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The changing FUTURE: competition, specialization and reorganization in the contemporary English future temporal reference system[1]

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The English future temporal reference system has long been recognized as a variable system undergoing change. The main variants in contemporary English (*will* and *be going to*) have both been argued to have gone through (and to potentially still be undergoing) grammaticalization. At the same time, *be going to* has been gradually increasing in frequency relative to *will* over the last 500 years. However, investigation of the ongoing development of this system has been sparse. This article makes use of a large contemporary sociolinguistic corpus of a mainstream variety of North American English and the apparent-time construct. Several factors that have been implicated in the development of this system (Sentence Type, Clause Type, Proximity, Verb Type, and the Animacy and Grammatical Person of the Subject) are considered and a multiplex series of changes are uncovered. Underlying an overall, albeit slow, change in frequency towards *be going to*, we find evidence for specialization of one or the other variant in different linguistic contexts, neutralization of a constraint consistent with ongoing loss of variant nuances through semantic bleaching, and the persistence of constraints consistent with morphological doublet competition.

1 Introduction

This article examines variation and change within the FUTURE TEMPORAL REFERENCE (FTR) system of English. The synchronic layering of variants represents different stages of its development offering the analyst a means to test the contemporary reflexes of diachronic change and the mechanisms which underlie such change. Contemporary variation in English FTR has been argued to reflect earlier and, in some cases, continuing, processes of GRAMMATICALIZATION – a type of language

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change in which lexical elements develop grammatical function (inter alia, Hopper & Traugott 2003; Bybee, Perkins & Pagliuca 1994). Because of its attention to competing variants and the ability to model multidimensional correlates in corpus data, variationist methods are suited to the task of examining such grammaticalization and/or the suite of associated changes that are theorized to take place during the grammaticalization process. To date, most studies have examined English FTR in written sources (e.g. Nesselhauf 2012) or abstracted away from social factors to focus on grammatical developments (e.g. Torres Cacoullos & Walker 2009; Poplack & Tagliamonte 2000; Tagliamonte, Durham & Smith 2014). However, as Janda (2001: 318) argues, to study the nature of grammaticalization, we need 'sociolinguistically-oriented studies' that consider how elements evolve (or not) over consecutive generations. Following Mair (2004: 138) we approach the data with the expectations that 'ongoing grammaticalization processes can be recognized and documented' and that the study of the continuing evolution of apparently grammaticalizing forms beyond a single point in its history offers critical insight into our understanding of language change (Tagliamonte & Denis 2010; Pichler & Levey 2011; Denis 2015). In this article, we offer a sociolinguistic perspective on English FTR by employing the variationist construct of APPARENT TIME (Bailey, Wikle, Tillery & Sand 1991) which enables cross-generational analysis. The data come from the Toronto English Archive (TEA), a corpus of sociolinguistic interviews from Toronto, a large urban centre in Canada (e.g. Tagliamonte 2006a, 2012). Given that individuals in the corpus were born between 1911 and 1992, these materials are taken to mirror developments in the FTR system across most of the twentieth century.[2]

While the grammaticalization of *be going to (BGT)* is said to have been 'completed centuries ago' (Mair 1997: 1538), its share of the system has been increasing in recent history (e.g. Mair 1997; Leech *et al.* 2009: 141; Tagliamonte *et al.* 2014). Quantitative studies have demonstrated that this expansion is particularly gradual. Tagliamonte & D'Arcy (2009: 80, table 3) show that *BGT* has risen to approximately half of FTR markers in Toronto. What is propelling this trajectory? Further, what can this large, sociolinguistically stratified archive of spoken data tell us about the underlying mechanism of change in English FTR in time and place?

1.1 Expressing future temporal reference

English FTR can be expressed with modals, *will, shall*, as in (1) and (2), a group of periphrastic verbal constructions, *be going to, be about to, be fixing to*, (3) and by bare present and progressive forms, with no future morphology, FUTURATES, as in (4).

(1) I still have some trips to Europe that I want to do, so I **will** be going back, probably sooner than later. (F/29)[3]
(2) I think Legolas says 'You **shall** die before you touch or strike Gimli!' (F/14)

[2] Even a 100-year time frame is a small window in the longitudinal development of English FTR.
[3] All examples come from the TEA. Codes in parenthesis detail the speaker's sex and age.

(3) I**'m going to** apply to pharmacy in Toronto. (M/18)
(4) (a) All I need is two more in-classes and I**'m** on the road. (F/16)
(b) Two of the three kindergarten teachers **are retiring** next year. (F/39)

In this article, we concentrate on the robust variation between *will* and *BGT* (and their allomorphs), as in (5).

(5) (a) [Have you seen their house?] No I haven't but I'm sure when I see it I**'m gonna** be green with envy because it**'s gonna** be everything I wanted. So I**'ll** just have to visit and get it through them. But we**'re gonna** get it, we've decided. When that time comes we**'ll** move downtown. (F/43)
(b) I mean I**'ll** absorb what**'s gonna** be beneficial to me. (M/72)
(c) No, well you **won't**. But you**'re going to** be sick to your stomach. (F/82)

The reason for this focus is twofold. First, these variants comprise the lion's share of FTR expression. *Shall* is obsolescent in North American English, apart from some formulaic expressions (e.g. *shall we go*?) (e.g. Williams 2014). In our corpus of approximately 3 million words, *shall* occured only five times. Additionally, futurates, while infrequent (less than 5 per cent), also seem to have a different distribution (if not semantics) from *will* and *BGT* (e.g. Visser 1963/1973; Huddleston & Pullum 2002: 131–3). For example, Copley (2009: 15–16) discusses the contrast in (6).

(6) (a) The Red Sox **play/are playing** the Yankees tomorrow.
(b) #The Red Sox **defeat/are defeating** the Yankees tomorrow.
(c) The Red Sox **will/are going to** play/defeat the Yankees tomorrow.

While futurates are licit in contexts in which future events are planned/scheduled, as in (6a), they are not available when the future event being described is not plannable, as in (6b). In contrast, both *will* and *BGT* are acceptable in either context, (6c).

While we leave aside futurates on the basis of their unique semantics, we must also acknowledge that *will* and *BGT* have been argued to convey different meanings, occupy different functional spaces, and have different morphosyntactic restrictions. Indeed in some contexts the forms are not interchangeable, as in (7) and (8).

(7) (a) Look out! That rock **is going to** fall!
(b) *Look out! That rock **will** fall! (based on Haegeman 1989: 298)

(8) (a) If interest rates **are going to** climb, we'll have to change our plans.
(b) *If interest rates **will** climb, we'll have to change our plans.
(Hopper & Traugott 2003: 3)

In other contexts, one or the other of *will* or *BGT* is nearly categorical, reflecting enduring semantic distinctions.[4] Copley (2009: 65) reports that for many speakers

[4] Semantic contrasts between *will* and *BGT* are primarily relevant for future-in-the-past contexts (i.e. contrasts in the distal forms *would* and *was going to*). In-depth analysis of the semantic implications of these differences is beyond the scope of the present analysis; however, extended discussion can be found in Copley (2009) and Nesselhauf (2012).

will more strongly conveys 'intention' than 'pure prediction'. Compare a context of intention (9a) to a context of pure prediction (9b).[5]

(9) I think that **I'll** buy a new guitar tomorrow…
  (a) ...I've been meaning to do that for some time. *intention*
  (b) ...that's the kind of thing I might do on a Saturday. *prediction*

However, many linguists, for example Haegeman (1989), have argued that the forms, though pragmatically nuanced, are truth-conditionally the same. The strongest argument is that one cannot affirm (10a) while denying the truth of (10b) and vice versa.

(10) (a) **I'll** send you an email tomorrow.
  (b) **I'm going to** send you an email tomorrow.

Indeed, Binnick (1971: 47) suggests that the 'tantalizingly subtle differences' between *will* and *BGT* are likely 'matters of style and not of semantics'.

Thus, we begin with the assumption that differences between *will* and *BGT* are largely 'neutralized in discourse' (Sankoff & Thibault 1981; Sankoff 1988). An advantage of using variationist techniques is that this methodology excels at pinpointing those contexts in which forms are indeed interchangeable (or not) and, critically, is able to uncover the probabilistic tendencies where one or the other is favoured or disfavoured (Labov 1982). This procedure can illuminate our understanding of how variants evolve and change and has been productively employed to study other tense, aspect, and modality variation in a variety of languages (e.g. Poplack & Turpin 1999 and Wagner & Sankoff 2011 on French future tenses; Poplack & Tagliamonte 2001 on tense and aspect in Early African American English; Tagliamonte & D'Arcy 2007 on variation in deontic and epistemic modals in English). Following this approach, we conduct a systematic quantitative analysis of the constraints on the expression of FTR by *will* and *BGT*.

2 Change and grammaticalization of *be going* to and *will*

Competition between *will* and *BGT* has been underway since the fifteenth century; *BGT* has gradually risen in frequency (e.g. Danchev & Kytö 1994). While the form is on the rise, Szmrecsanyi (2003: 296) notes that 'no matter what register and variety', *will* out-numbers *BGT* in contemporary English. Yet, in recent studies of vernacular speech in North America, the two forms compete at near equal frequencies (e.g. Torres Cacoullos & Walker 2009, Tagliamonte & D'Arcy 2009).

Figure 1 presents a compilation of the reported frequency of *BGT* (vs *will*) from a range of different studies. These data come from figures reported in Poplack

[5] Huddleston & Pullum (2002: 212) likewise observe a semantic contrast between *BGT* and *will* such that only *will* 'conveys dynamic volition' on the part of the subject, as in (i).

(i) (a) I have asked her to join us but she **won't**. *volition*
  (b) I have asked her to join us but she**'s not going to**. *no volition*

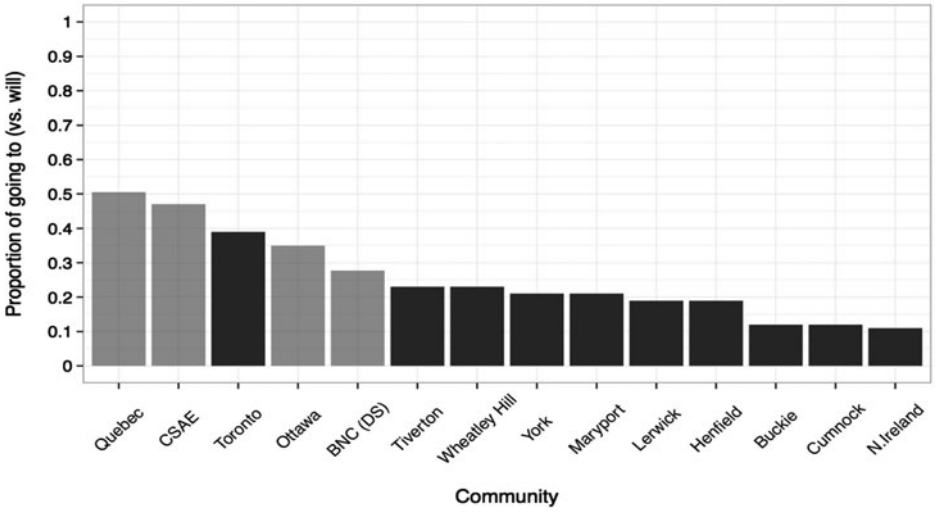

Figure 1. Cross-variety comparison of the proportion of *BGT* in fourteen speech communities

& Tagliamonte (2000; Ottawa), Szmrecsanyi (2003; *Santa Barbara Corpus of Spoken American English*, *British National Corpus*), Torres Cacoullos & Walker (2009; Quebec), Tagliamonte & D'Arcy (2009), Tagliamonte (2012; Toronto) and Tagliamonte *et al.* (2014; for other British varieties). Dark bars represent data for speakers over 60 years old while pale bars represent the whole community.

Consistent with the reports in the literature (Wekker 1976; Berglund 1997; Mair 1997; Szmrecsanyi 2003; Tagliamonte *et al.* 2014), figure 1 shows that *BGT* is more frequent in the North American varieties (Quebec, CSAE, Toronto and Ottawa) than in British varieties. Only in Quebec English is it more frequent than *will*.

This robust variation may be a case of what Kroch (1994: 1) refers to as 'MORPHOLOGICAL DOUBLETS'. Doublets are short lived; either one variant will win out over the other or the semantic/grammatical properties of the forms will become distinct (Kroch 1994: 8). If one form obsolesces, the prediction is that the rate of change across all contexts will be constant. For Kroch (1989 *et seq.*), this CONSTANT RATE EFFECT (CRE) is a reflection of the fact that competition is an artifact of a more abstract, underlying change in the grammar.[6] The prediction of constant constraints over time hinges on the assumption that the semantic and pragmatic nature of each variant also remains constant. However, differentiation of variants (i.e. SPECIALIZATION) may also occur. If so, the consequence is that particular forms will take on differentiating semantic or grammatical nuances and in so doing develop a different distributional footprint. Such a development will produce a trajectory distinct from the constant rate.

[6] The alternative is that constructions embedded within specific contexts are mentally distinct elements with lives of their own (e.g. Traugott 2003).

Specialization is widely attested in the literature on grammaticalization. Key processes underlying these shifts include SEMANTIC BLEACHING and PRAGMATIC ENRICHMENT (Hopper & Traugott 2003). Indeed, underlying the rising frequency of *BGT* since the fifteenth century are a suite of grammatical and semantic-pragmatic tendencies that have led to *BGT* becoming a definitive example of grammaticalization (e.g. Hopper & Traugott 2003; Bybee *et al.* 1994). Its development embodies the hallmark mechanisms of grammaticalization: phonetic reduction ([gowɪŋtu] > [gʌnə]), decategorialization (lexical verb > auxiliary, little *v* or modal) (see Copley 2009 for discussion of the syntax of *BGT*), and semantic-pragmatic change (movement > FTR). Two pathways of semantic development have been theorized for the grammaticalization of *BGT*. Hopper & Traugott (2003: 88–9) propose a metonymic shift in which the dual conversational inferences of 'later time' (indexed from *go*) and 'intention' (indexed from purposive *to*) are together semanticized for the expression of future. Others propose a shift from expressing actual motion of an agent, as in (11a), to movement towards a figurative goal, as in (11b), and lastly to pure prediction as in (11c) (e.g. Bybee, Perkins & Pagliuca 1994; Nesselhauf 2012).

(11) (a) I hitchhiked east. Said, 'Everybody's going west, **I'm gonna** go east.' (M/55)
(b) We**'re** probably **going to** record like ten songs. (M/22)
(c) It**'s going to** ruin the neighbourhood. (M/29)

In both cases, the concept of intention is involved. It has also been suggested that *BGT* retains its movement sense in collocating with verbs of motion (e.g. *go*, *come*) (see Torres Cacoullos & Walker 2009: 331). However, several studies have found no such connection (at least in Modern English) (Poplack & Tagliamonte 2000: 336; Roy 2007; Tagliamonte 2002: 754; Torres Cacoullos & Walker 2009). The FTR sense of *will* also developed via grammaticalization, though along a different path, from a verb of desire/volition (Old English *willan* 'to wish, want') to willingness to intention to prediction (Bybee, Perkins & Pagliuca 1994: 254–7).

In sum, the historical trajectory and ongoing development of English FTR expressions, combined with our apparent-time perspective, allows us to probe questions about grammatical change. What is the difference between morphological doublet competition and semantic-pragmatic change associated with grammaticalization? Are these two possibilities antithetical, given that one predicts shifting trajectories over time and one predicts constancy? Finally, what is the applicability of the CRE with respect to a variable undergoing simultaneous multiplex linguistic processes involving different levels of grammar (syntax, semantics, morphology and phonology) and potentially different underlying mechanisms of change?

3 Methodology

3.1 Data

Our data come from the TEA, one of the largest corpora of vernacular speech from a socially stratified sample of a single speech community (Tagliamonte 2005 *et seq.*).

The TEA comprises more than two hundred and fifty sociolinguistic interviews, mostly recorded in 2003 and 2004, with individuals born and raised in Toronto, Canada. Speakers range in age from 9 to 92 and are relatively evenly distributed by sex, education and occupation. The use of TEA makes this study of FTR concordant with other recent studies based on informal conversations from speakers born and raised in the same community (Poplack & Tagliamonte 2000; Tagliamonte 2002; Torres Cacoullos & Walker 2009; Tagliamonte *et al.* 2014). Uniquely, this analysis of a subsample of 126 speakers is stratified by age, allowing us to draw inferences from apparent time regarding the ongoing evolution of English FTR.

Our analyses follow variationist methods; we focus on a single variable in a circumscribed envelope of variation (Labov 1972; Poplack & Tagliamonte 2001; Tagliamonte 2006b). Previous analyses of FTR in other Canadian English varieties showed that futurates are highly circumscribed to temporal clauses and scheduled events as in (12) (Poplack & Tagliamonte 2000: 318; Torres Cacoullos & Walker 2009: 335). We exclude these from this analysis.

(12) (a) And he **says**, 'You meet me **next week**.' (F/74)
(b) So I**'m going**, **the end of September**, for sure. (M/16)

Shall is essentially non-existent in contemporary vernacular Toronto English, restricted to formal contexts and formulaic expressions, as in (13).

(13) (a) Yeah, and God said, 'There **shall** be light.' (F/82)
(b) There was a lot of emphasis on people who were anti-socialist **shall we say**, and not really ready to trust the NDP. (M/73)

Be about to is not considered in the present study as it strongly implies immediate futurity (Huddleston & Pullum 2002: 212). Consistent with earlier research, we also exclude future-in-the-past contexts, which constitute an independent variable system with distinct variable grammars and semantic contrasts (Poplack & Tagliamonte 2000: 334; Torres Cacoullos & Walker 2009: 327; Copley 2009), tag questions (e.g. *Oh, you'll spoil my chances, will you?*; Tagliamonte *et al.* 2014), and fixed expressions such as *I'll bet you…* and *we'll see*.

This results in a dataset of 2,299 tokens, 1,260 *will* and 1,039 *BGT* (including all allomorphic realizations of both variants).

3.2 Predictors of variation

We embed this study in other variationist research in testing different hypotheses about grammatical development and change in FTR (Poplack & Tagliamonte 1999; Torres Cacoullos & Walker 2009; Tagliamonte *et al.* 2014). First, we include in the variable context only those tokens that can be formulated with either form without a change in function. Second, we test five predictors (or factors) that have been theorized to correspond with various aspects of the grammaticalization of the variants of FTR or have been shown to correlate with the variable distribution of forms. We consider the

syntactic context in which each token is embedded, coding each token for sentence type and clause type. We identify the temporal proximity of events to the utterance time as this has been implicated in the alternation. Likewise, implicated in the grammatical development of *BGT* is the nature of the main verb of FTR clauses (motion vs non-motion). The nature of the subject distinguishes nuances of volition and intention from pure prediction. To accountably distinguish dimensions of these meanings we also consider the interaction of grammatical person and the animacy of the subject (see Tagliamonte *et al.* 2014: 19). We discuss each of these predictors in detail in the next section. Importantly, each predictor is underlain by an explicit hypothesis regarding the underlying grammatical mechanisms contributing to the evolution of English FTR.

As a general rule, ambiguous tokens and those that could not be straightforward coded for these predictors are left aside. That said, none of these predictors were onerous to annotate, except perhaps temporal proximity, which often required consideration of the broader discourse context.

4 Results

In the first half of this section we present a series of figures that plot the proportion of *will* vs *BGT* in apparent time with respect to each of the predictors. This analysis shows how the data are distributed and provide the first indication that different developmental processes – specialization, levelling and the stability of constraint rankings – are in progress simultaneously in the system. In the second half of this section we present the results of statistical modeling. The combined perspective of distributional and multivariate analysis leads to a comprehensive picture of twentieth-century developments in English FTR.

4.1 Distributions over time

Figure 2 presents the overall apparent-time trajectory of *BGT* vs *will* (see also Tagliamonte & D'Arcy 2009: figures 6b, 7f, 8f).[7]

In this figure (and figures that follow), tokens are binned into age groups of ten years according to the age of the speaker.[8] The size of each circle corresponds to the number of tokens in each group; there is a roughly even distribution with about 200 tokens in each group, although the Teens category contributes the most with just over 900 tokens.[9]

Figure 2 exhibits a flat pattern, which suggests diachronic stability; however, we know from Tagliamonte & D'Arcy (2009: 86, table 5) that there is a statistically significant correlation between the frequency of *BGT* and speaker age. Indeed, the

[7] Minor deviations from Tagliamonte & D'Arcy (2009) are due to combining 9–19 years into the same category.
[8] Speakers aged 9–12 are grouped with Teens.
[9] The disproportionate number of tokens in this category is due to a sampling strategy to focus on the adolescent population of the community (see e.g. Tagliamonte 2006b).

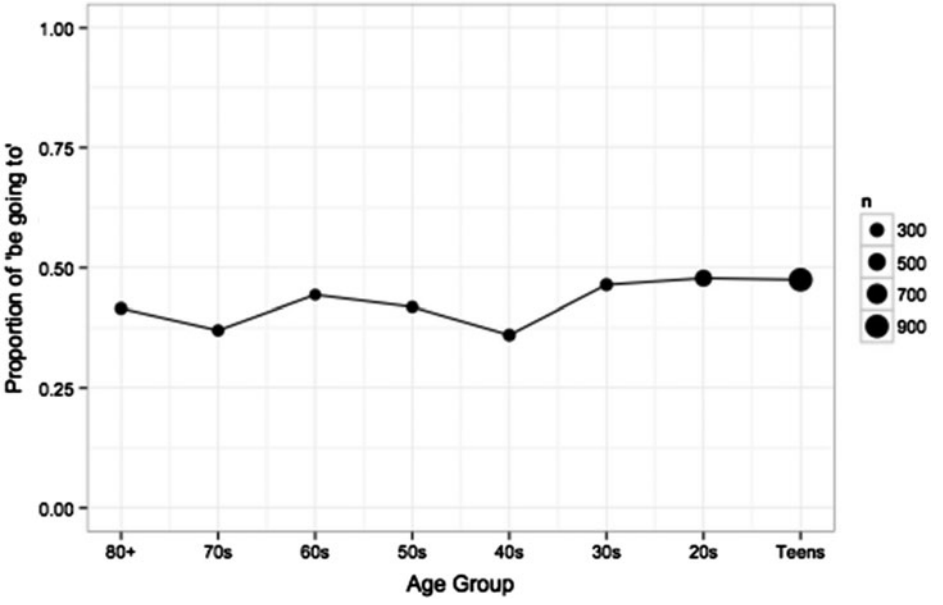

Figure 2. Apparent-time trajectory of *BGT* vs *will* in the TEA. Circle size corresponds to the number of tokens in each age group

three youngest age groups use *BGT* at a frequency of 46 per cent while the older age groups have a frequency of 38 per cent. This confirms a slow but ongoing development consistent with the long-term trajectory of competition between *BGT* and *will.* However, this gradual trajectory belies a series of more rapid changes in the underlying grammar of FTR. By examining the interaction between speaker age (as a proxy for time) and each of our predictors, we are able to offer new insight into how the change to *BGT* has evolved over the twentieth century.

Figures 4–9 in sections 4.1.1–4.1.5 below each consist of two charts. The charts on the left plot the relative frequency of *BGT* (as a proportion of *BGT* and *will*) by age group. For each level of a predictor, we plot a separate line (distinguished by solid, dashed and dotted lines). The size of the circle plotted on the line for each age group corresponds to the number of tokens from that age group for that level of the predictor, providing an accountable view of the trajectory of each predictor over time. In the right-hand charts, we plot the binomial probability of *BGT* by the interaction of each predictor and speaker age. In this perspective, speaker age, ordered from oldest on the left to youngest on the right, is treated as a continuous variable (see Tagliamonte & Baayen 2012). Each line in these charts shows how the predicted probability of *BGT* in a particular context (i.e. a level of a predictor) varies as a function of speaker age.

At least three types of change could underlie the trajectory in figure 2. Figure 3 demarcates these hypothetical trajectories, each indicative of a different process (see Tagliamonte 2012: 76, 90).

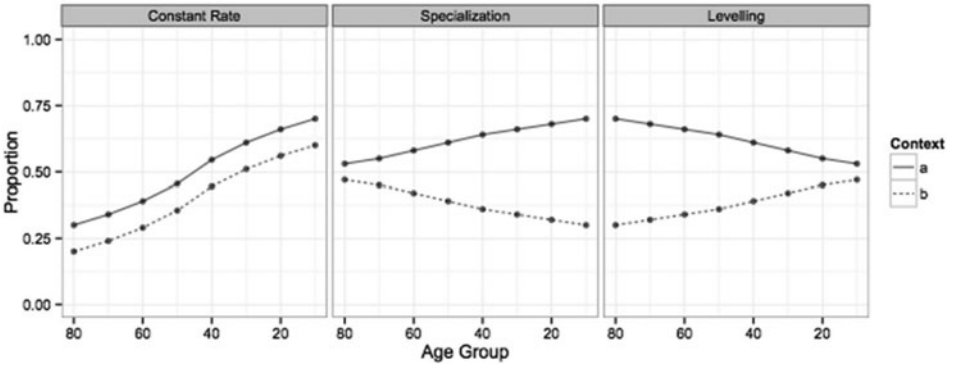

Figure 3. Three hypothetical trajectories of change

In the first hypothetical trajectory, the probability of an innovation changes at a constant rate in each context. The intercept of the solid and the dashed contexts is offset, but the slope of change is the same. This is the trajectory consistent with the CRE (Kroch 1989, 1994). The second trajectory is consistent with semantic and/or grammatical specialization (Kroch 1994). In this case, the trajectories for each level of the predictor diverge, the result of one variant or the other becoming highly favoured in some context(s). This pattern is also consistent with specialization according to the grammaticalization literature: 'the process of reducing the variety of formal choices available as the meanings assume greater grammatical generality' (Hopper & Traugott 2003: 116). A third possibility is the levelling or neutralization of a constraint. Here, the variants are 'de-specializing' so that the proportion of the variants in the two contexts become more like each other.[10] From a grammaticalization perspective, levelling is typically driven by semantic bleaching, which effectively removes the associations between variants and contexts.[11] With these possible patterns in mind, we turn to our analyses of each predictor, showing proportions on the left and probabilities on the right.

4.1.1 Sentence type

Sentence type is noted to have an effect on the realization of FTR (Berglund 1997; Szmrecsanyi 2003; Torres Cacoullos & Walker 2009; Tagliamonte *et al.* 2014). We distinguish four sentence types: affirmative declaratives, negative declaratives, affirmative interrogatives and negative interrogatives. In figure 4 we plot the trajectories of affirmatives (n = 1,806), negatives (n = 264) and (affirmative) interrogatives (n = 135) but exclude negative interrogatives from our analysis due to

[10] Alternatively, if the trajectory continues we might anticipate a reversal, rather than neutralization, of the effect: where context A once favoured *BGT*, the variant may come to be favoured in context B.

[11] A fourth possible pattern (not shown), also consistent with levelling, would display relative stability for context A at a high(er) frequency, while context B rises in frequency such that the frequencies of the variant in the two contexts eventually meet. This is the prediction of the wave model of change (Bailey 1973; see discussion in Denis 2015: 128).

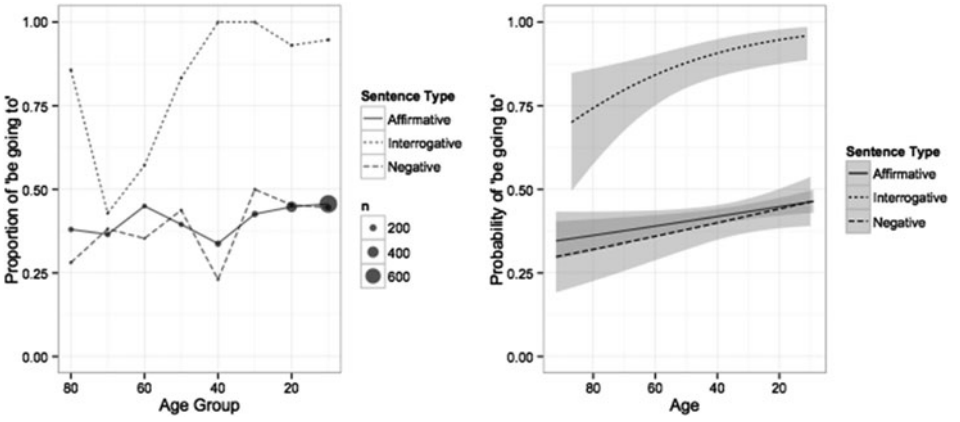

Figure 4. Proportion and probability of *BGT* by sentence type

paucity of data (n = 9). Berglund (1997) and Szmrecsanyi (2003) argue that negative sentences, as in (14a), favour *BGT*, while others argue that *BGT* is favoured in interrogatives, as in (14b) (Torres Cacoullos & Walker 2009; Tagliamonte *et al.* 2014).

(14) (a) I**'m not gonna** say all Torontonians are tolerant. (M/73)
(b) Like who**'s going to** be the garbage men in the future? (M/16)

Although the chart on the left in figure 4 plotting the proportions is uneven, a typical finding when numbers per cell are modest, the trends are clear in the chart on the right. Affirmative and negative sentences are not significantly different, as indicated by their overlapping trajectories; together the two contexts shift (albeit slowly) towards a higher probability of *BGT* among younger speakers. Thus, these data show no alignment with earlier reports on the favouring effect for negatives. Here, interrogatives are set apart from the non-interrogatives and the trajectory for this context is dramatically distinct from the overall trajectory for *BGT*. Even among the oldest speakers, *BGT* is highly favoured with interrogatives and this favouring effect increases over time to near-categorical.

Torres Cacoullos & Walker (2009: 343) argue that the retention of the 'agent on a path toward a goal' meaning of *BGT* means that it can be used in interrogative sentences that 'inquire about already-decided intentions or plans', e.g. *are you going to wash the dishes?*, and this contrasts with *will* which is used in interrogatives when inquiring about an addressee's future willingness, e.g. *will you wash the dishes?*. This may be related to the fact that *BGT* indicates 'greater focus' on the utterance time (Huddleston & Pullum 2002: 211). However, figure 4 indicates that interrogatives in general are specializing to *BGT* regardless of this subtlety.[12] Furthermore, while this

[12] The decreasing use of *will* in interrogatives may also be affected by the use of *can* for inquiring about addressees' ability, and by implicature, their willingness, e.g. *can you wash the dishes?*

pattern is evident in the apparent-time span of our data, there is reason to believe that the roots of this specialization trend may be even older. Whyte (1944: 336–7) quotes Fries, writing in 1925, who observes that *will* in interrogatives is 'rarely used' while *BGT* is the 'the first choice of the large majority' for future interrogatives. Furthermore, in conservative, rural locales in the UK where *BGT* represents modest proportions of the FTR system, the trend towards *BGT* in interrogatives is already apparent and expands incrementally across incipient, active and vigorous varieties (as defined by Nevalainen & Raumolin-Brunberg 1996: 213–55) of *BGT* use (see Tagliamonte *et al.* 2014: 96–7, figures 5–7). These observations suggest that specialization of *BGT* for interrogatives may have been present in earlier stages of grammatical development.

4.1.2 Clause type

A second linguistic predictor that has been implicated in the variable realization of FTR is clause type. Many researchers have observed that *BGT* is favoured in subordinate clauses, as in (15) (Poplack & Tagliamonte 2000; Szmrecsanyi 2003; Torres Cacoullos & Walker 2009; Tagliamonte *et al.* 2014).

(15) Nobody told me that I**'m going to** be walking on a ledge with an elephant. (F/37)

This is potentially unexpected given Bybee's (2001) argument that main clauses tend to foster grammatical innovation while subordinate clauses are conservative. That said, Bybee's (2001) argument is primarily about early grammaticalization and would not be expected to apply in the present case. On the other hand, Leech (1971), Torres Cacoullos & Walker (2009) and Copley (2009) observe that *BGT* is disfavoured (or even barred) in apodosis clauses, as in (16).

(16) If we last until February then he**'ll** be my date. (F/16)

Apodosis and protasis clauses, which are subsets of main and subordinate clauses respectively, have been observed to behave differently from other main and subordinate clauses.

To test these hypotheses, we categorized four types: main clauses (n = 1,701), subordinate clauses (n = 422), apodosis (or the consequent clause in a conditional sentence, here defined as clauses introduced by *if* only) (n = 176) and protasis (or the clause expressing the condition of a conditional) (n = 26). The small number of protasis clauses were all *BGT* (see Huddleston & Pullam 2002: 211). These were excluded from further analysis.

Figure 5 shows that the main vs subordinate clause contrast is supported by our data. In comparison to main clauses (the dotted line), subordinate clauses (the dashed line) favour *BGT* and both increasingly disfavour *will*. In contrast, *will* is increasingly favoured in apodosis clauses. In this case, the trend is ongoing specialization. While we excluded the categorical protasis context, we note that its categorical nature is consistent with specialization as well.

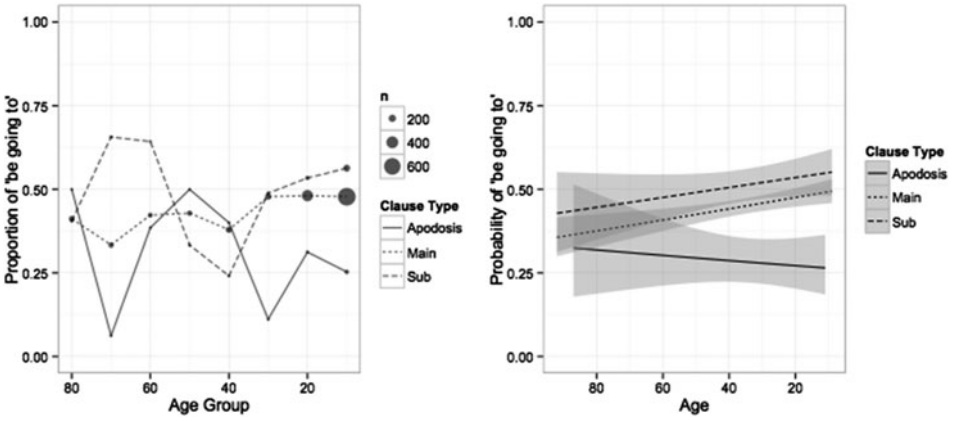

Figure 5. Proportion and probability of *BGT* by clause type

4.1.3 Temporal proximity

The temporal proximity of the future event has been widely discussed as linked to the variation between *BGT* and *will*. In the grammaticalization literature, it has been argued that because *BGT* retains aspects of its earlier 'purposive movement' meaning, it is favoured with more proximal events (Hopper & Traugott 2003: 89). However, as Torres Cacoullos & Walker (2009: 326) point out, as *BGT* further grammaticalizes, this association is expected to become bleached. Indeed, Tagliamonte *et al.* (2014: 99) report that a statistically significant effect of proximity is present only in speech communities where *BGT* has just begun to penetrate the grammar. By the time it reaches approximately 20 per cent of the system, the effect of proximity is gone. Others have argued that *BGT* and *will* are pragmatically distinct with respect to whether or not there is an implicature that 'there are present indications or circumstances which suggest that something will happen' (Wekker 1976: 128; cf. Haegeman 1989). For example, Huddleston & Pullum (2002: 211) note the contrast in (17); (17a) suggests that the dog will imminently take the roast, while (17b) lacks 'the focus on matrix [clause] time' (in this case interpreted as lack of immediacy).

(17) (a) The dog**'s going to** take the roast.
(b) The dog **will** take the roast.

The temporal proximity of events and whether or not one expresses a focus on the matrix time are related by virtue of the rules of the world (i.e. we are more likely to have present indications about events that will happen in the more proximal future than in the more distal future). However, this correlation is not strict (Huddleston & Pullum 2003: 212). Indeed, Torres Cacoullos & Walker (2009: 330) observe no 'straightforward linear correlation between degree of temporal proximity and any of the variants [of FTR]'. We replicate Torres Cacoullos & Walker's (2009) examination of temporal proximity and code each token for the proximity of the future event from

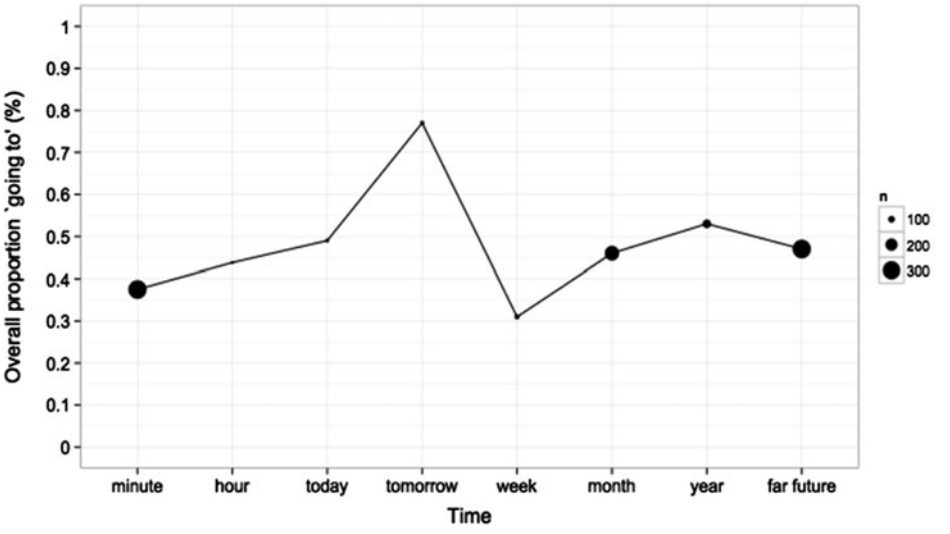

Figure 6. Overall proportion of *BGT* by temporal proximity breaks

matrix clause time (= speech time as we do not consider future-in-the-past contexts): within a minute, an hour, a day, tomorrow, within a week, a month, a year and beyond a year.[13] Figure 6 plots the overall proportion of *BGT* according to these eight temporal categories.

Consistent with Torres Cacoullos & Walker (2009) and Tagliamonte *et al.* (2014), we find no correlation between proximity and the frequency of *will* and *BGT*. There is a surprising upswing in the frequency of *BGT* with crastinal (tomorrow) futures but otherwise the trajectory shows stability. A lack of temporal proximity distinctions could be the result of semantic bleaching of both variants (see Torres Cacoullos & Walker 2009). However, consider the polar ends of the chart; the more proximal events have relatively lower rates of *BGT*, while more distal events have relatively higher rates. To assess the significance of this result, we partition the data into a binary predictor for proximity. This new predictor contrasts hodiernal events (happening today), as in (18a), with distal events (happening beyond today), as in (18b). This contrast is common in languages that distinguish temporal proximity morphologically (either in future or past tense) (Dahl 1984: 112–13).

(18) (a) This is my frivolous day. **I'm going to** play badminton. (F/78)
(b) He**'ll** be in grade four next year. (F/37)

Figure 7 shows the apparent-time trajectory of *BGT* with respect to the binary proximity effect. Across the age range of the TEA, distal futures favour *BGT*. This is the opposite effect from what is predicted for *BGT* if it retains its hypothesized 'purposive movement' sense. Furthermore, both distal and hodiernal future times are

[13] Most tokens have no overt temporal reference (n = 1,454).

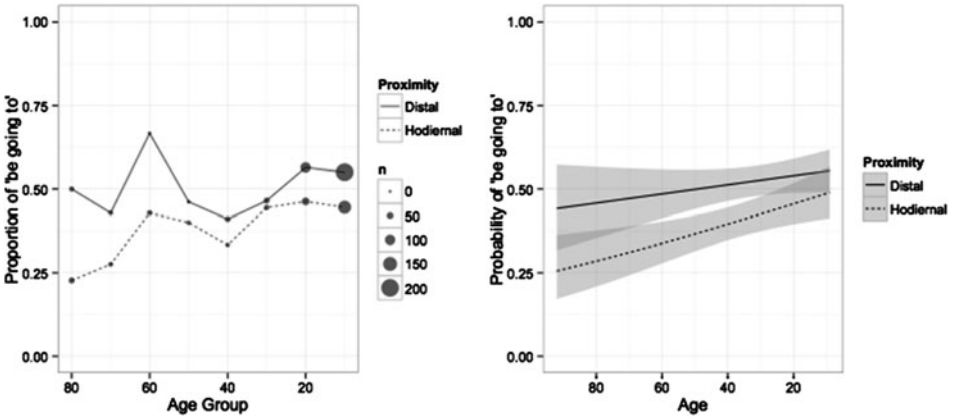

Figure 7. Proportion and probability of *BGT* by temporal proximity

changing towards *BGT*. While Torres Cacoullos & Walker (2009: 326) suggest that this semantic nuance may be bleaching (or may have already been bleached), figure 7 suggests a change in line with the CRE across apparent time with *BGT* rising at a constant rate in both contexts.

4.1.4 Verbs of motion

The fourth predictor we consider is whether the main verb is a verb of motion. There is some contention in the literature as to whether *BGT*'s collocation with *go* (and other motion verbs) indicates early or late grammatical development. While some researchers have argued for initial resistance to *BGT* with the verb *go* and an increase in this collocation over time (Poplack & Tagliamonte 2000: 335; see also Tagliamonte 2000: 376–7), others have argued that a collocation with *go* is symptomatic of early grammaticalization (Torres Cacoullos & Walker 2009: 331). These hypotheses can be tested by partitioning the data into two groups: verbs with no movement interpretation and verbs that embody motion as in (19).

(19) (a) I don't think I**'m going to go** tell my orthodontist. (F/17)
(b) You have to watch where you**'re going to drive** because it's very difficult to get back. (F/60)
(c) He said, '**I'm gonna come** and give you a hand with your books tomorrow.' (M/85)

Figure 8 shows that there is no correlation according to verb type in any age group. This is consistent with Poplack & Tagliamonte's (2000) analysis of Ottawa English as well as with Torres Cacoullos & Walker's analysis of Quebec English (2009: 338): both analyses revealed no effect of a verb of motion. Our data are silent on whether the lack of effect for verb type in Toronto is the result of earlier semantic bleaching (and thus the tail-end of a levelling trajectory) or if this effect was never present (see Roy 2007). In either case, the recent development of this system does not involve verbs of motion one way or another.

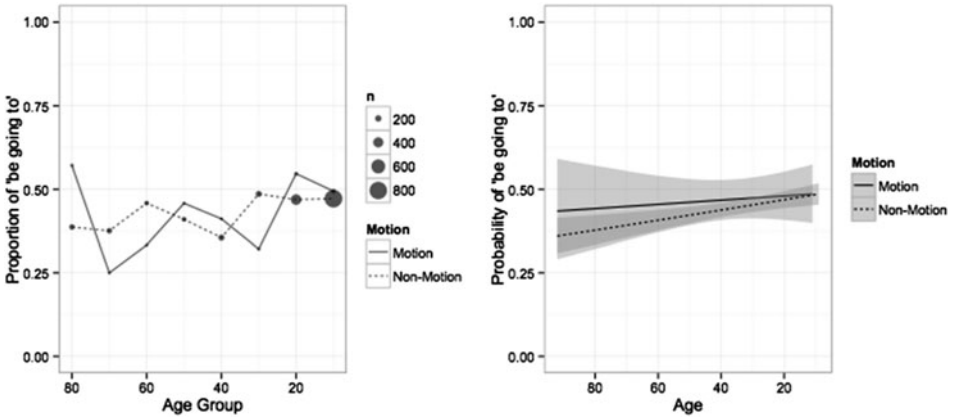

Figure 8. Proportion and probability of *BGT* by type of verb (non motion vs motion)

4.1.5 Animacy and grammatical person

Our last predictors are the effects of animacy and grammatical person of the subject. These factors have been used to operationalize both the retention of volition (associated with *will*) and the retention of intention (associated with *BGT* by way of its early association with 'purposive motion') (see Torres Cacoullos & Walker 2009: 331; Bybee *et al.* 1994: 255–6, 268–70). Because the two factors inherently overlap (first- and second-person subjects are always animate but third person can be either animate or inanimate), we combine them into a single predictor following Tagliamonte *et al.* (2014). First-person subjects, as in (20a), are predicted to imply the highest volition and intention, followed by other animate subjects, as in (20b), and lastly inanimates, as in (20c), which embody neither volition nor intention.

(20) (a) **I'll** go trick-or-treating until I'm like uh twenty-four! (F/11)
(b) This beautiful naked woman **is going to** give me anything I want. (M/17)
(c) The slush **is going to** freeze around it. (F/75)

Notice that the hypotheses for this constraint are difficult to disentangle because both *BGT* and *will* are predicted to pattern with the same hierarchy – first-person > second/third-person animates > inanimates. Torres Cacoullos & Walker (2009: 332) argue that because *BGT* is the newer form, it should retain its sense of 'purposive motion'/intention more strongly than *will* retains its sense of volition. In other words, *will* is hypothesized to be more semantically bleached in contemporary English. Thus *BGT* is predicted to be more favoured with agentive subjects (first-person subjects and animate subjects) than inanimate subjects. *Will*, which is assumed to be more semantically bleached, should show a levelled pattern across contexts, and thus, in contrast with *BGT*, is predicted to exhibit increasing use with inanimate subjects. In any case, shifts in the distribution of the variants across the levels of this predictor could indicate semantic bleaching within the timeframe of our data.

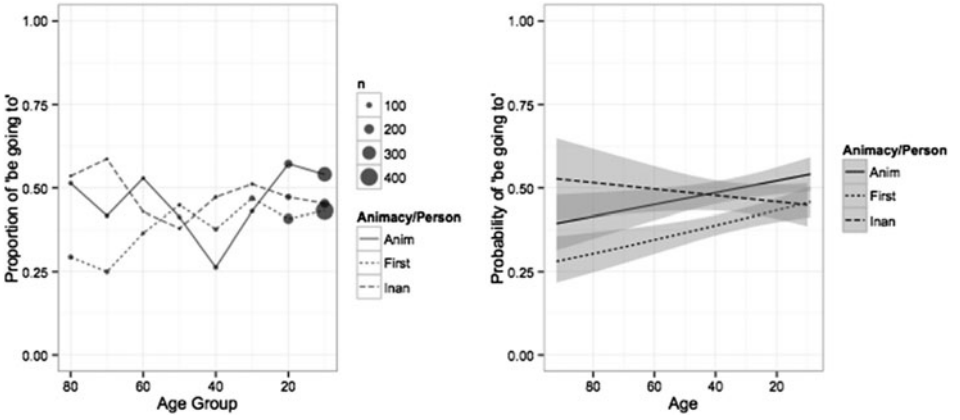

Figure 9. Proportion and probability of *BGT* by animacy and grammatical person of subject

Figure 9 exposes a trajectory different from the previous four figures. Over the temporal period covered by these data, we observe reorganization. For older speakers, the hierarchy of constraints (first person > animate > inanimate) follows from the retention of volition with *will*; first-person and other animate subjects favour the older variant, evident here as lower probabilities for *BGT* in these contexts. This is contrary to Torres Cacoullos & Walker's (2009) hypothesis that the newer *BGT* will exert its semantic nuances more strongly than older *will*. However, this pattern is not consistent in apparent time. For the youngest speakers, the effect levels. This is consistent with ongoing semantic bleaching: *BGT* increases in probability for first-person and animate subjects and decreases in probability with inanimate subjects. We discuss the implications of this reorganization in section 5.

4.2 Modelling the variation

To confirm the validity of these patterns we must ensure that they remain significant when all are treated simultaneously (i.e. over and above the combined effects of each other). Thus, MULTIVARIATE ANALYSIS is required (Tagliamonte 2006b). In this section, we test the significance of these patterns in a two-step analysis. First, we partition out (near-)categorical contexts – those contexts in which we observe disproportionate usage of *BGT* or *will* to the point of (near) specialization – using a CONDITIONAL INFERENCE TREE. Once it is confirmed that these contexts are outside the general scope of variation, we conduct a MIXED-EFFECTS LOGISTIC REGRESSION to test the effects of the remaining predictors.

4.2.1 Conditional inference tree

Conditional inference trees are a non-parametric statistical model that 'provide ... estimates of the likelihood of the value of the response variable [in this case *BGT* vs *will*] on the basis of a series of binary questions about the values of predictor variables'

(Tagliamonte & Baayen 2012: 159). Conditional inference trees are particularly useful for visualizing the effect of multiple (potentially interacting) factors in data sets. We utilize a conditional inference tree to tease apart the contrast between near-categorical contexts (i.e. those that we have hypothesized to have specialized or to be undergoing specialization) and contexts in which *BGT* and *will* vary robustly. The hypothesis is that specialized contexts will be set apart in the conditional inference tree. An alternative possibility is that those contexts which appear to be specializing in figures 4 and 5 are the result of collinearity with other contexts that highly favour one or the other variant. In this scenario, the trajectory which we have attributed to specialization would be epiphenomenal.

We initially constructed a maximal model in the conditional inference tree, including all our predictors (sentence type, clause type, proximity, verb type, animacy/grammatical person of the subject and speaker age); however, we present the output of a pruned model for expository purposes. This model, shown in figure 10, includes only sentence type, clause type and speaker age. Critically, in both the maximal model and pruned model the first splits made in the conditional inference trees were: (i) interrogatives distinct from affirmative declaratives and negatives and (ii) within the latter partition, apodosis clauses from other clause types.

The bar plots in the nodes of the conditional inference tree represent the distribution of *will* (darker grey) and *BGT* (lighter grey) in various subsets of the data. The topmost plot (node 1) shows the distribution in the whole data set with *will* only slightly more frequent than *BGT* (see also figures 1 and 2). The first partition made in the data partitions out interrogatives. As observed above, interrogatives highly favour *BGT* (node 9) and this favouring effect increases over apparent time – compare those over 52 (node 11) and those under 52 years old (node 10). The next partition is with clause type such that apodosis clauses are distinguished from other clauses. Within apodosis clauses (node 3), *will* is preferred as we noted above. Within the remaining 1998 tokens, we observe evidence for change in progress complete with an adolescent peak in apparent time (Labov 2001; Tagliamonte & D'Arcy 2009): speakers younger than 24 exhibit a higher use of *BGT* than those over 24, while those under 11 pattern more similarly to those over 24.

We interpret the partitioning out of the interrogative and apodosis contexts as confirmation of their specialization with *BGT* and *will* respectively. While the specialization of *will* with apodosis does not exhibit change over the time span of our data, the age partition within the interrogatives context suggests that *BGT* has become increasingly specialized in this context, nearly categorical with speakers under 52.

4.2.2 Mixed-effects logistic regression

We now turn to a mixed-effects logistic regression analysis to determine the statistically relevant predictors in contexts of robust variation (non-interrogative, non-apodosis). Table 1 presents the results of a model that includes each of the predictors as main effects. It also includes an interaction term between 'Animacy/Grammatical

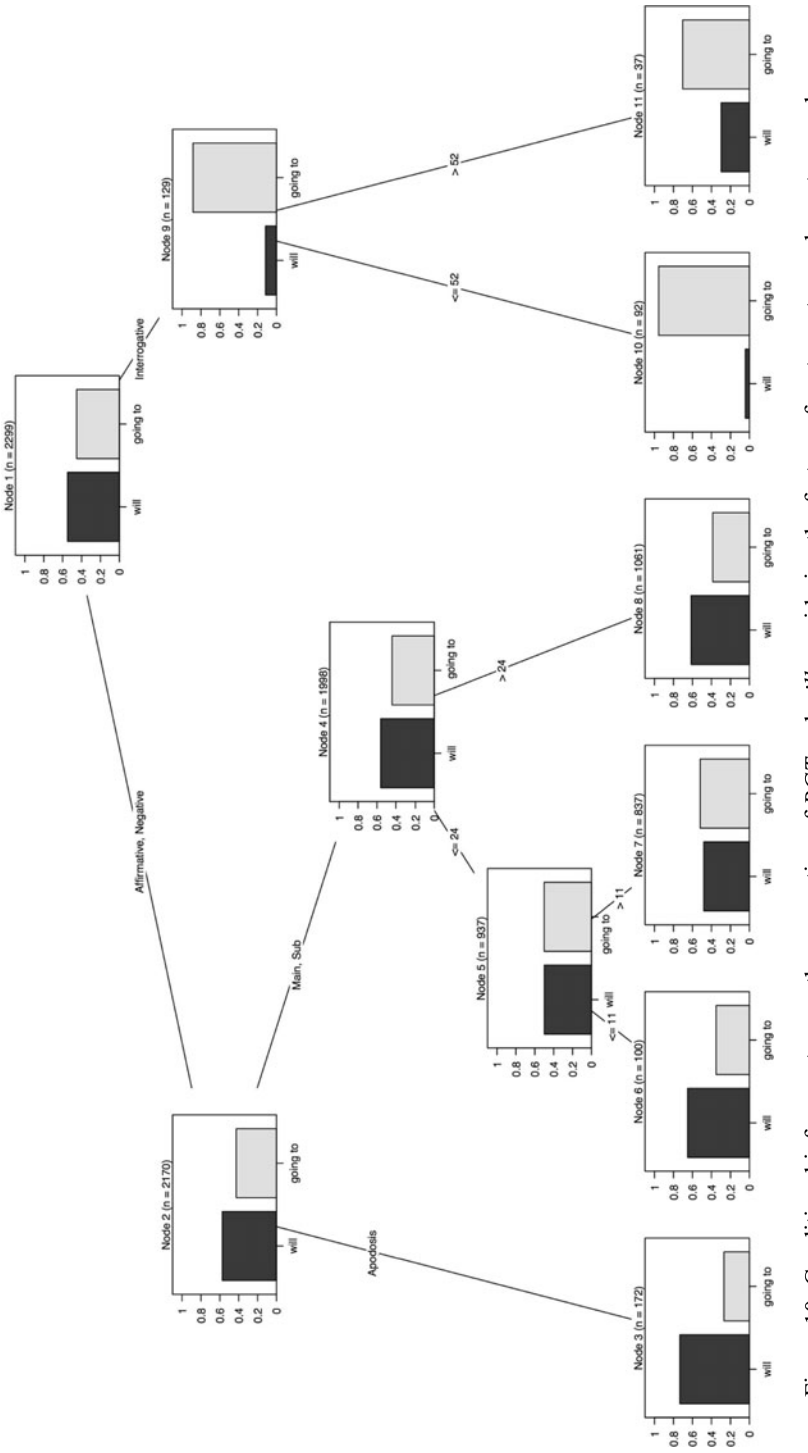

Figure 10. Conditional inference tree on the proportion of *BGT* and *will* considering the factors of sentence type, clause type and age

Table 1. *Mixed-effects logistic regression on the realization of* BGT *vs* will *by main effects Age (continuous), Sentence Type (reference level = Affirmative), Clause Type (Main), Proximity (Distal), Verb Type (Motion) and Animacy/Grammatical Person of the Subject (Animate), the interaction of Age and Animacy/Grammatical Person. A random intercept for speaker is included. Treatment contrast coding. Coefficients presented as log-odds. N = 1998.*

	Coefficient	Std error	z-value	p-value	
Intercept	0.854	0.253	3.37	7.48×10^{-04}	***
Age	–0.013	0.004	–2.93	3.35×10^{-03}	**
Sentence Type (Negative)	0.005	0.130	0.04	9.70×10^{-01}	
Clause Type (Subordinate)	0.296	0.122	2.44	1.49×10^{-02}	*
Proximity (Hodiernal)	–0.571	0.165	–3.45	9.82×10^{-06}	***
Proximity (No Reference)	–0.560	0.127	–4.42	9.82×10^{-06}	***
Verb Type (Non-Motion)	–1.460	0.150	–0.97	3.29×10^{-01}	
Anim/Person (First)	–0.479	0.205	–2.34	1.95×10^{-02}	*
Anim/Person (Inanimate)	–0.586	0.244	–2.40	1.63×10^{-02}	*
Age:Anim/Person (First)	0.002	0.005	0.428	6.69×10^{-01}	
Age:Anim/Person (Inanimate)	0.014	0.006	2.272	2.31×10^{-02}	*
Random effects:				Variance	N
Speaker				0.382	126

Person of the Subject' and speaker age in order to disentangle the competition between *BGT* and *will* and to test the possibility of systemic reorganization of the variable grammar in apparent time that we noted in discussion of figure 9.[14]

The model shown in table 1 provides statistical confirmation for all of the distributional patterns discussed above. First, the negative coefficient for the main effect of Age indicates a negative correlation between a speaker's age and the probability of *BGT* (i.e. younger speakers are more likely to use *BGT* than older speakers). While the overall distribution of the variants in figure 2 suggests relative stability, once all the factors that contribute to the variable choice are taken into account, change over time towards *BGT* is confirmed. This is expected given our interpretation in figure 10 of an adolescent peak, consistent with Tagliamonte & D'Arcy (2009). Once interrogative sentences are accounted for, there is no significant effect of Sentence Type (affirmative vs negative). This result aligns with Torres Cacoullos & Walker (2009: 338), who likewise find the effect of interrogatives to be the

[14] Our approach to modelling and the presentation of results is rooted in hypothesis testing. We include only (and all) predictors for which we have theoretical hypotheses. Only interactions between age and the predictors that we have suggestive evidence for in our distributions are included in the model. That said, a maximal model (which included interactions between age and all of our predictors) found no significant interactions other than the one significant interaction in table 1, and all the coefficients for main effects were in the same direction and had the similar effect sizes. This is likewise the case for the pruned model that included only the significant predictors in table 1.

main sentence type constraint. Together with the findings for Quebec English (Torres Cacoullos & Walker 2009), the non-significance of this effect may be evidence that Canadian English is relatively advanced with respect to *BGT*. Tagliamonte *et al.* (2014: 97–100) find that only in communities in which *BGT* is vigorous is this constraint non-significant. In communities which lag behind in the development of *BGT*, negatives favour the incoming variant.[15] There is a significant main effect of Clause Type such that subordinate clauses favour *BGT* consonant with the literature (Poplack & Tagliamonte 1999; Szmrecsanyi 2003; Torres Cacoullos 2009; Tagliamonte *et al.* 2014). With respect to Proximity, the significant negative coefficients for hodiernal reference and no reference (each in comparison to distal reference) suggest that distal futures favour *BGT* while hodiernal futures and futures with no overt reference disfavour (favouring *will*). The similar effect sizes for hodiernals and futures with no overt reference suggests that these contexts behave similarly. While this effect may be unexpected given the association of *BGT* with proximate events, it is consistent with Torres Cacoullos & Walker's (2009: 338) significant, albeit small, effect in the same direction. This further suggests that the association between *BGT* and proximal events is a result of the variant's implicature that 'there are present indications or circumstances which suggest that something will happen' (Wekker 1976: 128; cf. Haegeman 1989) rather than a deictic/grammatical-tense distinction as morphologicalized in some languages. The implicature is consistent with both proximal and distal events. The lack of interaction with Age and Clause Type and Age and Proximity is consistent with the CRE: the rise of *BGT* takes place at a constant rate in both contexts in both constraints. As suggested in our distributional analysis and other analyses of contemporary varieties, there is no significant effect of Verbs of Motion. Lastly, consider the effect of Animacy/Grammatical Person of the Subject and its interaction with Age. In comparison to the reference level, animate subjects, both first-person and inanimate subjects disfavour *BGT* overall. However, there is also a significant interaction with Age indicating that younger people have an increasingly levelled use of *BGT* across all subjects. Coupled with the main effect of Age, the coefficients in the model corroborate the pattern in figure 9: older speakers favour *will* with first-person and animate subjects, but *BGT* has become increasingly favoured in these contexts over apparent time. This is observed in the main effect of Age and lack of significant interaction between Age and first-person subjects (in reference to animate subjects), which confirms a parallel rise of *BGT* in these two contexts. In contrast, inanimates became less favoured, as indicated by the significant interaction between this level (in reference to animate subjects) and Age. This is statistical validation of our interpretation of levelling and reorganization of this effect.

[15] As Tagliamonte *et al.* (2014: 100) note, this would suggest that Szmrecsanyi's (2003) data, from the *British National Corpus*, which include a significant effect for negation, represent a more conservative variety.

5 The contemporary grammatical development of *will* and *be going to*

We began our analysis of variation between *will* and *BGT* as variants of FTR in English with the observation that across almost 100 years of apparent time the relative frequency of these two variants fluctuates by less than 10 per cent. However, underlying the unremarkable distributional frequency trajectory we have exposed a complex series of changes underway in the conditioning of the variants. Moreover, we have presented evidence that the patterning of these changes is diagnostic of different developmental processes.

On one hand, we have evidence for the two predicted results of morphological doublet competition offered by Kroch (1994): (i) Specialization: over the last century or so, *BGT* has specialized as the variant for use with interrogatives and is categorical for protasis clauses; *will* is specialized for use with apodosis clauses. With those contexts accounted for, we observe evidence for (ii) the Constant Rate Effect: two predictors, Clause Type and Proximity, exhibit an increasing preference for *BGT* leading to obsolescence of *will*, and this competition occurs at a constant rate across contexts.

On the other hand, we have presented evidence for an additional process of change with respect to the nuances of volition and intention associated with *will* and *BGT* respectively. The pattern visible in figure 9 and confirmed in table 1 points to a semantic reorganization of the variants, which can be interpreted in two ways. The first possibility is encroachment of *BGT* into first-person (and animate) subjects, the previous stronghold of (volitional) *will*. This type of development suggests that the semantic bleaching of *will* (predicted by Torres Cacoullos & Walker 2009) is a contemporary and ongoing process. As *will* loses its sense of volition, it also expands beyond its earlier association with first-person and animate subjects. As a result, the intentional nuance of *BGT* becomes more consequential. In such a scenario, the prediction is a complete reversal of the animacy hierarchy. A second possibility is the bleaching of both variants. In this scenario, the constraint is predicted to weaken as the idiosyncratic correspondences of each form are bleached.

To further substantiate the validity of this shift we compare the patterning of Animacy/Grammatical Person of the Subject in TEA (*c*. 1911–2004) to Tagliamonte *et al*.'s (2014) data from multiple varieties of British English, which are taken to represent a somewhat deeper time depth. Tagliamonte *et al.* (2014) categorize these varieties with respect to the overall frequency of incoming *BGT*. Incipient varieties exhibit less than 15 per cent *BGT*, active varieties have between 21 and 28 per cent, and the one vigorous variety (speakers from York under 30) has 43 per cent. Figure 11 plots these data: TEA, split into older (over 24) and younger (11–24), and the three categories from Tagliamonte *et al.* (2014).[16] We plot these varieties along the x-axis ordered as relative stages in the development of *BGT*. We place the vigorous UK

[16] The TEA data are partitioned into age groups according to the conditional inference tree model in figure 10. The data are restricted to affirmative declarative clauses in order to be comparable with Tagliamonte *et al*.'s (2014) figures 5–7.

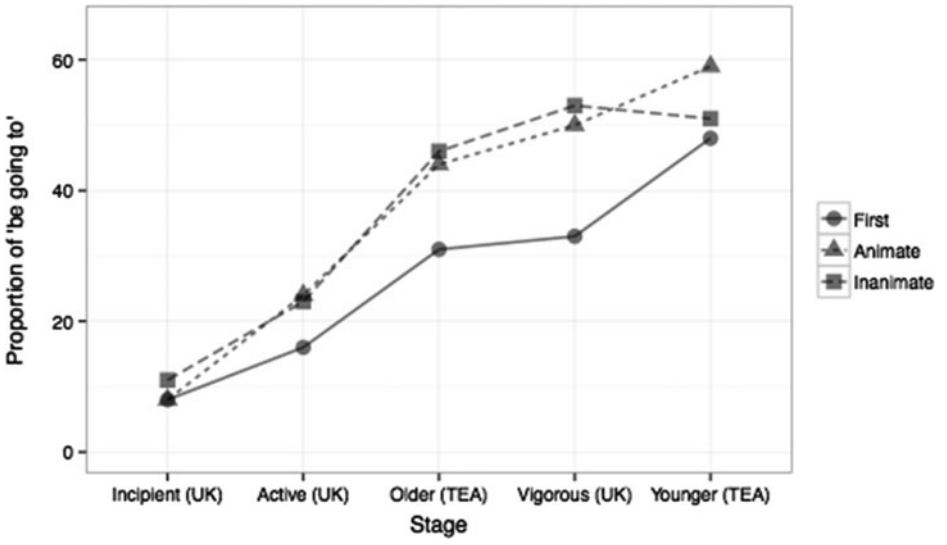

Figure 11. The effect of Animacy/Grammatical Person of the Subject in comparative perspective

variety between the two TEA age groups, assuming that young people from York will be more advanced than older TEA speakers but less advanced than younger TEA speakers as is the case with other variables (e.g. general extenders, Denis 2011; intensifiers, Tagliamonte 2008). The lines depict the frequency of *BGT* for each of the three Animacy/Grammatical Person of the Subject categories.

In the incipient variety, there is a small (albeit statistically significant) effect such that first-person and animates occur more with *will*. This first-person effect is maintained with the active, older and vigorous stages. We interpret this to reflect retention of volition for *will*. However, notice that *BGT* incrementally advances in each context. Instead of a consistent preference for *will* with first person, *BGT* has infiltrated this context in the last stage to the point where the strength of the constraint weakens (see also table 1). In this phase, the two contexts that formerly should be the most distinct (first-person and inanimate subjects) have levelled. While the four earlier stages exhibit a pattern consistent with the CRE and the rise of *BGT*, the latest stage in the trajectory (younger TEA speakers) shows that a semantic shift has occurred. We suggest that this is an indication of a reorganization of the FTR system. Where once two morphological doublets competed and exhibited a contextual constraint, presumably as a result of preferences established at the onset of the change (see Kroch 1989: 205), this finding shows that these constraints may not remain constant for the entire trajectory of the change. In essence, if the nature of a constraint is affected by independent semantic-pragmatic change (whether or not the result of grammaticalization), it may interact with morphosyntactic change and disrupt the predicted constant rate trajectory.

6 Conclusion

We have now completed an extensive analysis of the variation between *will* and *BGT* in Toronto English. At the surface the data show a slow rise in the use of *BGT.* This is consistent with the nature of this longitudinal change, which began in the 1400s and has continued to the present day, yet still represents only a little above 50 per cent of the system at most. While most researchers agree that the grammaticalization of *BGT* as a marker of FTR occurred at the outset of this change, its subsequent development offers a unique view on what happens afterwards. Our finding of the CRE confirms the presence of grammar competition. As *BGT* rises and *will* falls into obsolescence, different contexts exhibit different intercepts but the rate of change is constant over time, each context a reflex of the more abstract competition. The new finding is that in the case of English FTR, other developments are also underway.

When Kroch (1994: 187) detailed the concept of grammar competition, he allowed for the possibility of specialization. In discussing the case of the English past tense he says:

> Over time, these fluctuations led to one of two outcomes: 1) in the absence of further linguistic change, one form eventually disappeared through disuse, just because of stylistic preferences or random statistical fluctuations… 2) the doublet pair became stable due to differentiation in meaning and grammatical properties.

Indeed, evidence for patterns of specialization in the competition between forms has long been reported in historical linguistics (e.g. French negation; Hopper 1991). The same outcomes have been reported in some quantitative studies of morphosyntactic variation, including the variation among forms used to mark stative possession (Tagliamonte 2003) and the alternation between *was* and *were* (Tagliamonte 1998). As Tagliamonte (2003: 550, 1998: 86) notes, 'constraints and weights on these variables shift in apparent time, suggesting that these developments are an intrinsic and viable characteristic of the process'.

Consistent with these reports, the shifts we have uncovered in the present analysis exhibit alternative developments to the CRE. On the one hand, we have specialization. On the other hand, orthogonal changes can disrupt a constraint hierarchy. In either of these cases, we no longer expect to see evidence for the CRE. Moreover, it appears that all these processes can occur within the same longitudinal change. Indeed, not every constraint we considered exhibited the same trajectory over time. It is worth highlighting the fact that such distinctions could only have been revealed by probing beneath overall frequencies and modelling all potential factors operating as forms undergo grammatical development. Furthermore, in light of potential specialization, it is critical to actively monitor the variable context as constraints are considered across time (e.g. figure 11). This study also demonstrates the utility of representative socially stratified corpora that include speakers of different ages (generations) in order to more fully understand grammaticalization and change (see Janda 2001: 318). Indeed, we predict that as English FTR continues to evolve, *BGT* will continue to expand;

however, because *will* has established its own functional/grammatical niches (e.g. apodosis clauses), this change may never go to completion. Rather than one form obsolescing, the end point of this grammatical change may be longitudinal partitioning (see e.g. D'Arcy & Tagliamonte 2015). While Labov (1982: 76) emphasized the need for in-depth linguistic analysis in order to uncover the 'ordered series of shifts in underlying probabilities associated with each environmental factor', he possibly did not foresee that different constraints within the same variable might exhibit distinct trajectories. However, Labovian variationist methods and practices have enabled us to offer up a new perspective on the continuing development of English FTR. We have even been able to make predictions about the future: what's it *going to* be like? If we wait long enough, we'*ll* find out.

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