice day, <em>eh</em>?</td>
</tr>
<tr>
<td>Statement of fact</td>
<td>It goes over here, <em>eh</em>?</td>
</tr>
<tr>
<td>Command</td>
<td>Think about it, <em>eh</em>?</td>
</tr>
<tr>
<td>Exclamation</td>
<td>What a game, <em>eh</em>?</td>
</tr>
<tr>
<td>Question</td>
<td>What are they trying to do, <em>eh</em>?</td>
</tr>
<tr>
<td>Request for repetition</td>
<td><em>Eh</em>? What did you say?</td>
</tr>
<tr>
<td>Fixed expressions</td>
<td>Thanks, <em>eh</em>? I know, <em>eh</em>?</td>
</tr>
<tr>
<td>Insults</td>
<td>You’re a real snob, <em>eh</em>?</td>
</tr>
<tr>
<td>Accusations</td>
<td>You took the last piece, <em>eh</em>?</td>
</tr>
<tr>
<td>Narrative</td>
<td>This guy is on the 27th floor, <em>eh</em>, then he gets out on the ledge, <em>eh</em>...</td>
</tr>
</tbody>
</table>

In the ‘request for repetition’ context, *eh* is stand-alone and was thus excluded from the present analysis (see Section 4.2.2).
class with her, right? I was like a minute late and then other people came after me right? And they didn’t get a late slip. Like she made me get a late slip. And then I got a late slip in the morning. I deserved that one though. And then at the end I had another class. I was like less than thirty seconds late. Just before the announcements come that’s when you’re supposed to be before right? To be before the announcements. Just before the announcement come I was there. So literally I wasn’t late. She made me go get a late slip. (TEA/2p/M/14)

Strict narration: narration without fact reporting
I had a dream that that place was like a burial place. And all of a sudden her hand came up. And I thought, it would be nice to help her right? And I helped her and out of nowhere she pulls a knife on me. So I start running down the hall. She’s chasing me. (TEA/2a/M/14)

Quotative delimiter: the delimitation of reported speech
He calls me over to the corner and bitches me out for ten minutes. For ah, you know, not wearing blue shorts. And I was like, ‘Come on, like look at them’, you know? So I just he was kind of bad. (TEA/2j/M/18)

All UFTs produced by a sub-set of fifty speakers, chosen to represent the full range of ages and both sexes, were coded for discourse context in order to test the hypothesis that semantic-pragmatic context expansion is the driving force of discourse-pragmatic change.12

4.3 The trajectory of change in the UFT system
We begin our analysis of UFTs by examining in Table 4.3 the distribution of UFT variants in three broad age ranges: under thirty, thirty to fifty-nine and over sixty. Out of the nearly 2000 tokens of UFTs extracted from the corpus, the variants right and you know are the majority variants, representing 42.2% and 36.4% of the total number of UFTs respectively. Variation between the two variants is strongly correlated with age. Right rises from

Table 4.3. Frequency of UFT variants by three broad age groups

<table>
<thead>
<tr>
<th></th>
<th>right</th>
<th>you know</th>
<th>yeah</th>
<th>eh</th>
<th>other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>&gt;60</td>
<td>2.2</td>
<td>66.2</td>
<td>26.5</td>
<td>2.4</td>
<td>2.7</td>
<td>491</td>
</tr>
<tr>
<td>30–59</td>
<td>49.8</td>
<td>319</td>
<td>200</td>
<td>11.7</td>
<td>5.9</td>
<td>641</td>
</tr>
<tr>
<td>&lt;30</td>
<td>60.4</td>
<td>487</td>
<td>181</td>
<td>12.0</td>
<td>1.4</td>
<td>806</td>
</tr>
<tr>
<td>TOTAL</td>
<td>42.2</td>
<td>36.4</td>
<td>15.6</td>
<td>3.1</td>
<td>2.7</td>
<td>1938</td>
</tr>
</tbody>
</table>

12 As a result, the total Ns in Table 4.3 do not match the total Ns in Tables 4.5–4.6.
2.2% of all UFTs among the oldest speakers in TEA to 60.4% among the youngest speakers. In contrast, you know decreases from 66.2% to 31.2% and 22.5% across age groups. The less frequent variant, yeah, is also in decline, and eh is very infrequent at all ages despite its status as a stereotype of Canadian English (Denis 2013). Other variants, such as you see and okay, also play a peripheral role in this speech community and we will not discuss these further.

Figure 4.2 plots the results of four separate binomial fixed-effects logistic regressions testing the effect of speaker age (on the x-axis) on the probability of right, you know, yeah and eh respectively (on the y-axis). The size of the data points plotted along the top of the figure represents the frequency of occurrence of right, you know, yeah and eh (as indicated by the shape) at that point along the x-axis. The dots along the bottom of the figure represent non-occurrence of the respective variant. Fitted logistic regression lines for speaker age from each of the four models are also plotted. The grey ribbons represent 95% confidence intervals. The patterns in Figure 4.2 confirm the observations made with respect to Table 4.3. For older individuals, right is a marginal variant with a probability hovering under .20. However, the probability of the variant rises steadily among the forty- to sixty-year-olds (born between 1943 and 1963) and continues to rise among young people to a probability of almost .75. In contrast, the probability of you know decreases over this same apparent-time period from just under .75 to around .20 such that right becomes the majority variant among speakers born after approximately 1970. This cross-over pattern is confirmed by independent mixed-effects models that take individual speaker variance into
account (not shown). The probabilities of the two marginal variants *yeah* and *eh* are consistently low, and speaker age was not significant for either variant. A mixed-effects model with individual speaker taken into account (not shown) confirms that the frequency of these two variants is stable across apparent time.

Labov’s (2001b) principles of linguistic change (whether from above or below) champion the role of women. Countless studies of linguistic changes in progress have confirmed this observation across many different situations, both cross-dialectally and across languages (see, for example, Dubois and Horvath 1999; Haeri 1994; Milroy et al. 1994; Tagliamonte and D’Arcy 2009). However, Tagliamonte and Denis (2010: 360) report that the recent change in progress in the GE system of Toronto English is led by males. In a multivariate analysis, males significantly favour the innovative variant *and stuff* while females favour the outgoing variant *and things*. Further, Denis (2011) observes that the innovators of *and stuff* in York, England, were both men and women. An added nuance was that the leaders of the change in York were shown to be the most gregarious individuals in the dataset. These findings corroborate the hypothesis that sex asymmetry may not be a necessary concomitant of linguistic change (see Tagliamonte and D’Arcy 2009: 99).

This brings us to the question of who may be the innovators of *right* in Toronto English. Table 4.4 shows the results of a fixed-effects binomial logistic regression which tests the effects of age and sex on the occurrence of *right*.13 Furthermore, in order to model the non-linear trends over time (note that in Table 4.3, the difference in frequency between the middle-age group and the oldest age group is much greater than the difference between the middle-age group and the youngest age group), we include a quadratic polynomial term for age. (For discussion of modelling age as continuous and with quadratic polynomials, see Tagliamonte and Baayen [2012: 152–3].) The results of the best model are presented in Table 4.4.14

Given the complexity of regression models that include interactions with continuous factors and polynomial terms, we graphically represent these results in Figure 4.3 to facilitate interpretation. (All R code is provided in the Appendix.) Two fitted logistic regression curves are plotted representing the interaction between age and sex against the probability of *right*. The solid line represents the trajectory of females (the reference level of the model in

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13 We model age as continuous and non-linear rather than binning speakers into age groups as in Table 4.3. Sex is modelled using treatment coding with females as the reference level. In treatment coding, the coefficients of levels of categorical factors, such as our sex factor, reflect the contrast between the level in question (male) and a reference level (female).

14 The best model was chosen using the ‘stepAIC’ function of the R package MASS (Venables and Ripley 2002).
Table 4.4. Binomial logistic regression testing the fixed effects of sex in interaction with a polynomial (degree 2) for age (centred) on the realisation of UFTs as right (treatment contrast coding; coefficients reported in log-odds; \( N = 1938 \))

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>Z</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>−1.42</td>
<td>0.20</td>
<td>−7.11</td>
<td>1.17e-12***</td>
</tr>
<tr>
<td>Sex = M</td>
<td>0.91</td>
<td>0.22</td>
<td>4.15</td>
<td>3.40e-05***</td>
</tr>
<tr>
<td>Age (linear)</td>
<td>−89.60</td>
<td>11.88</td>
<td>−7.54</td>
<td>4.65e-14***</td>
</tr>
<tr>
<td>Age (quadratic)</td>
<td>−2.79</td>
<td>8.64</td>
<td>−0.32</td>
<td>7.47e-01</td>
</tr>
<tr>
<td>Sex = M:Age (linear)</td>
<td>25.63</td>
<td>13.24</td>
<td>1.94</td>
<td>5.29e-02</td>
</tr>
<tr>
<td>Sex = M:Age (quadratic)</td>
<td>−34.69</td>
<td>9.75</td>
<td>−3.56</td>
<td>3.73e-04***</td>
</tr>
</tbody>
</table>

Key: *** \( p < 0.001 \), ** \( p < 0.01 \), * \( p < 0.05 \), . \( p < 0.1 \)

Figure 4.3 A visual summary of the generalised linear model reported in Table 4.4

Table 4.4); the dotted line is the trajectory of males. Light grey ribbons around each line represent 95% confidence intervals. Any region along the horizontal axis (i.e., age range) where the two lines’ confidence intervals do not overlap can be interpreted as a statistically significant difference between the relevant social cohorts in that age range. The points along the top of the figure represent the frequency of occurrence of right by the two sexes, and the points along the bottom of the figure represent the occurrence of any other UFT.

Figure 4.3 reveals that underlying the general upward trajectory of right observed in Figure 4.2 is a striking effect of sex. Males and females favour (and
disfavour) *right* at different points in apparent time. Males are the first to adopt innovative *right* beginning with the seventy-year-olds born between 1933 and 1943. However, males under thirty-five have not taken up the new variant to the same degree as their elders. In contrast, there is a sustained linear increase in the use of *right* among females under fifty years old.\(^{15}\) The result is a cross-over pattern at approximately age twenty.

A so-called ‘retreat’ by men from a variant that is accelerating among females is a well-attested pattern of linguistic change (see, *inter alia*, Labov 2001b: 300; Tagliamonte 2012: 33; Trudgill 1972). What we observe here seems reminiscent of Tagliamonte and D’Arcy’s (2007) observation of males in Toronto retreating from the innovative *be like* quotative as it rises in frequency among females. In the initial stages of this change, no sex effect was observed but in the most recent developments, the rate of *be like* among females accelerated, and males not only lagged behind but visibly withdrew from using the new variant. Tagliamonte and Denis (2014: 123) observe this same trend (men lagging behind women) with *be like* in south-eastern Ontario. However, unlike these *be like* changes (or any change we know of), the increasing use of *right* has a cross-over pattern. Why is this the case? With both *be like* and *right*, the consistency is that young males retreat from whichever variant the young females are using. The nuance with *right* is that men actually led the change in the first place. But after the females substantially increased their use of this apparently male innovation (among the thirty-year-olds), the rate among younger males significantly lowered, suggesting a withdrawal from its use. A dissociation by men from a change they initially led is a pattern that, to our knowledge, has not been observed before.\(^{16}\)

In sum, our statistical analyses up to this point expose a genuine change in progress in Toronto English. Given the patterns in Figures 4.2 and 4.3, *right* is taking over from *you know*. The full spectrum of change from zero usage to nearing categorical usage (among young females) provides us with the opportunity to test for gradual semantic-pragmatic expansion of this incoming UFT variant over apparent time. Is the change in frequency visible in Figures 4.2 and 4.3 the result of grammaticalisation, i.e., the gradual expansion

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\(^{15}\) This later adoption of *right* by females and the subsequent decrease in probability for males is confirmed by the significant interaction between sex and age in Table 4.4.

\(^{16}\) The model presented in Table 4.4 and Figure 4.3 includes only fixed effects and does not take into account the variance of individual speakers. A mixed-effects logistic regression (not shown) of the same fixed predictors and the addition of a random intercept of individual speaker did not offer statistical confirmation of the male retreat, i.e., the interaction between age and sex was not significant. However, there is still evidence that this is a male-led change: the main effect of age is significant in the same direction and there is a marginal main effect of sex, with males favouring *right* (*p* = 0.056). (For discussion of fixed- vs. mixed-effects modelling, see Johnson 2009; Tagliamonte and Baayen 2012.)
of right into semantic-pragmatic contexts formerly reserved for you know, or of lexical replacement, i.e., the complete replacement of one variant for another?

4.4 Semantic-pragmatic context expansion

Bybee (2003), Heine (2003), Himmelmann (2004) and Traugott (1982, 1988, 1995a,b) all identify the expansion of semantic-pragmatic contexts as a defining feature of grammaticalisation. Crucially, this functional expansion is theorised to be gradual rather than abrupt (see, for example, Brinton and Traugott 2005: 150; Bybee 2003: 612; Traugott and Trousdale 2010: 25–6). However, much of the literature that argues for gradual, rather than abrupt, semantic-pragmatic expansion is typically qualitative and considers diachronic correspondences rather than changes currently in progress (see Janda 2001: 318). As Janda (2001: 318) observes, ‘[w]hat we are most sorely missing […] are sociolinguistically oriented studies which would compare the ways in which elements apparently undergoing grammaticalisation are used by speakers vis-à-vis those on whom they model their behavior’. That is, it is difficult to assess the gradualness of grammaticalisation without examining changes in progress in consecutive generations (see Denis 2015).

If discourse-pragmatic changes such as the rise of right observed earlier are a reflex of grammaticalisation, then we hypothesise that during the increase in frequency of right confirmed in Section 4.3, there should be a concomitant expansion across semantic-pragmatic contexts in apparent time. Upon inception of right as a UFT, the variant is predicted to be contextually restricted, but as it expands in use, it is hypothesised to gradually encroach on more and more contexts. In contrast, if the rise of right is similar to the abrupt lexical replacement of older GEs by and stuff, as documented in Toronto (Tagliamonte and Denis 2010), then we hypothesise that as soon as right entered the variable UFT system, it would have been immediately available in all of the contexts in which its main competitors were available and thereafter would not necessarily expand further. In this section, we put these two hypotheses to the test. Given the frequency and changing profile of right and you know, we will focus on these two variants in the remainder of the chapter, probing further into the linguistic mechanisms underlying their changing frequencies.

4.4.1 Distribution of discourse contexts in apparent time

This sub-section will serve two purposes. First, we show that both you know and right are used across a range of discourse contexts though the apparent-time trajectories of each are different. Second, we establish that the discourse contexts in which speakers use UFTs are stable across time.
Table 4.5. Distribution of discourse contexts of *you know* by age group

<table>
<thead>
<tr>
<th>Discourse context</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accusation</td>
<td>—</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Command</td>
<td>—</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclamation</td>
<td>67</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fact-reporting</td>
<td>49</td>
<td>124</td>
<td>33</td>
<td>79</td>
<td>15</td>
<td>293</td>
</tr>
<tr>
<td>Narrative fact</td>
<td>82</td>
<td>79</td>
<td>17</td>
<td>12</td>
<td>16</td>
<td>213</td>
</tr>
<tr>
<td>Opinion</td>
<td>53</td>
<td>15</td>
<td>39</td>
<td>23</td>
<td>24</td>
<td>46</td>
</tr>
<tr>
<td>Question</td>
<td>100</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Quotative delimiter</td>
<td>87</td>
<td>15</td>
<td>26</td>
<td>19</td>
<td>28</td>
<td>68</td>
</tr>
<tr>
<td>Strict narrative</td>
<td>67</td>
<td>18</td>
<td>33</td>
<td>12</td>
<td>19</td>
<td>133</td>
</tr>
</tbody>
</table>

Figure 4.4 Proportional frequency of *you know* by discourse context in three broad age groups

Table 4.5 and Figure 4.4 present the distribution of *you know* by discourse context across age group. We report the frequency with which *you know* occurred in a particular discourse context, in a particular age group as a proportion of all UFTs in that context in that age group. For example, of the 293 UFTs that occurred in fact-reporting contexts in the youngest age group,

17 In this case, binned age groups are a useful and meaningful way to view the correlation of discourse context and generational change.
15% were you know. First, note that the distribution of you know across contexts mirrors the downward trajectory observed in Figure 4.2. In all but one discourse context, younger speakers use you know less frequently than older speakers. (The exception is the context ‘accusation’ but this context has particularly low Ns.) Second, although the frequencies have decreased in each context, you know is still used across a wide range of discourse contexts in the youngest age group. This is particularly evident in the six most frequent contexts: fact-reporting, narrative fact, opinion, question, quotative delimiter and strict narrative.

Table 4.5 and Figure 4.4 also suggest that the discourse contexts in which UFTs are used are relatively stable. Fact-reporting, narrative fact, opinion, question, quotative delimiter and strict narrative have non-zero Ns in each generation. However, UFTs only occurred in the command context in the youngest generation and they occurred in the accusation context in the youngest and middle generation. On the basis of the TEA, one could argue that over the twentieth century, UFTs became licit in these contexts and thus what we may have evidence for is a gradual pragmatic expansion of UFTs (in general) to these discourse contexts (though note the very low Ns). However, consider the examples in (16) and (17). Although accusation contexts were rare in the TEA, example (16) from Canadian author H. A. Cody, writing in 1935, suggests that this context was available for UFTs early in the twentieth century, indeed just before the initial upswing in the use of right. Likewise, Avis (1972: 99) lists several early Canadian examples of eh in command contexts, as in (17), suggesting that despite a paucity of examples in our data, this context has allowed UFTs for some time.

(16) ‘Ho! ho! so you think I am the devil, eh?’ (H. A. Cody, 1935, The Crimson Sign)

(17) ‘Listen, Harry, phone me before you go out tonight, eh?’ (M. Callaghan, 1928, Strange Fugitive)

Table 4.6 and Figure 4.5 present the frequency of right in each discourse context in three age groups as a proportion of all UFTs in that discourse context and age group. From the oldest age group to the youngest age group, the proportional frequency of right in all but one discourse context increases. (The exception is the low-frequency exclamation context [total N = 8].) More importantly, the range of contexts in which right appears increases from two to five to eight. This contrasts with you know which both older and younger speakers use in seven out of nine discourse contexts. A superficial look at these proportions might lead to an argument for gradual semantic-pragmatic context expansion in the use of right in apparent time. However, statistical confirmation is required.
4.4.2 Statistical analysis

To test the significance of the pattern observed in Figure 4.5 and Table 4.6, we model the data with Poisson regression. Poisson regression is a generalised linear model like logistic regression, the standard statistical method used in variationist sociolinguistics. However, while logistic regression is recommended when the dependent variable in the model is binomial (i.e., application/non-application), Poisson regression is the appropriate model for dependent variables that are counts of occurrences (i.e., 0, 1, 2, 3 ... +∞).
the present case, our dependent variable is the number of discourse contexts in which each speaker used *right*. If *right* gradually expands into new discourse contexts from its actuation, we expect that speaker age will (negatively) correlate with the number of discourse contexts in which the speaker will use *right*. That is, older people will use *right* in fewer discourse contexts and younger people will use *right* in more discourse contexts.

One of the main points that we wish to emphasise in this chapter is that when assessing the semantic-pragmatic expansion of a discourse-pragmatic feature, it is necessary to take into account the fact that the overall frequency with which an individual uses a variant is necessarily correlated with the number of contexts in which that individual will use the variant. As shown in Figures 4.2 and 4.3, there is a strong correlation between speaker age and the frequency with which a speaker uses *right*, suggesting a change in progress. Thus, although it appears in Figure 4.5 that *right* is used in more discourse contexts by younger people, i.e., that the discourse contexts of *right* are gradually expanding, the variant is also being used more frequently by those younger speakers. In other words, there are more opportunities for younger speakers to use *right* in a range of contexts and, *vice versa*, too few instances of *right* used by older people to observe its full complement of contexts. It is possible that the result in Figure 4.5 is an epiphenomenon of the increased frequency of *right* over time and that it does not reflect a continued expansion of *right* across contexts.

We can address the collinearity between age and variant frequency by including in our statistical model both speaker age and the frequency with which that speaker used *right* as predictors of the number of discourse contexts in which a speaker uses *right*. If age remains a significant predictor of the number of discourse contexts in the best model, i.e., if age explains variance over and above the variance explained by variant frequency, then we can assume that *right* does indeed gradually expand to more contexts. In other words, regardless of how frequently one uses *right*, older people have a more restricted breadth of contexts in which the variant is licit. If, however, age is not a significant predictor, we can assume that the pattern of expansion suggested in Figure 4.5 is simply the result of younger speakers using *right* more frequently than older speakers and that the breadth of discourse contexts in which *right* is licit is not significantly different for older and younger speakers.

A second issue is the fact that the nature of our dependent variable (number of discourse contexts) is such that it can test two different questions. The first question addresses the issue of context expansion: what factors predict the number of discourse contexts in which *right* appears? A Poisson regression model can provide the answer to this question, as just described. However, in addition, our dependent variable can be thought of as *binomial* by contrasting
those speakers who never use *right* (despite using the discourse contexts in which the occurrence of *right* is possible for other speakers) and those speakers who use *right* in one or more contexts. This second question addresses the embedding problem. What factors predict the use of *right* vs. another UFT variant (in any discourse context)? Given Figure 4.2, age should significantly correlate with whether or not an individual will use *right*. A logistic regression model can test this hypothesis. A zero-inflated Poisson (ZIP) regression model can test both hypotheses, i.e., gradual grammaticalisation or abrupt lexical replacement.\(^{18}\) ZIP models are used to model count data that contain a large number of zero values and in which the binomial (zero vs. non-zero values) and count data are theorised to be the result of two separate processes. ZIP models jointly estimate the probability of the dependent variable being zero (vs. one or more) and model the count data (Long 1997). For the first part, a logit model is used (like a binomial logistic regression), and for the second, a Poisson count model is used.

In this case, the binomial model, which includes speaker age as a predictor of the use of a UTF variant that is not *right*, evaluates the change in progress we have confirmed earlier, i.e., apparent-time increase of *right*. The Poisson count model, which includes as predictors speaker age (as continuous) and the frequency of *right* (per 1000 words), evaluates whether or not the rise of *right* is characterised by gradual context expansion, as predicted by grammaticalisation theory. Table 4.7 presents the results of this model.\(^{19}\) First, consider

### Table 4.7. Results of zero-inflated Poisson regression of the number of discourse contexts in which *right* is used by each speaker

<table>
<thead>
<tr>
<th>Count model coefficients</th>
<th>IRR</th>
<th>Lower CI</th>
<th>Upper CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.007</td>
<td>1.195</td>
<td>3.369</td>
<td>8.5e-03**</td>
</tr>
<tr>
<td>Frequency of <em>right</em> (per 1000 words)</td>
<td>1.271</td>
<td>1.144</td>
<td>1.411</td>
<td>7.2e-06***</td>
</tr>
<tr>
<td>Speaker age</td>
<td>0.996</td>
<td>0.980</td>
<td>1.012</td>
<td>6.2e-01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Binomial model coefficients</th>
<th>Odds-ratio</th>
<th>Lower CI</th>
<th>Upper CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.073</td>
<td>0.012</td>
<td>0.427</td>
<td>3.7e-03**</td>
</tr>
<tr>
<td>Speaker age</td>
<td>1.057</td>
<td>1.017</td>
<td>1.098</td>
<td>4.6e-03**</td>
</tr>
</tbody>
</table>

Key: ***p < 0.001, **p < 0.01, *p < 0.05, . p < 0.1

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\(^{18}\) See Bohman et al. (2010) for a recent application of zero-inflated models in linguistic research and a clear explanation of their use and interpretation. For a step-by-step guide to ZIP models, see [www.ats.ucla.edu/stat/r/dae/zipoisson.htm](http://www.ats.ucla.edu/stat/r/dae/zipoisson.htm) (last accessed: 26 February 2014).

\(^{19}\) Following Long (1997), coefficients of these models were exponentiated. For the count model, exponentiated coefficients are incidence rate ratios (IRRs). Each additional one-unit increase of an independent variable increases the expected number of the dependent variable (in our case, number of discourse contexts) by the IRR. For the binomial model, exponentiated coefficients
the results for the binomial model. Age of the speaker significantly predicts a zero response \( (p = 4.6 \times 10^{-3}) \). As age increases, the probability of a UFT other than \textit{right} increases as indicated by a statistically significant odds-ratio that is greater than 1. In other words, older speakers are less likely to use \textit{right} than younger people. This confirms what we have already demonstrated in Section 4.3: a change in progress such that \textit{right} is on the rise.

In the count model, the frequency of \textit{right} per 1000 words significantly predicts the number of discourse contexts in which \textit{right} may appear, as indicated by a significant incidence rate ratio (IRR) greater than 1 \( (p = 7.2 \times 10^{-6}) \). On the other hand, speaker age is not a significant predictor of the number of discourse contexts in which \textit{right} may appear \( (p = 6.2 \times 10^{-1}) \). The non-significant IRR hovers close to 1, and its confidence interval overlaps with 1. We can interpret these results as follows: while the significant effect of frequency indicates that the more often an individual uses \textit{right} the more likely they are to use the variant in multiple discourse contexts, the non-significance of speaker age suggests that the apparent gradual expansion of discourse contexts over time shown in Figure 4.5 is an epiphenomenon of the increase in frequency of \textit{right} in the speech community. In other words, there is no statistically significant difference in the number of discourse contexts in which older and younger speakers use \textit{right}, and thus our statistical analysis does not provide support for gradual context expansion of \textit{right}. Rather, we must assume that when the variant entered the variable UFT system, it was available for use in all of the discourse contexts of its competitor variants, particularly \textit{you know} which was used in most contexts in each generation. Thus we interpret the rise of \textit{right} as a case of lexical replacement.\footnote{Kaltenböck \textit{et al.} (2011: 853) propose that ‘theticals’, i.e., those features of discourse that seem independent of the asserted content of an utterance and are rather concerned with ‘the discourse situation of social interaction’ (e.g., comment clauses, tag questions, appositives), develop instantaneously rather than gradually. An analysis of UFTs as theticals is beyond the scope of this chapter but we note that our results provide quantitative support of the idea of instantaneous ‘co-optation’ (Kaltenböck \textit{et al.} 2011: 879). We thank an anonymous reviewer for drawing our attention to the possible link here.}

### 4.5 Assessing grammaticalisation and semantic-pragmatic change

Two objections can be raised regarding this conclusion. First, the time-frame of our data may not have have sufficient depth for capturing grammaticalisation in action. Second, using discourse context as an evaluation metric of semantic-pragmatic change may be ill-founded.

are odds-ratios. Each additional one-unit increase of an independent variable increases the probability of a zero response of the dependent variable (in our case non-occurrence of \textit{right}) by the odds-ratio.
Is 100 years in apparent time across the twentieth century sufficient to assess grammatical developments? We have made the argument, following Janda (2001), that only by looking at consecutive generations within the same speech community are we able to assess grammaticalisation. However, in which generations does grammaticalisation occur? Méndez Naya (2006: 147–8) observed that right has had a long development in English dating back to the Old English adjective riht meaning ‘straight, not bent’; since, the adjective has been variously used as an adjunct, modifier, intensifier and eventually as a discourse-pragmatic feature. Indeed, Méndez Naya argues that as early as the eighteenth century, right functioned as a discourse-pragmatic feature, at that time already the result of a long period of grammaticalisation. Thus, how can developments 200 years later tap discourse-pragmatic grammaticalisation of this variant? Three facts support our approach. First, definitions of grammaticalisation typically emphasise the gradual and continuous development of forms. As Bybee et al. (1994: 4–5) put it, grammaticalisation involves ‘changes in lexical morphemes by which some few of them become more frequent and general in meaning, gradually shifting to grammatical status, and developing further after grammatical status has been attained’ [emphasis added]. By this definition, the focus of investigation could be any generation, as grammaticalisation is not theorised to end abruptly. Further, even after achieving discourse-pragmatic status, further developments are possible, and indeed likely. In any case, Méndez Naya’s (2006: 158) eighteenth-century examples are all instances of right ‘used to show that the speaker agrees with a previous statement’, and thus fail outside of our definition of a UFT (see Section 4.2.2). This leaves open the question of when right became a UFT (Méndez Naya 2006: 158). Regardless, linguistic expressions are not independent of the speakers and the speech communities that use them. Even if right may have functioned as a UFT in some community prior to the twentieth century, the fact remains that as a UFT it has only risen in frequency in Toronto English since the 1930s.21 Once right becomes a variant of the UFT variable, it simply infiltrates all the usual contexts without disrupting the extant system.

Is the expansion of discourse contexts a reasonable proxy for grammaticalisation? Himmelmann (2004), for example, explicitly equates grammaticalisation with context expansion. Others may argue that expansion from one context to another does not equate with pragmatic shift (i.e., propositional to textual to expressive function) often observed in grammaticalisation. The problem is that discourse context and pragmatic function are tightly linked and tricky to disentangle for independent assessment. As Andersen (2001: 71) observes, ‘it can be difficult to separate attitudinal functions from illocutionary functions,

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21 In the Corpus of Earlier Spoken Ontario English, comprising speakers born in Ontario between 1879 and 1920, there was not a single instance of right as a UFT (Denis 2015).
since pragmatic markers such as *eh?* can indicate both the speaker’s non-committing attitude and directive illocutionary force in the same utterance’. Further, textual and/or expressive functions may be more frequent in certain discourse contexts than in others. For example, Stenström et al.’s (2002: 169) epistemic function (i.e., ‘the speaker is uncertain as to the truth of [the proposition] and would like the hearer to verify it’) may be more common with interrogatives. The imagination-appealing function (i.e., the speaker ‘does not assume that [the proposition] is a shared belief, but assumes that it is compatible with the hearer’s background knowledge’) may be more common in narratives. The facilitative function (i.e., ‘the speaker believes that [the proposition] is an opinion or belief shared by the hearer and herself, and that the hearer may wish to corroborate [the proposition]’) may be more common with exclamations. In essence, expansion of discourse context may well correlate with increasingly more non-propositional meanings. In this way, context expansion can be taken to reflect pragmatic shift.\(^{22}\)

4.6 Conclusion

In this chapter, we have probed the nature of discourse-pragmatic variation and change by targeting a frequent discourse-pragmatic feature (*right*), and treating it as a variant within the UFT system. We have employed a representative sociolinguistic dataset, replicable quantitative methods and a variety of statistical tools (both old and new), all of which have offered insights to inform a defensible interpretation of UFT variation and change in Canadian English. These procedures can be applied to the study of any discourse-pragmatic feature once it has been conceptualised (and justified) as a variant in a variable system.

At the outset, a distributional analysis revealed notable generational trends in the data (Table 4.3). Then, using logistic regression models, we first presented statistical confirmation that *you know* and *right* are undergoing change in Toronto English. Individuals born in the early decades of the twentieth century up to approximately the 1920s only use *you know* while those born from the 1930s onwards increasingly use *right* (Figure 4.2). Further analysis distinguishing males and females (Figure 4.3) exposed that this change is socially complex: males advanced the use of *right* and females followed suit but much more slowly. The point of male/female convergence at approximately .65 probability is among individuals born in the early 1980s. After this point in the apparent-time array, young females

\(^{22}\) Indeed, Pichler (p.c., Nov. 2013) suggests (and we agree) that ‘a study that codes for both context and function and shows considerable overlap between individual contexts and individual functions’ would be a welcome addition to the field.
use *right* even more than their elders but young males’ use wanes. Our results confirm the general pattern of male retreat from features that females use substantially. The new observation here is that males retreat from changes in this way even when they originally led them. This male dissociation leads to a sex cross-over (Figure 4.3).

We also tested for gradual semantic-pragmatic expansion by coding a sub-set of the data for discourse context. To test for expansion in apparent time across contexts, we employed a new statistical technique, namely zero-inflated Poisson regression (Long 1997). This method disentangles the interaction between: (i) form (in this case *right*); (ii) its frequency differential across speakers of different ages; and (iii) the associated contexts of its use. Our statistical model suggests that the innovators of *right* in Toronto could use this new variant wherever UFTs were already used in the community. This result parallels earlier findings for another, utterance-final feature in the same corpus, GEs (Tagliamonte and Denis 2010). The system of GEs in Toronto underwent a similar change across the same speakers in the same time-frame such that *and things* was being replaced by *and stuff*. With this phenomenon as well, there was no evidence for ongoing, gradual grammaticalisation. Instead, the new variant emerged with the full set of characteristics of the variant it was replacing. In the GE and UFT systems, the new variants (*and stuff*, *right*) replaced earlier variants (*and things*, *you know*). This convergence across two studies of similar discourse-pragmatic features suggests that we may have tapped into a more general mechanism of discourse-pragmatic change: lexical replacement. For both GEs and UFTs, a new variant emerges full-blown with all the functional characteristics of earlier variants in the respective variable system.

**Appendix**

> # Logistic regression with interactions and polynomial terms (Table 4.4)
> social.model <- glm(right ~ Sex + poly(Age, 2) + Sex:poly (Age,2), data = uftdata, family="binomial")

> # Stepwise AIC comparison
> library(MASS)
> stepAIC(social.model)

> # Plotting the model in Figure 4.3
> library(ggplot2)
> ggplot(uftdata, aes(x = Age, y = rightbi, linetype = Sex)) + stat_smooth(method = glm, family = "binomial", formula = y ~ poly(x, 2), color = "black") + scale_x_reverse() + theme_bw() + coord_cartesian(y = c(0, 1))
Zero-inflated Poisson Regression (Table 4.7)

```r
> library(pscl)
> ZIP.model <- zeroinfl(formula = rightcontexts ~ rper1000 + Age | Age, data = uftindividuals, dist = "poisson", link = "logit")

> # Exponentiated coefficients and confidence intervals for Table 4.7
> library(stats)
> exp(coef(ZIP.model))
> exp(confint(ZIP.model))
```
Part III

Change
5 Antecedents of innovation: exploring general extenders in conservative dialects

Sali A. Tagliamonte

5.1 Introduction

Discourse-pragmatic change is perhaps the least well-studied type of change in quantitative approaches to language variation and change. This is undoubtedly due in part to the early debates questioning the extension of the variationist enterprise to levels of grammar above phonology (see, for example, Lavandera 1978; Rickford 1975; Sankoff 1973; see Waters [Chapter 2] for an overview). More recently, these earlier concerns have resurfaced as cautionary notes on the use of quantitative methods in the study of discourse-pragmatic variation. There is also a concomitant unease that current generalisations about the nature of change in phonology, morphology and syntax, including a constant rate of change (Kroch 1989), layering effects, phonetic reduction/erosion and analogical levelling (Hopper 1991; Hopper and Traugott 2003), will apply in the same way to discourse-pragmatic phenomena (see, for example, Pichler 2013: 13). Yet numerous studies over the past decade have determinedly opened up this area of grammar to quantitative investigation. Among the most prominently studied features is the general extender (GE) system (see, for example, Cheshire 2007; Denis 2011; Dines 1980; Overstreet 1999; Pichler and Levey 2011; Tagliamonte and Denis 2010; Winter and Norrby 2000). Given the extensive knowledge base that is developing for this area of grammar, the time is ripe to offer continued breadth to the emerging contemporary situation (see Pichler and Levey 2011).

GEs can be identified using a combined structural and functional approach (see also Denis and Tagliamonte Chapter 4; Pichler Chapter 3; Waters...
Structurally, they are semi-fixed constructions that share a common schematic pattern (Pichler and Levey 2011: 448) which typically involves the following items: a connector (i.e., and, or), a generic (e.g., stuff, thing) or indefinite pronoun (e.g., something, everything, anything), and an optional comparative (e.g., like that), as in the examples in (1). The GE system also includes a number of expressions whose structural configuration is more fixed, as in (2a), as well as the occasional idiosyncratic variants, as in (2b).

(1) a. Dad always had the garden. We grew our own vegetables, potatoes and onion-sets and cabbages, sprouts or something like that, yes. (Grace Kenway, 74, MPT)
   b. See Aunty Jessie, she made wee sheets and wee pillowcases for the cot and everything. (Esther Hamilton, 88, CMK)
   c. We were told there was no saluting or medals or anything. (Roger Bishop, 88, MPT)
   d. You go back thirty years and look at all the old maps and all. Portavogie was only put down as a headland or something. (Robin Mawhinney, 55, PVG)
   e. Then the harvest time you know where they cut the corn and that. (Hugh Keane, 84, CLB)
   f. I seen there they brought some nettles over and things. (Rob Paisley, 78, CLB)

(2) a. I says, well I would like some nice gifts to take back . . . I’ll take this, that, blah, blah, blah. (Heather Baker, 67, CMK)
   b. Kerry would send the wee one up with his box of chocolates and what have you for Gran. (Iain Ferguson, 72, CMK)

A typical GE will occur at the end of a phrase and will often evoke a general category of similar objects that the speaker has in mind (Dubois 1992: 198). For example, the use of or something like that in (1a) calls to mind different types of vegetables that would grow in a garden. The GE and everything in (1b) refers to a group of attributes relating to the things that make up a child’s bedding. The GE in (1c) refers to the paraphernalia suitable for a military parade, that in (1d) to historical materials that one might find in an archive, that in (1e) to the things that are cut at harvest time, and that in (1f) to any of a variety of herbs. Thus, speakers use a GE in order ‘to suggest the multitude of possible elements of the set’ that they are thinking or talking about (Dubois 1992: 182). As the research on GEIs has expanded, the boundaries of what can be treated as a GE has extended to encompass additional forms and in some cases additional functions. As we shall see, however, the core remains fairly constant.

1 The information in parentheses records the pseudonym, age and place of origin of the speaker: Maryport (MPT), Cumnock (CMK), Portavogie (PVG) and Cullybackey (CLB) (see further Section 5.2). The transcriptions in the examples have been edited slightly for readability.
Research shows that the use of GEs is conditioned by social factors such as age, sex, education and socio-economic class (Dubois 1992; Stubbe and Holmes 1995). The distribution of GEs has also been found to be constrained by the semantic-syntactic characteristics of the generic/pro-form they contain (Aijmer 1985; Cheshire 2007; Dines 1980; Overstreet and Yule 1997). Other research suggests GEs encode various interactional functions (Aijmer 1985), marking politeness (Overstreet and Yule 1997; Winter and Norrby 2000), topic shift and speaker exchange (Dubois 1992).

A rich aspect of the research on GEs is the implications they have for theories of grammaticalisation. Early research on GEs suggested that they were grammaticalising in some varieties of contemporary English (see, for example, Aijmer 2002; Brinton 1996). Grammaticalisation is change that involves grammatical development. Originally, Meillet (1912) defined grammaticalisation as ‘the change of an autonomous word into a grammatical element’; however, later research demonstrated that not only lexical items, but also grammatical forms and even phrases can develop along a pathway of grammaticalisation (Traugott 1982). Furthermore, the processes by which items develop grammatical meanings are multiplex and in some cases antithetic. For example, grammaticalisation is associated with reduction in some models (Heine et al. 1991; Lehmann 1982) but with expansion in more recent formulations (see, for example, Himmelmann 2004; Traugott and Trousdale 2010). These hypotheses are particularly germane to GEs since the processes invoked to explain their development include phonetic reduction or clipping, decategorialisation and semantic-pragmatic change (see, for example, Cheshire 2007), all among the suite of mechanisms that have been discussed in the grammaticalisation literature. In the analyses that follow, I will test the operation of some of these mechanisms.

The originality of the present analysis lies in the viewpoint it offers from conservative dialects. The argumentation and interpretation is built on the foundations of distributional findings presented in Tagliamonte (2013: 172–84), based on a unique archive of language materials from south-west Scotland, north-west England and Northern Ireland. In contrast, virtually all of the research on GEs has been on contemporary data, much of it from mainstream communities and contemporary youth. Further, claims in the literature that implicate the diachronic development of GEs have never been fully explored (see, however, Carroll 2008). Perhaps one of the most compelling claims is that GEs develop from long forms to short forms, paralleling linguistic change in other areas of the grammar. Using the apparent-time construct (Bailey et al. 1991), recent quantitative research (Denis 2011; Pichler and

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Levey 2011; Tagliamonte and Denis 2010) took up the challenge of testing this claim by studying the distribution of long and short GE variants in synchronic datasets. The consistent finding arising from these investigations is that there is no relationship between speaker age and the length of GEs. Indeed, it appears that short GE variants such as *and stuff* and long GE variants such as *and stuff like that* exist in relative stasis in contemporary varieties. Thus, if the short variants did indeed derive from the longer variants, they must have done so before most of the speakers interviewed for the apparent-time studies quoted above were born. Of course, the real problem is the availability of comparable time-depth to test this hypothesis. Appropriate data, i.e., spoken, interactional and vernacular, from earlier points in time does not exist. Spoken-like materials in drama, diaries and court reports provide some evidence for GEs at earlier periods (see, for example, Culpeper and Kytö 2010) but they reflect a qualitatively different register. There is no perfect solution to this problem given the impossibility of *bona fide* spoken historical data from earlier than the twentieth century. However, there is another worthwhile data source that may shed light on the diachronic development of GEs: conservative British dialects. Peripheral dialects are known to reflect earlier stages in the evolution of English and thus make possible the analysis of the antecedents of contemporary GE variants. If so, they can offer insight into the evolution of GEs to complement the synchronic corpora studied by Cheshire (2007), Pichler and Levey (2011) and Tagliamonte and Denis (2010).

In what follows, I will first describe in more detail the nature of the data under investigation in this chapter. In Sections 5.3 and 5.4, I will provide a brief historical and synchronic backdrop for the study of GEs. The methods of data analysis employed will be outlined in Section 5.5. The results are then presented in terms of distributions, Section 5.6, and constraints, Section 5.7. I will end with a discussion of the results in Section 5.8 and my conclusions in Section 5.9.

5.2 The data

An informative construct that has been successful in recovering earlier stages in the development of linguistic variables is the relic area (Poplack and Tagliamonte 1991: 97; Tagliamonte and Smith 2000: 141). Such areas, because of their peripheral geographic location and/or isolated socio-political circumstances, tend to preserve older features of a language (Anttila 1989: 294; Hock 1986: 442). Among the more recent criteria for establishing the status of a variety as ‘peripheral’ are geographic location, historical continuity and group identity (Wolfram and Thomas 2002: 26–36). The present study is based on the Roots Archive (Tagliamonte 2013), a database which comprises four such peripheral communities. Their location is shown by the grey circles.
on the map in Figure 5.1: Maryport in north-west England, Cumnock in south-west Scotland, and Cullybackey and Portavogie in Northern Ireland. In addition, the white circles on the map in Figure 5.1 show northern England locations where GEs have been studied recently: Kingston-upon-Hull (henceforth Hull) (Cheshire 2007), the city of York (Denis 2011) and Berwick-upon-Tweed (Pichler and Levey 2011).

In the early 2000s, over 100 individuals among the oldest living generation in each of the peripheral communities were interviewed using sociolinguistic fieldwork techniques (Labov 1972c; Schilling 2013; Tagliamonte 2006). These audio-recorded conversations contain a wealth of cultural information, local traditions, narratives of personal experience, local gossip and informal discussions, reflecting the typical discourse found in each community. GEs are a vibrant component of the vernacular in these communities, as evident in (3):

(3) a. When I worked there, I worked in the stores department and one of my jobs at that particular time was clock cards and things like that. Pay documents
all this, making them out. Anybody that was entitled till extra money or owt like that. (Jack Dobson, 66, MPT)

b. Well, she took natural sciences. It covers a wide area. I think she wants to work with people like you know like sort of these trouble shooters people and that you know. (Lucy Fisher, 73, MPT)

Most other research on GEs in the UK is based in urban settings, for example London (Stenström and Andersen 1996). More generally, research on GEs has in large part been conducted on other major varieties of English, including Australian English (Norrby and Winter 2002) and Canadian English (Tagliamonte and Denis 2010). One of the compelling findings arising from the literature on GEs is the extent to which varieties of English share the same variants. From England to Canada to Australia, virtually the same inventory of GE variants has been reported (at least with respect to the most frequent variants), suggesting longitudinal continuity of GEs. Yet this remains open to investigation. Pichler and Levey (2011: 464) call for an extension of current variationist work on GEs to studies of real time and most especially to deeper time-depth and consideration of the earlier antecedents of the contemporary GE system. Exploration of the conservative dialects in the Roots Archive offers the possibility to gain access to a window on the past through which an earlier stage in GE variation and change may become visible, allowing us to probe the formal consistency of the GE system as well as hypotheses about the development of short GE variants from long GE variants. The question is: how do the GEs in these relic communities compare with the extant body of knowledge of this linguistic phenomenon?

5.3 Historical perspective

GEs can be traced far back in the history of English, at least to the fourteenth century (Poutsma 1926: 914). The earliest documented forms comprise fixed expressions such as and such, and so forth, and so on, and what not. Carroll (2008: 16) provides an example of and so forth from Chaucer, 1390. Many of these early forms are found in the Roots Archive, as shown in (4).

(4)  
a. He was doing the lambing and such. (Elspeth Ferguson, 70, CMK)
b. And they sold fruit and so forth. (Charlie Baxter, 67, CMK)
c. Saddie McCaine would sell broken biscuits, chocolates, broken chocolates and so on. (Fergus Bell, 90, CMK)
d. My mother went to see my cousin in Workington. They were confectioners you know sort of they had a café and what not. (Miriam White, 81, MPT)

GEs tend to comprise a core set of generic nouns and pronouns, including thing(s), stuff, anything, something, everything and nothing. Dialectal variants of the generic pronouns also occur such as summat in (5a) and owt in (5b).
(5) a. She’s a black belt and first dan or summat. (John Edwards, 70, MPT)
b. Cos he’s not a fellow to mix with other men or owt like that or do anything or owt, isn’t Bob. (Grace Kenway, 74, MPT)

GEs with a generic but no connector occur in the Roots Archive as well, consistent with reports from nearby Hull and Berwick-upon-Tweed (Cheshire 2007; Pichler and Levey 2011), as in (6).

(6) a. That’s right, aye, you’d the place to yourself kind of thing. (Dan James, 64, PVG)
b. I’ve a feeling it was summat like er- one of the H’s, Hunslett, Huddersfield something like that. (Jack Dobson, 66, MPT)

Examination of the historical record shows that GEs with and developed first and those with or arose somewhat later. The earliest GE with or, or something, is attested in the early 1800s; or whatever is attested in the early 1900s (Tagliamonte and Denis 2010). This suggests that there is incremental historical layering in this system over time that may be corroborated by the Roots Archive.

5.4 Synchronic perspective

GEs have been studied in contemporary data from the following countries: England, Scotland and Ireland (Cheshire 2007; Denis 2011; Levey 2012; Macaulay 1991; O’Keeffe 2004; Pichler and Levey 2011); the United States and Canada (Overstreet 1999; Overstreet and Yule 1997; Tagliamonte and Denis 2010; Wagner et al. Chapter 9); and Australia and New Zealand (Britain and Sudbury 2002; Dines 1980; Norrby and Winter 2002; Stubbe and Holmes 1995). As mentioned earlier, a common set of variants are reported, including: or something (like that), and everything (like that), and things (like that), and stuff (like that). Some GE types or categories (e.g., those containing stuff and whatever) are more frequent in large urban centres such as Toronto, Canada (Tagliamonte and Denis 2010) or London, England (Stenström et al. 2002). On the whole, however, there is remarkable consistency in the inventory of main forms across widely divergent geographic locales, social groups and registers. Another overarching characterisation is that GEs are typical of the vernacular.

A frequent observation is that GEs are rising in frequency, with a greater usage among younger individuals and in particular females (Denis 2011; Stubbe and Holmes 1995; Tagliamonte and Denis 2010). Further, in part due to the wide-ranging variety of GE variants, from almost literary (and

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3 By ‘type’ or ‘category’ I refer to the group of variants that have the same generic. For example, ‘stuff types’ refer to the variants stuff, and stuff, and stuff like that etc.
conservative) (e.g., and so forth) to highly vernacular and nonstandard (e.g., and that), different GE variants are often associated with varying levels of formality, register or style (see, however, Wagner et al. Chapter 9). Certain GE variants are also often associated with class and other socio-economic indicators. For example, GEs such as and things are associated with middle-class individuals while others such as and that or and that lot are associated with working-class individuals (Cheshire 2007: 165; Stenström and Andersen 1996: 102).

Further, GEs are claimed to have a range of interpersonal and textual functions (see, for example, Cheshire [2007] for a recent overview). Among other things, they are claimed to mark in-group affiliation and rapport (see, for example, Youssef [1993] on an ting ‘and things’ in Trinidad Creole). The in-group nature of GEs is evident in (7a) and (7b) where one must know what a ‘bran tub’ and ‘cobbles’ are to interpret the reference set of the GE.\footnote{A ‘bran tub’ is a tub containing bran in which small wrapped gifts are hidden, used at parties and fairs in Britain. A ‘cobble’ is a term used for gritstone setts, small rectangular paving blocks made of stone such as granite, used to provide durable road surfaces.} Because cultural knowledge is required to interpret many GEs, their use is thought to signal that speakers perceive an in-group relationship to their listeners.

(7) a. Aye, and at Haleve time it was real smashing at Haleve time. Aye, they had the- the bran tub and all this sort of stuff at Haleve. (Bob Cottell, 85, CLB)
   b. And a-fore they knew where they were at there was cobbles and all sorts flying at windows. (Keith Price, 89, MPT)

The semantic-syntactic properties of the GE generic (e.g., stuff, things) have been shown to influence the choice of GE variant. Grammatically, a form such as stuff refers to mass nouns and a form such as thing(s) to count nouns, as in (8a)–(8b). However, researchers have noticed that GE generics do not always match the semantic-syntactic properties of their antecedent nouns, as in (8c)–(8e). Further, note that it is much more difficult to retrieve a set for the referent pumps in (8e) than for the parsley and leeks and kale in (8b). What does one sink with a pump? This is not part of the knowledge set of most people.

(8) a. When they made anything new, they started to make oh meats and stuff like that, all kinds of things in the factory, all chutneys and things. (Helen Philips, 79, MPT)
   b. My granny would go out and get parsley and leeks and kale and things out the garden for soup. (Esther Hamilton, 88, CMK)
   c. Oh aye, that’s the sort of things I used to give them too, you know, clothes and things. (Nancy Taylor, 78, CMK)
   d. It’s a shame when it’s stuff like- even affects like pigeons and stuff. (John Edwards, 70, MPT)
   e. Did they not sink pumps and stuff? (Kate Devoy, 62, PVG)
More critically, it is sometimes the case that GEs have no clear-cut reference set (Winter and Norrby 2000: 4). What should be inferred by and that in the examples in (9)? What else might be involved in being ‘sent back out’ to work in (9a) and what is involved in being ‘a big friend of Josh’ in (9b)? These examples demonstrate that some GEs are quite vague, not always functioning to generalise to a set (Aijmer 1985). If not, they may have other functions.

(9) a. There was nae unions or protective clothing then, they just . . . and I mean she had to work because her mother made sure she worked. She never missed a day. You know she was Irish. Go to work, that’s it. Cut hand or no she was sent back out the next morning and that. (Graeme Nesbitt, 69, CMK)

b. Pickering chemist, he was a big friend of Josh and that. (Keith Price, 89, MPT)

Changes to the syntagmatic length of GEs may be a reflection of shifting function. For example, and things like that may evolve into and things as part of the grammaticalisation process whereby clipping or shortening occurs as the original form expands its functional domain. This is, of course, not a discrete stepwise development but part of a suite of shifts that evolve in the milieu of synchronic variation. In this case, we can conceive of GEs starting out as a generalisation to a set. At a later stage, the forms may not generalise to a set at all. In such a process, the form and that in (9) could be a development. However, researchers are discovering a multitude of forms within each GE type (e.g., and all things like that, and things like that, and things, and thing) and a broader set of contexts (i.e., extension beyond set-marking) (see, for example, Carroll 2008: 14; Pichler and Levey 2011).

The question is: what are the characteristics and patterns of GE variant types and forms that obtain in the peripheral northern communities under investigation?

5.5 Methodology

Discourse-pragmatic variables are notoriously difficult to study from a quantitative perspective because they comprise many different variants with potentially diverse functions (see Waters Chapter 2). To approach the GE system scientifically, I used the combined structural and functional approach employed in early variationist studies of GEs (Dubois 1992) and other discourse-pragmatic variables (Vincent 1992; Vincent and Sankoff 1992), also consistent with Pichler’s (2010, 2013) more recent methods for studying discourse-pragmatic variation. First, forms and structural configurations are identified. Quantitative research on GEs, which often includes the full inventory of GEs in the data under investigation, provides a precedent.
These procedures are aided by the well-known GE template: (connector) (modifier) (generic noun/pro-form) (similative) (deictic) (Pichler and Levey 2011: 448). With known structural and functional possibilities in mind, additional forms can be identified and included. A total of 1662 GE tokens were accumulated across the four communities presented in the Roots Archive. Each token was then coded so as to identify the generic/pro-form (e.g., thing, stuff, something) and to probe two salient claims in the literature for grammaticalisation of GEs: the relative length of the construction (e.g., and things vs. and things like that) tests for the relationship between grammaticalisation and the syntagmatic length of the GE; the co-occurrence of GEs with other discourse-pragmatic variables in the same clause (e.g., ken, you know, I mean) tests whether there is a relationship between GE use and support from other discourse-pragmatic variables.

5.6 Distributional analysis

Table 5.1 provides a breakdown of the inventory of the GE types in the Roots Archive. The table documents all the types in the data by grouping the GE variants into categories according to the type of generic/pro-form they contain. The most frequent form of each category is displayed first, followed by a combination of all the other variants in the category with that generic type. There were 88 different forms in all. As with many linguistic variables, several main forms dominate the system while many others occur only once or twice. The distribution reveals that nearly a full third of all GEs in the data are some combination of and (all) (that), representing 38.1% of all GEs. Variants with something or thing(s) make up the bulk of the remainder, followed by everything, anything and stuff variants. The large catch-all category ‘other’ at 12.3% comprises innumerable idiosyncratic forms along with a group of fixed expressions which include and whatnot, and such, and all the rest etc., each one alone well under 2% of the data.

Table 5.2 provides a breakdown of the most frequent fixed GEs, which were grouped with idiosyncratic forms as ‘other’ in Table 5.1. These are constructions that do not entirely fit the structural characteristics described earlier, but perform the same range of functions and occur in the same syntactic

Each of the categories comprises a large number of variants. For example, included in the category ‘thing(s)’-variants are the following forms: and this kind of thing, and that sort of thing, and that kind of thing, this sort of thing, or this sort of thing, and all these things, and all that sort of thing, and all sorts of things, and things, kind of thing, that kind of thing, type of thing, sort of thing, that sort of thing, and all little things like that, or that sort of thing, and all these kinds of things, or things like that, and all the things, and all these sort of things, and all this sort of thing, things like that, all this sort of thing, all that sort of thing and all things like that. A similar multifaceted group is found for ‘stuff’.
environments as the more prototypical and less formulaic GE variants in Table 5.1 (see also Pichler and Levey 2011: 448).

In sum, the Roots Archive is consistent with previous research on GEs in its rich variation of forms. However, the particular GE inventory in these communities contrasts from existing reports outside the northern climes of the United Kingdom, particularly that reported for Reading in the south of England where thing(s)-variants dominate, and Toronto in Canada where stuff-variants dominate. In the Roots Archive, variants with the generic stuff are rare (2%, N = 34/1662). While stuff-variants were also infrequent in Berwick-upon-Tweed (6%, N = 50/783; Pichler and Levey 2011), the rate in

<table>
<thead>
<tr>
<th>GE type</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>and that</em></td>
<td>19.1</td>
<td>318</td>
</tr>
<tr>
<td><em>and all</em></td>
<td>15.8</td>
<td>262</td>
</tr>
<tr>
<td><em>and all that</em></td>
<td>3.2</td>
<td>53</td>
</tr>
<tr>
<td><strong>Combined ‘and (all) (that)’</strong></td>
<td><strong>38.1</strong></td>
<td><strong>633</strong></td>
</tr>
<tr>
<td><em>or something</em></td>
<td>15.0</td>
<td>249</td>
</tr>
<tr>
<td>other something-variants</td>
<td>5.1</td>
<td>84</td>
</tr>
<tr>
<td><em>and things</em></td>
<td>3.4</td>
<td>56</td>
</tr>
<tr>
<td>other thing(s)-variants</td>
<td>10.8</td>
<td>179</td>
</tr>
<tr>
<td><em>and everything</em></td>
<td>6.7</td>
<td>112</td>
</tr>
<tr>
<td>other everything-variants</td>
<td>0.7</td>
<td>12</td>
</tr>
<tr>
<td><em>or anything</em></td>
<td>3.8</td>
<td>63</td>
</tr>
<tr>
<td>other anything-variants</td>
<td>2.1</td>
<td>35</td>
</tr>
<tr>
<td><em>and stuff</em></td>
<td>1.4</td>
<td>24</td>
</tr>
<tr>
<td>other stuff-variants</td>
<td>0.6</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>12.3</td>
<td>205</td>
</tr>
<tr>
<td>TOTAL GEs</td>
<td></td>
<td>1662</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>and what have you</em></td>
<td>2.2</td>
</tr>
<tr>
<td><em>or nothing</em></td>
<td>2</td>
</tr>
<tr>
<td><em>or what</em></td>
<td>1.7</td>
</tr>
<tr>
<td><em>and all the rest of it</em></td>
<td>1.3</td>
</tr>
<tr>
<td><em>and so on</em></td>
<td>.96</td>
</tr>
<tr>
<td><em>and such</em></td>
<td>.84</td>
</tr>
<tr>
<td><em>and what not</em></td>
<td>.72</td>
</tr>
<tr>
<td>remaining ‘other’ GEs</td>
<td>2.6</td>
</tr>
</tbody>
</table>
the current data is even lower, perhaps approaching the rate of working-class speech in Hull (Cheshire 2007: 164, Table 4). Second, the frequency in the *Roots Archive* of the category of short forms, i.e., *and that, and all, and all that*, is relatively high. These variants have been reported in earlier research in Scotland (Macaulay 1985) and both Pichler and Levey (2011) and Cheshire (2007: 164) report these to be frequent among working-class speakers in Berwick-upon-Tweed (34%, \( N = 268/783 \)) and Hull. Moreover, recent work reports them to be frequent among working-class children in London (Levey 2012). In the *Roots* communities, the rate of *and that* is only 19% overall, compared to 31% in Berwick-upon-Tweed (Pichler and Levey 2011). However, when *and that, and all and and all that* are taken together in the *Roots Archive*, they represent nearly 40% of the GEs in the data, i.e., their combined rate in the *Roots Archive* is higher than that in Pichler and Levey’s (2011) data from Berwick-upon-Tweed, as mentioned earlier. Given that the data under investigation were collected in relic dialect areas and from conservative speakers, the overwhelming presence of these short variants, which are thought to be a later development, is notable.

The next step is to consider whether the *Roots Archive* communities are differentiated with respect to this overall picture in type/variant distribution. Figure 5.2 shows the distribution of the major GE types by community.

![Figure 5.2 Distribution of GE types by community](image-url)
It confirms that the communities have a parallel pattern with respect to their inventory of GE types. *And (all) (that)* (light grey columns) is the prevailing category in nearly every community. Indeed, in Cullybackey and Maryport, it is the dominant category by a wide margin. The GE category with *something* (dark grey columns) is most robust in Cumnock and Portavogie whereas in Cullybackey and Maryport it is less frequent. The rate of use of forms in the ‘other’ category (nonce forms that are also reported elsewhere, e.g., *and so on, and whatnot*) is relatively stable throughout. None of the communities show more than a few tokens of *stuff-* or *whatever-*variants. Yet GEs with *stuff* and *whatever* are reported as frequent in North America (Tagliamonte and Denis 2010) and to be rising in frequency in apparent time in Berwick-upon-Tweed (Pichler and Levey 2011: 454, Figure 2) and York (Denis 2011). These discrepancies between the conservative dialects in the *Roots Archive* and the dialects from two larger centres in north-east England support the hypothesis that there is change in the composition of variants within the GE system over time but no change in terms of grammatical development. If it is simply the lexical components that are changing, this may reflect renewal rather than the evolution of lexical items into new grammatical functions.

Further support for this interpretation comes from a fortuitous comparison that can be made between individuals of different ages in the corpora. As it happens, two of the fieldworkers were in their twenties, i.e., considerably younger than the individuals they were interviewing who were all over the age of sixty.6 Thus, their use of GEs within the interview context offers a unique generational perspective on usage.7 Figure 5.3 shows the distribution of the major GE categories but this time contrasts the elderly participants with these interviewers. The results expose some pointed apparent-time differences in GE use. GE use among the elderly community members is dominated by the *and (all) (that)* category, forms rarely used by the interviewers. In contrast, the interviewers exhibit dramatic use of *stuff*-variants, a GE type rarely used by the interviewees. These discrepancies between the conservative dialect speakers and the younger interviewers provide a suggestive reflection of the type of change the GE system may have undergone over the twentieth century, namely lexical replacement of: *thing > stuff*. At the same time, it is interesting to note the relatively parallel frequencies of the *something/anything*-types across the two groups. This shows that while some

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6 These young interviewers are members of the same supra-local community (United Kingdom) and may be compared to the younger York speakers reported in Denis (2011). In other cases, local facilitators conducted the interviews with community members and there was considerably more parity by age.

7 Whether these differences are due to the fact that the young interviewers were also not in-group members cannot be disentangled from these data and remains an important issue for future investigation.
parts of the GE system are changing, other areas remain stable, at least across the (apparent-time) span of these materials. While other factors could be contributing to the differential use of GE variants among these two groups (e.g., contrasting roles in the interview context, gender asymmetry), it is striking that the very differences visible here in frequency and proportion of GE variants across elderly interviewees and young interviewers is also consistent with the patterns reported for older vs. younger individuals in urban locales elsewhere, either in North America (Tagliamonte and Denis 2010) or in more urban settings relatively nearby in the United Kingdom (Denis 2011; Pichler and Levey 2011), namely more stuff-variants among youth and more and (all) (that)-variants among elderly. These results directly impact the hypothesis stated earlier regarding the purported nature of the GE system. The hypothesis is that conservative dialects can be taken as a cautious representation of an earlier stage in the development of this system. If they are, then that system was no more grammaticalised than the GE systems reported in any other study. What contrasts is the composition of the system. These conservative dialects are dominated by forms of the type and (all) (that).

5.7 Constraints analysis

A central issue that emerges is whether or not GEs have been subject to grammatical change or lexical replacement (see also Denis and Tagliamonte
Chapter 4). Two of the main indicators of grammaticalisation are: (i) a change from longer GEs to shorter ones, and (ii) a change from co-occurrence of GEs with other discourse features to independent usage. The key evidence for lexical replacement is marked change in the use of the generic but no shifts in the contextual grammatical constraints. In the analyses that follow, I subject the data to an analysis of these constraints in order to test these potential indicators.

5.7.1 Length of the GE

Cheshire’s (2007) research carried out in the 2000s on young people’s GE usage in three English towns found a high frequency of *and that*. Following Aijmer (2002: 227), Erman (1995: 145) and others, Cheshire (2007: 167) reasoned that this was the result of a gradual loss of the longer GE variants because of reduction via clipping. In this hypothesis, longer GEs such as *and things like that* would have been present at earlier stages in the development of the GE system. Then, these would have gradually evolved into shorter GEs to arrive at a situation of frequent use of *and things*. If this trajectory is accurate, we would expect a greater number of longer GEs than shorter GEs in the *Roots Archive* data which represent an earlier stage in the development of GEs than the data analysed by Cheshire (2007).

Figure 5.4 tests this possibility by comparing the frequency of short and long GEs in each of the *Roots Archive* communities. The results provide a striking demonstration that the shortest GEs are predominant across all communities. Interestingly, the longer GEs show the highest frequency in Maryport. This is the locale that has previously exhibited the most advanced profile among the *Roots*
Archive communities (see, for example, Tagliamonte 2013). If anything, this suggests that the longer GEs, rather than the short ones, are developmentally advanced.

Figure 5.4 groups all of the GEs together. However, Figures 5.5–5.8 split the data so that the cross-community distribution of long vs. short variants can be viewed separately for the highest-frequency GE categories (see Table 5.1). Figures 5.5–5.8 confirm that the long vs. short phenomenon reported in the
overall perspective in Figure 5.4 accurately reflects the situation for each GE type and for each Roots community. There is no evidence for a trajectory of change from long to short. This means that the GE system in these varieties shows no evidence of an earlier stage in which longer GEs were present. Instead, just like more mainstream varieties (e.g., Toronto, York, London), they simply have more two-word variants.

5.7.2 Collocation of GEs with other discourse-pragmatic features

Another proposed indicator of grammatical change in the GE system is collocation with other discourse-pragmatic-pragmatic features. Cheshire
(2007: 185) argues that as GEs develop new pragmatic functions, they no longer require the support of other discourse-pragmatic features in the same clause. In this hypothesis, not only would longer GEs such as and things like that occur more often at earlier stages in the development of the GE system but they would also co-occur with discourse-pragmatic features to a greater extent than would shorter GEs. To test this hypothesis, we first tabulated the frequency and type of discourse-pragmatic features that co-occur with each of the main GE categories introduced in Table 5.2.

The most frequent discourse-pragmatic features used with GEs in the Roots Archive are you know \((N = 76)\), aye \((N = 25)\) and ken \((N = 25)\). Because the frequency of these markers was so rare, I offer a basic overview of co-occurrence patterns in Table 5.3. While most GEs can occur with these features, GEs with stuff rarely occur with any discourse-pragmatic feature. Moreover, not a single one occurs with anything-variants. The ‘other’ category is distinguished from the other GE categories by the co-occurrence with like and I don’t know. Importantly, and (all) (that) co-occurs with the most wide-ranging discourse-pragmatic features in these materials.

The results in Table 5.3 cannot be feasibly split between short and long GEs, which would be the true test of the hypothesis, because the co-occurring discourse-pragmatic features themselves are too sparse. However, the overall results demonstrate that and (all) (that) – an inherently short GE type – co-occurs with the broadest range of discourse-pragmatic features while others have a comparatively narrow range. This trend goes in the opposite direction of prediction, i.e., more co-occurring discourse-pragmatic features with short GEs.

### 5.7.3 Statistical modelling

Statistical confirmation of the major trends and patterns among the main GE types in the Roots Archive is provided in Table 5.4. The model tests the effect on variant category choice of length and the presence of a co-occurring discourse-pragmatic feature where this is possible. The analysis is a fixed-effects logistic model using Goldvarb X (Sankoff et al. 2005). The results reveal that the only factor that is significant to the variation among the major types of GEs in these data is community. Each community favours different GE types. Further, certain varieties privilege one or more types and in some cases certain types rarely occur. For example, something-variants are disfavoured in Maryport while thing(s)-variants are disfavoured in Cumnock. More importantly, however, observe that neither the length of the GE nor the presence of a co-occurring discourse-pragmatic feature is significant for any

---

8 The type and (all) (that) is an inherently short GE type and so it is not modelled in the analysis.
<table>
<thead>
<tr>
<th>GE type</th>
<th>you know</th>
<th>aye</th>
<th>ken</th>
<th>I mean</th>
<th>eh</th>
<th>just</th>
<th>anyhow</th>
<th>like</th>
<th>kind of</th>
<th>I don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>and (all) (that)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>something-variants</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>thing(s)-variants</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>everything-variants</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>stuff-variants</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>anything-variants</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Other</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
of the main GE types (where testing this effect is possible). Only in the catch-all group of ‘other’ GE variants is there an effect of length and co-occurrence with a discourse-pragmatic feature. The reason for this is the wide range of forms, mostly long (e.g., and all the rest of it), that comprise this part of the system.

5.7.4 What of ‘and that’?

Given the notable differences across communities based on the type of GE, it will be instructive to determine how the major GE type in these data, and (all) (that), distributes across communities when the individual variants are viewed independently. The form and that is the pivotal form proffered as evidence that the GE system is changing over time. The argument is that it is the most advanced in terms of grammaticalisation based on tests for frequency, length and co-occurrence with discourse-pragmatic features (see, for example, Cheshire [2007] based on earlier research by Aijmer [2002]; Brinton [1996]). Figure 5.9 plots the frequency of each of the variants of this type, i.e., and all, and that and and all that. The results reveal that the distribution of these forms is highly differentiated from one community to the next. Maryport favours the and that-variant, Portavogie favours and all that and Cumnock and Cullybackey favour and all. The results for Maryport, in north-west England, show remarkable correspondence with working-class individuals in the communities of Hull.
(Cheshire 2007) and Berwick-upon-Tweed (Pichler and Levey 2011), also both located in northern England. The fact that, in addition, these data comprise a majority of working-class speakers corroborates the hypothesis that and that is a working-class variant (Cheshire 2007: 164). Further, correspondence across these northern communities suggests that and that may well be a more general northern working-class feature.

A final question to consider is whether and that, as in (10), is old or new. In working-class speech in the early 2000s in Reading, Milton Keynes and Hull in the United Kingdom, and that is reported to be ‘firmly entrenched’ (Cheshire 2007: 165). Quantitative investigation in Berwick-upon-Tweed (Pichler and Levey 2011) allows a consistent comparison with the Roots Archive data, as in Figure 5.10. This demonstrates that the oldest living generation in the small north-east England town of Maryport also use and that to a relatively high degree, patterning along with Berwick-upon-Tweed. This distributional pattern suggests that and that is not an advancing GE in England but rather the retention of a conservative northern English feature generally, as in (10a)–(10b).

In sum, the short GE and that is not a development, i.e., a reflex of ongoing grammaticalisation, but it is a retention.

(10) a. We had greenhouses like and green tomatoes and that you know. (Phil Stevenson, 84, MPT)

b. And then there were maybe a wee dance and that. (Angus Milroy, 66, CMK)
The study of GEs in the Roots Archive has offered a new perspective on the GE system in relatively conservative dialects among elderly speakers from the general vantage point of northern England, south-west Scotland and Northern Ireland. GE use in these conservative dialect data is an indication into a possible earlier stage in the GE system. Given the competing hypotheses regarding the status of the GE system in contemporary varieties in England (and elsewhere), this is an important addition to the current body of knowledge. Both frequency and patterns of use combine to show the inner workings of the system across dialects. While there is very little use of stuff-variants, a type that is reported to be accelerating in North America as well as in the northern English city of York (Denis 2011), other short forms are prevalent, especially and that, and all and all that.

Comparing these conservative northern English dialects with earlier analyses of Hull (Cheshire 2007), Berwick-upon-Tweed (Pichler and Levey 2011) and in some cases York (Denis 2011) reveals that both short and long forms are part of the GE inventory, regardless of place or nature of the locality or period represented by the data. Thus, while some previous research (see, for example, Aijmer 2002; Brinton 1996) has built a picture of the GE system as one that involves increasing grammatical development of forms (e.g., and things like that > and things) as they grammaticalise over time, the results presented here continue to corroborate the alternative perspective (Pichler and Levey 2011;
Tagliamonte and Denis (2010), namely that there is no evidence for ongoing grammaticalisation.

Indeed, it seems likely that the English GE system has had a varied inventory of forms over an extended period of time. Perusal of the Oxford English Dictionary shows that most of the currently available variants have been attested for centuries. At the same time, it is becoming apparent that the generic component of this system is undergoing shift (i.e., that > stuff). Conservative dialect speakers in the four isolated communities in the Roots Archive as well as working-class speakers in Berwick-upon-Tweed and Hull retain a healthy proportion of variants with and (all) (that) and show scant incursion of stuff-variants.

Another attribute of the GE system is its marked dialectal dimension. The cross-dialect comparison has exposed the local aspects of this area of grammar. While a core inventory of forms is stable both across these conservative dialects and across studies (e.g., or something, and things, and everything), the individual communities in the Roots Archive each privilege one of the other forms in their inventory: and all, and all that, and that (Figure 5.9). These results suggest that further research on different varieties will offer additional new perspectives on this grammatical system. Which parts of the system are universal (in the sense that they occur consistently across varieties) and which are local (in the sense that they are unique to particular communities), and what is the linguistic mechanism underlying the difference between these types across locales?

5.9 Conclusion

The use of relic dialects as a proxy for diachronic data in the study of discourse-pragmatic change introduces a novel application of research practice that extends the time-depth for discourse-pragmatic change research. As far as methods themselves are concerned, none of the analyses I have implemented here are particularly new. They follow in line with a long-standing tradition in variationist sociolinguistics to approach linguistic phenomena systematically, employing methods that are both accountable and replicable (Labov 1972b). The extension of quantitative methods to features beyond phonology has been going on since the early 1970s, beginning with Sankoff’s (1973) research on tense-aspect phenomena, indefinites and complementisers, then extending into broader areas of more quintessential discourse-pragmatic phenomena, including punctors (Vincent and Sankoff 1992), exemplification (Vincent 1992) and, of course, GEs (Dubois 1992). Within the same time-frame, many developments were concurrently underway in the investigation of the pragmatic and interactional functions of these features (see, for example, Aijmer 1985; Schiffrin 1987; Stenström 1998). What is new in more recent approaches to
discourse-pragmatics is to follow through on: (i) Lavandera’s (1978: 181) suggestion to ‘relax the condition that the referential meaning must be the same for all the alternants and substitute for it a condition of functional comparability’; and (ii) Sankoff and Brown’s (1976: 650) method to include the grammatical function of a construction as well as the ‘the uses to which it is put’. In other words, variationist methods are employed but are guided by structural, functional and interactional information (see, for example, Cheshire 2007; Pichler 2013, Chapter 3; Tagliamonte and Denis 2010, Chapter 4; Wagner et al. Chapter 9). In essence, this practice leads to a synthesis of information that can then be used for delimiting the grammatical dimensions of the variable set of which the discourse-pragmatic variants are a part. These developments tap the best of both worlds (quantitative and qualitative) and together serve to advance the host of discourse-pragmatic features available for study. The next step will be to ensure that a consistent methodological practice is applied rigorously across datasets so that cross-variety comparisons and diachronic pathways can be meaningfully explored.

With regard to more theoretical issues, these findings offer an illuminating window into discourse-pragmatic change. First, the building evidence suggests that the nature of changes in the GE system is not a singular or linear grammaticalisation pathway as often documented in the literature. There is no apparent influence of the Constant Rate Effect (Kroch 1989), the well-attested pattern of parallel development of constraint effects over time. While the GE inventory seems to exhibit a cohesive set of forms and patterns, their compositional inventory varies and local (idiosyncratic) forms appear. Nor is analogical levelling, the foundational process underlying grammatical change (Kurylowicz 1949), visible in the evolution of GEs either singularly or as a group, at least not insofar as I have been able to test for this here. At the same time, the GE system has evidently changed dramatically over the past century as new components have emerged (stuff) and taken a prominent position within the system, at least in some locales and populations. As research on discourse-pragmatic features continues, a more comprehensive inventory of variables, time points and types of data will enrich this building picture of the nature of change in features such as GEs and their like.

As one reviewer noted, previous studies have demonstrated that decategorialisation is a crucial measure of GE grammaticalisation. Further study of the GEs in the Roots data would undoubtedly profit from a test of their semantic-syntactic distribution and could substantiate the claim regarding analogical levelling.
6 Quotatives across time: West Australian English then and now

Celeste Rodríguez Louro

6.1 Introduction

Labov’s (1972c: 98) ‘cumulative principle’ which states that ‘the more that is known about a language, the more we can find out about it’ crystallises in a plethora of studies on direct speech- and thought-encoding across Englishes, exemplified in (1)–(4).

(1) I walked down the hill and as I was going down the hill I thought, ‘By Jove, I might be able to get into the Flying Corps. Wouldn’t it be lovely?’ (HB-M-1889)

(2) Dad had no time for religion. He reckons it was just a big, bloody business robbing all the poor people! And he says, ‘Well, that’s her thing. She can go for her life on that so long as it doesn’t interfere with me!’ (FB-M-1922)

(3) So you’re thinking positive and the next thing you know, they find out you’ve got a record or something. Ø, ‘Tough luck Charlie. You don’t get the job.’ (TM-M-1970)

(4) She’s like, ‘Oh!’ and then goes off into yelling, you know, and you can’t have a decent argument any more. (AM-M-1970)

Quotation plays a key role in how narratives are constructed and researchers have investigated the use of quotative verbs in some depth. A wealth of mostly synchronic research into the quotative system of predominantly inner-circle

A heartfelt ‘thank you’ to Hayley Crookes and Jean Chetakovich from the State Library of Western Australia for their invaluable help locating audio and transcription files in their collection, and to Cecilia Leong-Salobir for putting me in touch with the State Library of Western Australia in late 2011. Thanks are also due to Anneli Strutt for her fantastic research assistance, and to Sali Tagliamonte and Alex D’Arcy for their unparalleled intellectual and human support. I am also grateful to Heike Pichler for the opportunity to showcase original variationist research into Australian English and for her brilliant editorial guidance. Any infelicities are purely my own.

1 All examples in this chapter are reproduced verbatim from the UWA Corpus of English in Australia (see Section 6.2.1). Throughout, the information in brackets indicates speaker ID (e.g., ‘HB’), speaker sex (F = female, M = male) and speaker year of birth (e.g., 1889). All names are pseudonyms. Non-verbal information is provided in curly brackets, e.g., {laughter}, and Ø stands for the zero quotative variant (see Section 6.2.2.1).

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Engishes has noted the emergence of innovative forms such as be like in (4) to introduce speech, sound, thought and gesture (see, inter alia, Baird 2001; Barbieri 2007; Blyth et al. 1990; Buchstaller 2006a; Buchstaller and D’Arcy 2009; Cukor-Avila 2002; D’Arcy 2004, 2010; Dailey-O’Cain 2000; Ferrara and Bell 1995; Johnstone 1987; Macaulay 2001; Romaine and Lange 1991; Tagliamonte and D’Arcy 2004; Tagliamonte and Hudson 1999; Terraschke 2010a; Winter 2002). Crucially, quotative be like is not a fleeting innovation but is instead strongly entrenched in the quotative system of many contemporary varieties of English (Buchstaller 2006a; Cukor-Avila 2002; Levey Chapter 7; Tagliamonte and D’Arcy 2007). In my recent study of Australian English (AusE) (Rodríguez Louro 2013), I have reported an adolescent peak in the use of be like, an indication of a change in progress (Labov 2001b: 455). If be like usage in AusE is a recent innovation (as my earlier findings suggest), two questions remain: (i) what was the AusE quotative system like before the incursion of quotative be like?; and (ii) given that self-revelation has emerged across varieties of English as a discourse mode where speakers imbue their narratives with reports of their inner thoughts, attitudes and feelings (Buchstaller and D’Arcy 2009; D’Arcy 2012; Ferrara and Bell 1995; Tagliamonte and D’Arcy 2007), is the incursion of be like motivated by an increase in self-revelation in earlier AusE narratives?

The evolution of the English quotative system has received less attention than its synchronic variation. Notable exceptions are listed in Table 6.1. Buchstaller (2011) and D’Arcy (2012) performed variationist analyses on the diachrony of quotation in north-east England and New Zealand, respectively, in order to examine the quotative system of these varieties before the rise of be like. They document little variation in earlier quotative systems, with say

<table>
<thead>
<tr>
<th>Study</th>
<th>Variety</th>
<th>Corpora</th>
<th>Data collection</th>
<th>Speakers’ years of birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2011)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2012)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
uncontested well into the twentieth century and think emerging as an encoder of thought and attitude before the ingress of be like in the second half of the twentieth century. Crucially, both studies show marked restructuring of the quotative system over time. As D’Arcy (2012: 360) notes, the contemporary quotative system of English results from historical evolution and is not the ‘reflex of recent lexical innovations and incursions’, a finding also underscored in the present study and only made possible through the examination of longitudinal data. Moreover, the rise of self-revelation in narrative mentioned earlier is viewed as one of the main reasons motivating the expansion of the English quotative system. Ferrara and Bell (1995: 283) observe that internal state reporting in their American English data is to be expected given Carbaugh’s (1988) socio-cultural observation that American narrative tends towards, as they put it, the ‘lionisation of self-revelation as a preferred cultural mode’. The increase of self-revelation in narrative – and the concomitant rise in the use of quoted material – has been documented beyond American English to include Canadian, British and New Zealand English (NZE) (Buchstaller and D’Arcy 2009; D’Arcy 2012; Tagliamonte and D’Arcy 2007). The question remains as to whether these changes are also attested in earlier AusE.

Drawing on spontaneous narratives of personal experience collected in Perth, Western Australia, between 1963 and 2011, this chapter offers the first longitudinal study of quotatives in AusE, a variety severely underdocumented in the variationist literature (Schneider 2012: 349). A singular real-time depth of forty-eight years and a sample of speakers aged thirty-five to ninety-three show that the Australian quotative system has undergone dramatic changes from the nineteenth to the twenty-first century and that – in line with D’Arcy’s (2012) findings for NZE – the quotative system was in flux well before the arrival of be like. These findings contribute an original perspective to current knowledge about the expansion of the quotative system in AusE. They suggest that the functional niche of internal thought- and attitude-encoding was already in place by the time be like entered the system in the late twentieth century, which, in turn, may explain why be like’s expansion was so rapid. The analysis also reveals variability in the use of quotative frames across time: a highly invariable system dominated by say giving way to patterned variability in how quotative introducers, grammatical person and tense are deployed in narratives. Moreover, variation in AusE quotatives across time is socially constrained. These results are important in highlighting the complex nature of discourse-pragmatic variation and change.

2 The term Australian English (AusE) is used in this chapter to refer to Anglo-Celtic varieties of English spoken by the majority of the population in Australia. The data used here stem from speakers born and bred in Western Australia, and the use of the term AusE may mask intra-variety variation. The degree to which further terminological distinction is needed remains an empirical question.
The chapter is organised as follows. The data and methods used in this study are presented in Section 6.2, followed by the presentation of the longitudinal results in Section 6.3. The chapter ends with a discussion and conclusion in Sections 6.4 and 6.5.

6.2 Data and methods

6.2.1 Data: the University of Western Australia Corpus of English in Australia

The present study is based on an analysis of spontaneous narratives of personal experience extracted from two corpora of West Australian vernacular English: (i) the State Library of Western Australia Oral History Collection collected between 1963 and 2007 and including speakers born between 1870 and 1980; and (ii) the University of Western Australia (UWA) Sociolinguistic Interview Corpus collected in 2011 and including speakers born between 1950 and 1960. Both data sources are components of the UWA Corpus of English in Australia (Rodríguez Louro under construction); they are comparable in that the data were collected in the Australian city of Perth by an interviewer asking questions about the interviewees’ lives, including danger of death scenarios as well as childhood experiences and reminiscences (Labov 1984: 34). The combined dataset of 822,144 words includes forty-four interviews with twenty-three female and twenty-one male Anglo-Australians of professional ($N = 29$) and non-professional ($N = 15$) backgrounds. A breakdown of the speaker sample is given in Table 6.2. For the present analysis, it is organised into four periods by speakers’ year of birth: 1870–1890, 1920–1930, 1950–1960 and 1970–1980.

<table>
<thead>
<tr>
<th>Speaker year of birth</th>
<th>Period of data collection</th>
<th>Speaker age at the time of data collection</th>
<th>$N$ of speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870–1890</td>
<td>1963–1980</td>
<td>88–93</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total $N$ of speakers</strong></td>
<td></td>
<td></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>

3 The first pages of the transcribed oral histories and sociolinguistic interviews contain detailed information on each speaker’s demographics, including age, sex, place/year of birth and occupation. These demographic details were used in coding tokens for social predictors.
Data for each of these periods were collected at different points in time during the period spanning 1963 and 2011; speaker ages range from thirty-five to ninety-three across time periods. Importantly, all speakers included in the sample were aged thirty-five and above at the time of the interview, i.e., they were all interviewed well after the stabilisation of their vernaculars (Labov 2001b: 447; Tagliamonte and D’Arcy 2009: 66).

6.2.2 Methods of data analysis

6.2.2.1 Variable context Research into linguistic variables ‘above and beyond phonology’ (Sankoff 1973) must grapple with the type of ‘form-function polyvalence’ (Sankoff 1988: 157) characteristic of natural discourse. In the tradition of variationist research into discourse-pragmatic variables (Dines 1980: 15) and in line with previous research on quotatives (see, inter alia, Macaulay 2001; Tagliamonte and Hudson 1999), the variable context for the present analysis was functionally defined to include ‘all strategies used to introduce reported speech, sounds, gesture and thought by self or other’ (Buchstaller 2006a: 5). I thus included in the analysis the range of quotative frames, including variants with an overt quotative introducer, as in (5)–(12), and the zero variant represented by Ø in (13).

(5) A mate said, ‘Look do you want to meet a good girl, beautiful girl? She’s staying with my sister.’ (RKT-M-1925)

(6) Because I thought, ‘The government has no right to take that money.’ (JT-M-1886)

(7) I put my arms out and went, ‘Nooo!’ (SIBUR-F-1955)

(8) We were listening to it and as it goes on it gets worse and I’m like, ‘Oh my God!’ But yeah, you should listen to it. (HGCD-M-1950)

(9) And it’s like, ‘Calm down, it’s me that’s going, not her.’ (AM-M-1970)

(10) Cause every job you go for it’s, ‘What experience have you had? What experience have you had?’ (VC-F-1960)

(11) Her boyfriend was the one that got her pregnant, or supposedly pregnant, and after he got her pregnant, he just told her, ‘Piss off. I was only using you.’ (TM-M-1970)

4 Tokens of it’s like were not included in the multivariate analysis presented in Section 6.3.2 due to the variant’s invariance, i.e., the fact that it does not feature in constructions with lexemes other than like (*it’s say; *it’s think; *it’s go) (Tagliamonte and Hudson 1999: 169, fn. 10).
Garry yelled out, ‘Mum, what’s that man sitting them orses for?’ in his worst South Fremantle accent. (GB-M-1926)

And his high beam didn’t work, so they pulled him over Ø, ‘Flick your high beam on for us please.’ (HC-F-1970)

The data were analysed drawing on the available verbatim transcripts and their corresponding digitised audio files. Checking each transcription against the recorded material proved crucial to providing accurate results. Quotative frames and the quote/inner thought they introduce had at times been omitted from the original transcription. This may be due to the fact that ‘discourse-pragmatic features [...] are referentially and syntactically optional elements of discourse that can be omitted without necessarily altering the propositional meaning or syntactic structure of an utterance’ (Pichler 2010: 588). However, making sure they are extracted from the available materials is paramount to exhaustive data mining. An example is shown in (14), where the bolded and italicised text consists of material missing from the original transcription which was later recovered by double-checking the transcript.

Me and most people get tired in the afternoon when it’s about half past two, three o’clock, because you’re standing on your feet eight hours a day and your legs just can’t take it anymore, but then they get used to it but you still feel tired at the end of the day. You say, ‘Oh I can’t wait till half past four and you’re at the door.’ (TMA-F-1971)

6.2.2.2 Exclusions Incomplete and ambiguous tokens were excluded from the analysis. Instances such as (15) were viewed as incomplete as the quoted content was missing. In (16), the connector and makes utterance interpretation ambiguous: while in (16a) call is analysed as the quotative verb, in (16b) the quotative is zero.

And he just had it going cheap so we just thought ... (AM-M-1970)

a. And the tradesmen would call, ‘And Good morning Mrs Thompson,’ it was getting embarrassing so it wasn’t long and we thought we would get married. (JT-M-1886)

b. And the tradesmen would call and Ø, ‘Good morning Mrs Thompson,’ it was getting embarrassing so it wasn’t long and we thought we would get married. (JT-M-1886)

Canonically, English quotative frames are positioned immediately before the quoted content (D’Arcy 2012; Romaine and Lange 1991; Schiffrin 1981). However, among those born in the earlier periods, say is differentially positioned before or after the quoted material, as shown in (17). Such tokens were included in the distributional analysis in Section 6.3.1. However, given the fact
that post-posed syntactic position is restricted to the variant *say*, post-posed *say* tokens were excluded from the multivariate analysis presented in Section 6.3.2 which focuses on quotative variation in pre-quote position.

(17) ‘No blokes,’ they *said*. (FB-M-1922)

6.2.2.3 Sociolinguistic variables

The adoption in this chapter of variationist methods parallel to those in Buchstaller (2011) and D’Arcy (2012) – including circumscription of the variable context and coding procedures for independent variables – allows for comparability of results across longitudinal studies of the quotative system in order to ‘determine where intra- and inter-dialectal discourse variation occurs’ (Pichler 2010: 601).

The linguistic factors involved in synchronic variation in the English quotative system – usually described in relation to *be like* but also applicable to other quotative frames (D’Arcy 2012) – include the ‘classic’ variables of grammatical person (of the matrix subject) and content of the quote (Tagliamonte and D’Arcy 2007: 203), with the latter including the factors: speech, as in (18); inner thought, as in (19); and non-lexicalised sounds and gestures, as in (20). Previous research has shown that *say* and *go* tend to co-occur with third-person speech and that *go* tends to collocate with non-lexicalised sound (Blyth et al. 1990; Buchstaller and D’Arcy 2009; Romaine and Lange 1991; Tagliamonte and D’Arcy 2007).

(18) He said, ‘I never got a photo of it because we didn’t have a damn camera.’ (FB-M-1922)

(19) I thought, ‘This looks like a really lovely little school.’ (RKG-F-1957)

(20) And she goes, {sound of intake of breath} ‘did you hear that Peter ... he’s going with a girl?’ (AM-M-1970)

The effect of tense/time reference on quotative variant choice has been shown to vary across locales (see, for example, Buchstaller and D’Arcy 2009), with the most consistent finding suggesting that in narration *be like* tends to collocate with the historical present, i.e., with verbs that are morphologically present but have past tense reference (Schiffrin 1981). To test the effect of tense on quotative variant choice in AusE, I coded all tokens of the variable in my data for one of the following factors: present tense, as in (21); past tense, as in (22); and historical present, as in (23).

(21) So, you know, he goes to the shop and *says*, ‘Oh, did any kids bring any crates in here today?’ and they *go*, ‘Yeah.’ And if you just happen to be hanging around he *goes*, ‘Oh, that kid there, there and there,’ and he looks around and he gets the cops and you hear this walling of sirens. (TM-M-1970)
I remember he was an American sailor and he was just solitary and walking round and we picked him up and said, ‘Come in,’ and he sat down at our grand piano and played the piano for a couple of hours. (MR-F-1928)

And of course when the contract was finished they wanted us to move and my father says, ‘No.’ (SH-F-1889)

The social factors of sex and occupation are included in the quantitative analysis to tease out the degree to which these impact potential changes in the choice of quotative variants across time. Information about speakers’ occupational status is available across corpora. Professional occupations include those for which speakers have completed one or more university-level courses (e.g., medical doctor, lawyer, university professor). Non-professional speakers are engaged in occupations for which an apprenticeship or trade certificate is needed (e.g., factory worker, welder, plumber).

6.3 Results

6.3.1 Overall distribution of variants

To examine the distribution of quotative variants before the onset of be like and to establish whether the AusE quotative system has changed across time, let us first consider in Figure 6.1 the overall usage frequency of quotative frames in the West AusE speaker sample introduced in Table 6.2.5 Figure 6.1 shows that, across time periods and in line with previous research (Blyth et al. 1990; Buchstaller 2011; Buchstaller and D’Arcy 2009; Cukor-Avila 2002; D’Arcy 2004, 2012; Ferrara and Bell 1995; Tagliamonte and Hudson 1999; Tannen 1986), say is the main quotative variant used. These results are noticeably different from those reported in recent comparable research into the contemporary AusE quotative system. Rodriguez Louro (2013) reports that be like is the most widely used quotative variant among Australian speakers aged eleven to twenty-six (born between 1985 and 2000), accounting for 80% of all quotatives used by speakers in this age cohort. The results presented in Figure 6.1 illustrate a vastly dissimilar system for AusE speakers born between 1870 and 1980, with quotative say dominating across cohorts and time periods.

5 The ‘other’ category in Figure 6.1 includes the following quotative variants across time periods. 1870–1890: tell (N = 5), ask (N = 2), be (N = 2), write (N = 2), yell (N = 1), reply (N = 1), explain (N = 1), whisper (N = 1) and a small group of miscellaneous tokens (N = 5). 1920–1930: be (N = 7), yell (N = 4), go like that (N = 3), ask (N = 3), tell (N = 2), hear (N = 2), something like Ø (N = 2) and a small group of miscellaneous tokens (N = 4). 1950–1960: be (N = 6), figure (N = 2), something like Ø (N = 2), wonder (N = 2), ask (N = 1) and tell (N = 1). 1970–1980: tell (N = 7), be (N = 7), ask (N = 4), something like Ø (N = 2) and small group of miscellaneous tokens (N = 6). Across time periods, the ‘miscellaneous’ category includes infrequent and unusual quotative variants such as lash out with, talk and sing.
Example (24) illustrates typical uses of quotative *say* in late nineteenth century Anglo-AusE. A usage unattested in the later AusE data is that of *say* after the quotation (see also (17) in Section 6.2.2.2). This usage is most frequent in the speech of those born between 1870 and 1890 where it accounts for 11% (N = 42/392) of all quotatives used (see D’Arcy [2012] for similar findings in NZE). As noted in Section 6.2.2.2, because post-posed syntactic position is restricted to *say*, these tokens were not included in the multivariate analysis presented in Section 6.3.2. However, a brief note on their usage is in order. With time, and in line with D’Arcy’s (2012) findings for NZE, quotative post-posing has become obsolete and is absent from contemporary conversational AusE. We can witness a steady decrease in its use from the late nineteenth to the mid-twentieth century: 11% (1870–1890) > 4% (1920–1930) > 0% (1950–1960). This development suggests an important change in how direct speech is framed in AusE narratives.

(24) On this particular day he *said*, ‘We are going to have company drill.’ He *said*, ‘I’m going to make a few purposeful mistakes and I want you to tell me when it’s over what mistakes I’ve made.’ Well, he made some palpable errors and I *said*, ‘Oh, there’s another mistake, Captain Thompson.’ He *said*, ‘And what was that?’ ‘Well,’ I *said*, ‘The company was in such and such a position and you gave a certain order which was quite incorrect.’ ‘Oh,’ he *said*, ‘Was it?’ So I thought, ‘I put my foot in it!’ (JT-M-1886)
6.3.2 Multivariate analysis

This section focuses on uncovering the sociolinguistic constraints on the use of say, the most frequent quotative variant in the dataset across the time periods represented in the current data (see Figure 6.1). What do these constraints tell us about the evolution of the AusE quotative system?

Multivariate analysis with Goldvarb X (Sankoff et al. 2005) is used to uncover these constraints. Some notes on the analysis and the results reported in Tables 6.3–6.4 and 6.6–6.7 are in order. Firstly, across multivariate analyses, non-application values feature the most frequent quotative variants other than say, including zero, think, go and (where applicable) be like. Quotatives in the ‘other’ cohort are not included in the multivariate analysis. Secondly, the token count across factor groups is not always identical due to exclusions. For example, zero quotatives had to be excluded from consideration in the grammatical person and tense factor groups. Thirdly, the only factors considered in the analysis are those representing no more than 95% of the data in the respective factor group (Guy 1988: 131). Where tense variation is modest, all tokens with non-past tenses (i.e., simple present, historical present, modal constructions) are collapsed. Fourthly, content of the quote is not included as a factor group in the multivariate analyses of say because say categorically introduces direct speech (rather than thought or non-lexicalised sound/gesture). The relative frequency of speech- vs. thought-introduction is addressed in the discussion of the results in Section 6.4. Finally, across multivariate analyses, favouring factor weights are shaded while non-significant factor weights are given in square brackets.

Qualitative observations across time periods are also offered to illustrate how numerically marginal quotative variants have extended their pragmatic function across time.

6.3.2.1 The late nineteenth century (speakers born between 1870 and 1890)

The quotative system of those born between 1870 and 1890 is remarkably invariable, both in terms of the quotative variant used and in terms of the function of quotation. As shown in Figure 6.1, say represents 76% of the quotatives employed by speakers born in this period. Zero quotatives are well represented (14%); think is used minimally (5.4%); and (third-person-marked) quotative go is infrequent (0.6%) and pragmatically restricted to introducing either lexicalised sound, as in (25), or verbatim content, as in (26).

   b. The machine was flying about a hundred thousand feet and all of a sudden it went, ‘Whoosh’ and nearly turned over. (HB-M-1889)
The first verse went, ‘Let books for a while have a rest on their shelves Viva la compagnie. While we’re singing the praise of our excellent selves. Viva la compagnie.’ (BH-F-1889)

Table 6.3 displays the results of a multivariate analysis of the sociolinguistic factors constraining the use of say among speakers born between 1870 and 1890. The results show that tense exerts the strongest influence on say usage, with say more likely to occur with the past tense in this cohort. Regarding social factors, occupation plays a significant role, with professionals slightly favouring say over non-professionals. A closer look at the use of say vs. other quotative variants across occupational groups shows that while professionals in this period use quotatives other than say (including zero, think and go) at a rate of 13.5%, their non-professional counterparts employ quotative variants other than say at a rate of 29.4%. These differences suggest that change in the quotative system of speakers born in the late nineteenth century was propelled by those from a non-professional background. Cross-tabulations of occupation and sex (not reproduced here) show that it is non-professional males who frequently use quotatives other than say, while non-professional females exclusively use say.

6.3.2.2 The early twentieth century (speakers born between 1920 and 1930)
As shown in Figure 6.1, the quotative system of those born between 1920 and 1930 is also relatively invariable, with say dominating at 68%. Zero quotatives

\[ \begin{array}{lrr}
\text{Input} & .92 \\
\text{Total } N & 495 \\
\text{FW} & \% & N \\
\text{Tense} \\
\text{Past} & .51 & 93.1 & 407 \\
\text{Non-past} & .25 & 81.2 & 16 \\
\text{Range} & 26 \\
\text{Occupation} \\
\text{Professional} & .50 & 86.5 & 267 \\
\text{Non-professional} & .49 & 70.6 & 228 \\
\text{Range} & 1 \\
\text{Sex} \\
\text{Female} & [.69] & 91.3 & 23 \\
\text{Male} & [.49] & 78.6 & 472 \\
\end{array} \]

In line with previous research (Blyth et al. 1990; Romaine and Lange 1991; Tagliamonte and Hudson 1999), say almost categorically occurs with third-person subjects in this cohort; therefore, person was not included as a factor group in the analysis presented in Table 6.3.
show a sizeable increase in comparison with the previous cohort (21%), and *think* continues to feature minimally (2%). Quotative *go* (marked for third person) evinces a minimal increase in frequency across the two cohorts (from 0.6% to 2%), and the pragmatic contexts in which it appears are in line with its long-documented usage, i.e., the encoding of lexicalised sound and gesture (first attested in the Oxford English Dictionary in 1791, D’Arcy 2012: 353). Importantly, we find two variants in this cohort (subsumed in Figure 6.1 in the ‘other’ category) that were not attested in the previous cohort: the *go like that* {gesture}-construction, illustrated in (27) and the *something like Ø*-construction, shown in (28). Use of the latter variant is in line with Haddican and Zweig’s (2012: 12) proposal that ‘be like’ quotatives involve a null *something* indefinite’ and a null deictic ‘that’ usually unexpressed in inner-circle Englishes. The uses in (28) may thus be viewed as precursors to quotative *be like*, undocumented in the dataset used here until the mid-twenthieth century (see Section 6.3.2.3).

(27) A little girl at the till there was *going like that* {gesture} and she marked it up. (RKT-M-1925)

(28) a. *Something like Ø*, ‘State School kids are stupid kids’ and something else, I don’t remember. (FB-M-1922)
   b. *What’s that rhyme they did? Something like Ø*, ‘Pigs in and out the water.’ {laughs} (MMS-F-1924)

The sociolinguistic conditioning of *say* in this cohort is considered in Table 6.4. The results are similar to those yielded for the predecessor cohort: *say* overwhelmingly occurs with third-person subjects (and was therefore not

<table>
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<tr>
<td>Non-professional</td>
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<tr>
<td>Range</td>
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<tr>
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<th>N</th>
</tr>
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<tbody>
<tr>
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<td>191</td>
</tr>
<tr>
<td>Non-past</td>
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<th>N</th>
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<td>153</td>
</tr>
<tr>
<td>Male</td>
<td>65.9</td>
<td>223</td>
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Table 6.4. Contribution of linguistic and social factors to the use of *say* among speakers born between 1920 and 1930
included in the multivariate run), and it is associated with past tense contexts. However, the strength of tense has diminished in relation to the previous period; this factor group no longer ranks first in the multivariate analysis. Instead, in this cohort, occupation exerts the most important effect on the variation between say and other quotative variants, with professionals favouring say over non-professionals. When occupation and sex are considered together, males in both occupational groups are more likely than their female counterparts to use quotatives other than say (i.e., zero, think, go): 34% ($N = 76/223$) vs. 17% ($N = 26/153$). Specifically, it is non-professional males who take the lead: their use of non-traditional quotatives, including think, zero and go, equals their say usage.

Particularly noticeable is non-professional males’ preference for the zero variant, exemplified in (29), which accounts for almost half of all quotatives used by this group (47%, $N = 54/116$). The rise of the zero variant goes hand-in-hand with an increase in the introduction of thought and attitude in narratives, and is in line with the change in narrative style mentioned at the outset of the chapter and explored in more detail in Section 6.5.

(29) Yes we had a few Italians at our school, due to them coming in from the vineyards and the Swan. Ha! Garlic all over you! You could smell who was sitting behind you. Ø, ‘Oh, stop your yawning. Blow your stinking garlic in some other direction, not down our neck.’ (FB-M-1922)

Previously dominated by say and direct speech encoding, the system of those born in the early twentieth century shows increasing variability in quotative variants, and the rise of the null form heralds the introduction of reported thought and non-lexicalised content, an upward trend that, as shown next, continues well into the mid-twentieth century.

6.3.2.3 The mid-twentieth century (speakers born between 1950 and 1960)

Although still dominated by say (58%), the quotative system of AusE speakers born between 1950 and 1960 nevertheless displays richer variation than it did previously. As shown in Figure 6.1, the frequency of think has risen considerably (16%), that of zero has declined somewhat (16%) and that of go is negligible (1%). While still incipient (1%), be like is first attested among those born in the mid-twentieth century. The increasing usage rates of think and the appearance in this cohort of be like reflect a rise in the encoding of inner thought and attitude (see, for example, (8) where be like introduces internal thought). Previously almost invariably used with the third person, the occurrence of say is no longer restricted to third-person subjects, and hence its inclusion in the statistical analysis reported in Table 6.5.

Table 6.5 shows the results of a multivariate analysis of the sociolinguistic factors constraining the use of say by speakers born between 1950 and 1960.
Say is significantly constrained by grammatical person and tense: it is favoured with third-person subjects and in the past tense. The rise of think among those born in the mid-twentieth century further contributes to the strong effect of third-person subjects on say usage. The hallmark of think is its co-occurrence with first-person subjects, and the effect of this trend impacts the entire quotative system. Say usage is not significantly constrained by social factors in this period. In line with previous cohorts, however, females continue to use say slightly more frequently than males. Crucially, while occupation significantly constrains the use of quotative variants in previous periods (with professionals consistently favouring say over non-professionals), this constraint is no longer operative among those born between 1950 and 1960: professionals and non-professionals now utilise the combination of non-say quotatives at comparable rates.

6.3.2.4 The late twentieth century (speakers born between 1970 and 1980)

As shown in Figure 6.1, the quotative system of AusE speakers born between 1970 and 1980 is the most variable in the corpus. Say is still the majority variant (55%), but other quotative frames also feature with different degrees of prominence: zero (14%), go (12%), think (9%) and be like (2%). The frequency of think has declined noticeably in relation to the 1950–1960 cohort (16% > 9%). In contrast to previous cohorts, go is the third most frequent quotative in late twentieth century AusE. Not only has

<table>
<thead>
<tr>
<th>Table 6.5. Contribution of linguistic and social factors to the use of say among speakers born between 1950 and 1960</th>
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<tr>
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</tr>
<tr>
<td>Third</td>
</tr>
<tr>
<td>First</td>
</tr>
<tr>
<td><strong>Tense</strong></td>
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<tr>
<td>Past</td>
</tr>
<tr>
<td>Non-past</td>
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<td><strong>Sex</strong></td>
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<td>Female</td>
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<td>Male</td>
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<tr>
<td><strong>Occupation</strong></td>
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<tr>
<td>Professional</td>
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<tr>
<td>Non-professional</td>
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quotative *go* increased in overall usage frequency, it has crucially expanded its pragmatic function and is now a firm encoder of ‘vivid’ third-person speech, in line with Winter (2002: 11). Starting in the *go like that* [gesture] construction used by participants born in the early twentieth century and as an introducer of lexicalised sound for speakers born in the late nineteenth century, quotative *go* has expanded to introduce a variety of quote content types, along the following cline: lexicalised sound/gesture > direct speech (see also Butters 1980, 1982; Vandelanotte 2012). The final stage in this extension is evidenced in *go*’s preference for third-person subjects (see also Blyth et al. 1990; Buchstaller and D’Arcy 2009; Romaine and Lange 1991) and its co-occurrence with the historical present (in line with Winter 2002), a fundamental feature of English narrative complicating action clauses (Wolfson 1982). These trends are clearly documented among those born between 1970 and 1980: *go* collocates with third-person subjects at an overwhelming 94% (*N* = 34/36), and features with the historical present at 72% (*N* = 26/36). These trends for *go* are related to how *say* is used in narrative, as explained next.

Table 6.6 shows the results of a multivariate analysis of the sociolinguistic factors constraining the use of *say* among speakers born between 1970 and 1980. Sex and occupation do not make a significant contribution to the occurrence of *say* in this cohort. *Say* now appears across the factors constituting the

<table>
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<tr>
<th align="left">Table 6.6. Contribution of linguistic and social factors to the use of <em>say</em> among speakers born between 1970 and 1980</th>
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factor groups person and tense, which for the first time allows us to include all factors (individually) in the multivariate analysis. In line with previous studies (Blyth et al. 1990; Buchstaller and D’Arcy 2009; Romaine and Lange 1991; Tagliamonte and D’Arcy 2007), say in this cohort is significantly correlated with past tense usage and – to a lesser extent – the present tense. Contrary to the data from those born in previous decades, say is suddenly favoured here with first-person subjects. The change in the association of say from third to first person stems from the aforementioned encroachment of go as a narrative device and from the pivotal role of grammatical person in discourse organisation (see Section 6.4). Among those born between 1970 and 1980, say introduces first-person, past tense-marked speech while go is used to encode speech, thought, non-lexicalised sounds and gestures by third parties in the historical present. An example of speech encoding through third-person, historical present-marked go vs. first-person, past tense-marked say is given in (30).

(30) And he goes, ‘Why aren’t you there?’ I said, ‘Because I was up here. I was going to get myself something to drink.’ And he goes, ‘If I see you around here again tonight I’m going to take you in and bust you for loitering.’ (TM-M-1970)

6.3.3 Summary

The longitudinal development of the linguistic and social constraints on say use in AusE is summarised in Table 6.7.

6.4 Discussion

In line with previous research across varieties of English, the development of the AusE quotative system is such that say as the canonical introducer of direct
speech by third parties is slowly but steadily replaced by a system featuring a wealth of quotative frames encompassing zero, think, go and – to a lesser extent – be like. The systems of those born between 1870 and 1980 reflect a trajectory of change which speaks of overarching shifts in how the variable grammar operates. Studying the quotative system as a whole allows for a nuanced understanding not only of why say shifts its sociolinguistic constraints with the passing of time but also of how these shifts ultimately influence the rise and fall of other quotative frames, notably the incomer be like, and their sociolinguistic conditioning. What are some of the forces that triggered these changes?

Close inspection of various developments in the data examined in Section 6.3 suggests a threefold answer. Firstly, the ingress of quotatives other than say is linked to a steady increase in the expression of internal thought. Secondly, not only does storytelling increasingly feature more internal thought expression, the way quotatives are deployed is crucially intertwined with the organisation of quoted content in narrative discourse. Thirdly, changes in the AusE quotative system – in terms of both the number of quotative variants used and the pragmatic contexts of their usage – are socially embedded. Each of these hypotheses is explored in detail here.

Regarding the first hypothesis, the data analysed in this chapter suggest that the decrease of say and gradual incursion of other variants, notably be like, in contemporary AusE (Rodríguez Louro 2013) is motivated by the increase in self-revelation in narratives referred to in Section 6.1. Figure 6.2 depicts the relative frequency of quotative frame-introduced direct speech vs. quotative frame-introduced internal thought among Anglo-Australians born between 1870 and 1980.

![Figure 6.2 Relative frequency of quotative frame-introduced direct speech and internal thought among adult Anglo-Australians born between 1870 and 1980](image)
born between 1870 and 1980. The results reveal that the changes in quotative variant choice and preference were accompanied by changes in the type of content introduced by quotative frames, namely a rise in the encoding of internal thought across time. Once negligible, thought-reporting represents a sizeable portion of direct quotation among those born post-1950 (in line with D’Arcy 2012: 367, fn. 18). The finding that internal thought-reporting was already in place when *be like* entered the AusE system is important given that *be like* is believed to have entered the English quotative system as an introducer of internal thought (Buchstaller 2014; Butters 1982; see also D’Arcy 2012: 360). As such, the contemporary AusE quotative system is the result of rich historical evolution.

Regarding the second hypothesis, the construction of narrative discourse is important to the development of the (AusE) quotative system. Two linguistic variables are intrinsically related to the organisation of complicating narrative clauses (in the sense of Labov and Waletzky 1967): grammatical person and tense (Levey 2006b). Examination of their effect on *say* usage in Section 6.3 revealed key differences between the speakers born before and after the mid-twentieth century, especially those born after 1970. Once overwhelmingly associated with third-person grammatical subjects, *say* is favoured with first-person subjects among those born after 1970; once restricted to the past tense, the grammars of speakers born after 1970 show a more complex tense-marking system, and *say* occurs in non-past tense contexts. The implications of these findings are best understood by focusing on how information is organised in narrative discourse. Rodríguez Louro and Ritz (2014) analysed tense variation in the complicating clauses of personal narratives (the ‘then, what happened?’ portion of narratives, Labov 1972a: 359) and established the following pattern: in contemporary AusE narrative discourse, the first person and the past tense introduce information pertaining to the narrator while the third person and the historical present encode situations relating to individuals other than the narrator. This trend is also evident in the longitudinal dataset examined in this study. Examples (31) and (32) contain vastly differently constructed narratives by two Anglo-Australian males: (31) was produced by a speaker born in 1922 where past tense-marked first- and third-person *say* is used to organise the narrative; (32) was produced by a 1970-born speaker where first person-marked *say* encodes quoted speech by the narrator, and *go* in the historical present introduces quoted speech by a third party. In this sense, AusE *say* does not only decrease in overall usage frequency across time periods (see Section 6.3) but, importantly, it narrows its pragmatic scope to encode first person-marked speech in the narratives of those born post-1970. These changes affect the usage and frequency of *say*’s competitor variants.
Well, I used to help a chap named John Edmondson, and he used to go up to the house to get his shovel and axe. He said, ‘I’ll be down shortly,’ and probably about quarter of an hour or half an hour later he’d come down, and I’d be digging away there. But I just didn’t like it, especially when I got down towards the box. I was frightened I’d go through the box or something. So I said to Will Smith, he was the superintendent at the time... He said to me one morning that I’d be going on the digging. I said, ‘Oh no, Will, I don’t like the digging. I don’t want to go on.’ So I went off and he came out and saw me later on and said to me, ‘Why wouldn’t you go on the digging?’ I said, ‘Well, I don’t like it, Will.’ And he said, ‘Oh well, you’re no good to me.’ And I said, ‘Oh well, I don’t care, Will.’ So he went off. He didn’t seem to be too concerned really, and I didn’t have to go digging, except if they were busy. I went and helped them to fill in the graves, because everybody, everybody, had to go and fill in the graves. (ES-M-1925)

And I went to the boss and I said, ‘I’d like to see the boss, please.’ I said, ‘I just want to see him. Now.’ And she said, ‘Okay, hang on.’ I’m in there, and he said, ‘What can I do for you?’ I said, ‘I resign.’ He said, ‘What?’ And I said, ‘I resign.’ And he said, ‘Why?’ And I said, ‘Because that bitch down there is giving me the shits, going off my face.’ And he said, ‘Would you like to reconsider your decision here?’ and I said, ‘No, I wouldn’t.’ (TM-M-1970)

Given these findings, the importance of discourse context in the development of the English quotative system cannot be underestimated. One of the most salient syntactic contrasts attested in narrative discourse includes the use of direct speech. The more dramatic the narrative, the more likely the storyteller is to rely on direct speech reporting where ‘the reporter-speaker plays the role of the reported/original speaker’ (Li 1986: 38). The results of the present and previous longitudinal studies of English quotation (Buchstaller 2011; D’Arcy 2012) show important shifts in the type of quoted content introduced by speakers (e.g., speech vs. thought). The findings presented here offer a further contribution by considering discourse organisation more generally, addressing the important question of how narrative structure itself constrains quotative usage (see Rodríguez Louro 2015).

The third and final hypothesis explored here concerns the social embedding of linguistic change in the English quotative system. As shown in Table 6.7, professional speakers born between 1870 and 1950 show a slight preference for say over other quotative variants. Women in this study also tend to prefer say over other quotatives, a (non-significant) trend operative until 1970. These results are in line with D’Arcy’s (2012: 354) findings for NZE where women born between 1890 and 1935 significantly favour say over other quotative verbs. They support the view that innovation in the English quotative system was brought about by males, with females ‘catching up’ later on. However, given the non-significant findings across time periods, further research is needed. Sex and occupation interact in
important ways. Firstly, although non-significant, Anglo-Australian women born before 1960 prefer \textit{say}, the unmarked or ‘standard’ quotative variant (see D’Arcy 2012: 367, fn. 13) (see Table 6.7). Coincidentally, the occupation constraint whereby professionals (significantly) favour \textit{say} disappears among those born before 1950. These findings indicate a shift in the social evaluation of quotative variants in early Anglo-AusE: once a prestigious form preferred by professionals and women, in the middle to late twentieth century \textit{say} is no longer the sole favoured quotative frame in the system. Secondly, as noted in Section 6.3.2, non-professional males born in the early twentieth century contribute to variability in the AusE quotative system through their use of the \textit{zero} variant. This, too, is partly in line with D’Arcy’s (2012: 354) findings for NZE where men born between 1890 and 1935 (occupation unspecified) are responsible for an increase in the use of the \textit{zero} variant. These trends suggest that what starts off as a virtually invariant system with \textit{say} encoding direct speech gradually expands to include further quotative introducers (e.g., \textit{zero}), and males play a central role in this expansion. The role of the non-professional male in the evolution of AusE should not be underestimated. Kiesling (2004: 422) notes that the language of the predominantly working-class, male population of early colonial Australia constituted a source of covert prestige, a trend likely to have continued well into the late nineteenth century and, arguably, beyond. These findings are especially noteworthy when compared to Buchstaller’s (2014: 169) claims that middle-class Tyneside English speakers in her 1960s/1970s data were responsible for the expansion of the quotative system, i.e., the use of quotative variants other than \textit{say}. In this study, occupation proved useful in the identification of change in progress, especially in analysing quotation as a primordial feature of narrative.

6.5 Conclusion

Drawing on a previously unexplored corpus of archival and recently collected naturalistic interaction, this longitudinal study has established that quotation in Anglo-AusE has undergone significant changes in a period of some one hundred years. The results are in line with what has been shown for NZE (D’Arcy 2012), offering support for the claim that ‘there is a strong linguistic connection between New Zealand and Australia [and that] varieties with similar structural features may be linked by history even if separated by distance’ (Kiesling 2004: 432). The parallels arising from this research are noteworthy in that they indicate similarities in how discourse-pragmatic change operates across geographically distant speech communities.

The longitudinal nature of the original data investigated here, spanning forty-eight years of data collection and including speakers born between
1870 and 1980, has allowed us to trace the trajectory of change in the Australian quotative system, identifying shifting forms and revealing new insights into the AusE quotative system before the encroachment of *be like* late in the twentieth century. This longitudinal perspective is important to understanding whether what may be seen as recent innovations (e.g., the upsurge of *be like*) are rooted in the historical evolution of the system as a whole. Such historical evolution is best illustrated here in the rise of internal thought-encoding across time. The findings reported in this chapter underscore the importance of discourse context in understanding language change.
The role of children in the propagation of discourse-pragmatic change: insights from the acquisition of quotative variation

Stephen Levey

7.1 Introduction

Much of the foundational research on children’s acquisition of sociolinguistic patterns of variation and change has paid specific attention to phonological variables (see, for example, Foulkes et al. 2005; Roberts 1996, 1997), with an expanding number of studies addressing morpho-syntactic variables (see, for example, Kovac and Adamson 1981; Miller and Schmitt 2010; Smith et al. 2007; Youssef 1999). While cumulative advances in developmental sociolinguistics are refining our understanding of how children acquire variables situated in different grammatical domains (see, for example, Smith et al. 2013), this line of inquiry remains hindered by the dearth of accountable quantitative studies of the acquisition of discourse-pragmatic variation.

An understanding of how children acquire, replicate and employ community-based patterns of discourse-pragmatic variation poses a number of methodological challenges. A first requirement is the availability of a large compendium of naturally occurring child language as well as a suitable adult control variety with which to compare child and adult usage patterns and to track children’s acquisition of community-based norms. A second requirement calls for access to an analytical approach capable of teasing apart the multiple factors that condition the acquisition process. Among the myriad factors to be considered are the age of the child (Kerswill 1996); the type of variable being acquired (Smith et al. 2013); its relative stability or engagement in change (Cameron 2005); the complexity of its sociolinguistic conditioning (Meyerhoff and Schleef 2013; Roberts 2013); as well as the possible existence of dialect-specific

The research reported here was generously funded by a grant from the Social Sciences and Humanities Research Council of Canada. I am grateful to Shana Poplack for access to the Ottawa-Hull Spoken Language Archives housed at the Sociolinguistics Laboratory, University of Ottawa. Many thanks to Laura Kastronic and Lorenzo Patino for collecting the child language data.
constraints on variation (Rutter 2013). In view of the multiple factors that constrain variable use, many of which differ from one variable to another, it seems reasonable to hypothesise that the acquisition of discourse-pragmatic variation will not necessarily parallel that of phonological or morpho-syntactic variation. The investigation of this hypothesis constitutes a major impetus for the research described in this chapter. An additional motivation for the work reported here comes from the limited number of studies addressing the acquisition of changes in progress, as opposed to stable variation (Rutter 2013).

Focusing on the quotative system, I examine maturational constraints on children’s acquisition of discourse-pragmatic variation and situate children’s usage patterns with respect to baseline community norms. The quotative system is an ideal site to test the hypothesis described earlier because it typically accommodates multiple variants, and it is widely acknowledged to be the locus of rapid change and reorganisation (see, for example, Buchstaller 2004, 2011; D’Arcy 2012; Ferrara and Bell 1995; Rodríguez Louro Chapter 6; Tagliamonte and D’Arcy 2007). In the course of the past three decades, many varieties of English have witnessed the exponential rise of quotative be like, reported to be one of the most aggressive changes in the recent history of the language (Labov, p.c., 2000, cited in Cukor-Avila 2002: 21–2). A cursory glance at the strategies used by Canadian children (1)–(6) and adults (7)–(12) to report speech and thought confirms that both speaker groups make use of this innovative quotative alongside a number of competing variants, including the null or zero variant represented by Ø in (5):

**Children’s quotative usage**

1. she’s *like*, ‘Oh my god, ok, I’m coming home, I’m gonna go catch the bus, it comes in two minutes’ (OCLC:009/F/11/19.04)¹
2. it’s *like*, ‘Are you talking about soccer?’ (OCLC:015/M/11/05.35)
3. if I- say I’m making some noise in my room she’ll *be*, ‘Jake be quiet I’m trying to do my homework’ (OCLC:015/M/11/01.58)
4. he’ll *go*, ‘Don’t say that’ (OCLC:031/F/11/22.23)
5. throughout the four periods, maybe two times Ø ‘I don’t feel well, I don’t feel well’ (OCLC:048/M/8/34.38)
6. they *told* them, ‘Oh you’re in first class too’ (OCLC:051/M/8/16.51)

¹ Codes in parentheses refer to the speaker in the Ottawa Child Language Corpus (OCLC) and the Ottawa English Corpus (OEC): speaker sex (M = male, F = female); speaker age (8 = children aged between eight and nine, 11 = children aged between eleven and twelve, Y = young adults aged between twenty and thirty, O = older adults aged forty or above). The last four digits in the coding string refer to the time stamp indicating the location of the token in the audio file. All examples are reproduced verbatim from speaker utterances. All names are pseudonyms.
Adults’ quotative usage

(7) people keep coming in and being like, ‘Man, like your friend’s like really, really, really pale, like should we call an ambulance?’ (OEC:012/M/Y/41:31)

(8) I would never lord myself over my staff like, ‘I’m your boss’ (OEC:006/M/Y/23:04)

(9) I said, ‘Thank you, have a nice day’ (OEC:006/M/Y/22:38)

(10) they always complain, ‘There’s not enough art, there’s not enough culture’ (OEC:003/F/Y/22:05)

(11) and I thought, ‘Hmmm, I’m sort of on the spot here’ (OEC:009/F/O/52:01)

(12) nowadays, they’re talking about, ‘Oh, I’ve got a huge class of twenty-five!’ (OEC:020/F/O/24:41)

The spread of quotative be like throughout mainstream urban varieties of Canadian English is reported to exhibit distinctive age-correlated patterns of use: older adolescents are spearheading this change, with preadolescents using the incoming form less frequently (Tagliamonte and D’Arcy 2009: 82–3). Preadolescents’ lower rate of use is generally explained by appealing to the fact that children typically have had less time to accrue changes in progress. As children mature and their vernacular stabilises in late adolescence, they are expected to contribute to the ‘logistic incrementation’ of linguistic change by advancing the use of innovative features (Labov 2007). The question of how children acquire and propagate ongoing changes merits further research, not least because this issue remains ‘a problem that lies at the forefront of [...] efforts to understand the mechanism of linguistic change’ (Labov 2012: 276).

Linguistic change can be tracked developmentally by comparing the stages that children pass through during their acquisition of a particular feature (Romaine 1989: 61). As I will show, it is particularly instructive to pursue such comparisons using narrowly defined age ranges capable of revealing differences which may be concealed by more broadly defined age cohorts (Llamas 2007: 75). Combining a developmental perspective with apparent- and real-time components to assess what has changed, I focus on: (i) children’s acquisition of social and linguistic constraints on quotative variation; (ii) the extent to which these constraints parallel those operating on the same variable in the corresponding adult community; and (iii) the role of children in sustaining and propagating change in the quotative system. In order to address these objectives, I make use of a number of complementary data sources. These

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2 I use the terms ‘children/preadolescents’ to refer to children in the six-to-twelve age range (see Kerswill 1996: 191) and reserve the terms ‘teenagers/adolescents’ for speakers in the thirteen-to-nineteen age range.
include synchronic corpora of child and adult speech supplemented by real-time data, affording a diachronic perspective on the rise of *be like* and its progressive infiltration of the quotative system.

In the following sections, I first review in **Section 7.2** the literature addressing children’s acquisition of variation and the emergence in childhood of strategies for reporting speech and thought. In **Section 7.3**, I supply information about the data on which this study is based before describing the theoretical framework as well as the methodological procedures underpinning the analysis. After presenting the results of the study in **Section 7.4**, I examine in **Section 7.5** their contribution to addressing the research objectives before offering my conclusions in **Section 7.6**.

### 7.2 Acquiring sociolinguistic competence

#### 7.2.1 The acquisition of multiple constraints on variation and change

An expanding number of studies indicate that sensitivity to socially motivated patterns of variation and change emerges well before the onset of adolescence, beginning as early as the third year of infancy (see, for example, Roberts 1996, 1997). Given that the input to which young children are exposed is inherently variable and socially situated, it is unsurprising that the acquisition of sociolinguistic variation should be ‘an integral part of the acquisition process itself’ (Roberts 2005: 153–4). Indeed, Chambers (2009: 170) goes so far as to claim that there are ‘no studies indicating a time gap between the acquisition of grammatical competence and the development of sociolinguistic competence’.

A central preoccupation in the developmental sociolinguistic literature concerns the sequence in which multiple constraints on variable usage are acquired (Labov 1989; Smith et al. 2007). Investigation of the acquisition of variable patterns of (t/d)-deletion in word-final consonant clusters revealed that children as young as three had mastered the phonological constraints and had partly acquired the grammatical constraints, but had not internalised the social constraints associated with this variable (Roberts 1996). Conversely, Labov’s (1989) examination of children’s use of (ing) indicated that stylistic constraints on variable use were acquired before grammatical constraints. In yet other studies, social and linguistic constraints are reported to be acquired contemporaneously (see, for example, Foulkes et al. 2005; Smith et al. 2007; Youssef 1991).

Another major research focus concerns the ability of young children to engage in ongoing change. Active participation in change has been documented in the case of very young children. Research undertaken by Roberts and Labov (1995) on the tensing and raising of short /a/ in Philadelphia
demonstrates that children between the ages of three and four are acquiring community norms associated with this change. In a similar vein, Rutter (2013) reports that children as young as five in Oklahoma City are acquiring newly emerging variability associated with the palatalisation of /s/ in the onset cluster /str-/. In brief, a number of studies, based primarily on the investigation of phonological variables, confirm that young children are capable of acquiring both social and linguistic constraints on variation but not necessarily in lockstep. Furthermore, not only do young children have the capacity to engage in ongoing change, they are even able to exceed adult rates of change by extending the environments in which innovative forms are used (Roberts 1997). The present study considers whether similar findings obtain when the investigation is extended to the acquisition of discourse-pragmatic variation.

7.2.2 The acquisition of strategies for reporting speech and thought

Explicitly framed direct speech is reported to emerge initially around twenty-eight to thirty months of age (Nordqvist 2001: 61). When young children (three to five years) start to use overt quotative frames productively, they almost categorically employ them to report speech but rarely thought (Nordqvist 2001: 263). Between the ages of four and ten, there is evidence of a significant expansion in children’s metalinguistic ability to report their own speech as well as that of others (Ely and McCabe 1993: 690; Hickmann 1993: 83). With maturation, there is also increasing diversification in the range of markers used to frame quotations (Goodell and Sachs 1992: 411), although the extent to which this process follows a developmental sequence warrants further investigation. A preliminary study of quotatives (N = 136) in the spontaneous speech of twenty-two Canadian four- to six-year-olds (mean age = 4;9) revealed that these children preferentially introduce reported speech with say (38%), followed by the zero variant (22%), go/go like (18%) and be like (8%), confirming that change in the quotative system used by the wider speech community is percolating down the age spectrum (Levey and McIntyre MS). Drawing on natural language data collected in London, Cheshire et al. (2011: 174) likewise note that four- to five-year-olds rely predominantly on say to report speech whereas children aged eight and above use a more extensive repertoire of variants, including go and be like. Increasing use of vernacular variants in preadolescence, concomitant with the ascendancy of peer group influence on linguistic behaviour during this life stage, suggests that expansion

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3 The remaining proportion of variants (14%) comprises it’s like and discourse marker like (both treated separately from be like in this analysis; see note 5) as well as be all, tell and do.
Children’s acquisition of quotative variation

in variant usage may be (at least partly) motivated by children’s shifting social relationships and their progressive convergence on peer norms (Kerswill 1996: 191–6).

Another factor implicated in the acquisition of strategies for reporting speech and thought includes speaker sex. Although sex differentiation has been documented in the speech of young children (see, for example, Romaine 1984a), its effects are claimed to become more salient in later childhood. Robust indications of sex-differentiated variation are believed to surface around the age of ten (Eckert 2000). To date, it is only in the discourse of older children and teenagers that statistically significant sex-based differences in quotative use have been reported. In the speech of ten- to fourteen-year-old Canadians, for example, females were found to favour be like (Tagliamonte and D’Arcy 2004: 506) but, crucially, the relative importance of this effect was found to be weaker than those contributed by the linguistic factors associated with grammatical person and content of the quote. Moreover, when the strength of the sex effect in this age cohort was compared with an equivalent effect in the speech of older, seventeen- to nineteen-year-old adolescents, its relative strength was found to increase with age. These findings suggest that internal constraints on be like are internalised before the relevant social constraints, which may not be fully acquired until later adolescence.

Conspicuously absent from earlier studies of quotative variation is detailed quantitative information on speakers younger than ten. Little is known about the development of the sociolinguistic patterns of quotative variation in the years leading up to adolescence. Factoring younger speakers into the investigation is a prerequisite to understanding when children first begin to acquire such patterns, and how these are transformed over time into adult strategies (Eckert 2000: 11). These issues are pursued in the quantitative analyses detailed in the following sections.

7.3 Data and method

7.3.1 Nature of the data

The linguistic material on which this study is based was collected in Ottawa, Ontario. The primary source of material, compiled between 2011 and 2012, comes from the Ottawa Child Language Corpus (OCLC), a corpus of digitised recordings of children aged between eight and twelve. These children are grouped into two age divisions, eight- to nine-year-olds vs. eleven- to twelve-year-olds, with each age division stratified by speaker sex. No other stratifying measure was imposed during corpus construction. A total of forty-six children were recorded using a sociolinguistic interview methodology (Labov 1984). All the children participating in the study had English as their primary language.
and had resided in Ottawa since infancy. The distribution of sample members by age and sex is shown in Table 7.1.

The children are grouped according to significant life stages identified by Labov (2001b: 101): eight to nine representing alignment to the preadolescent peer group and eleven to twelve representing the age at which membership in the preadolescent peer group is typically achieved. The upper and lower boundaries of this age range provide a window on vernacular reorganisation, the process by which children begin to show strong linguistic influence from their peers and the speech of the community (Labov 2001b: 416).

In order to situate children’s usage in relation to community-based patterns of variation, the Ottawa English Corpus (OEC) serves as a reference variety with which to assess children’s approximation to adult norms. As shown in Table 7.2, this dataset of recordings from nineteen adults incorporates an apparent-time component: speech from twenty- to thirty-year-olds and speech from over forty-year-olds. These recordings were collected in 2010.

Because the apparent-time component incorporated into the synchronic dataset of the OEC cannot uncritically be assumed to reflect diachronic change (Cukor-Avila and Bailey 2013: 241), there is an additional need for a real-time benchmark to determine what has changed in the quotative system. To satisfy this requirement, the synchronic dataset is compared with the Ottawa-Hull Spoken Language Archives (OHS LA), a diachronic corpus comprising thirteen speakers recorded in Ottawa in 1982. These speakers were born between the end of the nineteenth century and the 1970s. This corpus (see Table 7.3) is

Table 7.1. Sample constitution: Ottawa Child Language Corpus (OCLC)

<table>
<thead>
<tr>
<th>Age range</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>8–9</td>
<td>8</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>11–12</td>
<td>12</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>26</td>
<td>46</td>
</tr>
</tbody>
</table>

Table 7.2. Sample constitution: Ottawa English Corpus (OEC)

<table>
<thead>
<tr>
<th>Age range</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20–30</td>
<td>7</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>40+</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>9</td>
<td>19</td>
</tr>
</tbody>
</table>

Table 7.3. Sample constitution: Ottawa-Hull Spoken Language Archives

<table>
<thead>
<tr>
<th>Age range</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>19th</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970s</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
based on spontaneous speech obtained from adults aged thirty and above as well as children aged between eight and twelve.

Potentially detracting from the utility of the OHSLA dataset as a diachronic reference point is its restricted size (circa 100,000 words) and the limited number of speakers drawn from disparate age groups. But for the purposes of this study, its great merit lies in the inclusion of preadolescents matching the age range of the contemporary child dataset. This asset qualifies the 1982 corpus as a viable, albeit limited, diachronic benchmark with which to investigate a precursor stage of the quotative system at a time when the use of *be like* is widely believed to have been incipient (see, for example, Buchstaller and D’Arcy 2009: 292).

### 7.3.2 Theoretical framework

This study draws on the theoretical framework of comparative variationist sociolinguistics (Labov 1972b; Poplack and Tagliamonte 2001). A key tenet of this approach is that language is inherently variable, and this variability is neither random nor indiscriminate but characterised by ‘structured heterogeneity’ (Weinreich *et al.* 1968: 99–100). Structured heterogeneity is typically subject to multiple social and linguistic constraints that are probabilistically correlated with the distribution of variant choices. The nature of the ‘system’ or ‘grammar’ underlying variable surface manifestations can be discerned by carefully inspecting the distribution and conditioning of competing variants in discourse (Poplack and Tagliamonte 2001: 6). Once characterised, the underlying grammar can be systematically compared across different speaker groups (i.e., children and adults in this study) in order to pinpoint any structural similarities or disparities between groups in the detailed sociolinguistic conditioning of variant selection. Where different speaker groups exhibit structural parallels in the conditioning of variant choice, a relationship between their underlying grammars can be inferred. Conversely, where such correspondences are limited, or absent, evidence of an affinity between the underlying grammars of the respective groups is vitiated.

### Table 7.3. Sample constitution: Ottawa-Hull Spoken Language Archives 1982 (OHSLA)

<table>
<thead>
<tr>
<th>Age range</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>8–12</td>
<td>2</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>30+</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>8</td>
<td>13</td>
</tr>
</tbody>
</table>

Children’s acquisition of quotative variation
7.3.3 Method

The variable context is defined in broad, functional terms and includes ‘all strategies used to introduce reported speech, sounds […] and thought by self or other’ (Buchstaller 2006a: 5; see also Rodríguez Louro Chapter 6).\(^4\)

In accordance with the ‘principle of accountability’ (Labov 1972b: 72), eligible strategies include not only frames containing an overt quotative marker but also those in which a null or zero variant is used, as in (5).

In line with previous investigations of quotative variation, accurate delimitation of the variable context necessitates a number of exclusions (see, for example, Tagliamonte and D’Arcy 2004: 500, 512). These include quotatives introducing indirect speech (13), excerpts of written language (14), as well as incomplete utterances (15).

(13) Mom says maybe that Dad lied to Rachel (OCLC:006/M/8/256.31)
(14) it just said on a note, ‘Gone to get groceries, be back in an hour’ (OCLC:021/M/11/16.08)
(15) it was all dark and my friends were like, ‘I’m scared to g-’ (OCLC:027/F/11/10.38)

Each token retained for analysis was coded for speaker age and sex as well as a number of linguistic factors hypothesised to affect variant choice. Most prominent among these are grammatical person and content of the quote (Tagliamonte and D’Arcy 2007: 202). With regard to grammatical person, be like is reported to be favoured with first-person subjects whereas say and go tend to occur with third-person subjects (Tagliamonte and D’Arcy 2004, 2007; Tagliamonte and Hudson 1999). Accordingly, first-person contexts (16) were differentiated from third-person ones (17):

(16) and I’m like, ‘See what he did?’ (OCLC:004/F/8/24.40)
(17) she goes, ‘I’m your mom, I have the right’ (OCLC:018/F/11/15.59)

In terms of content of the quote, an emblematic feature of be like is its use to represent internal dialogue (Buchstaller and D’Arcy 2009). By contrast, the prototypical speech verb, say, is overwhelmingly associated with externally realised speech. To detect any such associations in the current data, each token was distinguished according to whether it introduced reported speech (18) or internal dialogue/inner states (19) (Ferrara and Bell 1995: 283):

\(^4\) Instances of iconic gesture were omitted from the present study because these cannot be unambiguously reconstructed from the audio recordings.
Though less extensively researched, mimesis is another factor strongly implicated in variant selection, particularly in the case of quotatives derived from non-speech verb elements such as *go* and *be like* (Güldemann 2008: 373). In this study, mimesis is understood to include sound symbolism and prosodic variation (e.g., loudness, pitch, syllable length) to construct dramatised dialogue. To capture these effects in the data, quotations that have mimetic content (20) were differentiated from those that contain none (21).

(20) once the teacher leaves everybody’s like, ‘AAHHH no teacher!’ (OCLC:043/F/8/01.33)

(21) I said, ‘Where is my mother?’ (OCLC:020/M/11/23.06)

The temporal reference of the quotative is cited as one of the most powerful determinants of variant choice although it does not operate uniformly across varieties of English (Buchstaller and D’Arcy 2009: 308; Cukor-Avila 2012: 627). In Canadian English, a specific correlation between *be like* and the historical present has been noted for speakers under thirty (Tagliamonte and D’Arcy 2007: 209). To assess the combined effects of verb morphology and temporal reference on variant selection, each quotative marker containing a tensed verb was distinguished according to whether it was encoded with non-past-tense morphology used with past temporal reference (i.e., the historical present) (22); non-past-tense morphology used with present temporal reference (23); and past-tense morphology used with past temporal reference (24).

(22) then he showed it to me and I’m like, ‘Kerry you’re disgusting’ (OCLC:015/M/11/26.52)

(23) sometimes they’re just like, ‘No this is just for our fort’ (OCLC:004/F/8/04.42)

(24) and then I said, ‘Open your mouth’ (OCLC:042/M/8/36.22)

### 7.4 Results

#### 7.4.1 Distributional analysis

To determine the extent to which children have acquired adult-like rates of variant choice, it is first necessary to establish what these rates are in the corresponding adult corpus. Table 7.4 shows the distribution of variants by age and sex in the
Combining the data from males and females, a first important finding is that *be like* is the lead variant for speakers between twenty and thirty years of age, accounting for over half (56%) of their quotatives. The status of *be like* as an under-forties phenomenon is confirmed by the fact that it is not used once by any of the adults aged above forty, whose quotative system is largely restricted to the canonical variant *say*. In terms of the trajectory of change, the preponderance of *be like* in the young adult data offers a snapshot of the ‘upswing of the classic S-curve of linguistic change’ (Tagliamonte and D’Arcy 2007: 200). Closer inspection of the distribution of *be like* in the twenty-to-thirty adult cohort reveals a familiar asymmetrical sex effect, with females using this variant almost twice as often as males (see Ferrara and Bell 1995; Singler 2001; Tagliamonte and D’Arcy 2004, 2007). *Say* maintains a firm foothold in the speech of young males, with all remaining variants occurring at relatively low rates. Young females’ speech exhibits even greater uniformity, as no minority variant exceeds 8% of quotative use.

It’s like (see example (2) in Section 7.1) and discourse marker *like* (see example (8) in Section 7.1) listed in Tables 7.4–7.6 are treated inconsistently in the previous literature. Several studies point to the possibility that *it’s like* may be grammaticalising as a construction in its own right (Buchstaller 2004: 124–5; Tagliamonte and Hudson 1999: 170), suggesting that it should not be aggregated with tokens of *be like*. As far as discourse marker *like* is concerned, Tagliamonte (2007: 193–4) places it in the same category as the *zero* variant whereas Stenström et al. (2002: 117) classify it separately. Because the appropriate categorisation of *it’s like* and discourse marker *like* is unresolved, I have opted to list these variants separately in Tables 7.4–7.6. The ‘other’ category in these tables includes variants such as *tell, complain, add, ask, announce* and *yell*.

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Table 7.4. Distribution of quotative variants by age and sex in the Ottawa English Corpus (OEC)

<table>
<thead>
<tr>
<th>Quotatives</th>
<th>20–30 years</th>
<th>40+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>Be Like</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Say</td>
<td>35</td>
<td>79</td>
</tr>
<tr>
<td>Zero</td>
<td>28</td>
<td>63</td>
</tr>
<tr>
<td>It’s like</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>Go</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Disc. like</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Think</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Be</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>223</td>
<td>393</td>
</tr>
</tbody>
</table>
Turning to the OCLC child data, Table 7.5 shows the distribution of quotatives stratified by age and speaker sex. In both the eight-to-nine and eleven-to-twelve age groups (amalgamating the data for males and females), be like is the primary exponent of the quotative system. Restricted numbers of males and females in each age division as well as small token counts in the case of minority variants necessitate a cautious interpretation of sex-based differences in variant distribution. Unlike eight- to nine-year-olds and young adults, eleven- to twelve-year-old males and females use be like at comparable rates, and its overall frequency (54%) in this age group matches its corresponding rate of occurrence (56%) in the young adult data. In the eight-to-nine age group, males use be like far less often than females, but their rate of use is almost identical to that of the twenty- to thirty-year-old males in Table 7.4. Thus, not only have the youngest children appropriated quotative be like, the pattern of sex differentiation exhibited by the eight- to nine-year-olds resembles, at least superficially, the split in the corresponding adult community where females are clearly ahead of males in their use of this variant. Sex-based asymmetries are also apparent in the use of other variants. The zero quotative is a case in point. Although an infrequent option, it exhibits a male bias in both age groups. A similar pattern can be observed in males’ use of it’s like. Other minority variants exhibit less consistent patterning: go is used at appreciably the same rate by males and females in the eight- to nine-year-old cohort but, contrary to the male bias reported for North

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Table 7.5. Distribution of quotative variants by age and sex in the Ottawa Child Language Corpus (OCLC)

<table>
<thead>
<tr>
<th>Quotatives</th>
<th>8–9 years</th>
<th>11–12 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>Be like</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>33</td>
<td>45</td>
<td>50</td>
</tr>
<tr>
<td>33</td>
<td>45</td>
<td>26</td>
</tr>
<tr>
<td>Zero</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Go</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Think</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>136</td>
<td>141</td>
</tr>
</tbody>
</table>

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6 Three children aged between eight and nine, one male and two females, who had low overall rates of quotative use failed to produce any tokens of be like. Conversely, all the children sampled in the eleven-to-twelve age group made variable use of be like.
American populations (Singler 2001: 272; Tagliamonte and Hudson 1999: 160), it is used more by females in the eleven-to-twelve age group.

The children’s inventory of quotative markers and associated rates of occurrence offer compelling indications that they are registering linguistic influence from the wider speech community and are attuned to shifting norms in quotative use. An important question raised by the prevalence of *be like* in the child corpus concerns the potential source of its transmission to younger speakers. As no data from the children’s primary caregivers were collected, it is not possible to offer any detailed evaluation of the role that they may have played in transmitting *be like* (and its associated conditioning) to their children. The prevailing consensus in the literature is that older adults, the presumed locus of parental linguistic influence, play no determinative role in transmitting *be like* to younger speakers (Sankoff and Blondeau 2007: 583; Tagliamonte and Denis 2014: 121). Evidence in favour of this view can be found in Table 7.4, where the ‘temporal isogloss’ distinguishing young adult *be like* users from their older, i.e., above forty, non-*be like* counterparts vitiates the possibility that children inherit this change from older adults via the conventional route of parent-to-child transmission. This leaves the peer group, teenagers and young adults as potential agents of the transmission of change. The primacy of the peer group in reinforcing vernacular norms is reported to play a key role in the transmission of linguistic features from older to younger children, especially in cases where the features in question are not readily available in caregiver speech (Kerswill 1996: 190). Increased overall rates of *be like* use, as emerges from a comparison of the older children with their younger counterparts, suggest that convergence on the focused norms of the peer group helps to diffuse *be like* to preadolescent speakers.

Comparison with the OHSLA diachronic data, depicted in Table 7.6, foregrounds the spectacular rate of change. Although the data are restricted, an important finding to emerge from the diachronic control is the almost categorical absence of *be like*. There are only two instances of this variant, both produced by the same eleven-year-old speaker. In contrast with what is found some thirty years later, the quotative system in 1982 is circumscribed to *say, go* and, to a lesser extent, *zero* in the child data, and just *say* and *zero* in the corresponding adult data. If there is any candidate for

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7 Research in progress (Levey and McIntyre MS) targeting four- to six-year-olds recorded in the same community indicates that although younger children may acquire the form *be like* from older children, teenagers or young adults, they do not replicate the usage rates or the linguistic conditioning associated with this variant in older populations. Inspection of four- to six-year-olds’ use of *be like* reveals, for example, that this age group does not use this (or any other) variant to report internal dialogue. To the extent that these four- to six-year-olds have internalised linguistic constraints on *be like*, the linguistic conditioning appears to be heavily influenced by the children’s age and evolving pragmatic competence (e.g., their ability to adopt different perspectives in reporting speech events; see Nordqvist 2001).
change in Table 7.6, then quotative *go*, rather than *be like*, would be the frontrunner.

To summarise, these results corroborate the rapid rise of *be like* in a compressed time-frame and confirm that the eight- to twelve-year-old children in the synchronic datasets have clearly acquired this incoming variant, as evidenced by its elevated rate of occurrence in both preadolescent age groups. But consideration of rates alone is inadequate for establishing the extent to which children have acquired the underlying conditioning, or structure, of the variability associated with *be like* in the adult speech community. In order to address this question, the following section details the statistical procedures that were implemented to compare the underlying structure of the quotative system across speaker cohorts.

### 7.4.2 Multivariate analysis

To test which of the independent social and linguistic variables introduced in Section 7.3.3 exert a significant effect on variant choice, the stepwise multiple regression procedure in Goldvarb X (Sankoff et al. 2005) is utilised. This procedure yields three major lines of evidence that are critical to the interpretation of the results (Poplack and Tagliamonte 2001: 93–4): (i) the statistical significance of independent variables at the 0.05 level; (ii) the relative strength of significant effects, as indicated by the range value; and (iii) the constraint hierarchy or ordering of probabilities (‘factor weights’) within factor groups. The constraint hierarchy associated with each independent variable represents a portion of the underlying grammar. By holding the same independent
variables constant across speaker groups, constraint hierarchies can be systematically compared in order to assess the extent to which different groups share the social and linguistic conditioning of variant choice. This technique enables subtle adjustments in the underlying grammar to be detected and fine-grained differences between comparison groups to be identified. The information that emerges from such a comparison can be used to situate children’s usage patterns with respect to adult baseline community norms.

Another analytical advantage afforded by the constraint hierarchy resides in its capacity to determine the extent to which a form has grammaticalised. Grammaticalisation, the process whereby ‘lexical items and constructions come [...] to serve grammatical functions or [...] grammatical items develop new grammatical functions’ (Hopper and Traugott 2003: 1), typically involves a set of gradient processes that can be tracked quantitatively. One such process involves the extended, or generalised, use of a construction in new contexts (Heine 2003: 579). To trace the progress of a grammaticalising form such as be like along the pathway of change, a number of diagnostic measures can be exploited. Key metrics exploited in earlier research and operationalised in this study include the expansion of be like into contexts associated with third-person subjects, reported speech and non-mimetic discourse as well as a stronger correlation with the historical present (Ferrara and Bell 1995: 286; Levey et al. 2013: 12; Tagliamonte and D’Arcy 2007: 209). Evidence of these developments in synchronic data can be inferred from permutations in the underlying grammar (e.g., reweighting of constraints or their neutralisation) when constraint hierarchies associated with be like are compared across different speaker groups. The resultant information can then be used to situate these groups with respect to one another in terms of their advancement of change in specific linguistic environments.

Table 7.7 presents the results of nine independent multivariate analyses of the social and linguistic constraints that contribute to the selection of be like, say and zero in the speech of eight- to nine-year-olds, eleven- to twelve-year-olds and twenty- to thirty-year-old adults, respectively.8 Because Goldvarb only performs binomial multivariate analysis generating a choice of two results (i.e., application or non-application value), each time that an independent analysis is performed, one variant of the dependent variable must be selected as the application value and the remaining variants must be treated as the non-application. Thus, for the three comparison groups, each of be like, say and zero was treated in turn as the application value, and the remaining variants were selected as the non-application, yielding three independent multivariate analyses.

8 The focus is on be like, say and zero because these are sufficiently preponderant in the data to permit meaningful statistical analysis. Because the older adults aged forty and above produced no tokens of be like, they are excluded from the comparison groups.
Table 7.7. Nine independent multivariate analyses of the factors contributing to the probability that be like, say and zero will be selected in the speech of eight- to nine-year-olds, eleven- to twelve-year-olds (OCLC) and twenty- to thirty-year-olds (OEC) (N/A = not applicable)

<table>
<thead>
<tr>
<th>8- to 9-year-olds</th>
<th>11- to 12-year-olds</th>
<th>20- to 30-year-olds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total N</strong></td>
<td>116</td>
<td>304</td>
</tr>
<tr>
<td><strong>Corrected mean</strong></td>
<td>.42</td>
<td>.54</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td>FW</td>
<td>FW</td>
</tr>
<tr>
<td>Female</td>
<td>.59</td>
<td>.52</td>
</tr>
<tr>
<td>Male</td>
<td>.41</td>
<td>.48</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>18</td>
<td>31</td>
</tr>
<tr>
<td><strong>Temporal reference</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historical present</td>
<td>.88</td>
<td>.66</td>
</tr>
<tr>
<td>Present</td>
<td>.35</td>
<td>.35</td>
</tr>
<tr>
<td>Past</td>
<td>.25</td>
<td>.48</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>63</td>
<td>31</td>
</tr>
<tr>
<td><strong>Content of the quote</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal dialogue</td>
<td>.95</td>
<td>.59</td>
</tr>
<tr>
<td>Direct speech</td>
<td>.44</td>
<td>.49</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>51</td>
<td>10</td>
</tr>
<tr>
<td><strong>Mimesis</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voicing</td>
<td>.64</td>
<td>.51</td>
</tr>
<tr>
<td>No-voicing</td>
<td>.32</td>
<td>.49</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>32</td>
<td>24</td>
</tr>
<tr>
<td><strong>Grammatical person</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First person</td>
<td>.52</td>
<td>.55</td>
</tr>
<tr>
<td>Third person</td>
<td>.49</td>
<td>.47</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>3</td>
<td>8</td>
</tr>
</tbody>
</table>
analyses for each comparison group. In terms of the numerical values associated with each analysis, the probabilities, or factor weights, are to be interpreted as follows: those above 0.50 (shaded in Table 7.7) favour variant selection in the contexts listed on the left-hand side of the table whereas those below 0.50 have a disfavouring effect. Factors selected as non-significant are enclosed in square brackets.

Looking first at social constraints, speaker sex is selected as significant for eight- to nine-year-olds’ and adults’ use of *be like*, although the relative strength of this effect (as indicated by the range value) is greater in the adult data where it is the second-ranked constraint as opposed to the fourth-ranked one in the eight-to-nine age group. By contrast, this effect is neutralised for the eleven- to twelve-year-olds. Inspection of the constraint hierarchies for competing variants in the system reveals further social differences. In the case of *say*, the eight- to nine-year-olds match the direction of the sex effect (but not its statistical significance) found in the corresponding adult data whereas the same effect reverses direction completely in the eleven- to twelve-year-olds. As a marginal variant, *zero* is not selected as significant for any factor group, with the exception of speaker sex in the eleven-to-twelve age group where it is favoured by males. In summary, inconsistencies in the influence of speaker sex on variant selection, as revealed by comparison across speaker groups of statistical significance, direction and relative strength of effect suggest that the effect of this constraint is labile in the preadolescent groups studied here.

Turning to the effect of linguistic factors, the constraint hierarchies for *say* are broadly parallel in the child and adult data. As for the infrequent *zero* marker, the most noticeable difference relates to children’s categorical use of this variant to introduce direct speech, contrasting with its additional (albeit weak) association with internal dialogue in adult speech. As far as *be like* is concerned, temporal reference is the overriding determinant of its selection in the child and adult data (as assessed by the range values). Moreover, the strong association of *be like* with the historical present, shared by all speaker groups, indicates that preadolescents and adults alike are participating in a development reported to be characteristic of ongoing grammaticalisation. This development is schematised in the literature in terms of a three-stage model of change: in Stage 1, *be like* is initially encoded with non-past-tense morphology to express present and past temporal reference; in Stage 2, the specific association of *be like* with the historical present is favoured while its association with present temporal reference weakens; and in Stage 3, the association of *be like* with the historical present becomes particularly strong and its use with present temporal reference is disfavoured (Tagliamonte and D’Arcy 2007: 208–9). With regard to the comparison groups’ engagement in this trajectory of change, all three can be located at Stage 3, judging from the respective constraint hierarchies for
temporal reference. Another key piece of evidence aligning the children with the adults concerns the diminished contribution of grammatical person. Qualifying as the weakest significant constraint on *be like* in the child and adult data, its modest effect points to the attenuation of the robust association of *be like* with first-person subjects documented in earlier research targeting the quotative system (Tagliamonte and Hudson 1999). The reduced impact of this constraint can be interpreted as yet another indication of advanced grammaticalisation shared by children and adults. In sum, the results for temporal reference and grammatical person converge in demonstrating that all three comparison groups are participating in advancing change in particular linguistic environments.

By contrast, other factor groups reveal major disparities when constraint hierarchies for *be like* are compared across speaker cohorts. Content of the quote is a case in point. In the eight-to-nine age group, this makes a strong contribution (only moderately smaller than that of temporal reference) to the selection of *be like*. Conversely, in the eleven-to-twelve age group, its influence, though significant, is reduced, as indicated by the range value (=10) for this factor group which is three times smaller than the corresponding value (=31) for temporal reference. The modest effect of content of the quote in the eleven-to-twelve age group is taken one step further in the adult data, where the distinction between internal dialogue and direct speech is neutralised. Similar discrepancies in the conditioning of *be like* emerge from a comparison of the constraint hierarchies for mimesis. This factor group makes a moderately strong contribution to the selection of *be like* in the speech of the eight- to nine-year-olds, but exerts a neutral effect in the case of the eleven- to twelve-year-olds. In the adult data, its effect is significant but relatively minor. Comparison of the constraint hierarchies associated with content of the quote and mimesis suggests that the older children and the adults are more closely aligned with one another in relation to the relative progress of *be like* along the cline of grammaticalisation. Conversely, the linguistic behaviour of the younger children indicates that they are participating less fully in ongoing linguistic developments as far as these factor groups are concerned. Thus, in spite of compelling parallels between all three speaker groups with respect to temporal reference and grammatical person, nuanced differences between the two pre-adolescent age groups in relation to the remaining linguistic factor groups suggest that the acquisition of adult community norms is not complete before the age of eleven.

How are these differences to be explained? Inspection of the corrected means, or overall tendency of variant occurrence, sheds some light on this question. Note that the corrected mean for *say* is far higher for the eight- to nine-year-olds than the equivalent values for the older children or adults (0.29 vs. 0.14 vs. 0.14), indicating that in the youngest age cohort this variant still
accounts for a moderate proportion (30%) of the variable context. For the youngest children, *say* (and, to a much lesser extent, the *zero* variant) functions as the introducer of externally realised speech whereas *be like* remains firmly entrenched with internal dialogue. By contrast, for the older children, these contextual effects are adjusted as *be like* diffuses further into the system and consolidates its status as the default quotative marker. To be sure, *say* retains its association with direct speech in the eleven-to-twelve age group, but this variant is now effectively consigned to the margins of the system, as confirmed by its substantially lower corrected mean. As *say* wanes in the system used by the older children, it stands to reason that its territory will be susceptible to appropriation by the incoming variant *be like*. The effects of older children’s higher rate of *be like* and the extent of its diffusion throughout their quotative system are visible in the reweighting of the probability values for internal dialogue and direct speech. This reweighting of contextual effects can be interpreted as evidence of specialisation (Hopper and Traugott 2003: 116): as *be like* penetrates further into the quotative system, relegating competing variants to peripheral status, it assumes a more general quotative function, and its emblematic association with internal dialogue weakens. That this development is entirely in line with community-based norms is confirmed by the neutralisation of the distinction between internal dialogue and direct speech in the adult baseline variety.

In summary, adjustments in environmental constraints on *be like*, as emerges from the comparison of the youngest and oldest children with the adult control variety, provide a graphic illustration of the malleability of children’s grammars in response to ongoing discourse-pragmatic change in the ambient speech community.

7.5 Discussion

Innovative in the research reported here is the application of the variationist framework to tracking discourse-pragmatic change in later childhood, illuminating the transition between different stages of the grammar within a narrowly defined age range. A key component of this investigation involves the judicious use of a number of complementary data sources to track change in real and apparent time, and to situate children’s usage in relation to a commensurate adult control variety. A lynchpin of the methodological framework underpinning this investigation is the importance attached to variable structure, rather than rates of variant occurrence, as the primary heuristic for comparing the underlying grammar across different speaker groups. This approach is additionally informed by the recognition that an adequate understanding of how change is acquired can only be achieved when the incoming variant, *be like*, is situated in relation to the larger system of which it is part (Poplack and Malvar 2007).
A major finding to emerge from the comparative component of this research is that although the primary exponents of the quotative system are essentially the same in the preadolescent and adult data, their rates of occurrence and associated conditioning differ in a number of important respects. An especially intriguing pattern concerns the existence of a sex effect associated with be like in the youngest age group, superficially mirroring a similar (though stronger) effect in the young adult data. At first sight, it is tempting to construe this effect in the eight- to nine-year-olds as an instantiation of the classic pattern of male retreat from female-led changes (Labov 2001b), but the neutralisation of the same effect in the eleven-to-twelve age group militates against this interpretation. A more likely explanation is developmental: the eight- to nine-year-old males lag behind the females in acquiring be like but males subsequently increase their use of this variant in later childhood (see Table 7.5). What is striking in these data is the lability of sex effects: it is not just the contrast between the eight- to nine-year-old males and females in their rates of be like that is remarkable but also the rate increase that emerges when the males in the youngest age group are compared with males in the eleven-to-twelve cohort. Furthermore, differences between these two age groups in overall rates of be like are at odds with the claim that ‘the more diffused be like is, the more likely it is to differentiate male and female speech’ (Tagliamonte and Hudson 1999: 167). These discrepancies indicate that there is no constant relationship between the frequency of be like and sex-differentiated patterns of variation, at least when child and adult populations are compared, nor is there any simple correlation between the emergence of a sex effect in preadolescence and an equivalent effect in the corresponding adult community.

Among the major assets of the methodological approach adopted in this study are the refined measures it contributes to elucidating the extent to which preadolescents engage in and propagate discourse-pragmatic change. Comparison of constraint hierarchies across the preadolescent age cohorts provides key information in this regard. It is evident that the youngest children examined here have acquired more than just the form be like, as they have also internalised a complex set of linguistic constraints governing its use. Furthermore, not only are the eight- to nine-year-olds contributing to the incrementation of change, they are also extending its scope and specificity (Labov 2007: 346). This information can be inferred from measures of grammaticalisation operationalised in this study. These reveal that the youngest children, along with their older peers, are advancing the use of be like in specific environments (i.e., temporal reference and grammatical person) associated with the progression of this variant along the cline of grammaticalisation (Tagliamonte and D’Arcy 2004, 2007). Such findings are not altogether unexpected considering that by the age of eight, restructuring of the vernacular
in favour of the linguistic norms of the ascendant peer-based social order is liable to be well underway.

However, on other key measures, i.e., content of the quote and mimesis, the linguistic behaviour of the youngest children sets them apart from the older children who are more closely aligned with the adults, as indicated by correspondences in variant rates as well as the linguistic conditioning of variant choice. An important inference to be drawn from differences in quantitative patterning between the preadolescent age groups is that the grammar associated with the quotative system has not stabilised by the age of eight and remains malleable beyond this age, as demonstrated by the results of this investigation. This inference bolsters the general conclusion that the acquisition of adult-like patterns of quotative variation (and change) is a developmentally protracted process. The prolonged nature of this process points to fundamental differences between the acquisition of discourse-pragmatic variation and phonological variation. Whereas children are claimed to acquire the bulk of the phonology of their local variety by the age of six or seven (Kerswill 1996: 190), the acquisition schedule for discourse-pragmatic variation extends well into later childhood. Among the possible explanations for this difference is the complexity of the syntax-discourse interface, reported to be the locus of learnability issues in language acquisition (Sorace 2004). Because successful use of quotative markers draws on different areas of linguistic competence transecting discourse and syntax (Meyerhoff and Schleef 2013), integration of this knowledge may not be fully internalised before adolescence. Whatever the precise explanation, the hypothesis enunciated at the outset of this study, namely, that the acquisition of discourse-pragmatic variation will not necessarily resemble that of other variable components of the grammar, is sustained rather than refuted by the results reported here.

7.6 Conclusion

The findings uncovered in this study generate a number of additional questions for future research. An outstanding issue concerns the origins of the complex set of conditions on be like instantiated by the children in the present investigation. If, in the absence of a parental model, be like is acquired from the peer group and older children, when is this process initiated? At what age is be like first acquired and how is it conditioned? Resolution of these issues can only be achieved by extending the focus of the investigation to early childhood in order to probe the developmental roots of quotative variation (Levey and McIntyre MS). Another key, though understudied, question concerns the impact of inter-dialectal differences on the acquisition of change. In other communities where be like has made less dramatic inroads into the quotative system, earlier research found that neither the form nor its associated structure
had been acquired by preadolescents to any appreciable extent (Levey 2007). This raises the critical question of how quantitatively robust (and socially salient) a change needs to be in the speech community before children can begin to acquire it. It is not entirely clear to what extent constraints on incipient changes, as opposed to those operating on mid-range and advanced ones, are accessible to young children (see Cameron 2005). Engagement with these issues is a prerequisite for gaining new insights into children’s participation in and propagation of community-based change, with a view to acquiring a deeper understanding of how children ‘identify the newer pattern in the community system that they are learning, adopt that pattern and then move further in that direction’ (Labov 2012: 276). The empirically accountable framework adopted in this chapter is intended as a contribution to addressing these issues.
Part IV

Variation
8 Register variation in intensifier usage across Asian Englishes

Robert Fuchs and Ulrike Gut

8.1 Introduction

Variationist sociolinguists have repeatedly shown that language variation is constrained by multiple language-external and language-internal factors (Bayley 2002: 118). Two of the main language-external factors found to affect language variation are region/locality and register; yet research that combines the investigation of geographical variation with that of register variation has only just begun (see, for example, Balasubramanian [2009] on Indian English (IndE); Bao and Hong [2006] on Singapore English (SinE); Neumann [2012, 2013] on the Englishes spoken in Canada, New Zealand, India, Hong Kong, Singapore and Jamaica). This chapter contributes to this line of research. It uses phenograms, a type of phylogenetic network, for an investigation of discourse-pragmatic variation across national varieties and registers. Analysis of the distribution of forty-seven intensifier variants in twelve registers of Indian, Singapore, Philippine and British English (BrE) demonstrates how this semi-automatic method of data analysis enables researchers to examine and uncover patterns of discourse-pragmatic variation in large datasets that are not easily amenable to manual analysis. The results reveal variety-consistent effects of formality on intensifier frequency and variety-specific preferences for certain intensifier variants. The remainder of this chapter is structured as follows: Section 8.2 gives a brief overview of previous research on intensifier usage in English. After the description of the data and methods in Section 8.3, the results are presented and discussed in Sections 8.4 and 8.5. Section 8.6 is the conclusion.

This article was written while the second author worked as an External Senior Research Fellow at the Freiburg Research Institute of Advanced Studies (FRIAS), whose support she gratefully acknowledges. The authors would also like to thank two anonymous reviewers, Valentin Werner and the editor for their valuable comments on a previous version of the chapter.
8.2 Intensifier usage and variation in English

As adverbs that modify the concepts denoted by their heads, intensifiers belong to the category of degree modifiers that indicate a relatively high or low point on an intensity scale (Quirk et al. 1985: 589). As such, intensifiers can have an amplifying or diminishing effect on the modified head as in *very good* where the intensifier *very* amplifies the meaning of the adjective *good*, or in *barely begun* where the intensifier *barely* scales down the meaning of the following verb *begun*. Accordingly, intensifiers have been classified with respect to their position on an intensity scale (see, for example, Leech and Svartvik 2002; Sinclair 2005). In this chapter, we follow Quirk et al.’s (1985: 589–603) classification which broadly divides intensifiers into amplifiers and downtoners. Amplifiers, in turn, are divided into: maximisers such as *absolutely* and *perfectly* which put the concept denoted by the head on the upper extreme of the intensity scale; and boosters such as *enormously* and *greatly* which indicate a high but not the highest degree of intensification. Downtoners include approximators, compromisers, diminishers and minimisers which have in common that they diminish the concept denoted by their head. Approximators such as *almost* and *virtually* deny the truth value denoted by the head as in *I almost forgave him*, which implies that the speaker did not in fact forgive the third party. Compromisers such as *sort of* or *rather* ‘reach out towards an assumed norm but at the same time reduce the force of the [modified head]’ (Quirk et al. 1985: 600), while diminishers such as *only* and *somewhat* scale down the force of their heads. Minimisers such as *hardly* and *scarceley* place the concept denoted by the head on the lower extreme of the intensity scale.

As shown in the following examples, intensifiers can modify a number of different heads, including: verbs (1), gradable adjectives (2), nouns (3), and other adverbs (4).

1. I know who *really* matters in my life. (ICE-GB W2F-008-015)
2. Why does one have the impression that it is *particularly* acute in India? (ICE-IND S1B-041-69).
3. This is uh intended for people who perspire heavily *especially* the overweight. (ICE-PHI S1B-047-19)
4. And they stick to each other *quite* well. (ICE-SIN S1A-010-226)

1 Unless otherwise stated, all examples are reproduced *verbatim* from the International Corpus of English (ICE) corpora. Information in brackets refers to individual text codes: ICE-GB, ICE-IND, ICE-PHI and ICE-SIN refer to the British, Indian, Philippine and Singapore sub-corpora of ICE, respectively (see Section 8.3.1); labels such as W2F, S1B and S2A refer to different registers in these corpora (see Table 8.1); they are followed by the text number (e.g., 008) in the respective corpus and the line number (e.g., 015).
Intensifier use and variation have been widely studied in BrE and Northern American English (AmE) (see, *inter alia*, Altenberg 1991; Barnfield and Buchstaller 2010; Biber et al. 1999; Bublitz 1998; Greenbaum 1974; Ito and Tagliamonte 2003; Kennedy 2002; Paradis 1997, 2000; Partington 1993; Rickford et al. 2007; Tagliamonte 2008; Tagliamonte and Roberts 2005). These studies have largely focused on the collocational restrictions, syntactic distribution and semantic properties of individual intensifier variants. Register variation in intensifier usage has remained largely unexplored. A notable exception is Biber et al.’s (1999) comparison of intensifier usage across BrE and AmE conversations and AmE academic writing. Biber et al. found that while both registers have a similar overall ratio of downtoners, amplifiers are twice as frequent in conversations as in academic writing. Moreover, they found that some maximiser variants (*extremely, highly, entirely, fully*) occur exclusively in academic writing while the booster variant *really* and the maximiser variants *totally* and *absolutely* occur only in conversations. Moreover, some downtoner variants such as the compromiser *fairly*, the diminishers *slightly* and *somewhat* as well as the approximator *almost* were found to occur exclusively in academic writing; by contrast, the approximator *nearly* and the compromiser *pretty* were only found in conversations (a finding supported by Nelson et al.’s [2002] study of *pretty* in BrE).

Research on geographical variation in intensifier usage is equally scarce even though such variation does occur. For example, Biber et al. (1999: 565–7) report that the intensifier variants *very* and *quite* occur more frequently in BrE than in AmE conversations while the variants *so, pretty* and *really* are used more frequently in AmE. Moreover, some varieties of English have intensifier variants not found in other varieties. For example, *now* is used as an intensifier in colloquial South African English (Jeffrey and van Rooy 2004); *too much* is a common intensifier variant in all varieties of West African Pidgin English (Peter and Wolf 2007: 13).

Cross-varietal differences in variable frequency and variant preference were observed by de Klerk (2005), who compared the use of intensifiers in informal spoken language produced by Xhosa speakers of English in South Africa with their use in the Wellington Corpus of Spoken New Zealand English (Holmes et al. 1998). De Klerk found that Xhosa English speakers tend to use fewer amplifiers and downtoners than the New Zealand English (NZE) speakers; also, Xhosa speakers evince a higher rate of use of the variants *totally* and *especially*. Overall, though, the Xhosa English speakers use a smaller range of intensifier variants, for example, never using *perfectly* or *terribly* (de Klerk 2005: 84–5). These findings stand in contrast to Coronel’s (2011). Coronel

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2 In principle, it is possible to investigate cross-varietal differences in intensifier usage by comparing the results of existing studies. However, reliable and valid results are difficult to achieve from such comparison as it requires full comparability of the data and methods employed (see further Wagner et al. Chapter 9).
compared patterns of variation in intensifier use across the Wellington Corpus and a corpus of Philippine English (PhiE). She found that the PhiE speakers use a wide range of intensifier variants, comparable to that of the NZE speakers. Similar to the Xhosa English speakers, however, PhiE speakers use fewer intensifiers (particularly downtoners) than NZE speakers although some variants (e.g., the boosters very, especially, truly, highly, fully or the approximator almost) are more frequent in PhiE than in NZE.

In summary, previous research has shown that varieties of English differ both in the frequency of intensifier usage and in the choice of variants used, and that both intensifier frequency and variant choice in turn vary with register. Yet, to date, no study has investigated intensifier variation across more than two registers or more than two varieties of English. Also, previous investigations have tended to be restricted to a limited number of intensifier variants. The present study builds on previous research into intensifier variation in order to: (i) examine the combined effect of register and variety on intensifier variation in English; (ii) explore the role of geographic proximity and degree of nativisation in intensifier variation (see, for example, Xiao 2009; Yao and Collins 2012). To this end, our large-scale cross-varietal and cross-register analysis investigates intensifier variation across corpora of four varieties of English (three Asian English varieties as well as a BrE control variety), each containing twelve registers and forty-seven intensifier variants. The data and methods of data analysis are introduced in more detail next.

8.3 Data and methods

8.3.1 The International Corpus of English

The present study is based on the Indian, Singapore, Philippine and British sub-corpora of the International Corpus of English (ICE) project. The aim of the ICE project is to compile parallel one-million-word corpora of all national varieties of English in the world, including those spoken in countries where English is used as a first language as well as those where it is used as a second language. The project was initiated in the early 1990s by the late Sidney Greenbaum (Greenbaum 1991); at the time of writing, ten sub-corpora have been released and another sixteen are being compiled. All speakers and writers contributing to the corpora were at least eighteen years of age at the time of data collection and were proficient and educated speakers of their respective varieties.

All corpora consist of 60% spoken and 40% written language from a wide range of text types. Following Biber and Conrad’s (2009: 6) definition of

\footnote{More information about the ICE corpora, including details about access to the corpora, can be found on the project website at: \url{http://ice-corpora.net/ice/}.}
register as ‘a variety associated with a particular situation of use (including particular communicative purposes)’, we combine the ICE text types into the twelve registers listed in Table 8.1 (column 3). Constituting 20% (or 200,000 words) of each sub-corpus, private dialogues are by far the largest register represented in each corpus, followed by public dialogues (16% or 160,000

Table 8.1. *Common design features of the ICE corpora (adapted from The ICE Project 2009)*

<table>
<thead>
<tr>
<th>Modality</th>
<th>Subtype</th>
<th>Register</th>
<th>Text type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spoken (60%)</td>
<td>Dialogues</td>
<td>S1A Private (20%)</td>
<td>Face-to-face conversations (18%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S1B Public (16%)</td>
<td>Phone calls (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Classroom lessons (4%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Broadcast discussions (4%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Broadcast interviews (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Parliamentary debates (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Legal cross-examinations (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Business transactions (2%)</td>
</tr>
<tr>
<td></td>
<td>Monologues</td>
<td>S2A Unscripted</td>
<td>Spontaneous commentaries (4%)</td>
</tr>
<tr>
<td>(24%)</td>
<td>(14%)</td>
<td></td>
<td>Unscripted speeches (6%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Demonstrations (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Legal presentations (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S2B Scripted</td>
<td>Broadcast news (4%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Broadcast talks (4%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Non-broadcast talks (2%)</td>
</tr>
<tr>
<td>Written</td>
<td>Non-printed</td>
<td>W1A Student</td>
<td>Student essays (2%)</td>
</tr>
<tr>
<td>(40%)</td>
<td>(4%)</td>
<td>writing (4%)</td>
<td>Exam scripts (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W1B Letters (6%)</td>
<td>Social letters (3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Business letters (3%)</td>
</tr>
<tr>
<td></td>
<td>Printed</td>
<td>W2A Academic</td>
<td>Humanities (2%)</td>
</tr>
<tr>
<td>(30%)</td>
<td>writing (8%)</td>
<td></td>
<td>Social sciences (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Natural sciences (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W2B Popular</td>
<td>Humanities (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>writing (8%)</td>
<td>Social sciences (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Natural sciences (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W2C Reportage</td>
<td>Press news reports (4%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(4%)</td>
<td>Administrative writing (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W2D Instructional</td>
<td>Skills/hobbies (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>writing (4%)</td>
<td>Press editorials (2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W2E Persuasive</td>
<td>Novels and short stories (4%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>writing (2%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>W2F Creative</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>writing (4%)</td>
<td></td>
</tr>
</tbody>
</table>
words). With 2% (or 20,000 words), persuasive writing is one of the smallest registers. Each register-section of a corpus consists of a number of texts of at least 2000 words each in order to ensure that each section samples material from a representative number of speakers or authors. During corpus compilation, texts were not cut off mid-sentence when the 2000-word limit was reached; corpus compilers allowed sentences to run to completion and sometimes included following sentences as well if they felt that this was important for text interpretation. As a result, each corpus contains more than one million words, but usually not more than 1.13 million.

For the present study, the Indian, Singapore and Philippine sub-corpora, i.e., the Asian sub-corpora available at the time of the study, as well as the British sub-corpus were selected for analysis and comparison. The targeted Asian varieties are hypothesised to show both similarities and differences with regard to intensifier usage. IndE and SinE both derive from BrE while PhiE derives from AmE. Moreover, IndE has influenced both SinE and PhiE in variables such as lexical focus marking (Fuchs 2012; Parviainen 2012).

The sub-corpora were searched for forty-seven intensifier variants with the concordancing software AntConc (used for ICE India, Singapore and Philippines, see Anthony 2011) and IceCup (used for ICE GB, see Nelson et al. 2002). The forty-seven variants were selected on the basis that they were the most frequently occurring variants in the ICE corpora: each variant occurred more than twenty times in at least one of the corpora. The variants excluded from this analysis are highly infrequent, amounting to less than 0.6% of all intensifier tokens in the corpora. Their exclusion from this study is therefore unlikely to greatly affect the results reported in Section 8.4. In total, nineteen booster, nine maximiser, five diminisher, five compromiser, three minimiser and six approximator variants were included in the analysis. The individual variants are listed here by category:

- **boosters**: badly, damn, deeply, especially, extremely, fully, greatly, heavily, highly, incredibly, particularly, perfectly, (booster) quite, really, so, strongly, terribly, too, very
- **maximisers**: absolutely, altogether, completely, definitely, entirely, (maximiser) quite, thoroughly, totally, utterly
- **diminishers**: merely, partially, simply, slightly, somewhat
- **compromisers**: fairly, more or less, pretty, (compromiser) quite, rather
- **minimisers**: at all, barely, hardly
- **approximators**: almost, kind of, nearly, practically, sort of, virtually

All tokens automatically extracted with AntConc and IceCup were examined manually to retain in the analysis only those that functioned as intensifiers. For example, so in (5) is not an intensifier but a connector; in (6), however, it is used as an intensifier that could be replaced by other boosters such as very without
changing the meaning of the sentence. In (7), really is used in the sense of ‘in reality’ and is not an intensifier; by contrast, in (8), really is not used to correct assumptions to the contrary (‘It might not seem like it, but we really hope that . . .’) but functions to bolster the speaker’s commitment towards the sentiment expressed in the sentence.

(5) So I see the cheerful children and whenever I enter into the class they laugh at me. (ICE-IND S1A-001-182)

(6) We feel so happy to be with them. (ICE-IND S1A-001-103)

(7) ‘Is that really you, Ah Hung?’ She stared at me for a moment, incredulous. (ICE-SIN W2F-014-124)

(8) But we really hope that Mr Tan you could understand the position we are in. (ICE-SIN S1B-077-42)

After removing hits that did not constitute intensifiers, we prepared the data for variation analysis. To this end, we counted how many tokens of every intensifier variant occurred in each of the registers of the four sub-corpora. The resulting table consisted of four times twelve rows (four corpora and twelve registers) and forty-seven intensifier variant columns, totalling 2256 cells. Since identical registers usually contain slightly different numbers of words across the sub-corpora, the token counts in all cells had to be normalised per million words (pmw) to achieve comparability of results (see McEnery et al. 2006: 52–3).

8.3.2 Cluster analysis and phenograms (NeighbourNet)

With over 2000 cells, the table produced for this analysis to identify patterns in cross-corpora and -register intensifier variation is too large for detailed manual analysis. While it is possible to infer from the table broad patterns of variety- or register-specific variation in variable frequency (done by summing and comparing the frequencies of all variants for any given corpus or register), cross-variety or cross-register preferences for individual intensifier variants cannot be determined easily by eyeballing the data in this manner.

Consider, for example, the hypothetical dataset in Table 8.2. As shown in the bottom row of the table, the normalised overall frequency of the variable is identical in Corpora 1 and 2 (200 tokens pmw) and highest in Corpus 3 (255 tokens pmw). The figures suggest that the varieties represented in Corpora 1 and 2, but not that represented in Corpus 3, are comparable in terms of intensifier usage. However, this analysis ignores variation in the distribution of individual intensifier variants across the three corpora. Close inspection of the relative frequency (in per cent) of variants across the corpora reveals
similarities in variant distribution between Corpora 2 and 3 (Variant 2 is the majority variant; Variant 3 is negligible) and marked differences in variant distribution between Corpora 1 and 2 (Variant 1 is frequent in Corpus 1 and negligible in Corpus 2; Variant 2 is more than twice as frequent in Corpus 2 than Corpus 1). This hypothetical example demonstrates that comparisons of aggregate data or overall intensifier frequencies may mask more fine-grained differences in variable usage. Yet such differences may be difficult, if not impossible, to detect through manual inspection if the analysis compares dozens of different variants and corpora or registers. Automatic procedures are necessary to overcome this hurdle.

The remainder of this section will introduce two complementary methods for semi-automatic analysis of large datasets. First, we will introduce a distance measure from cluster analysis which is used to compute an index revealing the linguistic differences that occur between all pairs of corpora. \(^4\) (In Section 8.4, we will apply this method to twelve registers in four corpora.) Then, we will demonstrate how these differences can be visualised in the form of a phenogram. \(^5\) These methods were first developed in the field of genetics to help determine how different species are related. Given the genetic make-up of a specific species, the task was to compare it to other species and to determine degrees of relatedness, i.e., to investigate how similar their genomes are. Relatively similar species constitute a phylum, and hence the name phylogenetic methods.

In linguistics, phenograms and cluster analysis were first adopted by historical linguists to determine whether and how different languages are related. (For early applications of cluster analysis and similar methods, see Black [1976]; Embleton [1986]; for later work, see Forster and Renfrew

<table>
<thead>
<tr>
<th>Variant</th>
<th>Corpus 1</th>
<th>Corpus 2</th>
<th>Corpus 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>N pmw</td>
<td>%</td>
</tr>
<tr>
<td>Variant 1</td>
<td>50</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Variant 2</td>
<td>40</td>
<td>80</td>
<td>85</td>
</tr>
<tr>
<td>Variant 3</td>
<td>10</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>Total N of variable pmw</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

\(^4\) For an introduction to cluster analysis, see Manning and Schütze (1999), Nichols and Warnow (2008), Romesburg (1984) and Xu and Wunsch (2005, 2008).

\(^5\) A step-by-step guide to phenogram visualisation and analysis, including technical details, is available for download from the first author’s website at: www.uni-muenster.de/EnglishDepartment/Research/EngLing/people/fuchs.shtml.
The same methods have also been applied to analyses of dialect and intra-speaker variation (see, for example, Kortmann and Wolk 2012; Maguire et al. 2010; McMahon et al. 2007; Szmrecsanyi 2013; Szmrecsanyi and Wolk 2011). Moreover, cluster analysis and a related method, multi-dimensional scaling, have been applied extensively to analyses of register variation (see, for example, Biber 1992, 1996, 2006, 2009b; Biber and Finegan 1986; Gries and Hilpert 2010). However, to the best of our knowledge, only Werner (2013) has adopted the combination of cluster analysis and phenograms to explore register variation; his analysis focused on the use of the present perfect in World Englishes. As shown by Werner (2013) and illustrated further in this chapter, using cluster analysis and phenograms to explore register variation enables us to uncover patterns of variation in large datasets that may remain hidden otherwise. To demonstrate how these simple and transparent methods work in combination, we will apply them first to the hypothetical dataset in Table 8.2, before applying them to our ICE data in Section 8.4.

The first step, cluster analysis, involves quantifying differences in the frequency of each intensifier variant across each of the corpora included in the analysis. The difference (or degree of variation) in variant frequency across any two corpora is determined by subtracting the frequency of each variant in one corpus from its frequency in another corpus. If the result is a negative value, the absolute of the difference is taken. The sum of the differences for all variants included in the analysis is a measure of how dissimilar the use of the variable is across any two corpora. Take, for example, Corpora 1 and 2 in Table 8.2. Variant 1 has a frequency of 100 pmw in Corpus 1 and 20 pmw in Corpus 2. The difference in Variant 1 frequency is thus: 100 – 20 = 80, as shown in the top row of Table 8.3. Variant 2 has a frequency of 80 pmw in Corpus 1 and 170 pmw in Corpus 2. The difference in Variant 2 frequency is: 80 – 170 = –90.

Table 8.3. Computation of differences in variable use in the data presented in Table 8.2

<table>
<thead>
<tr>
<th></th>
<th>Corpus 1 vs. Corpus 2</th>
<th>Corpus 1 vs. Corpus 3</th>
<th>Corpus 2 vs. Corpus 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variant 1</td>
<td></td>
<td>100 – 20</td>
<td>= 80</td>
</tr>
<tr>
<td>Variant 2</td>
<td></td>
<td>80 – 170</td>
<td>= 90</td>
</tr>
<tr>
<td>Variant 3</td>
<td></td>
<td>20 – 10</td>
<td>= 10</td>
</tr>
<tr>
<td>Total difference</td>
<td>180</td>
<td>205</td>
<td>55</td>
</tr>
</tbody>
</table>

6 This way of determining pairwise differences is known as Euclidean distance, which is arguably the least complex and most well-known of a range of dissimilarity methods.
Because the absolute of negative values must be taken, the difference in Variant 2 usage between Corpora 1 and 2 is given as 90 in Table 8.3. For Variant 3, the difference is: 20 – 10 = 10. The total difference between Corpora 1 and 2 is the sum of these values: 80 + 90 + 10 = 180. The steps detailed here are then repeated for comparison of all pairs of corpora investigated, as illustrated in Table 8.3.

The bottom row in Table 8.3 gives the total differences in variant frequency across each corpus pair. It shows that Corpora 2 and 3 (right-most column) are the two corpora most similar to each other in terms of variant preference (total difference: 55), while Corpora 1 and 3 (middle column) are the least similar (total difference: 205). These figures confirm observations derived from visual inspection of Table 8.2. The proportion of each intensifier variant is roughly similar across Corpora 2 and 3 despite the fact that Corpus 3 shows a higher overall occurrence of intensifiers than Corpus 2. By contrast, although in Corpora 1 and 2 intensifiers occur with the same normalised frequency (see Table 8.2), these corpora are dissimilar to each other in intensifier use; this is due to the differences in variant distribution highlighted in Table 8.3. (Recall that later we will consider a total of forty-seven variants across twelve registers in four corpora which will hamper the uncovering of variation patterns such as these through visual inspection of the raw data.)

A powerful way of representing pairwise differences in variant frequency across large numbers of (sub-)corpora is the distance matrix. It is presented in the form of a table; its number of columns and rows equal the number of independent variables (e.g., corpora) being compared. For example, if the distance matrix compares three corpora, the table will consist of three data rows and three data columns. To illustrate this, Table 8.4 is a distance matrix of the data generated in Table 8.3. The middle data cell in the top row of the table gives the difference between Corpora 1 and 2, computed earlier as amounting to 180. Where a corpus is compared with itself (e.g., left-most cell in the top row of Table 8.4), the difference must be zero. These cells are redundant, as are the ones in grey in Table 8.4; they would essentially only repeat information already shown in other cells. In Section 8.4, distance

<table>
<thead>
<tr>
<th></th>
<th>Corpus 1</th>
<th>Corpus 2</th>
<th>Corpus 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corpus 1</td>
<td>0</td>
<td>180</td>
<td>205</td>
</tr>
<tr>
<td>Corpus 2</td>
<td>–</td>
<td>0</td>
<td>55</td>
</tr>
<tr>
<td>Corpus 3</td>
<td>–</td>
<td>–</td>
<td>0</td>
</tr>
</tbody>
</table>
matrices are computed using the ‘dist’ method included in the cluster library in the R statistical environment (Maechler et al. 2002).\footnote{By default, the ‘dist’ method uses Euclidean distance (see Maechler et al. [2002] for details and alternatives).}

The information contained in a distance matrix can be visualised in a phenogram.\footnote{This is by no means the only way of visualising the information contained in a distance matrix. A broad distinction is made between rooted and unrooted trees. Rooted trees are hierarchical and all nodes converge to a common origin. The phenogram (NeighbourNet) approach introduced here uses unrooted trees which are not hierarchical. The term ‘tree’ goes back to the earlier assumption made in biology (much as in historical linguistics) that all life forms/languages can be traced back to a common origin. Unrooted trees/phenograms have the advantage of not presupposing a common origin (unwarranted in some biological and many linguistic applications, comparisons of registers among them), and allowing comparisons with multiple neighbours. For example, if a rooted tree network were used in the present study, two registers A and B that are separated by a short distance would be grouped together in a single branch of the network. Another register C, which is also relatively close to register B but a little less than register A, would be placed in a separate branch. This would give rise to the impression that registers B and C differ more from each other than they really do. In an unrooted tree, the differences/distances between all sub-corpora (registers in our case) are represented more accurately.}

Figure 8.1 *Phenogram based on the distance matrix in Table 8.4*

[Diagram of a phenogram showing three corpora: Corpus1, Corpus2, Corpus3, with distances between them indicated by edge lengths.

Figure 8.1 shows an example. The row/column values shown in the distance matrix in Table 8.4 are represented in Figure 8.1 as the nodes (or endpoints) of lines (referred to as edges); the nodes bear the labels of the corpora (i.e., independent variables) included in the analysis. The numerical distance values given in the distance matrix are visualised in the phenogram by the length of the edges, i.e., the distance one has to travel between each of the nodes. For example, Table 8.4 has shown that the distance between Corpora 1 and 2 is smaller than that between Corpora 1 and 3, and that between Corpora 2 and 3 is the smallest. This is reflected in Figure 8.1 by the differential length of the edges between the corpora: the edge between the nodes for Corpora 1 and 2 is slightly shorter than that between the nodes for Corpora 1 and 3; the edge between Corpora 2 and 3 is the shortest. As the number of independent variables (e.g., corpora, registers) included in the analysis rises, graphic representations like the one in Figure 8.1 are much easier to interpret than corresponding distance matrices like the one in Table 8.4; they can reveal patterns not easily discernible from normalised frequency data such as those...
given in Table 8.2. The relative position of the nodes is not important. For example, in Figure 8.1, the node for Corpus 3 could also be placed closer to the node for Corpus 1 without changing the length of the edge line, i.e., the distance one has to travel along the edge lines between the two nodes. To put it simply: the black edges are the streets connecting two nodes and even if there were a more direct route through ‘white space’, one can only travel from one node to another along the black edges.

For this study, phenograms were generated using the ‘equal angle’ (NeighbourNet) method provided by the software SplitsTree4 (available free of charge at www.splitstree.org; see also Dress and Huson 2004; Huson and Bryant 2006a). It represents the distances between the nodes, i.e., the corpora, in two-dimensional space without imposing a hierarchy on the nodes. Unfortunately, the main advantage of phenograms, i.e., visualising in two-dimensional space the differences between a number of independent variables (e.g., corpora), may have certain disadvantages: the distances between the nodes in the phenogram may not always correspond fully to the numerical distance values given in the corresponding distance matrix. It is therefore important to verify whether there are any differences between a phenogram and its corresponding distance matrix. For the equal angle method used here, these differences are quantified by the least squares fit (LS fit). If the difference between the phenogram and the distance matrix is close to one hundred, the phenogram is an accurate visualisation of the data computed in the corresponding distance matrix.

8.3.3 Application of cluster analysis and phenograms to the analysis of cross-dialect and cross-register intensifier variation

To generate a phenogram that visualises register- and variety-specific patterns in intensifier usage across the IndE, SinE, PhiE and BrE corpora, the normalised frequency of the forty-seven intensifier variants was determined for each of the twelve ICE registers in each of the four corpora. It would also have been possible to use as the basis of the register variation analysis the thirty-two text types listed in the right-most column of Table 8.1 or the broader categories in the columns further to the left. However, analysis of twelve registers appeared to be a good compromise solution in order to keep the number of independent variables/nodes to be compared at a manageable level of forty-eight (twelve registers times four varieties). If this number were lower, important variation patterns might remain hidden; if it were higher, the phenogram would become too complex for visual

9 The LS fit is defined as ‘the sum of all pairwise differences in the graph divided by the sum of all pairwise distances in the matrix, times 100’ (Huson and Bryant 2006b: 29).
inspection and data interpretation, thus reducing the main motivation for using this method.

In addition to the normalised frequencies of individual intensifier variants, we included in the analysis the normalised frequencies of intensifiers across the six intensifier categories introduced in Section 8.3.1 (boosters, diminishers etc.). This decision was motivated by the following hypothesis: two registers might differ in intensifier usage in that, for example, the frequency of very is lower in Register 1 than in Register 2 while that of so is higher in Register 1 than in Register 2. Thus, while the normalised overall frequency of boosters might be comparable across the two registers, the registers might differ in terms of variant preference. If, on the other hand, Register 2 had a higher frequency than Register 1 of almost than of so (and vice versa), this may be indicative of cross-register differences in approximator and booster frequency. Consideration in the analysis of normalised variable frequencies across intensifier categories will allow us to uncover any such variation patterns.

8.4 Results

Figure 8.2 shows the phenogram generated from the normalised token frequencies of all forty-seven intensifier variants included in the analysis (see Section 8.3.1). Each node (end of edges) represents one of the twelve registers (see Table 8.1 for labels) in one of the four varieties included in the analysis (see Section 8.3.1): IndE, SinE, PhiE and BrE. Recall that the distance between two registers/varieties is visualised as the shortest route that connects their respective nodes along the edge lines; the route along the edge lines might in some cases be longer than the seemingly more direct route through white space. The twelve registers of each of the four varieties are distributed across two axes: a formality axis (Axis 1) stretching from the bottom left corner of the phenogram (most formal) to its top right corner (least formal); and a variety axis (Axis 2) representing geographical variation. In Section 8.4.1, we will describe the more general results of the analysis gleaned from visual inspection of the phenogram; in Section 8.4.2, we will move on to a more detailed analysis of how the differential frequency of individual intensifier variants contributes to variation in intensifier usage.

8.4.1 Variety and register variation in variable frequency

Focusing first on register variation, the four nodes at the top right of the phenogram (boxed in Figure 8.3) are those representing the least formal

---

10 With an LS fit of 99.8, this phenogram is an accurate visual representation of the data (see Section 8.3.2).
Figure 8.2  Phenogram of intensifier variation across registers and corpora (The first part of each node label refers to one of the registers listed in column 3 of Table 8.1; the second part refers to one of the ICE sub-corpora introduced in Section 8.3.1 (GB = BrE; IND = IndE; PHI = PhiE; SIN = SinE).)
register in all four varieties: private conversations (S1A). The nodes at the bottom left of the phenogram (also boxed in Figure 8.3) are those representing the two most formal registers in the four varieties: academic writing (W2A) and press writing/reportage (W2C). Furthermore, Figure 8.3 shows that across all four varieties, most of the written registers (node labels starting with W) cluster in the bottom half of the phenogram, i.e., the more formal end of the register continuum, while most of the spoken registers (node labels starting with S) cluster in the top half of the phenogram, i.e., the less formal end of the register continuum. There is, then, a clear division in variable frequency between written (more formal) and spoken (less formal) registers: written registers tend to have a low frequency of intensifier use; spoken registers tend to have a high frequency of intensifier use. The only exceptions are letters (W1B) and scripted monologues (S2B). The nodes for SinE, PhiE and BrE letters (W1B_SIN, W1B_PHI, W1B_GB) are located to the right of the register transition space in Figure 8.3 towards the less formal end of the register continuum. Scripted monologues are the only spoken register located to the left of the register transition space in Figure 8.3 towards the more formal end of the register continuum. They are one of the most formal spoken registers and resemble written registers in terms of intensifier frequency.

In terms of geographical variation, the short length of the four arrows placed in parallel to Axis 2 along the formality continuum in Figure 8.4 suggests that cross-varietal differences in variable frequency are less pronounced than cross-register differences; nodes that are further apart differ more from each other in intensifier usage than nodes that are positioned close to each other. Moreover, as indicated by the relative length of arrows in the top and bottom halves of the phenogram, cross-varietal differences in intensifier frequency are more pronounced among the less formal registers to the top right of the phenogram than they are among the more formal registers to the bottom left of the phenogram.

Figures 8.2–8.4, then, show that formality and variety need to be considered together to yield accurate descriptions of intensifier variation. As we progress from more formal to more informal registers along Axis 1 (bottom left to top right), we see an increase in the breadth of the network which equals an increase in the degree of intensifier frequency variation between registers. The four varieties differ the most in intensifier frequency in their most informal register: private conversations (S1A). Recall that the shortest route between two nodes along the edges of a phenogram equals the difference in intensifier usage between these nodes. Thus, the phenogram shows that the distance between SinE and BrE private conversations (S1A_SIN and S1A_GB, in the top right corner of Figure 8.2) is greater
Figure 8.3 *Phenogram of intensifier variation across registers and corpora – focus on register variation*
Figure 8.4 Phenogram of intensifier variation across registers and corpora – focus on geographical variation
than the combined distance between all of the written registers (in the bottom left corner of Figure 8.2).

Table 8.5 gives the normalised intensifier frequency (pmw) across selected varieties and registers. These are some of the frequencies from which the phenogram in Figure 8.2 was generated. Inspection of the raw data confirms our interpretation of the phenogram. Firstly, the raw data shown in Table 8.5 confirm the split in intensifier frequency between informal (spoken) and formal (written) registers: the former show much higher (individual and mean) normalised frequencies of intensifier use than the latter. Secondly, the raw data confirm that geographical variation in intensifier frequency is more pronounced in informal than formal registers: in private conversations, intensifier frequency differs markedly across the varieties; in press writing, it differs negligibly across PhiE and SinE.

The preceding analysis has revealed the following key findings about the effect of register and variety on intensifier usage: (i) across varieties, variable frequency varies according to the formality of the register, with a higher intensifier frequency found in informal than in formal registers; (ii) cross-varietal differences in intensifier frequency are more marked in informal than in formal registers.

Table 8.5. Intensifier frequency (per million words) in selected varieties and registers

<table>
<thead>
<tr>
<th>Variety and register</th>
<th>Label</th>
<th>Variable frequency pmw(^{11})</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spoken</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BrE private conversations</td>
<td>S1A_GB</td>
<td>12,742</td>
</tr>
<tr>
<td>SinE private conversations</td>
<td>S1A_SIN</td>
<td>12,667</td>
</tr>
<tr>
<td>IndE private conversations</td>
<td>S1A_IND</td>
<td>9358</td>
</tr>
<tr>
<td>PhiE private conversations</td>
<td>S1A_PHI</td>
<td>8744</td>
</tr>
<tr>
<td>BrE public conversations</td>
<td>S1B_GB</td>
<td>9663</td>
</tr>
<tr>
<td><strong>Written</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhiE press writing</td>
<td>W2C_PHI</td>
<td>2110</td>
</tr>
<tr>
<td>SinE press writing</td>
<td>W2C_SIN</td>
<td>2443</td>
</tr>
<tr>
<td>SinE instructional writing</td>
<td>W2D_SIN</td>
<td>2788</td>
</tr>
<tr>
<td>IndE academic writing</td>
<td>W2A_IND</td>
<td>2813</td>
</tr>
</tbody>
</table>

\(^{11}\) Since each intensifier token is tabulated both as an intensifier variant and as a representative of an intensifier group (e.g., a token of very is counted once for the variant very and again for the group of boosters), the actual normalised frequency of intensifiers given in this table is always half that of the frequency given in this table. Frequencies given further down for individual intensifier variants are actual normalised frequencies. This is particularly important when comparing our results to previous or future research.
However, there are also exceptions to the patterns outlined here, which provide interesting points of departure for more in-depth analyses of cross-variety differences in intensifier usage. Two such exceptions will be discussed next.

The first is that regarding PhiE private conversations (S1A_PHI) and PhiE public conversations (S1B_PHI). The relative location of their nodes in Figure 8.2 indicates that they differ in intensifier frequency from the same registers in the other varieties. The nodes for private conversations (S1A) are generally located at the top right of the Figure 8.2 phenogram, i.e., at the less formal end of the formality continuum. Intensifier frequency was argued to account for this result: nodes for private conversations cluster together because this register has the highest rates of intensifier usage across the sub-corpora. A more fine-grained analysis than that presented earlier, which compares the relative frequency of individual intensifier variants across private conversations in the different sub-corpora, is needed to reveal why PhiE private conversations are not among the four nodes with the highest intensifier frequency in the data.

As shown in Figure 8.2, the nodes for IndE and PhiE private conversations (S1A_IND, S1A_PHI) have similar positions on Axis 1 (formality), which was attributed to the two varieties’ comparable intensifier frequency in this register. However, their nodes are positioned at opposite ends of Axis 2 (cross-varietal differences): the former (S1A_IND) is situated towards the top end of the axis; the latter (S1A_PHI) towards the bottom end. We will argue later that their differential positioning on Axis 2 is due mainly to cross-variety variation in variant preference.

Table 8.6 displays the normalised frequency (pmw) of selected intensifier variants (so, too, really, very) and intensifier groups (boosters, compromisers) in private conversations in the IndE and PhiE sub-corpora (columns 2 and 3). In addition, the table gives values for differences in individual variant frequency between the IndE and PhiE private conversations as well as what percentage of the total distance between the registers this difference accounts for (columns 6 and 7). For example, really is very frequent in PhiE (2759 pmw) but infrequent in IndE (619 pmw); the difference between PhiE and IndE private conversations in terms of really usage thus equals: 2759 − 619 = 2140 pmw. The total distance (taken from the distance matrix) between PhiE and IndE private conversations amounts to 8326 pmw. Moreover, so is more frequent in PhiE and very is more frequent in IndE. Thus, the differential frequency of really explains 26% (= 8326/2140*100) of the difference in intensifier usage between private conversations in these two varieties, that of so explains 8%, and
Table 8.6. Intensifier variant (white rows) and intensifier group (grey rows) variation across IndE, PhiE and SinE private conversations (selected variants and categories only)

<table>
<thead>
<tr>
<th>Intensifier variant/group</th>
<th>S1A_IND</th>
<th>S1A_PHI</th>
<th>S1A_SIN</th>
<th>diff. PHI-IND</th>
<th>diff. SIN-IND</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All boosters</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>so</td>
<td>1418</td>
<td>2076</td>
<td>2719</td>
<td>658</td>
<td>1302</td>
</tr>
<tr>
<td>too</td>
<td>327</td>
<td>529</td>
<td>974</td>
<td>201</td>
<td>647</td>
</tr>
<tr>
<td>really</td>
<td>619</td>
<td>2759</td>
<td>1191</td>
<td>2140</td>
<td>572</td>
</tr>
<tr>
<td>very</td>
<td>4482</td>
<td>1948</td>
<td>4469</td>
<td>−2534</td>
<td>−13</td>
</tr>
<tr>
<td><strong>All compromisers</strong></td>
<td>534</td>
<td>304</td>
<td>1847</td>
<td>−230</td>
<td>1313</td>
</tr>
<tr>
<td>quite (compromiser)</td>
<td>435</td>
<td>172</td>
<td>1634</td>
<td>−263</td>
<td>1199</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>9358</td>
<td>8742</td>
<td>12,667</td>
<td>8326</td>
<td>9067</td>
</tr>
</tbody>
</table>

12 For diff-scores, note that minuend − subtrahend = difference +/−1 (due to rounding).
that of very 30%. In sum, almost two thirds (64%) of the distance between the S1A_IND and S1A_PHI nodes in Figure 8.2 are down to the variable frequency of really, very and so across private conversations in IndE and PhiE. The remaining one-third of the difference in intensifier usage across the two nodes is due to variable preferences for a large number of less frequent intensifier variants which, for reasons of space, are not discussed here. Yet despite cross-variety differences in the frequency of different booster variants, the overall frequency of boosters is roughly similar across the two varieties, as shown in the top row of Table 8.6 (N = 7523 and N = 7726) and indicated by the nodes’ similar positioning along Axis 1 in Figure 8.2.

Different variation patterns also account for the different positioning in Figure 8.2 of IndE and SinE private conversations (S1A_IND, S1A_SIN). In contrast to the nodes discussed, IndE and SinE private conversations differ mainly with respect to their positioning along Axis 1 (formality) and very little with respect to their positioning along Axis 2 (cross-varietal differences). Table 8.6 shows that the boosters so, too and really are more frequent in SinE private conversations (column 4) than in IndE private conversations (column 2). As a result, boosters in general are more frequent in SinE private conversations (N = 9739 vs. N = 7523). The compromiser quite is also more frequent in SinE private conversations and increases the overall token frequency of compromisers in this node. The differential positioning of the nodes for IndE and SinE private conversations in Figure 8.2 is thus not due to variation in variant frequencies but is due to the differential overall intensification rates in IndE and SinE private conversations.

The second exception to the general patterns described in Section 8.4.1 and to be explored here concerns intensifier usage in public conversations (S1B) and letters (W1B). In one part of the Figure 8.2 phenogram, which is replicated for convenience in Figure 8.5, there is a cluster of IndE, SinE and BrE public conversations (S1B) and IndE, PhiE and BrE unscripted monologues (S2A). These nodes cluster together in the solid-lined box in Figure 8.5 because they have comparable rates of intensifier use. Also note that, for the most part, the nodes for the two spoken registers (S1B, S2A) are located in the phenogram some distance away from the nodes for the written register of letters (W1B), as highlighted by the comparison of BrE and SinE public conversations and letters in the two right-most dashed ellipses in Figure 8.5. However, the node for PhiE public conversations (S1B_PHI) does not cluster with other spoken registers in the top half of Figure 8.5; instead, it is located close to the node for PhiE letters (W1B_PHI), as seen in the left-most dashed ellipses in Figure 8.5.

These patterns call for a more fine-grained analysis of intensifier usage in public conversations. Table 8.7 shows the relative frequency of selected
Figure 8.5 Phenogram of intensifier use in public conversations (S1B), unscripted monologues (S2A) and letters (W1B)
Table 8.7. *Intensifier variant (white rows) and intensifier group (grey rows) variation across IndE, PhiE and SinE public conversations (selected variants only)*

<table>
<thead>
<tr>
<th>Intensifier variant/group</th>
<th>S1B_IND</th>
<th>S1B_PHI</th>
<th>S1B_SIN</th>
<th>diff. IND-PHI</th>
<th>diff. IND-SIN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All boosters</strong></td>
<td>4647</td>
<td>4820</td>
<td>5095</td>
<td>173</td>
<td>4%</td>
</tr>
<tr>
<td>very</td>
<td>3161</td>
<td>2084</td>
<td>3168</td>
<td>-1077</td>
<td>24%</td>
</tr>
<tr>
<td>really</td>
<td>335</td>
<td>891</td>
<td>542</td>
<td>556</td>
<td>12%</td>
</tr>
<tr>
<td>so</td>
<td>508</td>
<td>859</td>
<td>508</td>
<td>351</td>
<td>8%</td>
</tr>
<tr>
<td>too</td>
<td>147</td>
<td>318</td>
<td>424</td>
<td>172</td>
<td>4%</td>
</tr>
<tr>
<td><strong>All approximators</strong></td>
<td>241</td>
<td>414</td>
<td>322</td>
<td>173</td>
<td>4%</td>
</tr>
<tr>
<td>almost</td>
<td>110</td>
<td>334</td>
<td>130</td>
<td>224</td>
<td>5%</td>
</tr>
<tr>
<td><strong>All maximisers</strong></td>
<td>419</td>
<td>207</td>
<td>424</td>
<td>-212</td>
<td>5%</td>
</tr>
<tr>
<td><strong>All compromisers</strong></td>
<td>256</td>
<td>255</td>
<td>736</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>quite (compromiser)</td>
<td>84</td>
<td>159</td>
<td>440</td>
<td>75</td>
<td>2%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>5892</td>
<td>5886</td>
<td>6953</td>
<td>4502</td>
<td>2867</td>
</tr>
</tbody>
</table>
intensifier variants and intensifier groups in IndE, PhiE and SinE public conversations (columns 2–4). It also shows the differences in normalised variant/intensifier group frequency between each pair of sub-corpora (columns 5 and 7) and the percentage of the total distance between the corpora that each intensifier variant or intensifier group constitutes (columns 6 and 8). (For reasons of space, only those intensifier variants are shown that contribute the most to cross-corpora differences in intensifier use.) The results show that the total distance between IndE and SinE public conversations (S1B_IND, S1B_SIN) is much smaller than that between IndE and PhiE public conversations (S1B_IND, S1B_PHI) (2867 vs. 4502), which is reflected in their respective positions in the Figure 8.5 phenogram. Inspection of the raw data in Table 8.7 suggests that the variation between IndE and SinE public conversations is mainly due to the higher frequency in SinE of two booster and one compromiser variant (really, too; quite), which causes boosters and compromisers in general to be more frequent in the SinE than in the IndE data. The difference between IndE and PhiE public conversations resembles that between IndE and PhiE private conversations discussed earlier. Compared to the respective PhiE registers, IndE public and private conversations have a much lower frequency of the variant very and a higher frequency of the booster variants really, so, too; the overall normalised frequency of boosters hardly varies across the two varieties. In addition, almost is more frequent in PhiE than IndE, contributing to a higher overall frequency of approximators in PhiE. The individual intensifier variants discussed earlier contribute to the differences in intensifier usage between IndE, PhiE and SinE public conversations and account for the differential positioning of these nodes in Figure 8.5.

8.5 Discussion

The preceding cluster and phenogram analysis has shown that there are two main predictors for intensifier variation in the varieties of English studied here. The first predictor is formality: intensifiers are used more frequently in informal than in formal registers. This result is in line with that yielded by Biber et al.’s (1999) comparison of informal conversations and academic writing in BrE and AmE. The second predictor is variety: individual intensifier variants occur with differential frequencies across varieties of English. Moreover, our analysis has revealed an interaction between the two predictors, formality and variety: cross-variety variation in intensifier use is more marked in informal than formal registers, as predicted by Schneider (2003, 2007) and Kirkpatrick (2007). Without use of the semi-automatic methods of data analysis introduced in this chapter, these patterns may have remained undetected in our large dataset.
It was the exceptional positioning of some nodes in the phenogram that led us to uncover this interaction effect and to examine more closely the distribution of selected variants in private and public conversations in our data. This examination revealed that SinE and IndE have more in common in terms of intensifier usage than previous research has suggested. Fuchs and Coronel (2011) reported that intensifiers occur around three times more frequently in SinE than in IndE and PhiE, which have roughly similar intensifier rates. However, the cluster and phenogram analysis of private and public conversations conducted in this chapter has revealed that despite comparable overall rates in intensifier use in IndE and PhiE, the two varieties differ markedly in terms of variant distribution. IndE and SinE, by contrast, while differing in terms of overall rates of intensifier use, resemble each other in terms of variant distribution. Our analysis, then, demonstrates the importance of going beyond comparisons of variable frequencies and investigating more closely cross-variety differences in variant choice.

Explanations for the cross-variety variation in intensifier usage can be sought in the varieties’ socio-historical development. PhiE is a somewhat atypical post-colonial variety of English in that its major historical influence is AmE. IndE and SinE, by contrast, are both the product of British colonisation, and IndE has influenced the development of SinE due to the settlement of South Indians in Singapore and the influx of English teachers from India to Singapore. Parviainen (2012) and Parviainen and Fuchs (MS) suggest that it may be due to these factors that some IndE discourse-pragmatic features have spread to SinE (and other varieties). However, the higher frequency in intensifier usage in SinE may also be explained by its greater degree of nativisation compared to IndE and PhiE (see Schneider 2007). We would like to argue that the varieties’ socio-political development may also explain the similarities in intensifier usage between IndE and SinE uncovered in our study.

One of the aims of this chapter was to uncover patterns of intensifier variation across three Asian varieties of English and to test whether geographical proximity and degree of nativisation influence intensifier variation. The analysis revealed the following: (i) SinE speakers use intensifiers with a higher frequency than speakers of IndE and PhiE; (ii) in private and public conversations, variant distribution varies considerably across the three varieties. These results suggest that with respect to intensifier usage there is no

13 Lim (2012) reports the following results: (i) in terms of modal verb usage, IndE is more similar to PhiE than to SinE; (ii) in terms of the relative frequency of different quasi-modal variants, PhiE and SinE are more similar to each other than to IndE. The differences between Lim’s (2012) results and ours could be explained in two ways. It is conceivable that the similarities between IndE and PhiE that we found do not extend to the usage of (quasi-)modals. Alternatively, it also seems possible that a more fine-grained analysis of the use of (quasi-)modals, taking into account register variation, would lead to results that are more similar to the patterns we found in intensifier usage in these varieties.
specific pattern that all Asian varieties of English examined here have in common. They contradict the results by Yao and Collins (2012), who found that patterns of variation between the present perfect and the simple past are comparable across Asian varieties of English, and the results by Fuchs (2016), who found differences between South Asian and East Asian varieties of English in variation patterns between the present perfect and the simple past. We conclude that intensifier usage is subject to more areal variation than references to the past. Future research will show whether these results are indicative of more general differences between morpho-syntactic and discourse-pragmatic variation across Asian Englishes.

8.6 Conclusion

In this chapter, we have demonstrated the descriptive value of semi-automatic methods for analysing linguistic variation in large datasets. Systematic application of cluster analysis and phenograms to the study of intensifier variation across different registers in different varieties of English has shown that: (i) intensifiers evince register-specific patterning across the varieties; (ii) Asian varieties have developed different patterns of intensifier use. Importantly, cluster analysis and phenograms can be applied to examine the effect of diverse extra-linguistic predictors on patterns of variation in the use of any quantifiable variable from any part of the linguistic system, including a wide range of discourse-pragmatic variables. In addition to language-external factors, language-internal constraints can also be investigated with cluster analysis and phenograms. For example, instead of basing our analysis on the frequency of different intensifier variants in each of the registers in our corpora, we could have examined the frequency of intensification across adjectives, verbs, nouns etc. to compare the effect of type of modified head on intensifier variation across varieties. Cluster analysis and phenograms will be particularly useful where large amounts of data and a larger number of cross-cutting extra- and intra-linguistic factors are of interest. This chapter serves as a model for future discourse variation analyses of this kind.
The use of referential general extenders across registers

*Suzanne Evans Wagner, Ashley Hesson and Heidi M. Little*

9.1 Introduction

General extenders (GEs), such as *and things like that, or whatever* and *that kind of stuff*, have become a mainstay of discourse variation studies (see, for example, Tagliamonte Chapter 5). Yet, analyses of their distribution across registers have yielded conflicting results. Some researchers have reported higher rates of GE use in talk with familiar interlocutors while others have reported higher rates of GE use in talk with strangers (see further Section 9.2.2). In this chapter, we seek to account for these seeming contradictions by utilising a novel, rigorous quantitative method to examine the differential distribution of GE functions, as opposed to GE frequencies, in familiar vs. non-familiar registers as well as vernacular narrative vs. non-narrative styles (henceforth ‘personal’ and ‘non-personal’ styles). As such, we first look at previous research concerning the many functions attributed to GEs as well as their distribution across registers. We then introduce our data which are drawn from two corpora of US English, namely the *Language Change and Stabilisation* corpus (LCS, Wagner 2008) and the *Fisher English* corpus (Fisher, Cieri et al. 2004, 2005). Using sub-sets of the LCS and Fisher...
corpora, which have been controlled for speaker sex, speaker age and speaker region of origin, we then apply quantitative methods to calculate the proportional use of referential (‘set-extending’) and non-referential GEs in talk between familiars and talk between strangers as well as in personal and non-personal styles. Our results suggest that GE variation across register and style may be more limited than previously suspected, indicating a remarkable consistency in the distribution of referential GEs across corpora and contexts. Furthermore, our innovative methodology provides a replicable way to classify broad GE functions and distinguish personal from non-personal styles, which can be used in future GE studies on other dialects of English and/or extended to other discourse-pragmatic features to ensure comparability of results.

9.2 Literature review

9.2.1 GE forms and functions

In what follows, we use the term GE to refer to the discourse-pragmatic variable that is the target of our study. GE appears to be the consensus term in recent literature (Cheshire 2007; Palacios Martínez 2011; Secova 2014; Tagliamonte and Denis 2010; Terraschke 2010b), although other labels have been applied such as set-marking tags (Dines 1980), terminating tags (Aijmer 1985), post-N(oun) hedges (Meyerhoff 1992) and vague category markers (O’Keefe 2004).

Tagliamonte and Denis (2010) have proposed a template-based definition of this variable, recognising the potential for lexical, semantic and structural diversity across forms (see also Pichler and Levey 2011: 448–9). English GEs are most frequently composed of some combination of: a connector (and, or), a quantifier (all, some, any etc.), a generic (thing, stuff etc.) and a comparative (like that, that kind of, that type of) as in (1)–(3), but they may also occur in the form of fixed expressions such as those illustrated in (4)–(5). GEs, like other discourse-pragmatic features, typically occur at utterance boundaries, as in (1). However, they can occur clause-finally, as in (2), and clause-internally, as in (3).

(1) you have a pie eating contest, like, all this kind of stuff (LCS, Julia, I023)
(2) um I’ve never been on a jury or anything like that and I’ve never been in court so (Fisher, 31406, 07813)

little work on the distribution of GEs in American English. This study is a step towards addressing this imbalance.

3 When referencing examples from the corpora, information is listed as follows for LCS: corpus name, speaker pseudonym and interview number (I = interview). For Fisher, examples are listed by corpus name, speaker’s personal identification (PID) number and transcription file number.
but like with my grandmom and everything I would speak all Chinese (LCS, Jeanne, I010)

I had a couple of colds or whatever but I never really got like real sick last year at all (Fisher, 9154, 00032)

I don’t know how to explain it I mean they have their own stadium and what not (Fisher, 44406, 02927)

GEs resemble other discourse-pragmatic features insofar as they are multi-functional. Previous research has attempted to disambiguate the various pragmatic functions of GEs (see, for example, Aijmer 1985; Ball and Ariel 1978; Dines 1980; Overstreet 2005; Overstreet and Yule 1997; Pichler and Levey 2011; Stubbe and Holmes 1995; Ward and Birner 1993). First, as their name suggests, GEs have an extending, or referential, function. GEs can serve to ‘extend’ a concept by evoking in the hearer’s mind a more ‘general’ set of entities to which a previously mentioned referent or referents belong(s), or with which it shares features. An example is given in (6), where arm and leg represent members of the general set of body parts evoked by or something. Thus, GEs allow for a degree of imprecision in speech by providing a way to express content without actually having to enumerate what that content is (Aijmer 1985).

and I’m afraid of like breaking an arm or a leg or something (Fisher, 50709, 07127)

Second, GEs may have non-referential functions that Pichler and Levey (2011: 452) term ‘interpersonal/textual’. These include, among others: indicating speaker uncertainty, signalling solidarity and doing face work, foregrounding a new discourse entity and introducing a new topic. Pichler and Levey point out that any given GE token can perform both referential and non-referential functions simultaneously. Third, some researchers have observed that GE tokens can be semantically bleached and appear in discourse with no discernible referent. Pichler and Levey (2011: 452) describe these cases as ‘punctors devoid of referential and pragmatic meaning’. In (7) and (8), the GE cannot be referential for lack of a clearly identifiable, populated (and thereby extendable) set in the discourse. With respect to (7), Pichler and Levey (2011) assert that and that is not extending because the speaker had stated that his lineage was exclusively Scottish, thereby making it unlikely that and that refers to some broader set. In (8), we posit that this is an example of an utterance-final string of discourse-pragmatic features (I don’t know, like) to which a GE is redundantly appended.

Just cos eh some of my family’s Scottish and that, and I don’t really like getting called a Geordie. (Pichler and Levey 2011: 452)
Although Pichler and Levey distinguish non-referential interpersonal/textual GEs from non-referential punctors, we found it quite difficult to apply this distinction consistently to our own data. Consider the example in (9) where the GE *or something* has several potential interpretations. It could be extending the set of activities that has to be done. It could also be indexing uncertainty on behalf of the speaker, or at least a reluctance to explicate a longer list of tasks. It is also possible that *or something* has no referential meaning whatsoever and that it is used to indicate a perception of mutual understanding, thus indexing speaker solidarity. Along similar lines, it could be signalling the end of a turn. It is additionally conceivable that *or something* could be a vacuous punctor with no appreciable referential, social or discourse-organising function. Finally, *or something* could be performing some or all of those potential functions simultaneously. Determining whether or not a GE has a referent is already a challenging task that runs the risk of being highly subjective; determining which interpersonal or textual function (if any) a non-referential GE performs is a no less challenging or subjective empirical process.\(^4\)

To circumvent these issues, we will focus on distinguishing referential and non-referential GEs and leave for future work the problem of distinguishing other GE discourse functions. In this chapter, we refer to GEs performing \textit{at least} an identifiable extending/referential function as eGEs (Wagner \textit{et al.} 2015). These can include GEs performing \textit{only} a referential function as well as GEs that are \textit{simultaneously} performing a referential and interpersonal/textual function. We do not distinguish between these two types. We will refer to non-referential GEs, i.e., those performing no identifiable extending function, as nGEs. These can include GEs performing \textit{only} an interpersonal/textual function and GEs that are simply discourse punctors performing no interpersonal/textual functions. Again, we do not distinguish these two types. In our study, we suggest an alternative to the more qualitative approaches employed in prior studies. Our objective is to replicably identify eGEs without recourse to subjective intuitions about GE users’ pragmatic goals. We will clarify both the eGE and nGE terminologies and our method for distinguishing

\(^4\) We are not the first to point this out, of course. For example, Cheshire (2007) writes candidly about her frustrations with coding GE functions. Tagliamonte and Denis (2010: 365, fn. 12) created a ‘maybe’ category for GE tokens that had a ‘potential’ referent rather than an obvious one.
the two function types in Section 9.5. Once eGEs in our data have been located, we can determine with some confidence the frequency with which speakers deploy them across stylistic registers.

9.2.2 GEs across registers

In the GE literature, claims about GEs’ discourse functions are often linked to the type of discourse (i.e., register) in which they occur. The most frequent way in which register has been operationalised in studies of GEs is by comparing talk between familiar and unfamiliar interlocutors. With particular regard to GE frequency across registers, there are two areas of potential ambiguity in the existing literature that we discuss in this section. First, competing claims have been made about the politeness strategies (positive or negative) that may typically motivate high rates of GE use. Second, in any given register, GEs may be performing both positive and negative politeness simultaneously. These factors both have the potential to complicate the interpretation of GE frequency rates across registers.

9.2.2.1 GE frequency and politeness strategies Several studies have pointed to frequent GE use as a marker of social intimacy. Among familiars, the indefiniteness conveyed by GEs may reinforce intersubjectivity by emphasising interlocutors’ interpersonal understanding (Aijmer 1985; Overstreet 2005: 1851; Overstreet and Yule 1997). Interlocutors may prioritise expressions of solidarity and implications of shared knowledge over clear, maximally informative speech. Hence, the employment of GEs as a unifying agent is commonly considered to be an example of a positive politeness strategy (Brown and Levinson 1987; Overstreet and Yule 1997). GEs can be used as positive politeness markers ‘to introduce the patterns of intimate language, and metaphorically extend the rapport between speaker and hearer’ (Meyerhoff 1992: 68). As such, GEs suggest ‘the existence of specific areas of social knowledge’ (Dubois 1992: 180), both contributing to and depending on speakers’ mutual understanding.

Support for the idea that GEs are used by interlocutors to promote positive politeness comes from a study by Overstreet and Yule (1997) which contrasted speech from two US English datasets. The first dataset contained dyadic face-to-face and telephone exchanges among friends who ranged in age from their twenties to their sixties. The other dataset contained less casual speech between strangers in contexts such as news interviews on the radio, political debates and courtroom proceedings on television, and face-to-face conversations in academic settings. Overstreet and Yule determined that GEs were utilised at a higher rate in the more casual speech among friends. They suggested that marking intersubjectivity is one of GEs’ basic functions and that it is therefore
unsurprising that they should occur most frequently in talk between interlocutors with a great deal of shared knowledge (Overstreet and Yule 1997: 255). Under this theory, familiar interlocutors employ GEs to indicate positive politeness and to invite solidarity.

However, Terraschke’s (2007) results potentially complicate the role of politeness strategies in inter-register GE variation. She analysed conversations between near-strangers in both New Zealand English and German, comparing her results to those obtained in Overstreet’s (1999, 2005) analysis of conversations between familiars in US English and German. Terraschke found that the overall rate at which GEs were employed in her data between near-strangers was higher than it was in Overstreet’s data between familiars.\(^5\) Terraschke accounted for the higher rates of GE use in her data by suggesting that interactions with non-familiars may be inherently face-threatening. As pointed out by Wolfson (1988: 32–4), politeness devices occur more frequently in interactions between people who do not know each other very well. Terraschke therefore concludes that in addition to using GEs to perform positive politeness, speakers may be using GEs as negative politeness ‘hedges’ in order to diminish the strength of their statements (Brown and Levinson 1987; see also Cheshire 2007: 158; Meyerhoff 1992).

\(9.2.2.2\) Individual GEs as markers of positive and/or negative politeness

GEs may be used simultaneously to serve both positive and negative politeness needs. This may make it difficult to categorise any given body of talk as mainly oriented to positive or negative politeness. For example, O’Keeffe (2004) examined the use of GEs and a small number of other vague category markers (e.g., non-GE things as in the most extraordinary things) in telephone calls to a radio programme broadcast in Ireland. She classified GE occurrences by their ‘reference domain’ (Irish, global, European, Biblical) and sub-domains thereof (e.g., sub-domains of ‘Irish’ included general, Northern Ireland, historical). Across domains, GEs occurred most frequently in the Irish reference domain, such as when the radio presenter or caller referred to government grants for Irish-speaking communities or to Irish car-rental companies. O’Keeffe suggested that GEs were being used intersubjectively to affirm common ground between unfamiliar interlocutors. However, she also found that the same GEs were used to hedge statements or to allow speakers to talk euphemistically about sensitive topics, as in ‘veneral diseases or prostitution or that kind of thing’ (O’Keeffe 2004: 14, Figure 6).

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\(^5\) In order to obtain comparable results with Overstreet (2005), only GE lexical variants used at least three times were included by Terraschke (2007) when calculating the frequency of GEs generated in the corpora. Frequency was measured informally as number of GEs compared to length of corpus in hours (Terraschke 2007).
Like O’Keeffe (2004), Youssef (1993) also found GEs to be operating as part of both positive and negative politeness in her work on Trinidad Creole *an ting* in the speech of patients and counsellors discussing AIDS. *An ting*, corresponding to Standard English *and things*, is argued by Youssef to be generally regarded as a positive politeness marker both because it is Creole and because, as a GE, ‘it conveys implicit shared knowledge’ (1993: 295). Although used relatively infrequently (once by a single counsellor and rarely more than once per patient), *an ting* was largely employed as a levelling device to negotiate the inherently asymmetric patient–counsellor dynamic: ‘whilst in some cases *an ting* established genuine shared knowledge, *an ting* most usually appeared as an attempt to feign shared knowledge’ (Youssef 1993: 296). Thus, patients used *an ting* to put themselves on a more equal footing conversationally with their counsellors. Yet, in addition to its role in power negotiation, *an ting* also seemed to alleviate the awkwardness of speaking on a potentially uncomfortable topic, supporting O’Keeffe’s (2004) hypothesis that GEs may be used to evade discussion of themes considered negative.

9.2.3 Summary

The likely referential and interpersonal functions of GEs have been primarily analysed across two principal register types: talk with familiars vs. talk with strangers. There is disagreement about whether GEs used in talk with strangers promote positive politeness, negative politeness or both. It seems that a case can be made for any of these functions in any given corpus. The upshot of this is that when frequency results conflict – with GEs sometimes more frequent in talk between strangers and sometimes more frequent in talk between familiars –, the discrepancies can be explained away by selecting any one of these politeness strategies as a motivation for increased GE usage. Of course, frequency measures in general, whether focused on politeness strategies or any other conversational feature, are not directly comparable between corpora, given the noted variability in transcription practices, speech situations, topic distributions etc. across datasets (Pichler 2010; see also Section 9.6.1). Yet, providing a *post hoc*, case-by-case explanation for contrasting frequency findings will not allow us to make generalisations about how GEs are used with familiar and unfamiliar speakers, regardless of the corpus from which they are drawn. In this chapter, we attempt to make some generalisations by: (i) side-stepping the qualitative explanations proffered in earlier studies; and (ii) applying a new method for quantifying GE distribution.

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6 These examples support Overstreet’s (2005: 1851) assertion ‘that it is the assumption of shared knowledge and experience, not the fact, that characterises intersubjectivity’.
9.3 Aims of the present study

As we have shown, only a handful of studies have employed quantitative methods to look at GE frequency across registers, and none of this work includes GE discourse function in the quantitative analysis. A quantitative analysis that is sensitive to function may help to disentangle the ambiguous and seemingly contradictory interpretations represented by the existing literature. As we observed earlier, a major obstacle to undertaking such an analysis has been the subjectivity inherent in distinguishing referential GE uses from non-referential GE ones despite some well-founded recent attempts to resolve this (see, for example, Pichler and Levey 2011).

In this chapter, we employ a conservative yet replicable method of identifying those GEs that have at least an unequivocal set-extending function (Wagner et al. 2015). We compare the proportional use of set-extending GEs vs. all other GEs in two datasets that represent two different registers: casual face-to-face conversation among familiar peers and more formal yet still casual conversation between strangers on the telephone (see further Section 9.4). The goal of this work is to test the conflicting claims in the literature about the effect of register on GE variation outlined in Section 9.2. To reiterate, these existing claims are: (i) conversations between familiars generate a larger proportion of GEs than conversations among unfamiliars (Overstreet and Yule 1997: 252); (ii) conversations between familiars produce a smaller proportion of GEs than conversations among unfamiliars (Terraschke 2007); and (iii) there is no difference in the rate of GE use in conversations between familiars and unfamiliars (Cheshire 2007: 160; Stubbe and Holmes 1995: 79). Given the variability of results across studies and with no a priori reason to find one set of results more empirically convincing than another, we will simply adopt a hypothesis based on (ii) for convenience and for its resonance with our own personal intuitions. That is, we hypothesise that GEs with an identifiable referential (set-extending) function will be proportionally more frequent in talk between strangers. This hypothesis is guided by our intuition that strangers are more likely to be introducing new information about themselves and that this may be favourable to the construction of lists (e.g., I like rock, pop, jazz and stuff. What about you?).

9.4 Data

We selected two corpora of American English that were comparable with respect to date of recording and speaker demographics but contrastive with

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7 We leave aside here any discussion of GE use within a specialised register, for example, medical discourse (Youssef 1993), academic discourse (Barbieri 2012) or computer-mediated communication (Fernandez and Yuldashev 2011).
respect to register. Our sub-samples comprise young women from the US state of Pennsylvania recorded in the mid-2000s.

9.4.1 Talk between familiars: LCS

The LCS data constitute sociolinguistic interviews between a researcher and thirteen white female high-school students, interviewed in pairs or triads in 2005 and 2006 (Wagner 2008). The age range was sixteen to twenty years. All of the young women were long-time residents of Philadelphia, Pennsylvania, and were native speakers of the local dialect of English. We regard LCS as speech between familiars for two primary reasons. First, the researcher had been a participant-observer in the high school prior to recording interviews and was known to the interviewees. Second, the interviews were highly informal, the participants in each interview were friends, and much of their speech was directed to their friends rather than the researcher.

9.4.2 Talk between strangers: Fisher

The Fisher English corpus was compiled by the Linguistic Data Consortium in 2003 (Cieri et al. 2004, 2005). It is composed of 11,699 recordings of more than 14,000 participants from across the United States. Speech was collected in a format similar to that of the Switchboard corpus (Godfrey and Holliman 1997), which is to say that an automated telephone system randomly connected participants to one another, and no pair was ever connected more than once. At the start of each phone call, a conversation topic was presented to the participants. In all, there were forty topics, ranging from pets to the 11 September 2001 attacks on New York City. A new subject was selected each day and then the list was restarted. Conversations lasted 5–10 minutes.

Detailed geographic information is not available for the participants, and the participants’ ethnicity is likewise not provided. Nonetheless, we were able to match a sub-set of Fisher participants with the LCS participants by speaker sex, age and region of origin (see Table 9.1). This sub-set comprised fifty-six female speakers aged sixteen to twenty-four, all from Pennsylvania. Since participants did not know one another, the telephone conversations between strangers

8 Switchboard is a well-known collection of conversations between strangers, originally sponsored by Texas Instruments in 1990–1991. It has been used extensively in linguistic research by phoneticians, computational linguists, corpus linguists and many others. For more information about the Switchboard corpus, see http://catalog.ldc.upenn.edu/LDC97S62.

9 Restricting the age range to sixteen to twenty years for perfect comparability with LCS did not yield a sufficiently large number of GE tokens for meaningful quantitative analysis. Therefore, we expanded the age range of speakers in the Fisher sample. Within the scope of a secondary data analysis, this is a decent second-best strategy. The age ranges are not unduly different from one another: we are not, for instance, comparing adolescents with senior citizens.
9.4.3 Extraction of GE tokens

As in Cheshire (2007), Pichler and Levey (2011), Tagliamonte (Chapter 5) and Tagliamonte and Denis (2010), we identified GEs in our data using a form-based procedure. As explicated in Section 9.2.1, GEs typically conform to a lexical template consisting of one or more of a connector, quantifier, generic and comparative. We employed the template given in Tagliamonte and Denis (2010: 337). After applying this template to our data, 605 GE tokens were extracted from the LCS data, and 337 GE tokens were extracted from the Fisher data.

9.5 Identifying referential GEs (eGEs)

In this section, we provide a brief overview of the identification criteria for what we refer to as eGEs, i.e., GEs with at least a set-extending/referential function, vs. nGEs, i.e., non-set-extending GEs. (A more detailed explication of this method can be found in Wagner et al. 2015.) GEs were coded for their pragmatic function using the hierarchical coding scheme in Figure 9.1. The scheme was designed to reduce coder subjectivity, and to enhance replicability and reliability across multiple datasets, as required for the present study.

Trained coders were directed to determine whether a given GE token had two or more identifiable REFERENTS (question A), under the assumption that listing
is evidence for extension (Jefferson 1990). It was virtually always the case that referents were of the same constituent type and were usually determiner phrases. Once referents had been identified, we assumed a standard generative model to use syntactic relations for further classification. As a first step, referents of a GE could only be searched for within a local domain, which we specified as the prepositional phrase (PP) if one was present, as in (10), and the tense phrase (TP) in all other cases.

\[ (10) \text{ it's not really [about math or English or anything else]PP (LCS, Jeanne, I042)} \]

If only one potential referent occurred within the local domain, coders were directed to consider whether it was unambiguously the intended referent of the GE or whether competing referents might be present (question B). In (11), there is no PP local domain, so referents are searched for within the first available TP. There is ambiguity in the domain: does and stuff extend the set of things that can be knocked down (e.g., trees, buildings) or does it extend the set of actions that could be taken to extend the campus (e.g., knock down trees, buy more land, build upwards)? Regardless of speaker intention, which cannot be reliably assessed, this ambiguity suggests that extension is not a primary function of

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Figure 9.1  *GE pragmatic function coding scheme*
(11) from the hearer’s view. If (11) were referential, its ambiguity would force the listener to choose between two possible interpretations. This strongly suggests from a practical, listener-oriented perspective that (11) is serving a social or discursive function if it has any appreciable function at all. Thus, based on our scheme and its underlying motivations, this token would be classified as an nGE as per question C in Figure 9.1.

(11) the school’s growing and the campus can’t unless [you knock down trees and stuff]_{TP} (LCS, Melissa, I044)

If the single referent was deemed unambiguous, with no competitors in the local discourse domain, coders were required to seek at least one more referent within the DISCOURSE CONTEXT (question C). We defined discourse context as the speaker turn and prevented coders from searching for a referent elsewhere in the discourse. In (12), old veterans is the only referent in the first local domain (the TP). A second referent, homeless people, can be found within the same speaker turn. This token was therefore classified as an eGE.

(12) no I think they help homeless people [help old veterans or something]_{TP} (LCS, Abby, I047)

GEs that passed all the required diagnostics were coded as set-extending eGEs. Those that did not, which were the majority, were coded as non-set-extending nGEs.

9.6 Results

9.6.1 Frequency of GE use in LCS and Fisher

Table 9.2 shows that the LCS and Fisher corpora were similar in terms of their distribution of GE variant forms, as might be expected for GEs drawn from age/
sex-matched populations in the same US dialect region. This reassured us that the LCS and Fisher datasets were comparable, and that any demographic and dialectal differences would have a minimal effect on our examination of register difference.

In the interest of providing a comparison with the existing literature on GEs and register, we began by considering whether overall rates of GE use would be higher in LCS (talk between familiars) or in Fisher (talk between strangers). However, as mentioned in Section 9.2.2, this type of calculation raises methodological and theoretical concerns. First, the results of the standard calculation of GE frequency per 10,000 words is dependent on the transcription conventions of the corpus/corpora at hand and the analyst’s definition of ‘word’ for counting purposes (see further Pichler 2010). This is a particular concern for a cross-corpora study such as our own. We employed the same method for counting words in both LCS and Fisher: the Unix wc function. As Pichler (2010: 594–5) has demonstrated, differences in the way words are hyphenated or compounded across corpora may affect the comparability of the overall word counts and thereby the frequency calculations derived from them. In the LCS corpus, for example, the word highschool was transcribed as a compound word while in the Fisher corpus it was transcribed as a two-word sequence high school. This kind of discrepancy is not impossible to retrospectively address but would require the researcher to generate an exhaustive list of words that might be transcribed differently in each corpus. Such an undertaking cannot be executed with any degree of accountability.

Second, like many discourse-pragmatic phenomena, GE frequency is subject to tremendous inter-speaker variability (Cheshire 2007: 163; Dubois 1992: 198). Overall frequencies are less useful under these circumstances since a single speaker could easily distort the mean production rate with an extreme value. In order to assess the amount of variability in our sample, we plotted individual speakers’ GE production rates per 10,000 words of speech for each corpus. These distributions indicated that GE use was approximately normally distributed in the population of interest, as both samples were unimodal and reasonably symmetric upon visual inspection. However, one LCS speaker (Jeanne) was an exception to this general pattern. She produced GEs at five times the rate of the LCS average, suggesting that she was an outlier with respect to our LCS sample. Her GE production rate was tested for exclusion using Dixon’s Q-Test (1950). She met the criteria

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10 Dixon’s Q-Test is a common measure for identifying outliers. It can be used to motivate removal of a single point from an otherwise fairly homogeneous dataset. Statistical outlier status is established by calculating the respective ratios of the data range with two points: the candidate for exclusion and the next most extreme observation. If the difference between these two ratios is sufficiently great, Dixon’s Q-Test supports removal of the candidate point.
for removal \((Q = 0.817, \text{ rejected at the 99\% confidence level})\) and was subsequently eliminated from the outlier-sensitive frequency calculations.

On average, excluding the outlier point, GEs in LCS were employed at a rate of 25.42 per 10,000 words as compared to a rate of 42.04 per 10,000 words in Fisher. This difference is significant \((t = 3.41, p < 0.01)\) and appears at first blush to provide support for Terraschke’s (2007) finding and our hypothesis formulated in Section 9.3, i.e., that GEs are more frequent in talk between strangers. In light of our concerns about transcription method having an effect on GE frequency calculations, this finding should be treated with caution. While we do not reject the possibility that a given speaker’s GE frequency may fluctuate in response to changes in register nor that a given register may generally favour or disfavour GE production, we assert that current methodology cannot discern these possibilities with any degree of reliability. Nonetheless, the method of comparing eGE and nGE distribution used here has been determined to be reliable compared with subjective methods (Wagner et al. 2015) and, as we will show, overcomes the aforementioned limitations of calculating GE frequency alone.

Furthermore, from a theoretical standpoint, the frequency with which speakers produce GEs in a given register is in any case likely to be a poor indicator of GEs’ stylistic and pragmatic functions. That is, gross frequency counts provide no information on what speakers are doing with GEs in different registers. Qualitative data analysis would be an appropriate tool for small datasets, but for a large cross-corpora comparison such as this one, we turned to quantitative methods. For this, we employed our operationalisation of GE pragmatic function described in Section 9.5.

### 9.6.2 Rate of eGE (extending function) use in LCS and Fisher

Table 9.3 displays the distribution of extending (eGE) and non-extending (nGE) tokens in the LCS and Fisher corpora. For LCS, 15.7\% \((N = 95/605)\) of GEs were eGEs and 84.3\% \((N = 510/605)\) were nGEs. Overall, 17.5\% \((N = 59/337)\) of GE tokens in Fisher were determined to be eGEs and the

<table>
<thead>
<tr>
<th></th>
<th>LCS</th>
<th>Fisher</th>
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<tbody>
<tr>
<td>GE tokens ((N))</td>
<td>605</td>
<td>337</td>
</tr>
<tr>
<td>eGEs ((N))</td>
<td>95</td>
<td>59</td>
</tr>
<tr>
<td>nGEs ((N))</td>
<td>510</td>
<td>278</td>
</tr>
<tr>
<td>% eGE</td>
<td>15.7</td>
<td>17.5</td>
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Table 9.3. Distribution of eGEs and nGEs in LCS and Fisher
other 82.5% (N = 278/337) to be nGEs. The difference in proportional use of eGEs in the LCS and Fisher corpora was not significant ($\chi^2 = 0.39, p = 0.53$), indicating that GEs are being used as set-extenders at approximately similar rates in both corpora.

This provides a point of comparison for the rates of GE use presented earlier. Though speakers may possibly be using more GEs in Fisher than LCS, they are using them in essentially the same way, a finding that we discuss in more detail in Section 9.7. This suggests that register may not have as considerable an influence on GE use as originally anticipated. Nonetheless, there remained the possibility that even if eGE and nGE distribution in our data is not conditioned by register, it is conditioned at a finer granularity by stylistic variation within a register.

9.6.3 Style

In variationist sociolinguistics, ‘style’ typically refers to intra-speaker shifts in the frequency of use of linguistic variants, as a result of changes of interlocutors, settings, topics or of the speaker’s own social goals during the course of a recording session (Schilling-Estes 2002). Though ‘register’ and ‘style’ are non-equivalent, they undoubtedly intersect in a meaningful way. Considering Agha’s (2005: 38) definition of registers as ‘reflexive models of language use that are disseminated […] through communicative processes’, it follows that consistent, topic-specific patterns in GE use associated with certain interlocutor types (i.e., unfamiliars vs. familiars) may contribute to (or even constitute) differences in GE production across registers. We have already established that our two corpora are likely to have a different overall style based on their contrastive registers: unfamiliar vs. familiar talk. However, up to this point, we have not considered the more fine-grained elements of style shifting as related to topic or speakers’ interactional goals.

This section delves into topic- and turn-based style shifting as a check on our earlier treatment of style and register as largely interchangeable within the context of familiar vs. unfamiliar talk. We tried to operationalise topic/turn-level style in a way that would allow us to identify similar types of talk in both LCS and Fisher using the same coding scheme, despite the established differences in interlocutor familiarity between these datasets. To this end, we needed a coding scheme that would distinguish friendly, personal and/or intimate speech from socially neutral speech.

Topic/turn-level style is generally coded in order to get a sense of the overall vernacularity of a speaker’s recording session: what Labov (2006 [1966]) originally described as the proportional use of ‘casual’ style vs. ‘careful’
style. So long as the parameters of ‘casual’ style (or whatever style the researcher would like to isolate) are well defined and carefully coded, speakers can be grouped for an analysis of inter-speaker stylistic variation. Labov (2001a), for instance, developed a coding algorithm (a style ‘decision tree’) for quantifying the vernacularity of a sociolinguistic interview. For every token extracted from the interview, the analyst codes its context for speech act or topic. Implicit in this scheme is the assumption (supported by many studies, for example, Henderson 1996; Labov 2006; Mazzaro 2005; Trudgill 1972) that certain speech acts/topics, such as narrating an eventful personal story or talking about games played as a child, are inherently favourable to quantitatively more vernacular speech, while other speech acts/topics, such as talking about language, are inherently unfavourable to the vernacular.

For our purposes, a similar scheme for coding and quantifying vernacular vs. formal speech was desirable. However, Labov’s style tree, which was developed specifically for sociolinguistic interviews, was not appropriate for our data since although the LCS corpus comprises sociolinguistic interviews, the Fisher corpus does not. Furthermore, the topics discussed in LCS mostly centred around school, friends etc. whereas the topics in Fisher were more diverse (not to mention prescribed by an external supervisor), ranging from discussions on ‘personal habits’ to ‘issues in the Middle East’. Thus, coding for topic alone was not helpful to our analysis.

Instead, we sought to capture some of the basic insights of Labov’s tree while jettisoning the requirement that specific topics be identified. In the same way that Labov’s scheme prioritises personal narratives as the major locus of ‘casual’ speech, we defined the speech context for every GE token in our data as ‘personal’ or ‘other’. This binary division is intended to represent the one between ‘casual’ and ‘careful’ speech set up by Labov, i.e., ‘personal’ style in our scheme is expected to be more vernacular than ‘other’ styles. Personal narratives are typically defined as a series of linguistic units (typically clauses) whose temporal sequence matches that of the ‘reportable’ event being described, but they are not simply chronological accounts (Labov and Waletzky 1967). They are told ‘in answer to some stimulus from outside, and to establish some point of personal interest’, and ‘narratives are so designed as to emphasise the strange and unusual character of the situation’ (Labov and Waletzky 1967: 34). Often the narrator recounts his or her experiences with danger or drama, and his or her post hoc perspective on those experiences. Importantly, the experiences are personal to the narrator and not an account of a third party’s experience. They are told in the first person and the main action is told in a series of independent clauses (e.g., *He came in. He attacked me. I hit him hard.*).

As explained, the Fisher data collection method did not lend itself to the elicitation of personal narratives. However, we sought to identify clauses that were linguistically similar to those in personal narratives described earlier.
Therefore, a GE was considered to occur in a personal context only if the following criteria were met by the clause that contained it:

a. The subject of the verb was in the first person: I, we.

b. The verb was in either the present tense or a past tense, i.e., the speaker was likely to be describing a lived experience, not speculating about a future one.

c. There were no modal verbs, i.e., the speaker was describing an actual experience, not a hypothetical one.

d. No mental/deontic matrix verbs (*I thought, I think, I wanted*) were used, i.e., the speaker was more likely to be recounting events rather than reflecting on them.

All other GE tokens were coded as ‘other’. For example, the speech context for the GE in (13) was coded as ‘personal’ because the GE or something occurs in a past-tense clause with a first-person subject and includes no mental matrix or modal verbs. This determination makes intuitive sense such that (13) seems to contribute to the progression of an unfolding set of actions, consistent with Labov and Waletzky’s (1967) definition of narrative. The speech context for the GE in (14) was coded as ‘other’ because it failed to meet the first criterion of first-person subject as well as the modal verb criterion. More importantly, however, (14) exemplifies talk that is not particularly friendly, intimate or casual. As a decontextualised utterance, it does not obviously belong to a personal disclosure. Instead, with its ambiguously generic second-person pronoun, (14) has the flavour of an incomplete and non-committal stance that could be made regardless of the social distance between the speaker and her interlocutor.

(13) and I realised and I got off at Moore Street or something (LCS, Abby, I047)

(14) even if you couldn’t really see the court or whatever (Fisher, 26894, 02879)

In summary, our system for coding topic/turn-level style focuses on defining and reliably identifying personal speech, just as Labov’s (2006 [1966]) style coding tree targets casual speech. Though our ‘other’ category is admittedly heterogeneous, its members are individually and collectively contrastive with our style of interest. This treatment, which can be directly compared to the ‘residual’ category in Labov’s coding tree, recognises that style cannot be conclusively and/or objectively determined for all utterances in a way that facilitates meaningful inter-speaker comparisons.

Table 9.4 shows the proportion of ‘personal’ style in each corpus and the proportional use of eGEs within that style category. As we might expect for talk between strangers, the Fisher corpus has an overall lower proportion of personal style (19.6%) than the more informal LCS corpus (23.0%). However, more unexpectedly, the difference between rates is not significantly different from chance ($\chi^2 = 1.27, p = 0.26$). This suggests that though LCS and Fisher represent socially distinct interaction types, their topic distribution
(grossly construed) is comparable. In other words, they are micro-stylistically fairly similar despite being socially contrastive. Likewise, within the personal style of talk, although eGEs are more frequent (19.7%) in the Fisher corpus than in the LCS corpus (10.1%), this difference is not statistically significant ($\chi^2 = 2.83, p = 0.92$).

### 9.6.4 Summary of results

In summary, we find that:

(i) overall GE frequency varies across the registers represented by Fisher and LCS, but this finding may be unreliable for reasons outlined earlier;

(ii) proportional use of GEs for referential purposes (i.e., set-extension, eGEs) is comparable across registers;

(iii) proportional use of GEs for referential purposes (i.e., set-extension, eGEs) is comparable across conversational styles within those registers.

Collectively, given these findings, it seems that speaker style, broadly construed whether at the macro-level of register or at the micro-level of contextual style, has minimal impact on the proportion of referential eGEs used by speakers. If these results are generalisable, then it may be the case that speakers (or at least young female speakers from Pennsylvania) use GEs referentially at a constant rate, regardless of register or style. We discuss the implications of this next and place our findings in the context of the literature we reviewed in Section 9.2.

### 9.7 Discussion

Studies of GEs across speech registers (namely, talk with familiaris vs. strangers) have proceeded from the assumption that as registers change, so will the frequency with which speakers employ GEs. However, as noted at the outset,
current work on GE frequency across registers does not offer a clear picture of how speakers are employing functionally different GEs between familiar and unfamiliar interactions. In fact, the contradictions in the literature suggest that GE frequency is an inconsistent marker of register even within age-, sex- and region-matched communities. In the study presented here, we contrasted the widely adopted frequency-based approach with a novel function-based treatment of GEs. GEs have been argued to perform a variety of functions including referring to/extending sets of entities, closing social distance, indicating turn transitions, punctuating the discourse and several more. We isolated eGEs that could consistently be identified as performing at least a referential function and, for lack of a consensus in prior work, settled on the hypothesis that eGEs would be proportionally more common in talk among strangers (Fisher) where interlocutors would engage in more explicit listing behaviour as they introduced themselves to one another and searched for common ground.

Focusing first on frequency, we found a sizeable difference between the overall rates of GE usage within the LCS and Fisher corpora: 25.42 vs. 42.04 GEs per 10,000 words, respectively. Following Terraschke (2007), we could make the claim that GEs were more frequent in Fisher than in LCS because the Fisher interlocutors were not familiar with one another and were expressing negative politeness via GE use. Yet, as we suggested in Section 9.6.1, there are other equally plausible sources of this variability, such as differences in the way the corpora were transcribed. Thus, we prefer not to interpret the frequency results in isolation.

With respect to GE function, we found no significant difference in the proportional use of referential (‘extending’) eGEs and non-referential nGEs across Fisher and LCS. Nor did we find a significant difference between distribution of eGEs and nGEs across personal and non-personal styles in these corpora. These findings are surprising insomuch as one might expect (as we did in moving to a function-based approach) that patterns in referential vs. non-referential GE use would distinguish the familiar and unfamiliar registers, and even the personal and non-personal styles. As it stands, however, in terms of Agha’s (2005: 38) definition for register presented earlier, LCS and Fisher speakers may be referencing and perpetuating the same model for GE use across familiar and unfamiliar contexts, i.e., they are not using GEs to mark a contrast between these registers.

The different outcomes of our function- and frequency-based treatments of GE register variation, when considered together, suggest that GE production is not register dependent, at least in the sense of register pursued here, i.e., familiar vs. unfamiliar talk. Nor is it dependent on style as we have defined it, i.e., personal vs. non-personal style. Other connotations of register, perhaps in the more traditional frame of institutional or specialised discourse, may show
more distinct patterns in GE use, as suggested by Barbieri’s (2012) work in academic discourse. Another possibility is that register is correlated not with eGEs but with nGEs. Under this scenario, certain kinds of non-referential GEs are sensitive to register/stylistic variation, resulting in proportional differences in their distribution across those registers/styles. Since these are the GEs that we assume carry solely personal and social meaning, it seems likely that they would be more affected by register differences than referential GEs. Perhaps, for example, Pichler and Levey’s (2011) proposed punctors are especially frequent in certain registers/styles while their interpersonal/textual GEs are especially frequent in others. Finally, it is worth considering that GE register variation may be a more complex process involving co-variation with other discourse-pragmatic features, intonation contours, discourse structure etc. Further research is needed to assess these options.

9.8 Conclusion

The current work has taken a novel approach to the synchronic, comparative study of GE use. Previous research findings on GEs and register variation vary substantially across studies. By employing a rigorous method for coding pragmatic function, as called for by Pichler (2010), we hope to have gone some way to reducing future cross-study variation. Though our work has generated questions as well as answers, it leaves future researchers with testable hypotheses to pursue. Specifically, we propose the following hypotheses for future work in the field of GE variation:

(i) referential GEs (eGEs) occur at similar rates across spoken informal registers;
(ii) (a) sub-types of non-referential GEs (nGEs) occur at different rates across spoken informal registers;
(b) sub-types of non-referential GEs occur at different rates across personal and non-personal styles within a given register.

With respect to (i), we anticipate that in future studies in which talk between strangers and talk between familiars are contrasted, eGEs will be used at a consistent rate, as we found in the present study. This is not to say, however, that eGEs will necessarily be used proportionally equally across all kinds of registers or all kinds of styles. As we speculated, it may be the case that eGEs will be used at different rates when, for example, a formal, institutionalised register such as academic talk is contrasted with an informal register. This is an open question for future research.

With regard to (ii), it may be that the locus of register variation (and potentially of style) lies for GEs in the more socially sensitive non-referential nGEs: those that only serve interpersonal functions. In the event that it may
one day be possible to identify such nGE pragmatic functions more reliably, hypotheses (iia) and (iib) can then be tested. Future studies should consider replicating the design presented here with similarly constrained datasets. Though our current study has focused entirely on GEs, this charge might be extended to other multifunctional discourse-pragmatic variables. As noted by Pichler (2010), formidable methodological challenges persist in the study of such variables, underlining the need for novel analytic methods whose reliability and accountability can be iteratively assessed and refined. Indeed, by using transparent replicable methods in the study of GE variation across registers, we might begin to answer some of the questions that still remain in this line of inquiry.
Constructing style: phonetic variation in quotative and discourse particle *like*

**Katie Drager**

### 10.1 Introduction

Linguistic resources are manipulated in the construction of interactional stances. As a result, language use varies over the course of an interaction as speakers take stances towards the content. Members of particular social groups may often take certain stances (or, at least, be believed to take certain stances) and, consequently, the linguistic forms directly indexed to the stances become indirectly indexed with the social groups and the people categorised as belonging to these groups (Bucholtz 2009; Du Bois 2007). This chapter focuses on the discourse-pragmatic variable *like* (discourse *like*) to explore how its phonetic realisations vary according to speakers’ styles and stances. Discourse *like* is multifunctional (e.g., *I did that in like two days vs. And Mum’s like, ‘Turn that stupid thing off!*’), and at least some of its functions are associated with young females (and with an air-headed Valley Girl persona in particular) as well as positive solidarity traits such as attractive, cheerful, friendly, trendy and animated (Buchstaller 2006b; Dailey-O’Cain 2000). Such associations make discourse *like* an especially promising locus of socially meaningful variation. This is evidenced by the fact that socially meaningful variation of discourse *like* (e.g., discourse particle *like*) is found not only in its frequency (D’Arcy 2007) but also in its phonetic realisation (Drager 2011).

My previous work combined a variationist approach with acoustic phonetic analysis to examine the variable realisation of discourse *like* by female high-school students in New Zealand (NZ) (Drager 2009, 2011). The current analysis builds on this work, exploring how the frequency of use and phonetic realisation of quotative and discourse particle *like*, the two most frequent pragmatic uses of discourse *like* in my NZ data, vary depending on a combination of speakers’ stances and their social group membership.

I would like to thank Christina Higgins, Gavin Lamb, Heike Pichler and two anonymous reviewers for their extremely helpful comments on earlier versions of this chapter. I would also like to thank the girls of Selwyn Girls’ High for sharing their stories (and chocolate) with me. Of course, all errors remain mine.
The analysis addresses two key issues: (i) whether the beliefs surrounding who uses *like* at the school are reflected in actual language use; and (ii) how variation in the phonetic realisation of discourse *like* contributes to speakers’ stance and style. I argue that variationists can gain a deeper, more nuanced understanding of linguistic variation if they consider the ways in which phonetic realisations of discourse-pragmatic variables co-vary with the stances that the speakers enact.

To inform the analysis, I begin in Section 10.2 by discussing speaker style and stance more generally, commenting on the relationship between them. This is followed by a description of the different functions of discourse *like* in Section 10.3. In Section 10.4, I turn to a description of the field site – Selwyn Girls’ High – and present a brief description of the social make-up of the school. Because using (or not using) discourse *like* during stance-taking is most meaningful when considered within the context of who is believed to use *like*, the description of the fieldwork site is followed in Section 10.5 by an examination of both the girls’ beliefs about who uses discourse *like* and the actual frequency of discourse *like* use at the school. Section 10.6 summarises my previous work on phonetic variation of discourse *like*. The analysis in Section 10.7 focuses on the phonetic variation of discourse particle and quotative *like* in the construction of speakers’ stances during interaction, and Section 10.8 considers a case in which a speaker’s realisations of discourse *like* are linked with personal style rather than interactional stances. Finally, Section 10.9 is the conclusion.

### 10.2 Style and stance

My previous work on the use of discourse *like* at Selwyn Girls’ High focused largely on personal style, examining the ways in which linguistic and non-linguistic components of the girls’ styles vary according to social group membership (Drager 2009, 2011). I argued that the phonetic variation in discourse *like* is linked with a concept related to style, i.e., a speaker’s stance. However, I did not explore how speakers’ stances shift during interaction or how realisations of discourse *like* vary as a function of these shifts. The work reported in this chapter fills this gap. In this section, I discuss style, stance and the link between them in order to clarify what I mean by these terms and in order to demonstrate the advantages that may arise through examining them together.

Style is a system of distinction (Irvine 2001); a style is constructed in contrast with other styles and within the context of signs that have pre-existing social meanings. Individuals construct their personal styles through the clothes they wear, the things they do and the ways they talk, continuously re-appropriating and re-interpreting the social meanings of the linguistic and
non-linguistic resources they manipulate. Any number of linguistic resources can be used to construct style, including (but not limited to) slang (Bucholtz 2006), tag questions (Moore and Podesva 2009) and phonetic realisations (Eckert 2000; Mendoza-Denton 2008). The resources co-occur with one another, forming clusters that together make up a style.

Style is not static; speakers shift their styles in order to construct their shifting identities. Coupland (2007: 3) argues that ‘what matters for linguistic style is more to do with process than with product, more to do with use than structure’. It is therefore critical to consider how style is constructed in the moment in order to investigate what specifically speakers are doing when styling and why.

Yet despite the fluid nature of style, individuals may frequently construct particular styles, activating stylistic meaning in consistent ways across different interactions. As Bucholtz (2009: 165) explains,

at the level of direct indexicality, linguistic forms are associated with interactional stances or orientations to ongoing talk, whereas at the level of indirect indexicality, these stances calcify into more enduring ways of being – that is, styles or identities – that are in turn ideologically associated with particular social groups.

This conception of style has been the focus of work stemming from the Half Moon Bay Style Collective (Campbell-Kibler et al. 2006) and is referred to by Kiesling (2009: 174) as a speaker’s personal style, defined as a relatively stable persona that stems from a recurring set of linguistic and non-linguistic practices. For example, Eckert’s (2000) study of Jocks and Burnouts demonstrates how realisations of the speakers’ vowels pattern according to a combination of their gender and social group membership, an association that stems not from a direct relationship between social categories and linguistic variables but from social moves made by speakers when constructing their styles (Eckert 2008). However, speakers may alter the way that they talk – and do so for social purposes – without being aware why they are doing it or even that they are doing it at all (Preston 1996). Additionally, because language use is manipulated alongside material components of style (e.g., make-up and vowel realisations; see Mendoza-Denton 2008), it is possible to observe co-variation between linguistic variables and other stylistic components (Cutler 1999; Eckert 2000; Mendoza-Denton 2008). Cutler (1999), for example, argues that a young, white male in her study adopted African American Vernacular English features alongside activities he associated with urban African American youth (e.g., tagging) in order to construct a style he believed was congruent with African American culture. Findings such as these highlight the ways in which

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1 This does not imply that these individuals do not also construct other styles or shift during interactions but rather that certain styles may be enacted more frequently than others.
different practices – both linguistic and non-linguistic – are manipulated in the construction of individuals’ personal styles.

For stance, I draw on Du Bois’s definition (2007: 163):

Stance is a public act by a social actor, achieved dialogically through overt communicative means, of simultaneously evaluating objects, positioning subjects (self and others), and aligning with other subjects, with respect to any salient dimension of the sociocultural field.

Thus, stance is enacted by a speaker during an interaction, and it depends on the speaker’s evaluation of an object, which can be anything the speaker demonstrates an emotional reaction to, including a person, thing, utterance or another person’s stance. Stance serves to position the speaker in regard to some prior discourse as well as align the speaker with (or against) some individual. Alignment is gradient rather than binary (Du Bois 2007: 144), meaning that it is not simply the case that a speaker agrees or disagrees with their interlocutor but that agreement shifts along a continuum. Speakers continuously negotiate alignment so that their stance is constantly shifting. Because of this, researchers who are interested in stance must work at the level of the interaction, seeking meaning in the sometimes subtle shifts that can be observed over the course of even very short conversations.

In addition to stance-taking through the content of their speech, speakers take their stances through manipulating a variety of linguistic variables (see, for example, Bucholtz 2010; Kiesling 2009; Moore and Podesva 2009), including discourse-pragmatic variables. For example, Bucholtz’s (2010: 110–15) work on quotatives at a California high school demonstrates how speakers’ use of different quotative variants (e.g., be all and be like) was predictable based on a combination of their social group membership and the stance they were taking: preppy students were more likely to use be all when taking a neutral stance; non-preppy students were more likely to use be all when taking a non-neutral stance. This example demonstrates how the use of linguistic variants in stance-taking is related to the social groups to which the speakers orient.

Stance is enacted during interaction, and social meanings are accrued through habitual stance-taking over many different interactions. Kiesling (2009: 175) argues that ‘identity and personal style are both ways of stereotyping habitual patterns of stance-taking’; personal style arises from the stances that speakers enact.

Given the link between linguistic variables and a speaker’s style and stance, it is important that researchers examine variation as interactions unfold and that such work be conducted alongside investigations of large-scale trends in language variation. If we, as variationists, ignore stance-based variation in favour of that which patterns with either broad social categories (e.g., gender, ethnicity) or locally relevant social categories (e.g., Jock and Burnout), we run
the risk of overlooking some explanations of why and how the variation exists in the first place. Yet despite the need to do work that integrates variation by stance and by social category, it is rarely done (see, however, Kiesling 2009; Rampton 2013). This chapter sets out to contribute to our understanding of the link between style, stance and linguistic variants through exploring how phonetic variation in discourse like, which has been shown elsewhere to be linked with a speaker’s personal style (Drager 2011; Drager and Hay 2012), is manipulated during the course of an interaction to construct speakers’ styles vis-à-vis their stances.

10.3 Discourse like

Discourse like has received a great deal of attention, both from specialists and non-specialists alike (see, for example, Buchstaller 2006a; Fox Tree 2006; Romaine and Lange 1991; Tagliamonte and Hudson 1999; and the non-specialist references cited therein). The different functions of discourse like are categorised differently by different scholars (D’Arcy 2007; Fox Tree 2006; Romaine and Lange 1991). Following D’Arcy (2007), I adopt the following classification: quotative like (1), discourse marker (DM) like (2), discourse particle (DP) like (3) and approximator like (4).

(1) Quotative introducer: And Mum’s like, ‘Turn that stupid thing off.’ (Marama)

(2) Discourse marker: Like it real cracks me up. (Emma)

(3) Discourse particle: Lily was like checking out my brother. (Kanani)

(4) Approximator adverb: I did that in like two days. (Theresa)

Of these, quotative like has received the most attention. It is used to introduce reported speech or thought and has been studied in a wide variety of English dialects, including those spoken in the United States (Buchstaller 2006a), Canada (Levey Chapter 7; Tagliamonte and D’Arcy 2004, 2007), England (Buchstaller 2006a; Cheshire et al. 2011; Tagliamonte and Hudson 1999), Scotland (Macaulay 2001) and Australia (Rodríguez Louro 2013, Chapter 7; Winter 2002). D’Arcy (2007) differentiates DM and DP like based on their clause position (the DM occurs clause-initially; the DP occurs clause-medially), and approximator like occurs before numerical expressions.

The decision to adopt D’Arcy’s classification was motivated by the fact that the current study analyses phonetic realisations of like and the fact that phonetic

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2 All examples are taken from the Selwyn Girls’ High data, collected in 2006. The speakers are identified by pseudonyms shown in parentheses.
realisations are known to be influenced by prosody, which is, in turn, linked with clausal position (Chafe 1984: 444). While quotative, DP and approximator like all appear in clause-medial position, DM like occurs in a different position, i.e., clause-initially. To avoid distorting the results due to potential prosody effects, DM like was therefore not included in the analysis reported in this chapter. Due to its infrequency in the data, approximator like was also not included in the analysis. The focus of the analysis will therefore be on variation in the frequency and phonetic realisations of quotative and DP like.

The data analysed in this chapter come from a year-long ethnography of an all girls’ high school in NZ that is referred to as Selwyn Girls’ High. Previous phonetic analysis of discourse like in these data suggests that speakers’ realisations vary in accordance with their social group membership and tokens’ functionality (Drager 2009, 2011). The current analysis delves further into the data in order to: (i) explore the girls’ beliefs about who uses like at the school; (ii) determine whether these beliefs are consistent with the frequency of quotative and DP like observed in the interviews; and (iii) investigate the extent to which the girls vary their realisations of like according to their stance-taking activities. If the girls are indeed manipulating the realisation of like for social purposes (as argued in Drager 2011), we might expect to observe analogous variation during the course of an interaction as the girls take various stances (see Section 10.2).

10.4 Selwyn Girls’ High

The data collection for this project took place at an all girls’ high school in NZ, referred to using the pseudonym Selwyn Girls’ High. Ethnographic methods were used in order to investigate the social make-up of the school. They also allowed me to learn about individual girls, both how they saw themselves and how they were viewed by their peers. After two months of regular interactions with the girls, conversations were recorded for later analysis.

The fieldwork focused on students in their thirteenth and final year at the school, and recordings were made only with girls from that year, all of whom were sixteen to eighteen years old. As the most senior class, the year thirteen students had privileges that more junior students did not enjoy. The privileges included use of the Common Room: a room with a microwave, stereo and beanbags that the year thirteen girls could use during lunchtime and other breaks. Another year thirteen privilege was that they were the only class that was not required to wear uniforms. This meant that – in comparison with their previous years at the school and with girls in other grades – they had much more opportunity within the context of the school to use clothes in the construction and expression of their social identities.
The girls oriented to tightly knit social groups, or communities of practice (Lave and Wenger 1991), that varied in size from two to over twenty members. In this chapter, I refer to these communities of practice as groups since this is the terminology used by the speakers. The names for the groups at Selwyn Girls’ High vary in how they came about: some were self-identified (The Relaxed Group), some were other-imposed (The PCs, The Goths, The Geeks, The Real Teenagers, Rochelle’s Group) and some were selected by the researcher (The Christians, The Sporty Group, The Pasifika Group).

Some of the groups at Selwyn Girls’ High were similar to one another in terms of their everyday practices. These groups both ascribed to and perpetuated what were considered normal practices at Selwyn Girls’ High such as partying, wearing casual but stylish clothes and, importantly for the analysis, eating lunch in the Common Room. The most popular group in the school, the PCs, was a Common Room group. Members of the PCs ascribed to popular notions of beauty, and valued physical beauty and trendy fashions. Several members of the Sporty Group had similar ideals as the PCs, and girls in the two groups became friends during the course of the year. A third group, the Relaxed Group, wore casual clothes and were friendly with girls in other groups, but they reported that they cared less about looks and were, in general, more relaxed. A fourth group, the Trendy Alternatives, varied from the PCs in terms of their clothing choices, but they took part in other practices that they shared with the PCs and the Sporty Group. For example, girls in all of these groups were highly visible at the school: they attended many of the same parties as one another, organised the school’s social functions and ate lunch in separate circles in the Common Room. Together with several other groups, they formed the Common Room girls.

Not all year thirteen girls, however, ate lunch in the Common Room or ascribed to other Selwyn Girls’ High behavioural norms. The groups that did not eat lunch in the Common Room were very different from one another. Two such groups were the Real Teenagers and the Christians. Whereas the Real Teenagers wore edgy clothing, frequently went to gigs to listen to live music, the Christians wore conventional clothing and went to church regularly.

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3 Communities of practice are groups of individuals who share ways of doing things and who are working towards a common goal (Wenger 1998).

4 A member of the Relaxed Group, Katrina, once referred to the groups as ‘cliques’ when speaking to me. She was immediately mocked by several girls who overheard the comment, which she defended by saying that the other girls merely deny that cliques exist by saying everyone is the same.

5 The PCs stands for ‘The Palms Crew’. The Palms is a mall in Christchurch that the girls frequented and that several of them worked at.

6 The ways in which the group names came about are described in detail in Drager (2009).

7 These groups are not discussed here due to space restrictions but they are discussed in detail in Drager (2009).
talked explicitly about sex and dated ‘ugly’, older boys, the Christians wore conservative clothes, attended youth group through the church, did not date and did not talk about sex. Thus, neither of these groups ascribed to what was seen as normal behaviour at the school but their resistance to the norms took different forms. Another group that did not eat lunch in the Common Room was the Pasifika Group who explained that what set them apart from the other girls was their culture: they all had Polynesian ancestry of some kind and viewed their respective cultures as the key part of their identities. Two other groups that did not eat lunch in the Common Room were the Goths and the Geeks. While these two groups differed in their clothing choices and hangout spots, they both embraced individuality and valued intelligence and good grades. Despite the myriad differences across the non-Common Room groups, individual groups shared a resistance to conforming to the mainstream values and practices of the Common Room girls as well as a belief that they were different from everyone else at the school, and that the difference (whatever form it took) was good. A list of the groups introduced here and their classification as a Common Room group or a non-Common Room group is shown in Table 10.1.

<table>
<thead>
<tr>
<th>Common Room</th>
<th>Non-Common Room</th>
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<tbody>
<tr>
<td>The PCs</td>
<td>Pasifika Group</td>
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<tr>
<td>The Sporty Girls</td>
<td>The Goths</td>
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<tr>
<td>The Trendy Alternatives</td>
<td>The Geeks</td>
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<tr>
<td>Relaxed Group</td>
<td>The Real Teenagers</td>
</tr>
<tr>
<td>The BBs</td>
<td>The Christians</td>
</tr>
</tbody>
</table>

10.5 Perceived and observed use of discourse *like* at Selwyn Girls’ High

Variables that index social characteristics may be especially susceptible carriers of socially meaningful phonetic variation (see, for example, Eckert [1996] on Burnouts’ extreme /ai/-raising in words associated with urban toughness). In Drager (2009), I provided evidence to show that discourse *like* was salient at Selwyn Girls’ High and that the different functions of *like* were...

8 The Real Teenagers explained that their boyfriends were not good-looking like the boyfriends of girls in other groups because other girls were shallow and cared too much about looks.
associated with different social groups. Moreover, I demonstrated how phonetic realisations of *like* varied in accordance with the speaker’s classification as a Common Room or non-Common Room girl and the token’s function. In this and the following sections, I build on this previous work. First, I describe briefly some of the beliefs surrounding discourse *like* at Selwyn Girls’ High and explore whether one of these beliefs, i.e., that Common Room girls use discourse *like* more often than non-Common Room girls, is born out in actual language use.

During post-fieldwork interviews, it was evident that the girls had strong opinions about discourse *like*, especially in regard to where discourse *like* came from and who used it: most students believed it entered their speech after watching the movie *Clueless* and that the PCs used discourse *like* more than other groups did. Additionally, they discussed the difficulty of not using *like* when they tried (as a game) to avoid using it and explained that it would be undesirable to use alternative quotative variants, such as *say*, that they reported as being preferred by their parents.

The girls reported that the PCs were the heaviest users of discourse *like* at the school. To test whether this perception is borne out in actual use, I conducted a quantitative analysis of quotative and DP *like*. The analysis compares frequencies of quotative and DP *like* across Common Room and non-Common Room groups in order to investigate trends at this broader, more abstract level of categorisation, and it also compares the frequency of quotative and discourse particle *like* of three members of the PCs with that of other Common Room groups.10 As a way to normalise the data across recorded conversations of different lengths, the frequency of quotative and DP *like* was calculated as the number of tokens per one hundred words produced by the speaker.11 The data are then plotted according to whether or not the speaker was in a Common Room group so that in each plot one observation equals one speaker. For quotative *like*, an additional measure of frequency was calculated: the percentage of all quotatives (e.g., *say, go, shout, tell* etc.) that were quotative *like*. This measure allowed for comparison of the use of quotative *like* within the context of quotative variants available and is consistent with Labov’s (1972b: 72) *principle of accountability*.

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9 *Clueless* was a popular movie from 1995 starring Alicia Silverstone and set in Beverly Hills, California. Both quotative *like* and DP *like* are used by the teenage characters in the movie.

10 This analysis is limited to speakers whose phonetic realisations were analysed by Drager (2011) and therefore does not include every girl at the school or every member of the PCs.

11 The decision to report the frequency of discourse *like* as tokens per hundred words produced was motivated by the possibility that individuals are sensitive to token frequencies instead of contextual probabilities. For example, speakers who do not frequently produce quotatives could produce 100% of their quotatives as *like* and, despite the large percentage of quotatives that are *like*, listeners may not perceive them as heavy producers of discourse *like*. 
A comparison of Common Room and non-Common Room girls’ use of quotative and DP like is shown in Figure 10.1. The analysis shows that both Common Room and non-Common Room girls are frequent users of quotative and DP like: every girl produced tokens of both quotative and DP like, regardless of her social group membership; even the least frequent users used at least one token of the DP every 500 words and produced at least 50% of their quotatives as like.

In comparing the frequency of quotative like for both measures introduced here, it is evident that the majority of girls produce a similar amount of quotative like, regardless of their group membership. However, the first measure (frequency per one hundred words) shows that some individuals in Common Room groups produce a much greater number of tokens than the mean; the entire fourth quartile and even some speakers in the third quartile produced more than three times the school’s mean number of tokens. In contrast, only two speakers from non-Common Room groups produced such high rates (who both, interestingly, produced the highest quotative like rates of all). As evidenced by the relatively longer lower quartile box and lower whisker, the second measure (rate out of all quotative introducers) shows that individuals in non-Common Room groups are more likely than individuals in Common Room groups to use alternative quotatives (e.g., say, be all, go), though there are two Common Room girls who use alternative quotatives at least 25% of the time. The differences across the groups...
are not robust and do not reach significance in a Wilcoxon rank-sum test (Quotative 1: $p > .1$, $r = -0.04$; Quotative 2: $p = .2$, $r = -0.21$). Moreover, further analysis of these data (not shown here) does not provide evidence that the PCs are the most frequent users of quotative *like*; of the three PCs whose data were analysed, one was in the highest quartile and one in the lowest quartile in their frequency of quotative *like*, according to both measures of frequency calculated. This is inconsistent with the students’ belief that the PCs are the most frequent discourse *like* users.

However, Figure 10.1 shows that girls in Common Room groups are more frequent users of DP *like* than non-Common Room girls. The difference between the groups’ frequencies of DP *like* use is significant in a Wilcoxon rank-sum test ($p = .0128$, $r = -0.45$). While there were Common Room girls who were less frequent users and non-Common Room girls who were frequent users, all five of the least frequent DP *like* users were non-Common Room girls. For the DP, two PCs were in the highest quartile of users of the DP, suggesting that the students’ beliefs regarding the use of discourse *like* were consistent with its actual frequency.

The next two sections discuss trends in the phonetic realisations of discourse *like* and take a more nuanced look at how both the frequency and realisation of discourse *like* can shift depending on speakers’ stylistic choices during interactions.

### 10.6 Discourse *like* realisation, style and stance

In Section 10.7, I investigate the extent to which phonetic realisations vary across different stances in interaction. To do this, I rely on the previously conducted phonetic analysis reported in Drager (2011). This analysis revealed that realisations of *like* vary according to a combination of factors: speakers’ social group membership (Common Room vs. non-Common Room) and the function of discourse *like* tokens. For the phonetic analysis, a continuous measure of monophthongisation was calculated as the Euclidean distance between the F1 and F2 of the nucleus and offglide. The Euclidean distance values are reported in Bark. */k/* realisation was treated as binary – either reduced (no closure or release period) or not – and the durations of any closure and release periods were also calculated. Lenition (including both */k/* deletion and monophthongisation) is common in fast speech; thus, in order to take speech rate into consideration, speech rate was calculated as the number of syllables per second in both the 5 and 20 seconds surrounding each token of *like*.\(^\text{12}\)

\(^\text{12}\) Speech rate was not found to significantly predict phonetic variation in discourse *like* (Drager 2011: 702), but its effects are still taken into consideration for the work presented in this chapter.
A summary of the ways in which the phonetic realisations vary across the groups is shown in Table 10.2. Common Room girls are more likely to reduce the /k/ in the quotative than discourse particle like. Common Room girls are more likely to produce a less diphthongal vowel than non-Common Room girls, regardless of the token’s function. Both functions are more likely to be realised with a less diphthongal vowel if produced by a Common Room girl, and both groups are more likely to produce a less diphthongal vowel in the quotative than in the DP. Drager (2011) argues that these differences in like realisation stem from the girls’ constructed styles, styles that crucially depend on whether the speaker claims to be normal or different from other girls at the school. While the styles of girls in the different non-Common Room groups take many different forms, what unites them is that they all take the stance that they are different from other girls at the school (see Section 10.4). The analysis reported in Drager (2009, 2011) focuses on the girls’ personal styles rather than stances taken during interactions. In the following section, I analyse the conversation around some of the tokens of discourse like that were the basis for the work reported in Drager (2011) in order to explore some of the interactional stances taken by the girls and to examine how these relate to phonetic realisations of quotative and DP like in these interactions.

### 10.7 Discourse like and stance

Identity is partially constructed through habitual stance-taking (see Section 10.2). Thus, if the variable realisations of discourse like observed at the school were indeed manipulated in the construction of the speakers’ identities, phonetic realisations of like may vary systematically depending on the stances that individual speakers take during an interaction. In this section, I explore the possibility that phonetic realisations of discourse like co-vary with a speaker’s stance as it shifts during an interaction. For the analysis, segments
in which the subjects discussed other groups and individuals were identified. These were then checked for tokens of quotative and DP *like*, stances were identified, and then the phonetic realisations were compared across tokens produced by a single speaker.

One striking trend that emerged during the analysis was that some speakers manipulated the frequency of DP *like* depending on the stances they took during an interaction. In some cases, this meant that these speakers had zero instances of DP *like* when taking a certain stance, making the analysis of phonetic variation impossible but yielding important insights nonetheless. For instance, the Goths (a non-Common Room group) frequently made overt claims that they were different than ‘normal’ girls (i.e., the Common Room girls) at the school. Segments containing such claims would seem like an obvious starting point for the analysis of stance. However, these segments contained zero instances of DP *like*. The absence of DP *like* in these segments is socially meaningful, especially considering the ubiquity of DP *like* for these girls in other contexts and when considered within the context of the beliefs about discourse *like* at Selwyn Girls’ High. Part of the Goths’ identity depended on what they were not; they described themselves as weird, a description that is only meaningful when set in contrast to something that is normal, and normal girls at Selwyn Girls’ High were known for using discourse *like*. In short, the avoidance of DP *like* is part of the system of distinction that the Goths used when taking a stance that overtly differentiates them from the other girls; it is stylistic variation that arises from stance-taking.

Variation in the realisations of DP *like* was observed, however, for some other girls, and I will argue here that this variation is related to speakers’ stance-taking. Isabelle was originally a member of the Goths but switched to the Real Teenagers because, according to two members of the Goths, she wanted ‘to become a teenager’. The Real Teenagers were the most rebellious group at the school and they proudly shared their stories with one another in class and during study break, loudly enough so that girls in other groups could hear. In (5), Isabelle and Onya are discussing Isabelle’s boyfriend’s ex-girlfriend, Anna, who attended a different school. Earlier in the interview, Onya makes it clear that she dislikes Anna, and Isabelle says how pretty she thinks Anna is.

---

13 In examples (5)–(8), the following transcription conventions are employed:

<table>
<thead>
<tr>
<th>[]</th>
<th>overlap</th>
<th>(.)</th>
<th>short pause</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>false start, truncation</td>
<td>’ ’</td>
<td>quoted pause</td>
</tr>
<tr>
<td>@</td>
<td>laughter</td>
<td>?</td>
<td>question intonation</td>
</tr>
<tr>
<td>((text))</td>
<td>extra-linguistic information</td>
<td><strong>bold italics</strong></td>
<td>highlights the token(s) discussed</td>
</tr>
</tbody>
</table>

Numbers are provided after the target tokens (in bold italics) for reference with the phonetic traits shown in Tables 10.2–10.4.
In lines 7-8, Isabelle provides the description of Anna that Sarah requested in line 5 and that provides evidence of why she thinks Anna is pretty: Anna is skinny and blonde. While Isabelle is also blonde, she’s not skinny and – at the time of this interview – she wanted to be. My interpretation that Isabelle’s statement in line 7 expresses envy and admiration gains support from Onya’s denial of Anna’s skinniness in line 9 (apparently intended to make Isabelle feel better), a denial she then retracts in line 10. Isabelle’s phonetic realisations in line 7 are made carefully and the token of DP *like* is also realised carefully: it has the most diphthongal realisation she produces in any token of *like* and the /k/ is produced with both a clear closure and release.

(5)  
1 Onya: Isabelle has this thing about Anna  
2 Have you met Anna?  
3 Sarah: Possibly  
4 Onya: Dumbest girl ever  
5 Sarah: [What does she look like?]  
6 Onya: [dumb dumb dumb]  
7 Isabelle: She’s *like1* (.) skinny (.)  
8 [and blonde]  
9 Onya: [She’s not that] skinny  
10 Oh yeah she is actually  

Isabelle’s stance in (5) with her stance in (6) which occurs later in the same interview. In (6), Isabelle is describing how her boyfriend, Russell, was dancing naked around her room the night before. (Recall that wild behaviours are a defining part of what it means to be a Real Teenager (see Section 10.4).) In the description, Isabelle produces a much less diphthongal vowel in *like* and she does not produce the /k/, a realisation that is consistently found in her group’s productions of DP *like*.

(6) Isabelle: @ and he was *like2* singing along to music going ((stomping))

Isabelle’s realisations of the vowel and final consonant in DP *like* in (5) and (6) are shown in Table 10.3. Her speech is an example of the benefits of conducting acoustic phonetic analysis of formants when looking at stance-based variation; acoustic analysis is a tool through which we can observe

<table>
<thead>
<tr>
<th>Topic</th>
<th>EucD</th>
<th>k present</th>
</tr>
</thead>
<tbody>
<tr>
<td>like1 Anna’s appearance</td>
<td>5</td>
<td>y</td>
</tr>
<tr>
<td>like2 Russell’s antics</td>
<td>1.8</td>
<td>n</td>
</tr>
</tbody>
</table>

In Tables 10.3–10.5, Euclidean distance (EucD) is reported in Bark. A larger Euclidean distance indicates a more diphthongal vowel.
gradient variables such as degree of diphthongisation. The vowels in the tokens of discourse like in (5) and (6) were both coded as diphthongal. In fact, every discourse like token of Isabelle’s that was analysed by Drager (2011) was coded as diphthongal. However, some realisations were less diphthongal than others, such as like2 in (6). Before we interpret the variation between like1 and like2 realisation in (5) and (6) in relation to stance-taking, we need to acknowledge the possibility that this example could be complicated by differences in speech rate which (while likely linked with stance) may contribute to the differences in diphthongisation and /k/ realisation. However, speech rate cannot explain all of the variation in vowel and /k/ realisation. First, the speech rate in (6) (187 syllables per minute) is only slightly faster than in line 7 in (5) (158 syllables per minute). Second, both rates are slower than Isabelle’s average speech rate in other phrases that contain DP like (285 syllables per minute) or her speech overall (266 syllables per minute). Third, despite the relatively slow rate in which like2 was produced, Isabelle does not realise the /k/ and produces one of her least diphthongal tokens of discourse like. (Only one of her tokens of discourse like was less diphthongal than like2.) Thus, I would argue, the difference between Isabelle’s realisations of discourse like when discussing Anna’s appearance in (5) vs. Russell’s antics in (6) is related to the content of the narratives and Isabelle’s stance towards the content. To explore the relationship between stance and the phonetic realisation of discourse like further, we turn to examples that contain quotative like.

For quotative like, the analysis focuses on who produced the reported speech introduced by the quotative and the relationship of that individual to the speaker. Thus, to select segments for analysis, I identified segments that contained multiple instances of quotative like and for which the reported or hypothetical speech introduced by the quotative was produced by more than one referent. Additionally, speakers’ evaluation of the referent had to be non-ambiguous, i.e., an authorially sourced inscribed judgement (Martin and White 2005: 167), and had to differ between the referents, i.e., a change in footing (Goffman 1981).

The first of these examples comes from Patricia, a member of the Sporty Group. In (7), Patricia describes an interaction she had with a hairdresser after receiving a bad haircut. While this segment contains tokens of DP like (lines 2 and 9) and DM like (lines 5–6 and 14), only quotative like (in bold italics) is considered here.

(7) 1 Patricia: I remember once this hairdresser cut
  2 I asked for like a side fringe (.)
  3 and she just cut this fringe it was about up to there
  4 KD: Oh no
  5 Patricia: And like she fluffed out my hair
And like this was all fluffed out
And she’s l- she’s like, ‘There you go’
And I was just
I s- just like s- kinda sat there for a couple of seconds
I was like, ‘Oh my god’
‘I hafta pay for this now’

Patricia: Yeah @
Yeah like was an older woman and she just [had no idea]

Patricia I was just like, [‘Oh’] @

KD: [oh that’s sad] @

Patricia’s realisations of quotative like in (7) vary depending on whose speech is reported, as shown in Table 10.4. When reporting her own reaction to the bad haircut in lines 10 and 16 (like4 and like5), Patricia realised like with a monophthongal vowel and a fully lenited /k/. In contrast, when reporting the speech of the hairdresser in line 7 (like3), Patricia produced a more diphthongal variant and both a closure and release for the /k/. The realisations when reporting her own speech are consistent with both Patricia’s Common Room girl status and with the realisations of other girls in her group (see Table 10.2), whereas the realisation of like introducing the hairdresser’s speech is not. This shift in realisation makes sense when interpreted within the context of Patricia’s stance-taking in the extract. Shifting between the reported speech of different speakers – as well as shifting between reported speech and narrative – involves a shift in footing (Goffman 1981), so that speakers may not only shift their stance towards the people or concepts they discuss but towards the speech they use. Patricia described the hairdresser as ‘older’ and as someone who ‘just had no idea’ about what was cool. She set herself opposite the older, clueless hairdresser, constructing for herself a persona that was young, hip and in-the-know. By introducing the hairdresser’s reported speech using a phonetic realisation of the quotative that is not used by her and her friends, Patricia helps take up a negative stance towards the hairdresser and the hairdresser’s verbal presentation of the atrocious haircut. Invoking a trendy persona is

<table>
<thead>
<tr>
<th>Referent</th>
<th>EuD</th>
<th>k present</th>
</tr>
</thead>
<tbody>
<tr>
<td>like3</td>
<td>hairdresser</td>
<td>1.8</td>
</tr>
<tr>
<td>like4</td>
<td>Patricia</td>
<td>0.26</td>
</tr>
<tr>
<td>like5</td>
<td>Patricia</td>
<td>0.1</td>
</tr>
</tbody>
</table>
consistent with the trendy clothes worn by Patricia and the other girls in her group, and Patricia’s realisations of like4 and like5 help to take up stances that are consistent with a trendy persona.

It is, however, possible that the variation observed in Patricia’s quotative like use in (7) is not due to stance per se but is instead due to differences across quotatives with first- and third-person subject pronouns; speakers could use the phonetic realisations associated with their group when they report their own speech and use other realisations when reporting someone else’s speech, regardless of their evaluation of (or stance towards) that person. This possibility is explored in the next example, which has two different third-person referents, both of which vary in terms of whether the speaker aligned with the referent or not.

Extract (8) is taken from a conversation between Kanani, a member of the Sporty Girls, Rose, a member of the Relaxed Group, and myself. This segment occurred within the context of Kanani explaining that she and her handsome older brother, Kimo, were very close, a closeness that is evident through the banter shown in this excerpt. In contrast, Kanani sets herself opposite the woman she is talking about in this segment by introducing her as a ‘chick’ (line 1) and her reported refusal to use polite language with the woman. Later in the conversation, Kanani explained how annoying it was when women expressed interest in her brother, rolling her eyes when describing their flirty behaviour.

(8) 1 Kanani: I remember this chick rung up (.) for my brother and um (.)
2 hh she’s like6, ‘Hi is Kimo there please’
3 ‘I’m like7, ‘Oh he’s in the toilet at the moment’
4 She’s like8, ‘Thanks’
5 @
6 Rose: I would’ve been like, ‘Oh actually he’s just [really constipated’]
7 KD: [‘he’s doing poos’]
8 Rose: Yeah
9 @
10 Kanani: And then my brother came and got the phone
11 And he’s like9, ((raises eyebrows))
12 He went off the phone he’s like10, ‘What a dick’

Kanani’s realisations of quotative like patterned according to how the referents were positioned. Kanani used a less diphthongal vowel and a fully lenited /k/ when reporting her own and her brother’s speech (like7, like9 and like10 in lines 3, 11 and 12). In contrast, she used a more diphthongal vowel and did not reduce the /k/ when reporting the speech of the woman who called (like6 and like8 in lines 2 and 4). In this example, it is clear that the variable realisation of quotative like does not depend on grammatical person. Instead, Kanani’s realisations of quotative like seem to depend on whose speech is being reported
and her stance towards that person; as with Patricia, the shift in phonetic realisations of the quotative involves a shift in footing.\footnote{It is possible that Kanani is especially apt at such manipulations, having previously been a member of a non-Common Room group (the Pasifika Group) and therefore having had ample exposure to alternative variants. (Kanani is the only girl in the study to have moved from a non-Common Room group to a Common Room group.)}

Kanani’s realisations of like, shown in Table 10.5, patterned in a way that was meaningful within the context of the school, using a realisation consistent with her friends when reporting her own and her brother’s speech, and using a realisation associated with speakers who were not her friends when reporting speech from the woman whose behaviour she deemed inappropriate (see Table 10.2).\footnote{Of course, given the link between phonetic reduction and other factors (e.g., intonation), I cannot rule out the possibility that the link between stance and the phonetic realisations discussed in this chapter may be an artefact of the link between stance and these other factors.}

The varying realisations of like help construct Kanani’s stances of familial closeness and anti-coquettishness, and these stances in turn contribute to Kanani’s personal style as a down-to-earth, confident and family-oriented young woman.

### 10.8 Discourse like and style

The examples discussed in Section 10.7 represent a wider trend in the data, demonstrating the way in which the realisation of discourse like varies according to a speaker’s stance. However, not all girls varied in whether or not they produced a reduced form of discourse like, and this non-variation is consistent with the personal styles they construct. For example, Mariah was a core member of the Geeks, a non-Common Room group. She frequently took control of the conversation during lunchtime and determined the social activities of the group (e.g., watching horror movies). Mariah produced tokens of quotative and DP like, but none of her productions contained either a reduced /k/ or a monophthongal vowel. Additionally, Mariah and the other girls in her group produced the /k/ in like with a long release, which has the effect of accentuating the presence of the /k/. Other researchers have demonstrated that
the release of voiceless stops is linked with a variety of social meanings. Most of this work has focused on realisations of /t/, which has been shown to be used by nerds (Bucholtz 1998: 125) and to signal gender and authority among Orthodox Jews (Benor 2001). Eckert (2008) plots the indexical field of /t/-release, linking it with personal qualities such as being educated and articulate as well as stances such as effortful and formal. Podesva (2007: 137), who argues that prissiness is signalled by the ‘strong stop releases’ in the speech of one of his subjects, shows that the duration of the release can be socially meaningful and that it need not correlate with frequency of release (Podesva 2004, as described by Eckert 2008). The social meanings associated with the release, which stem from its associations with clear speech (Krause and Braida 2004), are likely to extend to similar sounds.

When her resistance to producing reduced forms of discourse like is taken in tandem with the long durations of /k/-release she produces, Mariah’s data suggest that she actively manipulates her realisations of like, resisting phonetic reduction. In fact, Mariah’s resistance to phonetic reduction can be observed in far more environments than only in like (i.e., she resists reduction in general), which makes sense when considered within the context of the personal styles common in her group. The Geeks valued intelligence and good grades and, as pointed out earlier, articulations of stop releases are ideologically associated with intelligence. Bucholtz (1998, 2010) has found that nerds at a California high school produced released /t/, and that the nerdiest nerds did not use quotative like and produced few instances of reported speech in general. She concludes that geeks and nerds take part ‘in a set of speech practices that allow them to construct identities in opposition to other social groups’ (Bucholtz 1998: 120). The trends in Mariah’s speech are consistent with this claim and they help to demonstrate that sometimes stance is not the lens through which variation should be viewed; realisations can be linked with identity without necessarily being linked with interactional stances, highlighting the need to consider the making of social meaning in interaction as well as across social groups.

Taken together, the results presented in this and the preceding section provide evidence that the patterns presented in Drager (2011) are a simplification of the nuanced ways in which speakers manipulate realisations of discourse like in the creation of their personal styles. More in-depth analyses that take into account a wider range of social information (e.g., multiple speakers from each of the groups) and a wider range of phonetic information (e.g., prosody) are required.

16 In the Selwyn Girls’ High data, there is a correlation between the frequency with which speakers realise quotative like with /k/ present and the release duration ($r(146) = 2.54$, $p = .01214$). No such correlation exists for the discourse particle ($r(227) = 1.30$, $p = .1957$).
to further explore the relationship between style, stance and realisations of discourse like.

10.9 Conclusion

The results presented in this chapter demonstrate that sociolinguistic patterns observed across members of social groups (Common Room and non-Common Room) are tied with the stances that speakers take during interaction. The data suggest that girls at Selwyn Girls’ High manipulated their realisations of discourse like: whether the /k/ was realised depended on a combination of the speaker’s membership in a Common Room or non-Common Room group and the stances they took towards the people they talked about. Taken together, the variable realisations of the vowel and /k/ in quotative and DP like contribute to the speakers’ personal styles, both through frequent use of particular realisations and through the ways in which the realisations are used across different orientations in discourse.

Coupland (2007: xi–xii) comments that ‘meaning-making through talk has not been what variationists have generally tried to explain, although it seems to be a strange omission’. The work presented in this chapter takes a step towards filling this omission, examining stance during interactions within the context of variationist work conducted on speech produced by the same speakers. The results demonstrate how the use of different methods and perspectives can help us to better understand the ways in which speakers manipulate linguistic variables to construct their stances and styles. Additionally, the work incorporates acoustic phonetic analysis. Acoustic analysis is required to obtain continuous measurements of the degree of diphthongisation, and speakers seem to vary along this continuum depending on their stance-taking activities. Of course, much more work is needed. For example, it is possible that other factors have influenced the variation, factors (such as prosody) that have not been investigated. Despite these weaknesses, I hope that the analysis presented here can serve as an impetus for other researchers to explore similar kinds of variation in other communities. Through examining the relationship between discourse-pragmatic variation and phonetic variation, and through investigating how variation during interactional stance-taking is linked with variation at the level of a speaker’s social group, researchers can come to a better understanding of both the role of language in identity construction and the influence of speaker identity and stance-taking on language variation and change.

17 Of course, discourse like is not the only sociolinguistic variable in the girls’ speech, nor the only variable for expressing stance. Analyses of other features will reveal to what extent the results reported here generalise to other variables.
Introduction

Discourse-pragmatic features are essential to social interaction. They allow us to signal the structure of our discourse as we speak, for example by marking the end of reported speech. They also help organise turn-taking, showing that we accept the turn or that we have finished our turn and, sometimes, how we want our utterance to be understood. They mark assumed shared understandings between speakers, show our attitude towards what we are saying, and can be used as fillers to buy ourselves time when planning and producing our discourse. These diverse functions, and more, are often performed simultaneously. This makes discourse-pragmatic features different from any other kind of linguistic feature. Their use may even result from a different kind of cognitive activity: Heine et al. (2014) note that although we must be careful not to overgeneralise and more research is needed, there is evidence from neurolinguistic observations that the two hemispheres of the brain may be differentially activated when we use discourse-pragmatic features than when we use sentence grammar.

It is not surprising, therefore, that the nature of variation and the kinds of change that discourse-pragmatic features undergo is not the same as for other kinds of linguistic features, nor that, with some notable exceptions, discourse-pragmatic features have until recently been left out of the variationist enterprise. This volume is a landmark, putting discourse-pragmatic variation and change centre stage and demonstrating how it can be accommodated within the variationist framework. The chapters speak for themselves, with several authors suggesting new directions for future research. In this final chapter, therefore, I have decided to simply, and indulgently, elaborate on four new directions for research that particularly interest me, and to briefly relate them to other research on these topics. I will also, in the final section, reflect on the more general issue of analysing discourse-pragmatic features as linguistic variables.
Discourse-pragmatic features and language change

Denis and Tagliamonte (Chapter 4) suggest that they have uncovered a new type of language change associated with discourse-pragmatic features: lexical replacement. Their analysis focuses on pragmatic shift, which they take as a proxy for grammaticalisation since it is one of the changes typically associated with this process. If a discourse-pragmatic feature is undergoing pragmatic shift, younger generations would be expected to use it with a gradually increasing number of new pragmatic functions. If lexical replacement is involved, on the other hand, younger generations of speakers would use a different form from the one preferred by older generations, but there would be no change in the pragmatic functions for which the older and newer forms are used: younger speakers would use the newer form with all the same functions as the older form. This is the case for the utterance-final tags (UFTs) Denis and Tagliamonte analyse: younger speakers use utterance-final right more frequently than utterance-final you know, whilst older speakers prefer you know; but all speakers, both older and younger, use utterance-final right and you know with the same range of pragmatic functions. As Denis and Tagliamonte say, with lexical replacement a new variant ‘emerges full-blown with all the functional characteristics of earlier variants in the [...] variable system’ (p. 111).

Lexical replacement is also occurring in the general extender (GE) system in Toronto. Tagliamonte and Denis’s earlier research (2010) found and stuff replacing and things in the speech of younger speakers, with both forms used for the same pragmatic functions. Furthermore, they found no evidence in their data of other changes associated with grammaticalisation such as decategorialisation or reduction in form.

It is possible that lexical replacement is a general process of change for GEs in English. Although I argued in earlier research that GEs appeared to be undergoing grammaticalisation in three English towns (Cheshire 2007), my analysis was based on data from one generation of speakers only and, as a result, the argument could be only a hypothesis. Pichler and Levey’s (2011) research in Berwick-upon-Tweed found no evidence of ongoing grammaticalisation in GE forms though there were changes in the frequency with which younger speakers used individual forms (again, and stuff was replacing and things) and evidence of social differentiation (working-class male speakers preferred the form and that). In London, too, recent research finds no evidence of grammaticalisation for at least one of the changes usually associated with grammaticalisation: reduction in form. Secova (MS) compared the GE forms used in Kerswill et al.’s (2007) Linguistic Innovators Corpus (LIC) by speakers aged 16–19 and speakers aged seventy and above, and found that both groups of speakers used short forms such as or something with approximately the same frequency as longer forms such as or something like that. In both the younger
and the older speakers’ data, short forms accounted for approximately 65% of all GEs. Note, though, that this apparently high frequency of short GE forms is partly due to and that, which is the most frequent form for both younger and older speakers; but even without and that, the distribution of short vs. long forms was not significantly different across the two age groups.

An appealing question for future research, then, is to consider whether other discourse-pragmatic features may be undergoing different types of change from those to which we are accustomed. We would need diachronic corpora for investigations of this kind. Using just such a corpus, Denis (2015) analysed real-time changes in the use of epistemic parentheticals (forms such as I think and I guess) that are usually assumed to be grammaticalising. He found no evidence of the changes associated with grammaticalisation and proposed that rather than grammaticalising gradually from lexical material, the epistemic parentheticals included in his analysis have developed through abrupt reanalysis of lexical material from one syntactic category to another.

Intensifiers would be an interesting case to consider in this context; they are subject to constant change and renewal, are often recycled rather than developed afresh and are sometimes considered to be subject to lexical change rather than a change moving through the grammar (see, for example, Bakht 2010). Barnfield and Buchstaller’s research (2010) confirms, in fact, that lexical replacement may be involved in some changes in intensifier use. In Tyneside, north-east England, the intensifier dead did not occur at all in data from the 1960s, but by 1994 it had soared in frequency to become the most popular form for younger speakers aged between eighteen and forty, used with all semantic classes of adjective as soon as it appeared. This seems a clear example of lexical replacement of one form by another. By 2007, however, dead had become the least frequently used intensifier form for young people rather than the most frequent one. As Barnfield and Buchstaller point out, this type of change represents a linguistic fad: a particular form becomes fashionable for a while but the next generation then spurns it and finds a new form to use as an intensifier.

However, other intensifier forms were involved in different types of change. In Tyneside, as elsewhere in England, really is taking over from very as the most frequent intensifier form, but through a process of steady long-term replacement over the generations rather than by abrupt lexical renewal. Unlike dead, really was used in the 1990s Tyneside data with only two semantic classes of adjective: those describing human characteristics (e.g., kind, posh) and those describing a value (e.g., good, bad). As the frequency of really increased, it became used with an increasing number of adjective classes. The introduction of really, then, spread through the grammar in the same way as change in other components of language, beginning in a small
number of linguistic contexts and then used in a gradually increasing number of contexts. Later, as *really* stabilised as an intensifier, it became more specialised, so that although in the most recent Tyneside data collected in the mid- to late-2000s the overall frequency of *really* had not changed, it occurred more often with adjectives referring to age (e.g., *new, young*), measurement (e.g., *big, thick*) and speed (e.g., *fast, slow*).

It is important not to overgeneralise, then. Different discourse-pragmatic features may be involved in different types of linguistic change, even if they belong to the same functional category, as is the case with intensifiers. It seems clear that some discourse-pragmatic features may undergo lexical replacement, a different type of change from those that we are used to seeing in most previous work on discourse-pragmatic change. Furthermore, some features that we have assumed to be grammaticalising may not be involved in grammaticalisation at all. Future research could consider whether lexical replacement is a general mechanism of change for discourse-pragmatic features, or only for some. If it is only for some, which features are affected and what makes them susceptible to this kind of process?

It could also be interesting to consider the extent to which a change involving lexical replacement is likely to be localised. This was the case for the Tyneside intensifier *dead*; unlike steady long-term changes such as the introduction of *really, dead* did not occur throughout the United Kingdom as an intensifier. On the other hand, the new GE form *and stuff* is not localised, despite being involved in lexical replacement; on the contrary, it is widely used across the United Kingdom and in Toronto – and perhaps across the English-speaking world more generally. Fuchs and Gut’s contribution to this volume (Chapter 8) finds that intensifiers are localised across national varieties (more so, they point out, than the grammatical feature of past tense marking): why is this, and does it bear any relation to the type of change that different intensifier forms may be undergoing in the different national varieties? This volume has raised some thought-provoking questions for the future, then, about the nature of discourse-pragmatic change.

**Discourse-pragmatic features and the clause peripheries**

Over time, some discourse-pragmatic features tend to migrate from one periphery of the clause to another. For example, although words like *though* or *then* may occur at either the beginning or the end of a clause, during the last few decades they have become more frequent at the end of the clause (Haselow 2012: 182).

The majority of documented changes of this kind involve movement from the left periphery (LP) of the clause to the right periphery (RP). Beeching and Detges (2014b: 7) note that there are very few counter-examples to this trend.
The direction of travel is assumed to represent a change in the function of the feature. Although the differences cannot be upheld in a strong, exclusive way, there is a tendency for an asymmetry of functions at the LP and RP of the clause (Beeching and Detges 2014b: 19). At the LP, where speakers connect what they are about to utter to the preceding discourse, discourse-pragmatic features tend to have informational structuring or discourse structuring functions; at the RP, speakers can reformulate or correct what they have just uttered and reveal their attitude or stance. Features that move to the RP, then, tend to be involved in the expression of more interpersonal and intersubjective functions.

Pichler’s contribution to this volume (Chapter 3) is all the more interesting, then, because it documents a change in the reverse direction from what we might expect: *innit* in Multicultural London English (MLE) is moving from the RP of the clause to the LP. *Innit* also occurs after a lone or left-dislocated noun phrase (NP). The recruitment of tags to the LP is not completely unknown cross-linguistically, as Pichler notes, but she has caught the ongoing change at a very early stage, and this offers an unusual and important opportunity to discover what motivates speakers to use a discourse-pragmatic feature in a new clause position, and the extent to which a feature may change its meaning and functions as it moves.

Pichler discovers that at the RP of the clause, as might be expected, speakers regularly (but not exclusively) use *innit* to involve their interlocutor in the interaction or, sometimes, to seek corroboration for what has just been uttered. She finds that *innit* has similar functions when it is used at the LP of the clause, with the important difference that here *innit* has scope over the following proposition rather than a preceding one. Speakers may seek corroboration by using *innit*, therefore, but when it is at the LP of the clause, the corroboration is for the proposition that is about to be uttered; as such, LP *innit* is used to secure the hearer’s attention or to give advance warning of a request for confirmation. Very interestingly, when *innit* occurs after a lone or left-dislocated NP, speakers continue to seek the involvement of the interlocutor, but this time it is in order to secure collaboration in referent activation and identification, or to mark referents that become topicalised. Securing the involvement of the interlocutor is, of course, especially important when speakers mark a referent as a potential topic, as it will only become a topic in the subsequent discourse if their interlocutors cooperate by elaborating on the topic themselves or by allowing the speaker to keep the floor.

This brief account oversimplifies the detail of Pichler’s analysis, but a general point that can be made is that in the early stages of its change in clause position the general function of *innit* remains the same at both clause peripheries, seeking to involve the interlocutor in all cases. It is only as its scope becomes narrower that the discourse functions of *innit* become more
focused on information structure, a function that lies at the syntax-pragmatics interface.

It would be interesting in future research to see whether other discourse-pragmatic features preserve their core discourse functions in the early stages of a move from one periphery of the clause to another, as this goes against the general tendency for there to be an asymmetry between functions at the LP and RP. Perhaps functions change only as a feature becomes more established at a different periphery. It would also be interesting to see whether functions become more focused on the syntax-pragmatics interface as discourse-pragmatic features move to positions where their scope is narrower. For example, discourse *like* could be usefully analysed in this way, since this is another discourse-pragmatic feature that has moved from the RP to the LP and from there to an increasing number of clause-internal positions (D’Arcy 2005). Pichler’s chapter will serve as a model in our future analyses of other migrating discourse-pragmatic features.

We also have yet to discover why a speaker would decide to use a discourse-pragmatic feature in a new position. One possibility suggested by Pichler’s analysis of the LIC data is the nature of the recurrent interactions in which speakers are engaged (see Pichler [MS] for internally-driven hypotheses). Pichler finds that speakers consistently use *innit* at the LP of the clause to seek the attention of others who are not engaged in the interaction or when they are engaging in intense competition for the floor. Interaction in the adolescent peer groups where the LIC data were recorded is fast and lively, with a great deal of interruption and overlap. In lively adolescent speech between several friends, conversational management is more challenging than in other types of interaction and it may be more necessary to seek attention for what one wants to say in order to secure the floor. A feature that seeks the involvement of the interlocutor but that is usually at the end of an utterance could be an effective way of gaining attention and thereby securing the floor whilst maintaining solidarity with other speakers. It remains to be seen how the migration of other discourse-pragmatic features to the LP can be explained (e.g., discourse *like*), but, if the data are available, future research could consider the types of interaction in which speakers first begin to use the feature in the new position and how this relates to its core function (if there is one).

It may also be useful to consider the personalities and the social characteristics of the speakers who first use a migrating discourse-pragmatic feature in a new position. Pichler notes that the two most prolific users of negative tags in non-canonical positions share the characteristics associated with linguistic innovators in the London corpus. These two speakers were particularly outgoing and talkative, and they produced many other linguistic innovations in the LIC corpus (see further Cheshire et al. 2008). This ties in with Denis’s (2011) finding that outgoing people with many friends
used the new GE form *and stuff* more frequently than their less gregarious friends.

**The acquisition of discourse-pragmatic variation**

Levey’s contribution (Chapter 7) adds a new dimension to our understanding of discourse-pragmatic variation, considering whether children’s acquisition of variable discourse-pragmatic features mirrors their acquisition of phonetic and morpho-syntactic variation. As he points out (p. 180), the acquisition of adult-like patterns of variation and change in quotative usage is developmentally protracted relative to that of phonological features. He suggests that this may reflect the complexity of the syntax-discourse interface, noting Sorace’s (2004) research on developmental instability and problems of learnability at this interface. Hulk and Müller’s (2000) research confirms that the interaction between syntactic and pragmatic information is particularly difficult for children to acquire (see also Müller and Hulk 2001).

Researchers working on quotative *be like* usually analyse as internal constraints on its use the effect of temporal reference, grammatical person, content of the quote and, sometimes, mimesis. Temporal reference and grammatical person have syntactic reflexes in verb form and subject realisation, but content of the quote and mimesis are a different type of constraint, perhaps best considered as pragmatic. If the interaction between syntax and pragmatics is particularly difficult to acquire, this could mean that children will acquire the pragmatic constraints on variation later than the syntactic constraints. It is very interesting, therefore, that the eight- to nine-year-old children in Levey’s study have acquired the two grammatical constraints on the use of *be like* (notably the effect of temporal reference and grammatical person) and are advancing its use in these linguistic environments, but that they have not yet acquired the pragmatic constraints: the effect of the content of the quote and the use of mimesis does not pattern in the same way in their speech as it does in the speech of older children and adults.

In MLE, the constraints on the use of *be like* do not follow the patterns found elsewhere in the English-speaking world (Fox 2012). Nevertheless, a similar acquisition tendency to that reported in Levey’s chapter can be observed. Table E.1 shows the results of a multivariate analysis using Goldvarb X (Sankoff et al. 2005) on the use of *be like* vs. all other quotative expressions used by eight-year-olds, twelve-year-olds and sixteen- to nineteen-year-olds in London, all of whom are speakers of MLE. If we take the constraint hierarchies

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1 The data for the sixteen- to nineteen-year-olds are taken from the Linguistic Innovators project (Kerswill et al. 2007), and the data for the two other age groups from the Multicultural London English project (Kerswill et al. 2010).
Table E.1. Contribution of external and internal factors to the use of be like in MLE

<table>
<thead>
<tr>
<th></th>
<th>16–19-year-olds</th>
<th>12-year-olds</th>
<th>8-year-olds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total N</strong></td>
<td>1282</td>
<td>516</td>
<td>473</td>
</tr>
<tr>
<td><strong>Input</strong></td>
<td>.30</td>
<td>.32</td>
<td>.10</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>.59 29 182</td>
<td>.60 37 55</td>
<td>.76 24 81</td>
</tr>
<tr>
<td>Male</td>
<td>.42 20 131</td>
<td>.46 22 79</td>
<td>.06 1 2</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>17 26</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td><strong>Grammatical person</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd person</td>
<td>.52 26 11</td>
<td>.28 15 2</td>
<td>.74 33 2</td>
</tr>
<tr>
<td>1st person</td>
<td>.51 28 147</td>
<td>.60 46 48</td>
<td>.68 28 33</td>
</tr>
<tr>
<td>3rd person</td>
<td>.49 30 150</td>
<td>.48 28 83</td>
<td>.43 14 48</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>3 32</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td><strong>Tense/aspect</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Habitual <em>would</em></td>
<td>.67 51 18</td>
<td>.68 50 1</td>
<td>1</td>
</tr>
<tr>
<td>Habitual <em>will</em></td>
<td>.57 41 17</td>
<td>.50 38 3</td>
<td>.99 67 2</td>
</tr>
<tr>
<td>Simple past</td>
<td>.52 32 167</td>
<td>.60 47 70</td>
<td>.50 21 56</td>
</tr>
<tr>
<td>Present</td>
<td>.47 29 55</td>
<td>.42 26 21</td>
<td>.49 17 14</td>
</tr>
<tr>
<td>CHP</td>
<td>.41 29 51</td>
<td>.44 25 35</td>
<td>.46 15 11</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>26 26</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td><strong>Content of the quote</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-lexicalised sound/gesture</td>
<td>.78 57 12</td>
<td>[.40] 25 5</td>
<td>[.61] 16 17</td>
</tr>
<tr>
<td>Direct speech</td>
<td>.54 25 267</td>
<td>[.50] 26 124</td>
<td>[.46] 18 65</td>
</tr>
<tr>
<td>Internal dialogue</td>
<td>.26 13 25</td>
<td>[.59] 33 5</td>
<td>[.70] 50 1</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>52</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
in the speech of the sixteen- to nineteen-year-olds as the baseline for the quotative system in MLE, we see that content of the quote is the only factor group that does not show significant results for the two younger age groups. (We did not code for mimesis in this analysis.) The sixteen- to nineteen-year-olds favour *be like* when the content of the quote is non-lexicalised sound or gesture, but younger speakers do not. In fact, the younger speakers in our study quote non-lexicalised sounds and gestures more often than older speakers (see Kerswill et al. 2013), but their preferred quotative expression for this type of quote is *go* rather than *be like*. It seems clear, then, that younger MLE speakers have not yet acquired this pragmatic constraint on *be like* use.

The two grammatical factors, on the other hand – grammatical person and tense/aspect – are significant for all age groups. The range is very high for tense/aspect in the data from eight-year-olds, showing that for this age group it is the most important internal constraint. The ordering of the constraints for tense/aspect are inconsistent between the age groups and there are low numbers of tokens for some tense/aspect factors, but nonetheless we can see that the same tense/aspect factors disfavour the use of *be like* for all age groups: present tense and conversational historic present forms, in all cases. The results for the effect of grammatical person are less consistent: the range is again high for both eight-year-olds and twelve-year-olds, though not for the older speakers, for whom the factor weights hover around the 0.5 mark.

To some extent, then, speakers of MLE show the same developmental tendency as Levey found for young speakers in Ottawa: younger speakers in London have acquired grammatical person and temporal reference as significant constraints on the use of *be like* (even though they have not yet acquired the full variable system), but they have not acquired the pragmatic constraint of content of the quote.

A valuable question for future research would be to determine whether these internal constraints follow the same developmental pattern as children acquire *be like* in other communities. It is possible that Levey has uncovered a general pattern for discourse-pragmatic features, with linguistic constraints at the syntax-pragmatics interface such as content of the quote acquired later than linguistic constraints that are more integrated into the syntax of the language that children are acquiring. It would be interesting, too, to see whether the order of acquisition of constraints follows the same pattern in second language acquisition and whether there are differences between adult and child learners.

More generally, we do not yet know whether other discourse-pragmatic features are acquired later than features in other components of language, or whether some discourse-pragmatic features are acquired earlier than others. Levey (2012) found preadolescents (aged between seven and eleven) using an extensive range of GE forms (though somewhat less extensive than in teenage
and adult cohorts) and participating in contemporary patterns of variation in their use, but we lack information about children’s use of many other discourse-pragmatic features. In language contact situations, discourse-pragmatic features with the function of monitoring and directing the interaction are more susceptible to language transfer. Matras (2010: 81) suggests that this is because these features are subject to automatic routine rather than to ‘inflection and intent’. Does this make them easier or more difficult for children to acquire? This too, I would suggest, is an important topic for future research, with implications for our understanding of how pragmatic competence develops.

Yet another question concerns the effect of frequency on the acquisition of discourse-pragmatic variation. As Levey points out in the conclusion to his chapter, in communities where *be like* occurs with lower frequencies than the community he investigated, preadolescents had acquired neither the form itself nor its associated structure to any appreciable extent. As he says, this raises the critical question of how quantitatively robust (and socially salient) a form must be before children can acquire it. In the MLE analysis discussed earlier, *be like* occurs with relatively low frequencies (it accounts for approximately 25% of all quotative expressions used by the sixteen- to nineteen-year-olds and twelve-year-olds, and only 17% of all quotatives used by eight-year-olds), so perhaps this accounts for the incomplete acquisition of the grammatical constraints on its use. Future research of the kind conducted by Levey will lead to a greater understanding of the role of frequency and salience in the acquisition of patterns of discourse-pragmatic variation.

**The social meaning of discourse-pragmatic features**

Kiesling (2009) argues that stance has a fundamental role in driving both change in the community and children’s acquisition of language. It is important, therefore, to advance our understanding of the relation between variation and the expression of stance; and Drager’s contribution (Chapter 10) suggests some exciting ways forward in investigating the specific contribution of discourse-pragmatic features to this relationship.

Drager’s research in a girls’ secondary school (‘Selwyn High’) found that discourse *like* was socially salient in this community, and that, as a result, its use or non-use carried a locally-defined social meaning. Speakers belonging to the self-defined Goths group avoided using discourse *like* when discussing ways in which they were different from other groups in the school. Drager points out that the girls at this school were known for using discourse *like*; thus, by refraining from using it, the Goths take a stance that overtly marks them as different from the other girls. As far as I know, the use of specific
discourse-pragmatic features when discussing different topics has not previously been investigated, so there is plenty of scope for more of this kind of analysis.

Drager also shows that for some girls who used discourse *like*, the phonetic realisation of the vowel and the final consonant related to the stance they were adopting towards the people they were discussing. Drager’s analysis fits with a growing body of work on the use of phonetic variation more generally in the construction of stance, such as Kiesling’s (1998) analysis of the realisation of (ing) in the speech of fraternity men, or Levon and Holmes-Elliott’s (2013) analysis of /s/-fronting by working-class Essex speakers in reality TV shows. Drager’s focus on variation in the realisation of a specific word recalls Eckert’s (1996) analysis of (ay) in the speech of the self-defined Burnout adolescent group. The nucleus of the (ay) variable is undergoing raising in the Detroit area where Eckert carried out her research. Eckert found that nucleus raising was higher for Burnout speakers in words referring to cultural themes that were important to the group (such as *fight* or *all-nighter*). In Eckert’s entire corpus there was only one token of extreme raising on a word that was not associated with key cultural themes of the group. The Burnouts also used nucleus raising as an ‘interactional device’ (1996: 62), for example, to convey emphasis at the climax of a narrative. Of course, words referring to key cultural themes are a somewhat different phenomenon from discourse-pragmatic features that are frequent and salient for a group, as discourse *like* is for the girls at Selwyn High. But in both cases, speakers use phonetic variation on specific words that for them are significant. Future research, then, could focus on phonetic variation in other discourse-pragmatic features that speakers find socially salient, to see whether speakers use variation in the phonetic realisation of these features to express their stance towards what they are saying. It is possible that those discourse-pragmatic features that are frequent and that change rapidly between generations are particularly susceptible to stance-related variation. Discourse *like* has these characteristics; changing intensifier forms and GE forms might be other candidates for this kind of analysis.

It is possible that the functions of some discourse-pragmatic features make them particularly susceptible to the expression of stance through phonetic variation. Kiesling’s (2005) research on word final (er) in multi-syllabic words such as *brother* in Australian English is relevant in this regard. Kiesling (2005: 22) found that a new ‘bundling’ of length and open realisation of (er), plus high rising tone, was used by second-generation migrants as a resource for the expression of stance. The new realisation of (er) was especially frequent on the word *whatever*, which was used by interviewees in utterance-final position as a GE. Since *whatever* occurred in phrase-final position, it was

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2 ‘Pulling an all-nighter’ referred to staying out all night without the parents’ permission, especially when the night-time activities included brushes with the police.
more likely to occur with a high rising tone and the final vowel was more likely to be lengthened, but the discourse function of whatever was also crucial. Like other GEs, a frequent discourse function of whatever is to signal common ground. It is not surprising, therefore, that the migrant interviewees’ use of whatever occurred as they built solidarity with the interviewer, herself a second-generation migrant, and as they displayed stances of ‘authoritative connection’ on the basis of their assumed shared understanding of life as a migrant (Kiesling 2009: 188). Kiesling claims that the new open realisation of (er) began in non-Anglo communities as speakers took stances of authoritative connection with each other; it then spread to those Anglo speakers who had contacts with these communities, becoming linked in the process to any kind of authoritative connection, not just to experiences connected with migration.

Other frequent discourse-pragmatic features may have a more tangential effect on language innovation and change. In Cheshire (2013), I argued that the frequency and function of the discourse-pragmatic feature man, as in (1), was relevant to the emergence of man as a new pronoun in MLE, as in (2).

(1) I got raped in the toilet once. seriously man no yeah I got raped three times there man
(Cheshire 2013: 620, ex. 30)

(2) I don’t really mind how. how my girl looks if she looks decent yeah and there’s one bit of her face that just looks mashed yeah I don’t care it’s her personality man’s looking at
(Cheshire 2013: 621, ex. 33)

The discourse-pragmatic feature man is multifunctional, of course, but one of its more frequent functions is to construct solidarity and empathy between speakers. Its frequency allows the connotations of mutual solidarity and friendship to bleed into the homonyms of man – which include the new pronoun – and to encourage its use. The link with words referring to key cultural themes noted by Eckert (1996) is relevant here as well, since speakers used the singular noun man in a range of collocations to refer to types of individuals that were culturally salient for MLE speakers. For example, my man refers to older gang members who command respect and fear; big man to someone who feels superior for no good reason; and waste man to someone who does nothing with their life. These connotations may have further reinforced the salience of the word man for MLE speakers and, in an indirect way, contributed to the emergence of man as a new pronoun. I analysed the functions of the man pronoun in terms of politeness and rhetorical effect, but it may have been more revealing to consider its functions in terms of the
expression of stance, and the phonetic realisation of the word *man* may also prove to be relevant. Drager’s analysis, then, suggests that future research on variation and change in any component of language, including discourse-pragmatics, could benefit from considering the potential relation between phonetic variation and stance.

**Discourse-pragmatic variation and the variable**

In this final section I want to briefly comment on the issue that is at the heart of this volume: the accommodation of discourse-pragmatic variation and change within the variationist framework.

The excellent chapters in this volume showcase what can be achieved by analysing discourse-pragmatic variation in this way. One of the principal gains, of course, is in analytical rigour. The feature under analysis is carefully defined, as is the envelope of variation. Sophisticated statistical analyses tease out the factors that are relevant to the variation: Chapter 4 by Denis and Tagliamonte is exemplary in this regard. Researchers recognise that it is variable structure that is relevant, rather than simple frequency counts. As a result, analyses can be replicated and advances achieved in our understanding; this is well illustrated in this volume, for example by Rodriguez Louro’s analysis of quotative expressions in West Australian English (Chapter 6).

Many of the chapters show how further advances in methodological rigour can be achieved in future research: for example, by using prosodic phrasing and intonation to identify the scope and clause position of a discourse-pragmatic form (see Chapter 3 by Pichler), by using wave-form analysis to identify unambiguously a UFT (see Chapter 4 by Denis and Tagliamonte), and by formulating a replicable way of avoiding researcher subjectivity in the analysis of the pragmatic function of GEs (see Chapter 9 by Wagner et al.). Several contributions combine a qualitative analysis with a quantitative one, a development that can ‘tap the best of both worlds’, as Tagliamonte points out in Chapter 5 (p. 138). In this way, we can avoid one of the disadvantages of the variationist approach: we have sometimes tended to decide in advance what the potential constraints on variation might be, rather than to first investigate how speakers use a variable in interaction. The innovative methodology described in Andersen’s contribution (Chapter 1) for identifying new and emerging discourse-pragmatic forms provides a way of avoiding a further problem: the fact that analysts tend to analyse the same variables over and over again. Pichler rightly notes in the final paragraph of her Introduction that the volume should encourage researchers ‘to investigate a wider and more diverse range of variables, and to explore new and unexplored dimensions of discourse-pragmatic variability’ (p. 17–18).
And yet, I am not entirely convinced that the analytical concept of the variable is appropriate for studying all types of discourse-pragmatic variation. Both Waters (Chapter 2) and Pichler (Introduction) describe the heterogeneous category of discourse-pragmatic features as a ragbag, calling for a bespoke analysis. Waters points out that any one analysis that is performed can just as readily be performed in a different way, depending on the goals of the investigation. Future research might determine whether, and how, the ragbag could be refined into a smaller number of categories; it seems unlikely, for example, that it will be helpful to consider interjections such as *duh* and *rah* (identified by Andersen’s methodology in Chapter 1 as innovations in the LIC/MLE corpora) as members of the same overall linguistic category as quotative expressions or intensifiers. The latter are integrated into linguistic structure whereas the former are not (though future analyses may well prove me wrong). Quotative expressions and intensifiers fit with Labov’s (1972b: 8) early comments that the variables that are most useful to study are both frequent and integrated into linguistic and social structure, but many other discourse-pragmatic features, though frequent, are outside linguistic structure. Although some of the contributors to the volume define a discourse-pragmatic variable in (partly) structural terms (see, for example, Denis and Tagliamonte in Chapter 4), the fact remains that some discourse-pragmatic features are easier to conceptualise as a variable than others.

Waters does an excellent job in Chapter 2 of describing the different ways that previous researchers have dealt with the issue, and she and some of the other contributors to this volume illustrate innovative ways of setting up the discourse-pragmatic feature they analyse as a variable. It seems to me, though, that an analytic tool that is made so flexible that its definition can change on different occasions, sometimes quite drastically, is a weaker tool. And I am not sure that attempting to fit a discourse-pragmatic feature into a concept for which it was not designed is always the best way forward. As I stressed at the beginning of this chapter, discourse-pragmatic features differ from any other kind of linguistic feature in being inherently multifunctional. I remain uneasy about privileging one function over another, as some of the contributors to the volume have done, since this is unfaithful to the phenomenon that we are investigating. I would prefer to find a way of incorporating multifunctionality into an analysis rather than devising innovative ways of excluding it. I would be on stronger ground, of course, if I could suggest a way of doing so. Perhaps future researchers will be able to resolve the problem.

Not everyone will share my reservations. To some extent, my criticism of using the concept of the variable to analyse discourse-pragmatic variation is a matter of terminology. Discourse-pragmatic features can be investigated with all the rigour of a variationist analysis even if the terms ‘variable’ and ‘variants’ are not used, and this volume will certainly inspire all of us who are interested
in discourse-pragmatic variation to strive for this kind of rigour in our analyses. The volume is brimming with ideas, and the care with which the contributors have outlined their methods makes it possible for future researchers to replicate their studies and in this way to advance our understanding of this essential yet rather neglected aspect of language. The chapters have the common theme of analysing discourse-pragmatic variation in English; while there are some quantitative analyses of discourse-pragmatic variation in other languages (see, for example, Kern [2014] or Secova [2014], to mention just two relevant studies), it will be valuable in the future to consider discourse-pragmatic variation and change in other languages from the same kinds of perspectives as those illustrated here. In this Epilogue I have briefly considered just some of the directions for future research that I found particularly exciting, but other readers will find many different types of inspiration. The future looks bright for research on discourse-pragmatic variation and change.

3 It is odd that some of the contributors refer to my own research on discourse-pragmatic forms as variationist, when I have never thought of it in this way and have certainly never tried to define the discourse-pragmatic form under analysis as a variable. (If I had thought of it in this way, I would have tried to be more rigorous in the analysis!)


Ball, Catherine and Mira Ariel. 1978. Or something, etc. Penn Review of Linguistics 3: 35–45.


Barbieri, Federica. 2012. ‘Another god called Allah or something’ and so on: general extenders and register variation in American talk. Paper presented at the 1st Discourse-Pragmatic Variation and Change conference, April, Salford, UK.


Brinton, Laurel J. and Elizab...


References


References


References


References


Parviainen, Hanna and Robert Fuchs. MS. Indian English as a super-central variety. Unpublished manuscript, University of Tampere, Finland.


Pichler, Heike. MS. Positional and functional innovations in innit in Multicultural London English. Unpublished manuscript, Newcastle University, UK.


Rodríguez Louro, Celeste. under construction. UWA Corpus of English in Australia. Discipline of Linguistics, University of Western Australia.


Secova, Maria. MS. General extenders in Paris French and London English: are they changing or something? Unpublished manuscript, Queen Mary, University of London, UK.


Tagliamonte, Sali A. and Harald R. Baayen. 2012. Models, forests and trees of York English: *was/were* variation as a case study for statistical practice. *Language Variation and Change* 24: 135–78.


Taglicht, Josef. 2001. *Actually,* there’s more to it than meets the eye. *English Language and Linguistics* 5: 1–16.


Terraschke, Agnes. 2010b. ‘Or so, oder so, and stuff like that’: general extenders in New Zealand English, German and in learner language. *Intercultural Pragmatics* 7: 449–69.


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