Pulling Out All the Stops: Referee Design and Phonetic Correlates of Gay Men's English

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Abstract

Studies of intraspeaker variation and the linguistic indexing of sexual identity have formed an important part of recent research in variationist sociolinguistics. This study investigates patterns of word-final stop release in the speech of a flamboyantly gay television host, Graham Norton. The results indicate a significant correlation between the rate of released word-final stops and the sexual orientation of an absent referee, as defined by Bell (1984, 2001), with a higher proportion of released stops for gay-identified referees. We argue that this pattern demonstrates the linguistic indexing of an ingroup identity, which Norton shares with referees who identify as gay. In this way, the variable of word-final stop release can be considered a 'building block' (Barrett 2002:33) in the construction of Norton's sexual identity.

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1 Introduction

Recent studies of intraspeaker variation have demonstrated an increasing interest in the connection between sexual orientation and patterns of style-shifting (Crist 1997, Rogers et al. 2000, Podesva et al. 2002, Podesva 2008). However, intraspeaker research has paid little attention to effects of sexual orientation within the framework of audience design (Bell 1984, 2001). Podesva (2008) examines style-shifting across speech situations with different interlocutors, but influences beyond the immediate context are not considered. With specific reference to Bell's (1984, 2001) model of referee design, this study investigates the correlation of an absent referee's sexual orientation with the release of word-final stops in the speech of Graham Norton, a talk-show host of Irish descent famous for his 'camp' television persona (Hoover 2013). Our results indicate a significantly higher percentage of released tokens when the referee is an openly gay man than when the referee identifies as straight. We also observe longer burst durations for gay referees. These findings provide scope for a more comprehensive analysis of audience effects and the representation of sexuality in the linguistic construction of a speaker's identity. We explore the contribution of an absent gay referee to Norton's projection of a flamboyant diva persona as a television host, which contrasts with a number of other styles previously identified within the speech of gay men (Podesva et al. 2002:187).

2 Previous Literature

Studies of intraspeaker variation over the past few decades have offered a number of theories to account for patterns of style-shifting. Bell's 1984 theory of *Language Style as Audience Design* challenged previous theories of intraspeaker variation, rejecting explanations of style as attention paid to speech (Labov 1972). Bell proposes that style-shifting occurs primarily in response to a speaker's audience, with relative degrees of influence from each level of audience membership, the greatest influence coming from the immediate "addressee", followed by any surrounding "auditors", "overhearers" or "eavesdroppers" (Bell 1984:159).

In a more recent revision of his audience design framework, Bell (2001) places increased emphasis on an initiative, as opposed to responsive, dimension of style-shifting. He proposes that, as well as responding to the immediate audience, speakers can initiate a shift in style, influenced by a referee who is not physically present during the interaction. In this way, "linguistic features associated with a reference group can be used to express identification with that group" (Bell 2001:147). Referee design can be interpreted as speakers' "redefinition of their own identity in relation to their audience" (Bell 2001:147), taking the initiative to "deliberately reject identification with the immediate addressee", in order to identify with an external referee from the speaker's own absent ingroup (Bell 1984:187).

This theory of referee design is tested in Hay et al.'s 2010 study of style-shifting in the speech of Oprah Winfrey. The study investigates the correlation of referee ethnicity, as well as lexical frequency, with Winfrey's realisation of the /ay/ variable. Hay et al. report a higher rate of monophthongisation of /ay/ to [a:] when Winfrey discusses an African American referee (a guest who is to appear later on the show), as opposed to a white referee. The present study builds on these findings, but instead investigates the correlation between referee sexual orientation and the release of word-final stops in the speech of Graham Norton, a flamboyantly gay television presenter.

Central to our investigation of intraspeaker variation is the sociolinguistic indexing of a so-called gay identity, and specifically the way in which such an identity is manifested in the speech of Graham Norton. A number of phonetic correlates have been associated with stereotypical gay men's speech, including higher overall F_0 (or a wider pitch range), greater segmental durations for vowels and fricatives, longer voice onset time, and higher pitch for /s/ and /z/ (Smyth and Rogers 2008:139). Zimman (2010:4) proposes that "[v]irtually any deviation from ways of talking associated with heterosexual masculinity [...] can be interpreted as indexing gay identity". Crist (1997) tests the perception of differences between the speech of gay- and straight-identified men by comparing reading passages of gay men in an "ordinary voice" and a "queeny voice" (1997:67). He investigates differences in word-initial stop closure and aspiration time, proposing that the stereotype of gay men's speech sounding "breathy" or "lisping" could be attributed to the prolonged aspiration of voiceless stops (1997:55). The results do not indicate a significant difference in stop durations, possibly due to the small data sample, but the study concludes that durations of /s/ and /l/ are consistently longer in the "queeny" style (1997:57). Rogers et al. (2000) also propose that /s/ and /l/ durations are greater in the speech of gay-identified, as opposed to straight-identified, men. However, there could be some methodological concerns in Crist's 1997

study, given that participants were asked to deliberately imitate stereotypical gay speech. Crist arguably reveals more about cultural ideas of language stereotypes than the reality of, and diversity within, the speech of men who identify as gay. Despite the salient perceptual features associated with stereotypical gay men's speech, many studies have been inconclusive in the search for specific phonetic correlates. For instance, although pitch range is believed to correlate with sexual orientation (Jacobs et al. 1999), Gaudio (1994) concludes that F_0 range and variability alone cannot provide sufficient cues for sexual orientation to be identified.

Similarities have also been proposed between the speech of gay men and female speech styles. Lakoff (1990:204) suggests that gay men's speech shows "gender non-conformity", where men "imitate" features of women's speech. Specifically, camp speech is defined by Smyth and Rogers (2008:132) as "the ability to perform, through speech and gesture, an exaggeratedly feminine or gay identity". However, with the exception of overtly camp styles, Smyth and Rogers (2008) find little phonetic evidence of similarity in the speech of women and gay men. There is further concern that "the assumption that there is only one way of speaking erases the diversity within the 'gay community'" (Wong et al. 2002:4). Leap (2002:45) asserts that generalisations about gay speech "obscure critical social realities" that should be considered in more depth; the notion of a so-called gay community, and the manifestation of this notion within speakers' linguistic identities, is likely to show vast interspeaker variation.

Moving away from homogeneous accounts of gay men's speech, Podesva et al. (2002) consider the construction of a different kind of gay identity in their analysis of *activist style*. Their approach places a greater emphasis on speaker autonomy than theories of audience design, describing style as "the ongoing construction of identity, built both directly through linguistic (and other) resources, and indirectly through the performance of social acts or activities, and the projection of emotive stances" (2002:176). Podesva et al. identify a distinctive activist style, which is employed in contrast to a flamboyant gay style as a "deliberate and common response" to the meanings associated with stereotypical camp speech (2002:185). The study reveals that a gay rights' activist produces a higher percentage of word-final stop releases than his straight interlocutor. However, this result cannot be attributed solely to sexual orientation, as there could be numerous differences between the two speakers (2002:186). The present study eliminates any confounding interspeaker differences by examining variation within one speaker across different contexts.

In a more recent study, Podesva proposes that phonetically strong word-final stop releases, when co-occurring with other phonetic features, signal "prissiness" and "precision" in the construction of a *diva* persona, which a speaker can "turn off and on, depending on the demands of or his goals for an interaction" (2008:4–5). It is therefore important to note that, as well as contrasting with the speech of heterosexual men, as explored in Kiesling's 2002 study of hegemonic masculinity in fraternity speech, there is a wide range of distinctive styles *within* the speech of gay men, reflected both between speakers and within the speech of individuals (Wong et al. 2002:4). The characteristics of a diva persona become clear through comparisons with other styles (Podesva 2008:5).

Variability in word-final stop release has been considered in numerous sociolinguistic studies, which report that frequent stop release indexes super-standard speech in a range of social groups including geek girls (Bucholtz 2008), Orthodox Jews (Benor 2001), and the science fiction convention community (Ashburn 2000). Podesva et al. (2002:186) propose that this variable has a "culture-wide relationship to education or precision", motivating its use in the activist style. Contrastively, in a diva style, frequent word-final stop release can indicate the precision and hyper-articulation associated with a flamboyantly gay persona (Podesva 2008:5). These examples illustrate that the same phonetic feature can be used in the construction of different identities across a range of social contexts. Social meanings then become established through a feature's co-occurrence with other sociolinguistic variants (Podesva et al. 2002:187).

Patterns of stop release in our speaker, Graham Norton, are subject to influence from a number of aspects of his identity. Born in 1963, Norton grew up in Cork (Republic of Ireland) in a family of Irish Protestants. In an interview for the television programme *Who Do You Think You Are?* (Immediate Media Company Ltd. 2013), Norton reports feeling like an outsider as a gay Protestant living in an overwhelmingly Catholic country. Upon discovering that his grandmother was pregnant at her wedding, Norton jokes: "Good, I'm not the first person to bring shame on the family" (Immediate Media Company Ltd. 2013). Norton's persona as a flamboyantly gay television host (Hoover 2013) appears to be at odds with his traditional Irish background, both culturally and linguistically. While a diva persona is reported to employ an increase in word-final stop releases (Podesva 2008:5), Irish speech is typically characterised by the weakening of coronal stops to fricatives or taps (Hickey 1984:234). These conflicting cultural influences provide scope for considerable intraspeaker variation.

Based on the above findings, particularly Hay et al.'s (2010) conclusion that intraspeaker variation can correlate with aspects of referee identity, and Podesva's (2008:5) observation that frequent word-final stop release contributes to a salient diva persona, we aim to test the following hypotheses:

> (1) Norton will produce a higher percentage of released word-final stops for an absent referee who identifies as gay, as opposed to straight.

(2) Of the tokens that are released, burst durations will be longer for gay-identified referees, given Rodgers et al.'s (2000) proposal of greater segmental durations among gay-identified men.

Central to our investigation is the correlation of word-final stop release with referee identity, which could highlight the subtle but important influence of audience members beyond the immediate addressee in patterns of intraspeaker variation. We propose that referee design (Bell 1984, 2001) is particularly relevant to claims about speakers' linguistic construction of identity (Podesva 2008), given that an absent referee can correlate with specific phonetic features in a speaker's linguistic presentation of self (Hay et al. 2010).

3 Methodology

Our data consist of clips from seasons 1–13 of *The Graham Norton Show* (The Graham Norton Show 2008). Data were collected from Norton's monologues at the beginning of each show in which he introduces guests who will appear later in the episode. Like Hay et al. (2010:54), we only analysed speech where Norton was facing the camera and addressing the studio and television audience, with no guest on stage. Hay et al. (2010:53) note that, in order to isolate the influence of a referee, the addressee and other audience members must remain constant. Norton's monologues were recorded for the introduction of all openly gay male guests (Hoover 2013) who appeared on the shown between 2008 and 2013.[1] Only men were considered, given the proposal that gay men form a speech community which is distinct from, although affiliated with, the lesbian community (Gaudio 1994:31). An equivalent sample was then collected from monologues about male guests who, to our knowledge, do not identify as gay.[2] These monologues were collected from one episode per season to match the number of tokens for the gay referees. Speech data were digitised using Audacity (Audacity Team 2013) and Soundflower (Ingalls 2012). Tokens were coded manually by the authors using Praat (Boersma and Weenink 2011). All data were checked by both authors to ensure complete interrater agreement.

The initial envelope of variation featured only word-final /t/, but given the limited data with a gay referee, this was expanded to include all word-final stops: /p, b, t, d, k, g/. Both voiced and voiceless stops were included in order to maximise the data sample. Norton produces a variety of realisations of word-final stops. For instance, realisations of word-final /t/ include glottal stops, taps and fricatives, which are associated with Irish speech (Hickey 1984:234), unreleased tokens, and deletion. Given the correlation of frequent stop release with a diva persona (Podesva 2008:5), all realisations were collapsed into a binary distinction of released and unreleased tokens. Any token without a visible release burst on the spectrogram was coded as unreleased. Measurements of release burst duration were taken from the beginning of release to the end of visible activity on the spectrogram, as shown in the pink highlighted area in Figure 1 (below).
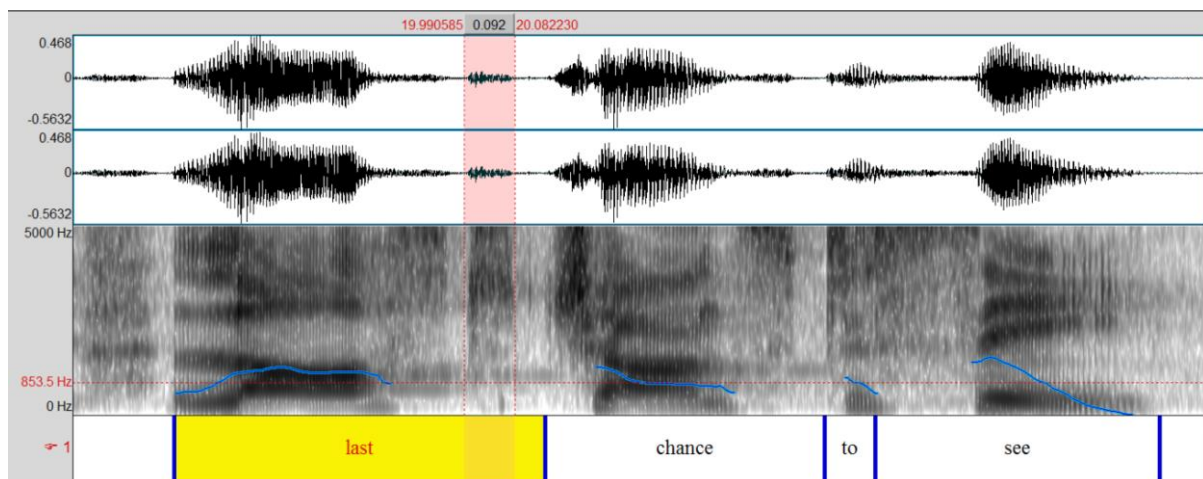

Figure 1: Release burst measurement for word-final stops.

Tokens in the following 2 phonetic environments were invariably deleted, and so were excluded from analysis:

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[1]The gay-identified guests were Alan Carr, Paul O'Grady, Matt Lucas, Stephen Fry, and John Walters.
[2]The straight-identified guests were Ed Byrne, Martin Sheen, Ricky Gervais, Ronnie Corbett, Bradley Cooper, Liam Neeson, Rob Lowe, Will Smith, and James Cordon.

(1) Tokens followed by an identical word-initial stop.

$$\begin{bmatrix} - \text{son} \\ - \text{cont} \\ \alpha \text{ place} \\ \beta \text{ voice} \end{bmatrix} \Rightarrow \text{\o} / \underline{\hspace{1em}} \# \begin{bmatrix} - \text{son} \\ - \text{cont} \\ \alpha \text{ place} \\ \beta \text{ voice} \end{bmatrix}$$

(2) Tokens occurring between two instances of /s/.

$$\begin{bmatrix} - \text{son} \\ - \text{cont} \end{bmatrix} \Rightarrow \text{\o} / [\text{s}] \underline{\hspace{1em}} \# [\text{s}]$$

Tokens were also excluded where background noise prevented acoustic analysis. Crist (1997:56) made a similar decision to exclude tokens occurring in an environment with a phonetically confounding factor which made measurement "impossible or of questionable salience".

To test for the interaction of confounding language-internal factors, a mixed model logistic regression was employed using the *R Project for Statistical Computing* (version 2.12.0, R Core Team 2013) and *lme4 1.0-5* (linear mixed-effects models package, Bates et al. 2013) using the *lmer() function*. To test whether the following segment can influence the likelihood of a stop being released, the factor of FOLLOWING ENVIRONMENT was included in the model. FOLLOWING ENVIRONMENT was defined according to manner of articulation (stop, fricative, nasal, approximant, glide, vowel or phrase boundary) rather than place of articulation because our independent variables (all word-final stops) encompass a range of places of articulation. Another factor included in the model was LEXICAL FREQUENCY, given Hay et al.'s (2010:56) proposal that "reductive phenomena are most prevalent in frequent words". We followed Hay et al.'s (2010) binary distinction, whereby only words occurring five times or more in the corpus are classed as frequent, with the prediction that frequently-occurring words are less likely to be released. WORD STRESS (primary stress vs. non-primary stress) was also included as a potential predictor of word-final stop release. We then considered each stop /p, b, t, d, k, g/ and each referee individually to search for more specific patterns of variation. In order to account for the possibility that certain words might be more likely to have a released stop, a random factor of WORD was included in the model.

In addition to the two contexts from *The Graham Norton Show*, a third context was included in which there is not an explicit external referee. Data were taken from Norton's appearance on *Who Do You Think You Are?*, in which he traces his family history and recounts memories of growing up in Ireland. While it is possible that Norton is thinking of an external referee in this context, and he often refers particularly to his Irish identity, the referee is not as obvious or consistent as in the context of his monologues on *The Graham Norton Show*. The *Who Do You Think You Are?* context offers a contrastive setting, where Norton is not performing his flamboyant television host persona, addressing only an interviewer (as well as the viewing audience). The analysis of a third speech context helped to disambiguate any extraneous variables that could have caused differences between the two main contexts, and increased the data sample from 309 to 464 tokens.

4 Results

4.1 Word-Final Stop Release

The results confirm our first hypothesis, that there would be a higher rate of stops released for gay referees. Figure 2 (next page) demonstrates that Norton releases a higher percentage of stops during monologues about a gay-identified guest (50%) than a guest who is straight (37%). A preliminary Chi-square test indicated a significant correlation between referee sexual orientation and the rate of word-final stop release ($\chi^2 = 14.5188$, *df* = 2, *p* < 0.001). This relationship between gay referees and frequent release bursts suggests an increase in Norton's presentation of a diva persona for gay referees, following Podesva's (2008:4) claim that phonetically strong stop releases signal "prissiness" and "precision".

The NO REFEREE context is Norton's appearance on *Who Do You Think You Are?*. This context shows the lowest rate of stop release (28%), in line with the assumption that, in this context, Norton is not projecting his flamboyant persona as a television host.
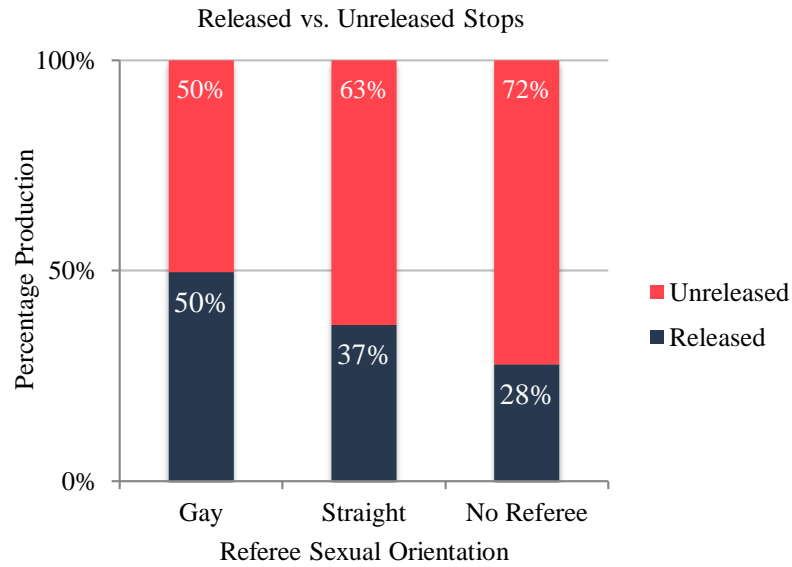
Released vs. Unreleased Stops

Figure 2: Production of released versus unreleased stops.

4.2 Release Burst Duration

The results also support, to some extent, our second hypothesis, that release burst durations would be longer for gay-identified referees. Figure 3 (below) illustrates that mean release burst durations are twice as long in monologues where the referee is GAY (60ms) as opposed to STRAIGHT (30ms). The mean duration for the NO REFEREE context (40ms) is close to that for straight guests, presenting the possibility that a gay referee correlates with longer release burst durations. This claim is supported by observations of longer segmental durations in gay men's speech (Crist 1997, Rogers et al. 2000). However, a Chi-square test revealed that this finding is not statistically significant ($\chi^2 = 348$, $df = 346$, $p = 0.4597$). Due to time restraints, the present study is limited by a fairly small sample of data. A larger sample, considering segmental durations for additional variables, such as vowels and fricatives, might reveal a significant difference in segmental durations for gay and straight referees. Data should also be normalised for speech rate to allow a comparison of relative, rather than absolute, durations.
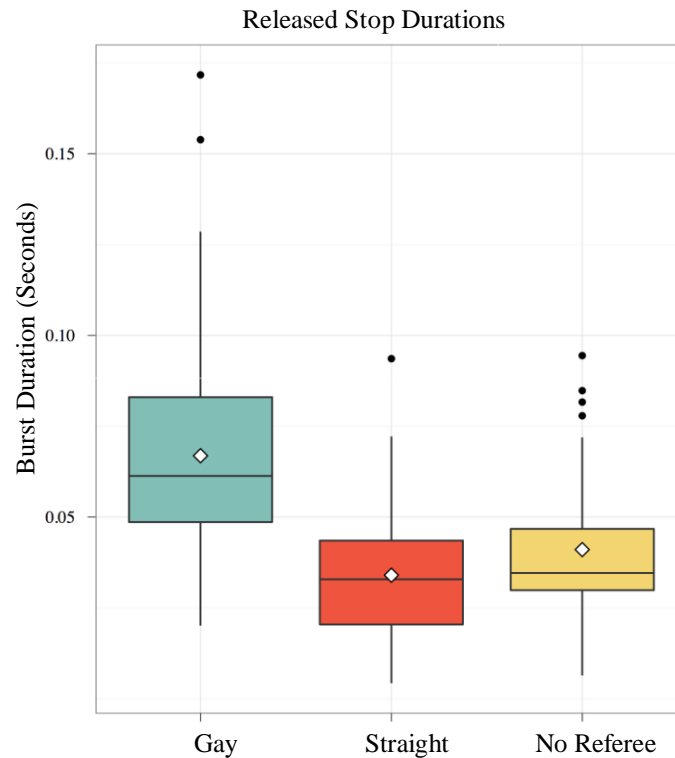
Released Stop Durations

Figure 3: Release burst durations by referee sexual orientation.

4.3 Statistical Analysis

Through the use of a mixed model logistic regression, we were able to test the significance of referee sexual orientation as a predictor of word-final stop release against a number of linguistic factors. The model considers FOLLOWING ENVIRONMENT (stop, fricative, nasal, approximant, glide, vowel or phrase boundary) and LEXICAL FREQUENCY, calculating the relative contribution of each of these factors to the prediction of whether a word-final stop will be released. An initial investigation revealed that WORD STRESS was not a significant predictor, so it is not included in the results below.

The results of the regression, with FOLLOWING ENVIRONMENT:APPROXIMANT as the reference level, are presented in Table 1 (below). REFEREE:NONE is shown to be the strongest predictor, disfavouring stop release (with a z value of -3.996). This means that word-final stops are less likely to be released when there is no external referee. The results support our first hypothesis, given that in contexts with a referee (i.e., when hosting his chat-show) Norton is more likely to release word-final stop, which we argue contributes to his projection of a diva persona. REFEREE:STRAIGHT is also a significant predictor disfavouring release (z value -2.855), indicating that a stop is less likely to be released if the referee is straight, and therefore more likely if the referee is gay. Of the language-internal predictors, only FOLLOWING ENVIRONMENT:PHRASE BOUNDARY (z value 3.42) and FOLLOWING ENVIRONMENT:VOWEL (z value 2.429) were shown to be significant, indicating that phrase-final tokens or those followed by a word-initial vowel are more likely to be released.

The results of the logistic regression show that, although following environment is significant in the prediction of word-final stop release, referee sexual orientation is a stronger predictor, supporting our claim that referee design accounts for patterns in Norton's style-shifting. An analysis of each stop /p, b, t, d, k, g/ individually found no effect of voicing or place of articulation. The correlation of referee sexual orientation with word-final stop release showed the same pattern when each referee was considered individually, but given the small number of tokens, these results were only significant when combined for all referees.

	Estimate	Std. Error	z value	P(>|z|)
(Intercept)	-1.37718	1.09255	-1.261	0.207483
FOLLOWING ENVIRONMENT:APPROXIMANT	0.9733	1.19809	0.812	0.416574
FOLLOWING ENVIRONMENT:PHRASE BOUNDARY	**4.07353**	**1.19101**	**3.42**	**0.000626**
FOLLOWING ENVIRONMENT:FRICATIVE	1.07039	1.14148	0.938	0.348388
FOLLOWING ENVIRONMENT:GLIDE	1.96671	1.30436	1.508	0.131605
FOLLOWING ENVIRONMENT:NASAL	-0.25538	1.44946	-0.176	0.860144
FOLLOWING ENVIRONMENT:STOP	0.03542	1.16747	0.03	0.975798
FOLLOWING ENVIRONMENT:VOWEL	**2.72591**	**1.12224**	**2.429**	**0.015141**
REFEREE:STRAIGHT	**-0.9764**	**0.34195**	**-2.855**	**0.004298**
REFEREE:NONE	**-1.52308**	**0.38119**	**-3.996**	**6.45E-05**
LEXICAL FREQUENCY	0.2599	0.3718	0.699	0.484440
N = 464				

Table 1: Mixed model logistic regression results. (Significant results appear in bold.)

5 Discussion

The results fit our initial prediction of a correlation between word-final stop release and referee sexual orientation, with a significantly higher rate of stops released when speaking about an upcoming guest who is gay as opposed to straight. We propose that this result can be accounted for with Bell's (1984, 2001) theory of referee design, in which style-shifting is explained as a speaker's initiative shift towards an absent ingroup referee. Bell (2001:146) explains that speakers have a fine-grained ability to design their style for audience members beyond the immediate addressee. The correlation between referee identity and patterns of intraspeaker style-shifting reflects Bell's observation that "[s]tyle derives its meaning from the association of linguistic features with particular social groups" (2001:142). We propose that Norton shifts in convergence with the perceived speech of a gay ingroup referee, indexing an affiliation with the gay community, particularly a diva identity, as envisaged by Norton himself.

Hay et al. (2010) draw a similar conclusion in their study of Oprah Winfrey, where the use of the monophthong [a:] co-varies with referee ethnicity, which suggests the indexing of Winfrey's African American identity. Hay et al. (2010:57) stress that referee design does not mean the *conscious* use of an individual variant to mark group membership, but speakers have a capacity for the "creative and proactive deployment of various elements in their repertoire", which can be drawn upon at different times (2010:53).

In order to account for this "dynamic, initiative use of style" (Bell 2001:162), recent studies have looked beyond audience design in search of a fuller account of speakers' personal motivations for style-shifting. Podesva (2008:5) proposes that speakers can employ numerous variants simultaneously to "sculpt" different aspects of their identity. Crucially, linguistic styles derive social meaning through the co-occurrence of linguistic features at specific interactional moments (Podesva 2008). Podesva compares the speech of Heath, a gay medical student, in his professional capacity as a doctor and at an informal barbeque with friends (2008:1). Podesva proposes that the co-presence of different variants in these two contexts gives rise to two distinctive styles, *caring doctor* and *diva* (2008:2). Our analysis of Norton's stage persona draws especially on Podesva's (2008:4) description of a diva style. Frequent word-final stop release could be said to index "prissiness" (Podesva 2008:4) in Norton's performance as a flamboyant chat-show host. Podesva notes that "long and intense release bursts" constitute one of the many features which are combined in the construction of Heath's "particular brand of diva, a style characterized not only by prissiness, expressiveness, or informality, but by all of these at once" (2008:5). We propose that Norton's higher rate of word-final stop release for gay referees indicates an exaggerated projection of this persona to mark solidarity with the referee. Podesva (2008) notes that the salience of a diva style arises from its contrast with Heath's style as a doctor. Similarly, Norton's flamboyant persona on his television show can be identified by its absence in his appearance on *Who Do You Think You Are?*, indicated by a lower production of word-final stop release. It is therefore important to consider context-specific linguistic patterns which, in relation to a speaker's overall stylistic range, can indicate separate motivations for style-shifting in different situations (cf. Podesva 2008).

This analysis does not mean to suggest that Norton's diva persona is a less authentic projection of his identity than his style in *Who Do You Think You Are?*. Norton's linguistic repertoire will be influenced by a complex interaction of life experiences, most of which are unknown to the authors of the present study. Bell (2001:164–5) notes the difficulty in "distinguishing the 'natural' from the intentional", given that, to some degree, all speech can be considered a performance (cf. Austin 1979). The goal of the present study is not to speculate about the authenticity of Norton's various speech styles, but rather to investigate referee identity as a possible motivation for style-shifting to index some aspect of Norton's sexual identity. Wong et al. (2002:4) suggest that the notion of an imagined community (Anderson 1983) could explain camp speech as an ideological construct symbolising an "imagined gay community", which we argue is indexed by Norton through frequent word-final stop release.

We also tentatively suggest that, with more data, release burst durations might show a significant correlation with referee sexual orientation. The data indicate a trend of longer durations in contexts with a gay referee than those with either a straight referee or no referee. This pattern supports the above proposal of a correlation between a gay referee and an exaggerated diva style, given previous claims of segmental lengthening in stereotypical gay men's speech (Crist 1997, Rogers et al. 2000). Further research is required to explore this relationship, which could be clarified by the consideration of speech rate as a confounding factor.

6 Summary

This study has tested the correlation of referee sexual orientation with the release and duration of word-final stops in the speech of Graham Norton. We conclude that there is a significantly higher release rate for referees who are gay, and a mixed model logistic regression confirmed referee sexual orientation to be a stronger predictor than the language-internal factors of FOLLOWING ENVIRONMENT, LEXICAL FREQUENCY, and WORD STRESS. This result can be accounted for by Bell's (1984, 2001) theory of referee design. Hay et al. (2010) have demonstrated that referee identity can correlate with intraspeaker style-shifting patterns, suggesting the indexing of an ingroup identity. The construction of different aspects of gay identity has been explored in detail by Podesva et al. (2002:179), who interpret contrastive styles as "a collage of co-occurring linguistic features" which combine to "constitute meaning in coherent and socially intelligible ways". Thus, the variable of word-final stop release, with its connotations of "precision" (2002:186) and "prissiness" (Podesva 2008:4) can be considered a "building block" (Barrett 2002:33) in the construction of sexual identity. Although not statistically significant, the results for release burst duration indicate a possible correlation with referee sexual orientation. The normalisation of data for speech rate could strengthen our results by allowing an analysis of relative, rather than absolute, durations and their interaction with referee sexual orientation.

Future research could investigate the "interplay of various simultaneous sociophonetic variables" (Hay et al. 2010:57) in relation to referee design and Norton's construction of a flamboyantly gay identity. An analysis of sociophonetic patterns within the speech of each referee could also further our understanding of the phonetic reality of a referee's speech, as well as Norton's perception of it. Ultimately, style-shifting research contributes to our broader understanding of language use, as intraspeaker variation reflects wider social variation (Schilling-Estes 2002:376). Further investigation into the relationship between style-shifting and referee sexual orientation could reveal interesting findings about audience design, gay speech, and the linguistic construction of identity.

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