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Editorial Note

This volume of Wellington Working Papers in Linguistics is dedicated to showcasing outstanding postgraduate research projects in LALS from 2020. It is a pleasure to be able to shine much needed light on these 'smaller' projects (LALS 583 - 60 points, and LALS 579 - 30 points) which exemplify the flourishing postgraduate research climate in the School.

In Volume 25, we bring together the original and excellent mahi of postgraduate scholars Francisca Knarston, Luané Lennox, Bryer Oden, and Reuben Sanderson (Ian Gordon Prize winner), whose contributions are not only rigorous and captivating, but testament to a great deal of hard work and academic growth. The papers reflect the broad range of linguistic interests in the School, as well as the impact of the global pandemic, which in 2020 was in the early stages. Set within this Covid climate, Knarston's contribution is an expert rendering of returning New Zealanders and their transition to work. Her research builds on the School's strong workplace discourse tradition, and the budding area of metapragmatics as a portal to understanding the discursive negotiation of norms. Following this, Lennox takes us into the realm of syntax with a detailed and original investigation into the left and right peripheries of Afrikaans, leaving promising space for future research to build on her findings. In the third chapter, Oden adopts an identity focus to explore who 'counts' as a New Zealander in the wake of Covid-19, convincingly arguing for a non-static conceptualisation. The volume closes with Sanderson's historical analysis of /s/-retraction in New Zealand English, a meticulously researched piece.

I have no doubt you will find the contributions engaging, thought-provoking, and impressive in equal measure. It has been a pleasure to work with the authors and with Reuben Sanderson as copy editor extraordinaire. Finally, thank you to the Ian Gordon Trust for the funding of this important volume and the deserved recognition it provides of LALS postgraduate work. Enjoy!

Shelley Dawson
December 2022

Returning New Zealanders and the Workplace

Francisca Knarston

As a central part of the societies within which we operate, and the site of countless daily interactions, workplaces and newcomers to this environment are a growing area of interest for sociopragmatic investigation (e.g., Angouri 2018; Clyne 1995; Kerekes et al. 2013; Piller & Takahashi 2011), including locally by the Wellington Language in the Workplace Project (LWP) team (e.g., de Bres 2009; Holmes, Burns, Marra, Stubbe & Vine 2003; Holmes, Marra & Vine 2019; Holmes & Schnurr 2005). More recently, the Covid-19 pandemic has acted as a catalyst for New Zealanders working overseas to return home, many earlier than expected. During this transition, returning New Zealanders face a variety of new challenges as they attempt to settle back into life in New Zealand and, in time, the New Zealand workplace.

The workplace is acknowledged as a primary factor involved in successful settlement, representing an environment through which newcomers negotiate their belonging to a community with its existing members (Angouri et al. 2017). This study takes a social constructionist approach to examine the concept of settling, using an analysis of critical incidents (Burr 1995; White 2004) captured within interviews with returning New Zealanders. I recognise both that identity is always a site of negotiation and the unexpected 'identity struggles' (Van De Mieroop & Schnurr 2017) that returning New Zealanders may face during this transition. This study seeks to question the homogeneity of the imagined community known as 'returning New Zealanders' (Anderson 1991), and the impact that this diversity plays in the boundary crossing that the group experiences.

1. The role of societal discourses

Tannen argues that meetings represent a 'microcosm of the workplace' (1994: 227). As a parallel to this, I contend that the workplace is a microcosm, and reflection, of wider society. Both settings host 'a diverse group of people, with their own ideas, [coming] together to get a job done' (Tannen 1994: 277). Through socialisation processes, the norms and values ingrained in societal discourses impact on a sense of belonging, negotiated through interaction. The 'verbal move' of an individual is acquired by others and eventually becomes 'public discourse' (Eckert & McConnell-Ginet 2013: 45; Holmes 2018). Societal discourses then influence 'the ways in which individuals discursively construct their social identities in particular contexts in different societies' (Holmes 2018: 34), highlighting the two-way influence of norms in interaction. Those transitioning between different environments (including workplaces) are faced with negotiating and co-constructing their identities in interaction in new settings (Schnurr & Zayts 2011: 42). For the returning New Zealanders who are the focus of my research, the transition 'home' and into a New Zealand workplace, exemplifies this boundary crossing.

2. Transitions, boundaries and belonging

Transitions between 'jobs, countries [...and] professions' (Angouri 2018: 1) are common aspects of the diverse, modern workplace (Kirilova & Angouri 2018). Boundaries created between those arriving and the already-formed workplace community generate a somewhat-alienating 'us' and 'them' scenario (Krzyżanowski & Wodak 2008: 101; see also Angouri et al. 2017; Antonsich 2010; Marra et al. 2017; Holmes & Marra 2017; Yuval-Davis 2006). 'Belonging' has been identified as an emotional concept relating to feeling 'at home' and a discursive resource that plays a role in identity construction (Antonsich 2010; Kirilova & Angouri 2018). In order to gain the title of 'belonging', new employees must participate in a negotiation of the social norms of 'the individual and the community' (Angouri 2018: 1), which, when successfully performed, are accepted by the group (Antonsich 2010; Holmes, Marra & Kidner 2018; Kirilova & Angouri 2018; Marra et al. 2017).

Expats, migrants and minorities are recognised as groups particularly vulnerable to being cast as outsiders in workplaces; lack of familiarity with norms often leads to struggles when constructing themselves as employable (Holmes et al. 2018; Kirilova & Angouri 2018). In New Zealand, the macro-level societal norms of the nation's egalitarian culture arguably filter into the meso and micro-level norms of workplaces and smaller-community interactions (Marra et al. 2017; Holmes et al. 2018). Consequently, as revealed through their discourse, newcomers may unintentionally deepen boundaries by failing to observe, for example, norms surrounding formality and hierarchy (Holmes & Marra 2017; Holmes et al. 2018; Kirilova & Angouri 2018; Marra et al. 2017). These boundaries can create issues that hinder employment and communication, suggesting that operating successfully in the workplace context may take time. For returning New Zealanders (who likely already consider themselves familiar with the norms) navigating new group norms from a sense of societal familiarity may be even more problematic if it challenges their sense of national self (Holmes et al. 2018; Kirilova & Angouri 2018).

Previous LWP research by summer-scholar, Jessica Scott (2013), investigated the experiences of 10 New Zealanders who had worked in the United Kingdom in the last ten years. Her results highlighted the place of egalitarianism and the consequent (perceived) informality and colloquialism of New Zealand's workplace culture as salient features to their experience of transition (Holmes et al. 2018). Interviewees noticed the effect of this egalitarianism via differences in directness, hierarchy, deference and work efficiency between New Zealand and the UK (Scott 2013). These findings emphasise the shared observations and challenges for the returnees, while also recognising that not all of their experiences were the same. Acknowledging that these findings resulted from data collected predominantly with participants who had already successfully returned calls into question what this means for currently returning New Zealanders.

Having recognised this influence of wider society on transitions and boundary crossing in workplaces, I am, 8 years on from the original study, replicating Scott's research. This replication extends the scope to include countries beyond the United Kingdom, acknowledges the context of Covid-19 and recognises the wider range of national experiences as motivators. While the

standard approach within the field of workplace discourse analysis is to use naturally-occurring speech (Paltridge 2012: 3; Taylor 2013: 12), I am using semi-structured interviews to replicate Scott's work and expand on findings concerning transitions, boundary crossing and identity in a way that maintains a degree of naturalism, while also controlling the focus of the interview (McIntosh & Morse 2015).

Replication studies contribute to the validity of research by verifying past observations and determining if results from previous studies can be generalised to new populations (Abbuhl 2011). My project is a 'conceptual' replication (Abbuhl 2011: 297) of Scott's (2013) research, with the principal differences being alterations to some of the semi-structured interview questions to suit the context of Covid-19 and a more varied participant group, as well as changing the interview format - conducted via Zoom, rather than in person. When designing the new interview questions, I aimed to encompass a wider range of overseas experiences (considering second language influences and generalising some questions, see Ker et al. 2013). The most notable alterations I made to Scott's questions, however, were additions that accommodated the complications of Covid-19 and the influence that it had on many participants' experiences. This included questions surrounding whether they returned as a result of Covid and how the pandemic affected their return and workplace experiences (overseas and in New Zealand). I also added questions about their Managed Isolation and Quarantine (MIQ)[1] experiences and what impressions they felt New Zealanders had towards them, in relation to their return. These questions provided fruitful responses, with participants eager to discuss their experiences of returning to New Zealand and how Covid has impacted their lives.

3. Interview as context: Data collection

It is important to be aware of the constraints that the context of using interviews within research has on the content of the interviews. I view interviews as 'social practice', through which people's experiences, attitudes and identities can be investigated as jointly produced accounts by the interviewee and interviewer (Talmy 2010: 128-141). While semi-structured interviews are suitable for lessening an agenda-led interview and encouraging natural conversation, it is necessary to remain mindful of the influence that my contributions in the interaction have on participants' responses (Dawson 2019; Mann 2011: 18-20). I recognise that some of my questions were more agenda-led than intended, meaning that some topics salient to me may not have been as important to participants. For example, when asked about social norms or communication difficulties, participants would often ask for examples, likely affecting their responses. Through my assumptions, and despite conducting a trial interview with a (linguist) returned New Zealander, this was an area that I was unaware would be problematic. Nevertheless, this approach often worked in my favour, triggering participants to remember observations and experiences that they had since forgotten (but still felt were true). This highlights the nature of

[1] MIQ refers to the managed isolation system used in New Zealand during the Covid-19 pandemic. Returnees must book a voucher to secure their place in a managed isolation facility (hotel), where they are required to quarantine for two weeks immediately after they arrive in the country.

the interaction as a co-construction of meaning between the interviewer and interviewee (Wilkinson 1998).

Conducting the interviews over Zoom, a web-based video conferencing programme, allowed for the constraints of the context of Covid-19 and also recognised how normalised this form of communication has become (Wiederhold 2020). I have grounded my use of Zoom in the HEC virtual interview guidelines[2]. Arguably, Zoom works as a safety-net through which to replicate face-to-face interviews, providing the opportunity to complete my research even if Covid restrictions were to interfere. In face-to-face interviews, the interviewer and interviewee must carefully arrange a suitable place, date, and time to meet, to ensure an appropriate environment for both individuals is chosen (Fox 2006: 22). Zoom interviews by contrast may be less of an imposition for participants; it allows them to remain in their own environment during the interview, creating a less stressful and time-consuming experience. Additionally, Zoom enables secure and unobtrusive recording of interviews, as well as the affordance of multimodal data (Archibald et al. 2019). Replicating the video recording in face-to-face interviews adds complexity, as it involves more visible (therefore potentially hindering) equipment (Fox 2006: 25). While I have not made significant use of the multimodal features in this analysis, the presence of the video recording gives scope for this data to be used in future research.

A disadvantage of Zoom is that Manaakitanga and Koha for participants are difficult to express online. As the interviewer, it is important that I uphold a relationship of collaboration and reciprocity with participants (Jones et al. 2006: 71). In an effort to attend to this, I ensured that participants were explicitly aware of my gratitude for their participation. While Zoom seemed like a sensible solution for conducting interviews during Covid, the online nature unfortunately meant that the interviews were easier to forget, without the travel and meeting location prompt. Technical difficulties relating to Zoom were also a disadvantage. Occasional lagging audio and distorted feedback meant that some portions of speech were incomprehensible, resulting in less naturalistic conversation and elisions in the transcripts. However, this issue was generally avoided when both participants used headphones during the call.

As a result of this research design and data collection process, I recorded 8 interviews, between 20 and 50 minutes in length, with New Zealanders returning from the United Kingdom, Spain, the Netherlands and the United Arab Emirates. I approached the data through a social constructionist lens, informed by interactional sociolinguistics, matching the conventional methods used in the field (see Holmes et al. 2011). This allows for the analysis of micro-level details, while recognising the macro-level societal structures that influence them. From an interactional sociolinguistic perspective, macro-level 'socio-cultural contexts' (Stubbe et al. 2003: 8), i.e., societal discourses, impact on everyday interaction and vice versa.

In presenting my analysis, I work from the macro-level towards the more micro-level details. This also reflects the structure of many of the interviews.[3]

[2] Ethics approval no. 0000029137

[3] See Item 1 in appendix for interview guide.

4. Referencing Societal Discourses

Societal discourses concern the macro level 'social and historical' structures and ideologies that mold how 'we construct our social realit[ies]' (Holmes et al. 2011: 13). These macro discourses both shape and are shaped by micro level discourses in daily interaction, creating and reflecting 'behaviour', 'values' and 'customary practice'(among other things) to form a socially recognisable identity that indicates membership to a group (Greenbank 2020: 25). Thus, societal discourses impact all interaction.

In my interviews, one of the interesting ways in which returning New Zealanders oriented to New Zealand societal discourses was to contrast them with their experiences overseas. They specifically noted how the societal discourses present in the countries or cities in which they lived were reflected within their workplaces. I acknowledge that my approach to the questions likely encouraged a comparison response. However, participants welcomed this opportunity to compare (and more often contrast) their experiences overseas with those in New Zealand.

Extract 1

Emily Jones[4]

Context: Emily recently returned to New Zealand after working in Spain for almost two years. This extract is in response to a question about things she noticed about New Zealand compared to Spain (particularly with regards to workplaces), since starting work in New Zealand after her return.

12:56

1	EJ:	but it's things like
2		I think in Spain there's a stronger emphasis on pl- like leisure [laughs]
		….
9		I think this is probably such a stereotype too
10		but I also think like on a kind of general level it is somewhat true
11		that they're um kind of like Spaniards know how to enjoy life
12	Int:	yeah
13	EJ:	and I think maybe here we have like a stronger culture to like be like
14		[puts on gruff expression] I don't know
15		I don't know
16		like put in lots of hours at work and like
17	Int:	yeah yeah

[4] Transcription note: The interviews with returning New Zealanders were transcribed and all participants were assigned pseudonyms. The time stamp indicates where in the interview the extract occurred, the transcript is separated by line numbers for easier referral to specific lines. Some lines of the transcripts have been removed, indicated by "....", for ease of reading. See appendix for full transcripts and conventions.

18 EJ: and kind of get ahead and things like that

In Extract 1, Emily identifies (her interpretations of) the societal discourses present in the workplace, through her explicit contrast of Spanish and New Zealand workplace *culture[s]* (line 13). This is seen in line 2, where she describes Spain's *stronger emphasis* on *leisure*, and almost immediately contrasts it with New Zealand's *stronger culture to...put in lots of hours at work..and kind of get ahead* (lines 13-18). This supports my use of Tannen's (1994) microcosm concept, as it highlights how the societal discourses present in Spain and New Zealand at the macro level have filtered down into the meso and micro levels of the workplace and the attitudes of the individuals that work there. Lines 16 and 18, in particular, enforce the idea that these discourses affect the ways in which members of these communities operate and interact - for example, encouraging Spaniards to prioritise 'down time' and *enjoy[ing] life* (line 11) and New Zealanders to have more competitive mindsets and a desire for continual improvement in the workplace. This contrast is emphasised through Emily's use of pronouns. The use of *we* (line 13) for New Zealand versus *they* (line 11) when referring to Spain creates a degree of separation between the two cultures and suggests Emily's identification with New Zealand and its social norms within the workplace (Calvo 1992: 17; Shin & Doyle 2018). It is also interesting to note that these conceptualisations of 'national cultures' are very much framed around stereotypes: here, 'laid back but hard-working Kiwis' (Wiles 2008: 11) and the image of Spain as the 'land of siesta and fiesta' (Chislett 2008). The recognition of these stereotypes further emphasises that societal discourses are inherent parts of our daily lives.

Extract 2

Hemangini (Hema) Balakrishnan

Context: Hema recently returned to New Zealand after living in Amsterdam for 2 years and London for the 4 years prior. This extract is in response to a question about what her workplace environment in the Netherlands was like compared to New Zealand workplaces she has worked in.

11:48

1 HB: and the way that their kind of motto of life is that average is good
2 so everyone should just maintain that kind of life
….
12 so that was something that I found so welcoming
….
14 HB: because + it wasn't um +
15 it didn't feel like a dog eat dog world
….
25 HB: um so that was really nice
26 and in our company it definitely was like that
27 like I became best friends with the company ceo

28 and I wasn't in the leadership team

Comparison, contrast and stereotypes of societal discourses are also enacted by Hema in Extract 2, when discussing work environments. However, here the contrast is more implicit. Hema's comparisons not only identify her perceptions of the societal discourses present in New Zealand, the Netherlands (Amsterdam) and the UK (London), but also convey the effect that they had on her sense of belonging. This is firstly seen when she describes the Dutch *motto of life* of *average is good* (line 1) as *something that [she] found so welcoming* (line 12), indicating her identification with this discourse, while also suggesting that it was not something that she had found in previous workplaces. She recognises it as not only contributing to her belonging in the workplace (line 12), but also describes its role in preventing (in her opinion) hierarchies at work, as she *became best friends with the company CEO* despite not being in *the leadership team* (lines 27-28). Hema implicitly contrasts this stereotype of the Dutch egalitarian and pragmatist ideal (Van den Haak 2014: 31) with the *dog eat dog world* idiom (line 15), in reference to the (stereotypical) societal discourses surrounding hierarchy in the UK (especially London). This parallels findings in Scott's study, which reported returned New Zealanders as 'noting a greater awareness of hierarchy in the UK' (2013: 4). Additionally, line 15 may also be referencing the New Zealand discourse of 'climbing the ladder', described by Emily (Extract 1, lines 13 - 18). This interpretation is supported by an explicit contrast later, within the same extract, where Hema identifies that she *did see the stark difference* between New Zealand and the Netherlands (line 41, see appendix). This seems to align with arguments that hierarchies in New Zealand workplaces are subtly hidden beneath the societal discourse of a desire for egalitarianism (Holmes et al. 2017: 3 -4).

Both Extracts 1 and 2 highlight, not only the differences in societal discourses, but also their influence in how workplaces operate. Additionally, Hema and Emily's alignments with certain discourses draw attention to boundaries between 'us' and 'them' (Mullen et al. 1992) and their potential for Othering.

5. Othering

Othering is a form of social representation that is related to stereotypes and the concept of belonging (Dervin 2012), creating a distinction between the binary oppositions of 'us' and 'them' (Dervin 2015; Nilsen et al. 2017: 41). Many participants used Othering in the embedded narratives (Pulvermacher & Lefstein 2016) of their interviews, often coupled with stereotypes, to convey their feelings of alienation and the lingering stress and anxiety they felt upon returning to New Zealand. They communicated the influential roles that their Covid-19 experiences and how New Zealanders received them had on their senses of belonging.

Although participants did not generally talk about Othering in the specific context of the workplace, they did describe it in more general terms in the context of their societal experiences.

Extract 3

Amy Smith

Context: Amy was living in London for 18 months before returning home indefinitely. This extract was in response to a question about readjusting to being back in New Zealand

06:22

3	AS:	I definitely think I've got a bit of PTSD
4		like I think I've got a bit of PTSD towards people
		….
26	AS:	everyone's so complacent here yeah
27		I tried to explain to a lot of people and I kind of just gave up
28		only people that have been overseas kind of understand that really strange
29		anxiety
		….
42	AS:	New Zealand is just so +
43		unaware of the turmoil that the rest of the world is in

In Extract 3, Amy describes the lingering worry, a result of her overseas Covid experience, as *a bit of PTSD* (line 3). She goes on to describe (lines 26-29) a lack of understanding and willingness to understand that she felt from New Zealanders when she had tried to explain it to them, eventually *kind of just [giving] up* (line 27) because *only people that have been overseas kind of understand that really strange anxiety* (lines 28-29). There are multiple layers of Othering within this. Firstly, Amy feels Othered by New Zealanders who do not recognise or empathise with her struggle to cope with what she has experienced and 'readjust' to being back in New Zealand. As a reaction to this, she simultaneously 'denies' herself the 'clearly defined status' (Jaworski & Coupland 2005: 672) of aligning with her perceptions of 'Kiwi attitudes' towards Covid, while also Othering New Zealanders (interestingly as a homogenous group) as not understanding the realities of Covid that *the rest of the world* (line 43) is aware of. In talking about the *unawareness* (line 43) of New Zealanders, Amy, like Hema and Emily, is drawing upon stereotypes, here, subtly referencing the stereotype of close-minded 'provincial backwater' New Zealand (Moffat 2017).

Like Emily's use of pronouns in Extract 1, Amy further distances herself from this *unaware[ness] of the turmoil that the rest of the world is in* (line 43) through her lack of pronoun use, instead simply using *New Zealand is* (line 42), indirectly excluding herself from this group. The *New Zealand* label (Loadenthal 2019) categorises and unintentionally 'obscures the differences' (Bucholtz & Hall 2004: 371) among New Zealanders in the same way that the 'returning New Zealanders' label does. The use of labels is also seen in other interviews, where New Zealanders are spoken about using the generalised term *people* (Extract 5, line 13; Extract 6, line 34). Through this, participants are able to hedge their criticisms of New Zealanders and dull the image of individuality (Greenbank 2020: 173), while also Othering themselves to communicate that they felt Othered by New Zealanders (Ginsburg et al. 2016: 177). This may be a reaction to being reduced to their own label of 'returning New Zealanders' despite their individuality.

Extract 4

Percy Black (and Anna Gordon)

Context: Percy Black and Anna Gordon are a couple who lived in Brighton (UK) for almost 2 years. This extract was in response to a question about whether they found it strange to be back in New Zealand where the Covid situation is so different to the UK.

16:40

13	PB:	you're still paranoid
14		I think it was-
15		oh we were down in Nelson recently
		….
18		the Nelson market had this laminated covid app sign
19		so I was trying to scan in and it wouldn't scan
20		so I was sort of stood there trying to get it to work
21		this old lady walked past me and she just kind of came right up to my face
22		and she was like
23		[in a faux grouchy old person voice] there's no covid here
24	AG:	[laughs]
25	Int:	[laughs]
26	PB:	[in normal voice] and then walked off and I was just like oh
27	Int:	god
28	PB:	so yeah
29		there's a a lot of almost denial over here
30	Int:	mm
31	PB:	that covid exists

Extract 4 highlights another incidence of Othering. Percy describes a similar experience to Amy, in terms of the lingering paranoia (*you're still paranoid* (line 13)) surrounding Covid and the unawareness, *almost denial* (line 29), of the pandemic's existence by New Zealanders. In the extract, Percy recounts a time when he was recently Othered by a woman while he was trying to scan in on the Covid tracer app[5] (lines 15-23). Percy emphasises the Othering through his use of double voicing (Bakhtin 1963: 198; Baxter 2014), putting on a faux-grouchy-old-woman-voice to say *there's no covid here* (line 23). This vari-directional double voicing (Bakhtin 1963: 199) allows him to Other himself, as he was by the woman, while also parodying her to convey his disbelief at both her attitude and her confronting positioning of coming *right up to [his] face* (likely particularly startling for someone who has just returned from a year of living socially distanced in the UK, line 21). The woman's ridiculing of him outed Percy as not belonging to her perception of ('covid-free') New Zealand norms, leaving him speechless (line 26) after being made to feel

[5] An app widely used in New Zealand during the pandemic, as a "private digital diary of the places you visit" (Ministry of Health, NZ Covid Tracer app), for tracing and controlling contact exposure if an outbreak were to occur.

foolish for attempting to belong by partaking in (what is generally thought of as) a New Zealand Covid norm. This highlights the connection between the 'social realities' that are created and co-constructed in discourse and how they 'constrain individual behaviour' (Dawson 2019: 23). In this case, the woman's construction of her own social reality and her consequent actions have led Percy, similarly to Amy, to construct an image of (some) New Zealanders around the stereotype of being out-of-touch with the rest of the world, which in turn has created a sense of alienation between himself and New Zealanders.

Double voicing is a linguistic technique used by multiple participants to portray Othering (see appendix: Extract 5, lines 15-16; Extract 6, lines 35-39). By enacting another's voice, interviewees were able to audibly create distinctions between themselves and New Zealanders, highlighting the misalignments in discourses between them. Primarily, *how unaware people are of the chaos going on outside of New Zealand* and participants' feelings that New Zealanders have *no fucking idea how hard* Covid has been for people overseas (Extract 5, lines 13 & 20). These attitudes contrast those of returning New Zealanders shown in Scott's (2013) research (which were positive), emphasising the complex additional layers of challenges that Covid adds to returning home: feelings of *PTSD* (Extract 3, line 2), Othering as a result of New Zealanders not being *willing to know anything more than what's going on in New Zealand* (Extract 5, lines 22-23) and being viewed as *disgusting* (Extract 6, line 40) for having *been from overseas* (Extract 6, line 38), to name a few. This likely has consequences for returning New Zealanders' sense of identity and belonging, as they seem to be expressing feeling out of place within their own country.

A key theme that arose from the interviews was the alienation that returning New Zealanders felt upon repatriation, especially once leaving their MIQ facilities and 're-entering' society. This is seen in the preceding extracts, as a result of participants' identifications, or lack thereof, with certain societal discourses. Many participants conveyed that it was not only their reception that made them feel alienated, but also the shifts within their own identities as a result of being away (although these influences are all intertwined) that created new boundaries (Sussman 2002: 395). Some participants understood this through being exposed to overseas norms and *so many different cultures and people* (Extract 9, line 2) which *becomes more [their] culture* (Extract 8, line 3). As a result, returning New Zealanders may *struggle* (Extract 10, line 1) with this culture being *stripped away* (Extract 9, line 9) from them, and the *smaller scale of things* (Extract 10, line 5) when they return. This emphasises norms as being constantly renegotiated and reinforced by speakers in daily interaction (Locher & Watts 2008: 78). Feeling *like a fish out of water when [they] get home* (Extract 7, line 3) suggests that returning New Zealanders initially deal with 'reverse culture shock' while 'readjusting' and 'reassimilating' into New Zealand society (Gaw 2000: 83-86).

6. Returning New Zealanders as a heterogeneous group

'Social groupings' like 'returning New Zealanders' not only 'acknowledge similarity', but also 'invent similarity by downplaying difference' (Bucholtz & Hall 2004: 371). As a result, analysing the experiences of returning New Zealanders may unintentionally conceptualise members into

what seems like a homogenous group, essentializing their identities by 'impos[ing] limitations' on their heterogeneity (Lee & Anderson 2009). Globalisation and superdiversity, as well as the current climate of Covid-19, highlights this sameness as working towards an imagined creation to support the notion of a 'national culture' (Anderson 1983). My data reflects that returning New Zealanders share a state of being fluid and dynamic, allowing for the creation of a diverse range of issues and experiences (Angouri 2018). My cohort of interviewees all had different circumstances surrounding their returns (job loss, separation from loved ones, restricted mobility etc.) and arrived to different circumstances (jobs arranged in isolation, returning to study, returning as a stepping-stone to increase their chances of reuniting with their partner overseas etc.), not to mention they were all away for different lengths and returned at different times. Generalising communities only deepens boundaries, as 'ignoring difference *within* groups contributes to tension *among* groups' (Crenshaw 1991: 1242, cited in Kassis-Henderson et al. 2018). Through understanding that groups (like returning New Zealanders) are made up of individuals with differing perceptions of society, we can in turn learn how to operate within communities (like workplaces) in a way that benefits and appreciates the diverse realities of the world around us (Marra & Dawson 2021).

7. The role of the workplace in settling

As noted at the outset of this report, an important aspect of regaining a sense of belonging and settling back into life in society is the workplace. This is made salient by returned New Zealander Mark Larson reasoning that his return rests *one hundred percent* (Extract 11, line 11) upon there being *no work...to justify living overseas* (Extract 11, line 13-16). Emily Jones further supports this by identifying, before any other factor, that part of her process of *readjusting* involved *look[ing] for jobs* (Extract 12, lines 21 & 13). These extracts highlight that being at home is also about having work, because having work not only indicates, but also motivates resettling. Work provides newcomers with an opportunity to 'settle and achieve some degree of social membership in a society' (Hellgren 2013), thus supporting my argument that workplace discourse analysts pay attention to how society impacts the workplace.

My study similarly answers calls for greater attention in the field to be paid to interviews as a valuable data source (see also Zayts & Lazzaro-Salazar 2020). Interviews are 'co-constructions between the researcher and the participants', and should thus be considered 'real-life utterances' to the same degree that naturally occurring talk, generally prioritised in discourse analysis, is (Angouri et al. 2021: 219). Interviews create a context within which the 'negotiation of ideals' can be investigated, where researchers can begin to conceptualise participants' responses to the context (Angouri et al. 2021: 219).

My interviews have provided an implicit opportunity through which to analyse metapragmatics (Marra & Dawson 2021: 489 - 491). Generally speaking, metapragmatics is 'talk about talk' (Johnstone et al. 2006: 80), here, talk about norms. This contributes to the understanding of what social norms are involved in particular contexts, as well as how interlocutors respond to and understand them. Researching metapragmatics foregrounds the significance of understanding

'the role of ideologies' (Marra & Dawson 2021: 491) in everyday life, such as in the workplace. As seen in the extracts discussed, ideologies are represented in the societal discourses that are present in all interactions, meaning that they both construct and constrain identity negotiations (Dawson 2019: 16-17). For many returning New Zealanders, the societal discourses currently circulating surrounding Covid-19 have left them feeling alienated from the New Zealand community, complicating their senses of belonging. Analysing the metapragmatics of how New Zealanders behave is valuable for gaining a comprehensive understanding of society, a facet central in shaping the way we operate.

Interviewing 8 returning New Zealanders has identified some of the struggles that this group faces while transitioning back into life in New Zealand and the workplace. Gaining an understanding of these struggles, through their experiences, has illustrated that 'returning New Zealanders' and 'New Zealanders' are not homogenous and monolithic groups, but rather highlights their ever-shifting diversity.

8. Appendix

Item 1: Interview Questions

Introductory (for rapport building)

- [As mentioned above, participants will be sent the information sheet and consent form ahead of time]
- [General discussion, which could include]: Have you lived/worked overseas before? How long were you away? Where were you living/working most recently before returning to NZ? Do you consider NZ home? What do you consider home? Did you come home because of covid?

Descriptions of experience: - What was your experience? (Adjusted as relevant)

- When did you go to (said overseas country)?
- Why did you decide to work/move overseas?/What motivated you to go there (to that particular place)?
- Were you working in the same kind of industry as in New Zealand?
- What were your expectations? How did these compare to what your experience was actually like?
- Was there anything that surprised you?
- Was your work in English or another language?
- (if 'another language'- Were you using a heritage language? How do you feel this affected your workplace experience and interactions with others? Did using another language affect your sense of identity as a New Zealander?)
- How did covid affect your return to NZ/the return to an NZ workplace?/How did covid affect your readjustment to an NZ workplace?
- How did you find the MIQ/managed isolation experience? Do you think this affected your adjustment to NZ?
- How did you feel that New Zealanders felt about you/other NZers returning during Covid?

New workplace norms: - What was the workplace culture like?

- Do you have any workplace experience in NZ?/Did you have NZ workplace experience before going overseas?
- What was the workplace culture like? Was it the same or different to your previous workplaces?
- Were you working mostly with people from that country?
- Was it normal for there to be people from other countries there (i.e. like you)?
- What was the workplace hierarchy like? E.g., Did you have people reporting to you? Who did you report to?
- How did this compare to your NZ workplace(s)?
- What was the working day like? (e.g., starting and finishing times, breaks, interactions with people, meetings etc.)
- Were there social activities? (e.g., shared lunches, morning teas, after work drinks, other celebrations, sports teams, quiz teams etc.)
- ^ How did these differ from what you had experienced in NZ?

Communication issues: - An area of interest for linguists is how people interact in new work settings

- Did you notice any communication differences?
- Did other people comment on your communication style?
- Did you ever experience miscommunication?
- Is there a lot of industry jargon? Was this the same? If they were working in a different industry, they wouldn't know.
- How did people interact with each other (e.g., face-to-face, corridor talk, meetings, email, phone, internet etc.)
- Were all of the interactions work related?
- [If they were involved in social activities]: What sorts of topics did you talk about at social events? Were the topics work-related?
- Are you still in communication with any of your colleagues from overseas?
- (Potential question) Did you find that it was more difficult to get to know your workmates overseas than in NZ?
- (If working in NZ) Have you experienced communication difficulties in NZ now that you are working here again?

Closing comments:

- What do you think you got out of the experience?
- What was the most useful/interesting thing you learnt?
- Anything else?
- [Describe how the data will be used]
- [Explain how feedback will be given to them]

Item 2: LWP Transcription Conventions
(https://www.wgtn.ac.nz/lwp_new/language-in-the-workplace/docs/ops/op5.htm)

Convention	**Description**
-	Speech that ends abruptly in the middle of an utterance
+	Short pause of up to one second
++	One to two second pause
//example\ /example\\	Simultaneous/overlapping speech
[example]	Transcriber notes (to describe non-verbal cues and paralinguistic features)
(incomprehensible)	Untranscribable or incomprehensible speech

Extract 1: Emily Jones
Context: Emily recently returned to New Zealand after working in Spain for almost two years. This extract is in response to a question about things she noticed about New Zealand compared to Spain (particularly with regards to workplaces), since starting work in New Zealand after her return.

12:56

1	EJ:	but it's things like
2		I think in Spain there's a stronger emphasis on pl- like leisure [laughs]
3		pleasure too probably
4		Int: right yeah [laughs]
5	EJ:	um like like having a rest and like going out for a coffee when you're
6		(incomprehensible) I don't know
7		(incomprehensible)
8		I think
9		I think this is probably such a stereotype too
10		but I also think like on a kind of general level it is somewhat true
11		that they're um kind of like Spaniards know how to enjoy life
12	Int:	yeah
13	EJ:	and I think maybe here we have like a stronger culture to like be like
14		[puts on gruff expression] I don't know
15		I don't know
16		like put in lots of hours at work and like
17	Int:	yeah yeah
18	EJ:	and kind of get ahead and things like that

Extract 2: Hemangini (Hema) Balakrishnan
Context: Hema recently returned to New Zealand after living in Amsterdam for 2 years and London for the 4 years prior. This extract is in response to a question about what her workplace environment in the Netherlands was like compared to New Zealand workplaces she has worked in.

11:48

1	HB:	and the way that their kind of motto of life is that average is good
2		so everyone should just maintain that kind of life
3	Int:	yeah
4	HB:	and everyone will be able to survive with that wage
5		you don't need to be a show pony
6		you don't need to be a billionaire
7		you just need to be average and you'll be happy in life
8		and you've got + you know you'll be able to eat
9		and //you've got\
10	Int:	/yeah\\
11	HB:	a house and all that kind of stuff
12		so that was something that I found so welcoming
13	Int:	yeah [nodding]
14	HB:	because + it wasn't um +
15		it didn't feel like a dog eat dog world
16	Int:	//yeah\
17	HB:	/where\\ you kind of like climb this ladder
18		and you didn't have to push people to the side to get there or
19	Int:	//yeah\
20	HB:	/um\\ there is space for everyone and um
21		it's not bad to be average
22		and it's ok
23		you don't have to be a doctor to be respected in society
24	Int:	yeah
25	HB:	um so that was really nice
26		and in our company it definitely was like that
27		like I became best friends with the company ceo
28		and I wasn't in the leadership team um
29	Int:	oh yeah
30	HB:	at all
31	Int:	yeah that sounds nice
32	HB:	and you know you can kind of walk in in the morning and kind of give them-
33		yell something inappropriate //(incomprehensible)\ and it would be fine
34	Int:	/[laughs]\\ yeah
35	HB:	but it didn't mean that I wasn't involved in anything leadership related
36		because I said something silly
37	Int:	yeah
38	HB:	it was never +

you were never looked down on like that
Int: yeah
HB: and so so it was really refreshing
so I did see the stark difference from New Zealand
Int: yeah
HB: especially to the Netherlands
even in England
England was very hierarchical
Int: yeah
HB: they're very much-
also the male female thing was a big difference
in England versus the Netherlands //I no-\
Int: /what do you mean\\ like
HB: maybe it was maybe it was my company
so I worked in house care tech
Int: yeah
HB: when I was in England
and there was still most of the leadership team were all men
and um white men um
Int: mm
HB: and the ones that made the decisions when it came to spending the budget and
stuff like that were also the men
and often when you're in the room as the only female
your voice wouldn't be heard
Int: yeah
HB: or you'd be silenced or
but I found the Dutch culture to be more open to listening
it still was very male dominated um in the tech industry um
our leadership team was largely male as well
but if I had something to say
or if anyone in the rest of the company had an opinion that they wanted to share
they got the opportunity to speak
um and they were heard
so in my time I did see a lot of change in the um
that shift of listening to the people and
Int: yeah
HB: having a bit more open discussions
even if there was these cultural differences and expectations they were still
willing to s- listen and try and change
and you know see what //those impacts\ would be
Int: /yeah\\
HB: so + yeah it was
New Zealand versus Amsterdam
I didn't want to leave Amsterdam

so I I would like to take that
wha- what my experience was in Amsterdam
I'd like to take that to the places I go moving forward
Int: yeah
HB: with with showing people examples of you don't have to go by the traditional
ways to still have a really um positive environment
Int: yeah
HB: and to not have hierarchy and um
Int: yeah
HB: learn new ways of working yeah

Extract 3: Amy Smith

Context: Amy was living in London for 18 months before returning home indefinitely. This extract was in response to a question about readjusting to being back in New Zealand

06:22

Int: so do you think that you didn't like
really need any readjustment back in New Zealand like
AS: I definitely think I've got a bit of PTSD
like I think I've got a bit of PTSD towards people
like I haven't been able to bring myself to go to a festival or to go
//(incomprehensible)\
Int: /oh yeah + yeah\\
AS: cause it's like quite overwhelming
I got out and had to go to a three hundred person wedding and //I\
Int: /yeah\\
AS: was exhausted just
it was quite hard
and I know when I got out
I was walking down to the beach
and I saw this old lady crossing the road into one of the retirement homes
and I really had to hesitate
and I felt like I needed to cross the street
Int: yeah
AS: and I still kind of look for a mask every so often //(incomprehensible)\
Int: /yeah\\
I actually never thought about that
like the coming from somewhere
where covid is still a lot like a much bigger issue than it is here
like how strange it must be
cause it's so easy to forget here
AS: everyone's so complacent here yeah
I tried to explain to a lot of people and I kind of just gave up
only people that have been overseas kind of understand that really strange
anxiety

30 Int: yeah
31 AS: I don't want to meet lots of people
32 not not not meet new people but not in large groups
33 Int: yeah
34 AS: but yeah it's a bit overwhelming //even\ (incomprehensible)
35 Int: /yeah\\
36 AS: I should be over it by now
37 because I'm a very social person
38 Int: no I can understand that
39 AS: yeah
40 it's going to shape society and the way we interact
41 Int: yeah
42 AS: New Zealand is just so +
43 unaware of the turmoil that the rest of the world is in

Extract 4: Percy Black (and Anna Gordon)
Context: Percy Black and Anna Gordon are a couple who lived in Brighton (UK) for almost 2 years. This extract was in response to a question about whether they found it strange to be back in New Zealand where the Covid situation is so different to the UK.
16:40
1 Int: did you find it weird to be back in New Zealand and sort of like +
2 in this weird bubble where covid is sort of like not that prevalent
3 AG: //yeah\
4 PB: /yeah we still\\ haven't we still haven't got over that
5 AG: I still feel weird going shopping without a mask on [laughs]
6 Int: yeah
7 PB: yeah
8 there's like the sudden panic oh I don't have my mask on me oh
9 yeah
10 Int: yeah
11 PB: and um +
12 yeah it was a bit of +
13 PB: you're still paranoid
14 I think it was-
15 oh we were down in Nelson recently
16 and um we went to the Nelson market
17 and uh I I (incomprehensible) as I uh
18 the Nelson market had this laminated covid app sign
19 so I was trying to scan in and it wouldn't scan
20 so I was sort of stood there trying to get it to work
21 this old lady walked past me and she just kind of came right up to my face
22 and she was like
23 [in a faux grouchy old person voice] there's no covid here

24 AG: [laughs]
25 Int: [laughs]
26 PB: [in normal voice] and then walked off and I was just like oh
27 Int: god
28 PB: so yeah
29 there's a a lot of almost denial over here
30 Int: mm
31 PB: that covid exists

Extract 5: Hema Balakrishnan
Context: In response to a question about what she felt that New Zealanders felt about her and other returning New Zealanders coming back to New Zealand.
33:14
1 HB: well the first big shock when I got out of isolation was
2 I was like why is no one wearing a mask
3 why is no one social distancing like
4 Int: yeah
5 HB: just felt very strange
6 Int: yeah
7 HB: that life is completely normal here
8 um so I was a bit like oof [leans away gesturing hands up] don't come near me
9 Int: yeah
10 HB: like I just didn't want to go near people for a little while
11 Int: yeah
12 HB: and the second thing that I real- that I noticed pretty quickly was ++
13 HB: how unaware people are of the chaos going on outside of New Zealand
14 like everyone kind of living in this high and mighty bubble of
15 [puts on slightly pompous voice]
16 oh you know we did it right and we locked down for four weeks
17 Int: mm
18 HB: [in normal voice] and I'm like four weeks
19 we've been in lockdown since march
20 //you've\ got no fucking idea how hard this has been
21 Int: /yeah\\
22 HB: like also not even just unawareness but they're not willing to know anything
23 more than what's going on in New Zealand
24 Int: yeah
25 HB: and like people just saying stuff like
26 oh why don't they just shut down the borders to the eu
27 and it's like there's so much more at stake here than just shutting the borders
28 they're not an island
29 you can drive from Amsterdam to Russia if you want to
30 Int: yeah

HB: like not like there's a hard border to close
also that there's laws in place that is a freedom of movement law
so you can't just you know

Extract 6: Maria Petersson
Context: On the topic of returning to New Zealand, staying at an MIQ hotel and how people in New Zealand were reacting to people returning from overseas.
06:30

MP: um yeah and then when I arrived in New Zealand
it was the weir- weirdest experience //um\
Int: /yeah\\
MP: arriving back in the country
and yeah I had to do managed isolation in uh [name of area of isolation hotel]
which was quite nice
Int: did you do you think that having to do that isolation changed like +
how you readjusted to being back in New Zealand
like having that period where you're back in New Zealand
but you're not actually in contact like physically with people
MP: yeah
Int: you know
MP: yeah
definitely helped with the jetlag
Int: oh yeah
MP: it was quite nice to get over jet lag
Int: yeah
MP: but um it was a really weird experience because I'm such an extrovert
I love to be around people
Int: yeah
MP: so you were forced to be away from people
and also everyone who worked there were lovely
super lovely
but they wer- everyone was almost scared of you
like everyone had bee-
There's a huge difference (incomprehensible)
and I guess this could be why it's spreading so badly over there
you're- we're a bit more relaxed overseas
in terms of like
you still try and keep two metres and things like that
Int: yeah
MP: but you don't look like everyone's got the plague or someones like gonna almost kill you
but I feel + in New Zealand
people would be like
[gasps with shocked expression, puts on mock-horror voice] oh my god like

37 Int: yeah
38 MP: you've been from overseas [gasps] get away from me
39 Int: yeah
40 MP: you disgusting thing

Extract 7: Tabitha Franks
Context: Tabitha Franks returned to New Zealand at the beginning of 2020 (just before Covid) after living overseas for almost 15 years. She lived in China for 4 and the United Arab Emirates for 10. This extract was on the discussion of adjusting to being back in NZ after being away.
19:00
1 TF: so if you came home and it was a normal year
2 maybe it would be a little bit harder
3 because you do feel like a fish out of water when you get home
4 Int: yeah yeah
5 TF: and that's what you feel initially and then covid hit
6 and everybody is in that situation
7 Int: yeah
8 TF: everybody is feeling a bit like a fish out of water
9 and everybody's got that kind of uncertainty
10 so I think that changes the equation
11 Int: yeah definitely

Extract 8: Tabitha Franks
Context: On the topic of communicating with people in her workplace in the UAE and any potential areas for miscommunication.
24:33
1 TF: and I think when you're away for fifteen years that's a long time
2 Int: yeah it really is
3 TF: that becomes more your sort of more your culture than
4 Int: yeah
5 TF: and I guess lots of people I know there are people that have travelled as well
6 so I guess in some ways I find more similarities in my way of thinking and theirs
7 than I do differences to be honest so
8 Int: yeah

Extract 9: Hema Balakrishnan
Context: Speaking about things that she has found challenging, since returning to NZ.
36:55
1 HB: I feel like I've gone from experiencing so much of life and even cultures
2 like even at work I got to talk to so many different cultures and people every day
3 Int: yeah
4 HB: and even sharing new music

5 like a new song from a new artist that's someone heard or um +
6 trying a new type of cuisine or
7 Int: yeah
8 HB: that kind of stuff
9 I just feel like all of that stuff just gets stripped away and it's very much um
10 yeah it's very small
11 Int: yeah

Extract 10: Hema Balakrishnan
Context: Speaking about things that she has found challenging, since returning to NZ.
37:33
1 HB: yeah so I've really struggled with that actually
2 Int: yeah
3 HB: really struggled with the coming back to
4 Int: yeah
5 HB: the kind of smaller scale of things

Extract 11: Mark Larson
Context: Mark has recently returned to NZ after living in London for 3 years.
00:58
1 ML: yeah so I moved there August twenty seventeen
2 and then I moved back in September twenty twenty um
3 but I was unemployed for the last five months I wa- or the last six months I was
4 unemployed
5 cos of covid
6 Int: right
7 ML: from March till September
8 Int: yeah
9 Int: is that why you ca- why you decided to come back
10 cos it //was hard to find a job\
11 ML: /yeah one hundred percent yeah\\
12 only reason why I'm back
13 yeah there's no work in the UK
14 um well there was work but I couldn't find a good enough job to sustain me
15 Int: yeah
16 ML: to to justify living overseas
17 and I have family back home

Extract 12: Emily Jones
Context: On the topic of how having time in MIQ affected her readjustment to being back in NZ
11:15
1 Int: do you think that having that time between
2 like actually getting back and then going into society affected your return

3 like how you adjusted to being back in New Zealand
4 EJ: mm maybe a little bit
5 I think too though that like I went home to my parents house
6 and I was there for two months two or three months
7 Int: yeah
8 EJ: kind of just having fun
9 Int: yeah
10 EJ: which was lucky that I could like do that
11 um so I didn't + like I feel like I kinda didn't have
12 um I had quite a relaxed time where I could you know
13 I could look for jobs comfortably
14 I could stay at home
15 I didn't have to worry about
16 Int: yeah
17 EJ: what was happening with accommodation and things like that
18 so I think that that probably was more beneficial
19 to
20 Int: yeah
21 EJ: readjusting

9. References

Abbuhl, Rebekha 2012. Why, when, and how to replicate research. In Alison Mackey & Susan M. Gass (eds.), *Research Methods in Second Language Acquisition - A Practical Guide.* Blackwell Publishing Ltd. 296-312.

Anderson, Benedict 1983. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. Verso.

Angouri, Jo 2018. *Culture, Discourse, and the Workplace*. Routledge.

Angouri, Jo, Janet Holmes & Meredith Marra 2017. *Negotiating Boundaries at Work: Talking and Transitions.* Edinburgh University Press.

Angouri, Jo, Meredith Marra & Shelley Dawson 2021. More than builders in pink shirts: Identity construction in gendered workplaces. In Jo Angouri & Judith Baxter (eds.), *Handbook of Language, Gender and Sexuality*. Routledge. 212-225.

Antonsich, Marco 2010. Searching for belonging - An analytical framework. *Geography Compass* 4, 6: 644-659.

Archibald, Mandy M., Rachel. C. Ambagtsheer, Mavourneen. G. Casey & Michael Lawless 2019. Using Zoom video conferencing for qualitative data collection: Perceptions and experiences of researchers and participants. *International Journal of Qualitative Methods* 18: 1-8.

Bakhtin, Mikhail 1963. *Problems of Dostoevsky's Poetics*. University of Minnesota Press.

Baxter, Judith 2014. *Double-voicing at Work: Power, Gender and Linguistic Expertise*. Palgrave Macmillan.

Bucholtz, Mary & Kira Hall 2004. Language and identity. In Alessandro Duranti (ed.), *A Companion to Linguistic Anthropology*. Blackwell. 369-394.

Burr, Vivien 1995. *An Introduction to Social Constructionism*. Routledge.

Calvo, Clara 1992. Pronouns of address and social negotiation in as You Like it. *Language and Literature* 1: 5-27.

Chislett, William 2008. Image and Reality: Contemporary Spain. *Real Instituto Elcano Working Paper* 45: 1-28.

Clyne, Michael 1995. *Inter-cultural Communication at Work: Cultural Values in Discourse*. Cambridge University Press.

Crenshaw, Kimberle 1991. Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*. 43: 1241-1299.

Dawson, Shelley 2019. Identities and ideologies in study abroad contexts: Negotiating nationality, gender, and sexuality. Unpublished PhD thesis. Victoria University of Wellington.

de Bres, Julia 2009. Language in the Workplace project and workplace communication for skilled migrants course at Victoria University of Wellington. *Language Teaching* 42(4): 519-524.

Dervin, Fred 2012. Cultural identity, representation and othering. In Jane Jackson (ed.), *The Routledge Handbook of Language and Intercultural Communication.* Routledge. 181-194.

Dervin, Fred 2015. Discourses of othering. In Karen Tracy, Cornelia Ilie and Todd Sandel (eds.), *International Encyclopedia of Language and Social Interaction*. John Wiley & Sons.

Eckert, Penelope & Sally McConnell-Ginet 2013. *Language and Gender*. Cambridge University Press.

Fox, Nick 2006. Using interviews in a research project. *Trent RDSU.* 1-40.

Gaw, Kevin F. 2000. Reverse culture shock in students returning from overseas. *International Journal of Intercultural Relations* 24(1): 83-104.

Ginsburg, Shiphra, Cee van der Vleuten, Kevin W. Eva & Lorelei Lingard 2016. Hedging to save face: A linguistic analysis of written comments on in-training evaluation reports. *Advances in Health Sciences Education: Theory and Practice* 21(1): 175-188.

Greenbank, Emily 2020. *Discursive Navigation of Employable Identities in the Narratives of Former Refugees*. John Benjamins.

Hellgren, Zenia 2014. Negotiating the boundaries of social membership: Undocumented migrant claims-making in Sweden and Spain. *Journal of Ethnic and Migration Studies* 40(8): 1175-1191.

Holmes, Janet 2018. Negotiating the culture order in New Zealand workplaces. *Language in Society* 47(1): 33-56.

Holmes, Janet, Louise Burns, Meredith Marra, Maria Stubbe & Bernadette Vine 2003. Women managing discourse in the workplace. *Women in Management Review* 18(8): 414-424.

Holmes, Janet & Meredith Marra 2017) You're a proper tradesman mate: Identity struggles and workplace transitions in New Zealand. In Dorien Van De Mieroop & Stephanie Schnurr (eds.), *Identity Struggles: Evidence from Workplaces Around the World*. John Benjamins. 127-146.

Holmes, Janet, Meredith Marra & Bernadette Vine 2011. *Leadership, Discourse, and Ethnicity*. Oxford University Press.

Holmes, Janet, Meredith Marra & Keely Kidner 2018. Managing transitions through discourse at work. *Journal of Applied Linguistics and Professional Practice* 13(1-3): 122-144.

Holmes, Janet, Meredith Marra & Mariana Lazzaro-Salazar 2017. Negotiating the tall poppy syndrome in New Zealand workplaces: Women leaders managing the challenge. *Gender and Language* 11(1): 1-29.

Holmes, Janet, Meredith Marra & Bernadette Vine 2019. Telling stories: Analysing Māori and Pākehā workplace narratives. *Journal of the Royal Society of New Zealand* 49(1): 104-117.

Holmes, Janet & Stephanie Schnurr 2005. Politeness, humor and gender in the workplace: Negotiating norms and identifying contestation. *Journal of Politeness Research* 1(1): 121-149.

Jaworski, Adam & Justine Coupland 2005. Othering in gossip: 'You go out you have a laugh and you can pull yeah okay but like...'. *Language in Society* 34(5): 667-694.

Jones, Rhys, Sue Crengle & Tim McCreanor 2006. How tikanga guides and protects the research process: Insights from the Hauora Tane project. *Social Policy Journal of New Zealand* 29: 60-77.

Johnstone, Barbara, Jennifer Andrus & Andrew E. Danielson 2006. Mobility, indexicality, and the enregisterment of "Pittsburghese". *Journal of English Linguistics* 342): 77-104.

Kassis-Henderson, Jane, Linda Cohen & Rosaline McCulloch 2018. Boundary crossing and reflexivity: Navigating the complexity of cultural and linguistic identity. *Business and Communication Quarterly* 18(3): 304-327.

Ker, Alastair, Rebecca Adams & Gillian Skyrme 2013. Research in applied linguistics and language teaching and learning in New Zealand (2006-2010). *Language Teaching* 46(2): 225-255.

Kerekes, Julie, Joanne Chow, Alina Lemak & Zhanna Perhan 2013. Trust or betrayal: Immigrant engineers' employment-seeking experiences in Canada. In Christopher N. Candlin & Johnathan Crichton (eds.), *Discourses of Trust*. Palgrave Macmillan. 269-284.

Kirilova, Marta & Jo Angouri 2018. You are now one of us - negotiating 'fitting in' in the workplace. In Angela Creese & Adrian Blackledge (eds.), *The Routledge Handbook of Language and Superdiversity*. Routledge. 345-359.

Krzyżanowski, Michał & Ruth Wodak 2008. Multiple identities, migration and belonging: 'Voices of migrants'. In Carmen-Rosa Caldas-Coulthard & Rick Iedema (eds.), *Identity Trouble: Critical Discourse and Contested Identities*. Palgrave Macmillan. 95-119.

Lee, Jin Sook, & Kate T. Anderson 2009. Negotiating linguistic and cultural identities: Theorizing and constructing opportunities and risks in education. *Review of Research in Education* 33(1): 181-211.

Loadenthal, Michael 2019. Othering terrorism: A rhetorical strategy of strategic labeling. *Genocide Studies and Prevention: An International Journal* 13(2): 74-105.

Locher, Miriam A. & Richard J. Watts 2008. Relational work and impoliteness: Negotiating norms of linguistic behaviour. In Derek Bousfield & Miriam Locher (eds.), *Impoliteness in Language: Studies on its Interplay with Power in Theory and Practice.* Mouton de Gruyter. 77-99.

Mann, Steven 2011. A critical review of qualitative interviews in applied linguistics. *Applied Linguistics* 32(1): 6-24.

Marra, Meredith & Shelley Dawson 2021. Workplace and institutional discourse. In Michael Haugh, Dániel Z. Kádár & Marina Terkourafi (eds.), *Cambridge Handbook of Sociopragmatics*. Cambridge University. 475-495.

Marra, Meredith, Janet Holmes & Keely Kidner 2017. Transitions and interactional competence: Negotiating boundaries through talk. In Simona Pekarek Doehler, Adrian Bangerter, Geneviève de Weck, Laurent Filliettaz, Esther González-Martínez & Cécile Petitjean (eds.), *Interactional Competences in Institutional Settings: From School to the Workplace*. Palgrave Macmillan. 227-251.

McIntosh, Michele J. & Janice M Morse 2015. Situating and constructing diversity in semi-structured interviews. *Journal of Global Qualitative Nursing Research* 2: 1-12.

Moffat, Kirstine 2019. Devoted to the cause of women's rights: The New Zealand new woman novel. *Women's Writing* 26, 3: 304-327.

Mullen, Brian, John F. Dovidio, Craig Johnson & Carolyn Copper 1992. In-group-out-group differences in social projection. *Journal of Experimental Social Psychology* 28(5): 422-440.

Nilsen, Anne Birgitta, Sandra Fylkesnes & Sølvi Mausethagen 2017. The linguistics in othering: Teacher educators' talk about cultural diversity. *Reconceptualizing Educational Research Methodology* 8(1): 40-50.

Paltridge, Brian & Ken D. Hyland 2012. *Discourse Analysis: An Introduction*. Bloomsbury Publishing.

Piller, Ingrid & Kimie Takahashi 2011. Linguistic diversity and social inclusion. *International Journal of Bilingual Education and Bilingualism* 14(4): 371-381.

Pulvermacher, Yael & Adam Lefstein 2016. Narrative representations of practice: What and how can student teachers learn from them? *Teaching and Teacher Education* 55: 255-266.

Scott, Jessica 2013. Learning the ropes: Report on summer scholarship research 2012-2013. School of Linguistics and Applied Language Studies. Victoria University of Wellington.

Shin, Hagyeong & Gabriel Doyle 2018. Alignment, acceptance, and rejection of group identities in online political discourse. *Proceedings of the 2018 Conference of the North American Chapter of the Association for Computational Linguistics: Student Research Workshop*. New Orleans: Association for Computational Linguistics. 1-8.

Schnurr, Stephanie & Olga Zayts 2011. Be(com)ing a leader: A case study of co-constructing professional identities at work. In Jo Angouri & Meredith Marra (eds.), *Constructing Identities at Work*. Palgrave Macmillan. 40-60.

Stubbe, Maria, Chris Lane, Jo Hilder, Elaine Vine, Bernadette Vine, Meredith Marra, Janet Holmes & Ann Weatherall 2003. Multiple discourse analyses of a workplace interaction. *Discourse Studies* 5(3): 351-388.

Sussman, Nan M. 2002. Testing the cultural identity model of the cultural transition cycle: Sojourners return home. *International Journal of Intercultural Relations* 26(4): 391-408.

Talmy, Steven 2010. Qualitative interviews in applied linguistics: From research instrument to social practice. *Annual Review of Applied Linguistics* 30: 128-148.

Tannen, Deborah 1994. *Talking from 9 to 5: Women and Men in the Workplace*. Avon Books.

Taylor, Stephanie 2013. *What is Discourse Analysis?* Bloomsbury Academic.

Van Den Haak, Marcel 2014. Disputing about taste: Practices and perceptions of cultural hierarchy in the Netherlands. Unpublished PhD thesis, University of Amsterdam.

Van De Mieroop, Dorien & Stephanie Schnurr 2017. *Identity Struggles: Evidence from Workplaces Around the World*. John Benjamins.

White, Robert 2004. Discourse analysis and social constructionism. *Nurse Researcher* 12(2): 7-17.

Wiederhold, Brenda. K. 2020. Connecting through technology during the Coronavirus disease 2019 pandemic: Avoiding "zoom fatigue". *Cyberpsychology, Behavior, and Social Networking* 23(7): 437-438.

Wiles, Janine 2008. Sense of home in a transnational social space: New Zealanders in London. *Global Networks* 8(1): 116-137.

Wilkinson, Sue 1998. Focus groups in feminist research: Power, interaction, and the co-construction of meaning. *Women's Studies International Forum* 21(1): 111-125.

Yuval-Davis, Nira 2006. Belonging and the politics of belonging. *Patterns of Prejudic*e 40(3): 197-214.

Zayts, Olga & Mariana Lazzaro-Salazar 2020. A sociolinguistic investigation of professional mobility and multicultural healthcare communication. In Zsofia Demjén (ed.), *Applying Linguistics in Illness and Healthcare Contexts: Contemporary Studies in Linguistics*. Bloomsbury Academic. 299-325.

The Left and Right Peripheries of Afrikaans

Luané Lennox

1. Introduction

In this paper, the left and right peripheries of Afrikaans, a West Germanic language indigenous to South Africa, will be examined. The focus of the paper will be on the various types of constructions associated with the respective peripheries, as well as their underlying information structure and their specific roles in discourse.

Afrikaans is a relatively young language, having developed from 17th century Dutch after Dutch settlers formed a colony and trading station at Cape Town in 1652 (van Huyssteen et al. 2015; van Rensburg 2019). Therefore, comparisons will be drawn to similar constructions in Dutch to demonstrate how the language has changed over the years yet continues to utilise equivalent constructions despite no longer having access to all the morphological processes of Dutch. The Afrikaans constructions will also be compared with relevant phenomena in German, whose left and right peripheries have been well-studied. Building on the basic assumptions of the Minimalist Programme, this paper draws heavily from Rizzi's cartographic approach to the left periphery (1997).

The Afrikaans-Dutch discussion will be built on De Vries's series of work on Dutch's Ā-syntax as well as recent studies on the information structure of the left and right peripheries of Germanic languages (De Vries 2007, 2009; Kalbertodt et al. 2015; Ott & De Vries 2016).

Like many other Germanic languages, Afrikaans imposes a V2 requirement whereby a standard finite clause can only have one argument (the subject) before the first verb in the clause. The V2 position can be occupied either by a lexical verb (1a) or by a modal or auxiliary verb, with the lexical verb present in the post-object position (1b). The standard word order for Afrikaans is therefore SVO or SV_2OV_{final}.

(1) a. *Neutral SVO*
Die seun gee vir die meisie 'n blom.
The boy gives to the girl a flower.
'The boy gives the girl a flower.'

b. *Neutral* SV_2OV_{final}
Die seun het vir die meisie 'n blom gegee.
The boy has to the girl a flower gave.
'The boy gave a flower to the girl.'

Afrikaans has an active and productive left periphery, where sentence constituents can surface to the left of the main clause and serve various discourse functions, such as contrast, emphasis, introducing new information or reiterating aforementioned information. In this paper, two left periphery constructions will be analysed through standard diagnostic tests under the Minimalist

framework. I will examine the syntactic properties of the respective constructions, demonstrating that they are distinct from one another and occur through different methods (Ā -movement vs. base generation).

I will show that the first construction behaves like *wh*-fronting (2) in that it involves an instance of discourse-driven Ā-movement into the left periphery, which I refer to as leftward fronting (LF) (3). In contrast, the second construction contains a constituent base-generated in its spell-out position (4), which I refer to as left dislocation (LD) throughout this paper.

(2) *Wh-fronting*
[Vir wie]$_i$ gee die seun ___$_i$ n blom?
[To who]$_i$ gives the boy ___$_i$ a flower?
'To whom does the boy give a flower?

(3) *Leftward Fronting*
[Vir die meisie]$_j$ gee die seun ___$_j$ 'n blom.
[To the girl]$_j$ gives the boy ___$_j$ a flower.
'To the girl, the boy gives a flower.'

(4) *Left Dislocation*
[Dié meisie]$_k$, die seun gee vir [haar]$_k$ 'n blom.
[This girl]$_k$, the boy gives to [her]$_k$ a flower.
'This girl, the boy gives a flower to her.'

Note the similarities between *wh*-fronting (2) and leftward fronting (3): both feature subject-verb inversion and the absence of clause-internal resumption. The left dislocation construction, on the other hand, triggers no subject-verb inversion yet requires a resumptive pronoun in the theta-position, as in (4). This suggests that (2) and (3) are likely to occur through a similar process, whereas (4) is constructed differently. This prediction will be examined in Section 2 with standard diagnostic tests under the Minimalist framework.

Compared to its left periphery, Afrikaans' right periphery is less active. Unlike the left peripheral constructions introduced in (2)-(4), Afrikaans' two right peripheral constructions are less productive and are used mainly in natural speech. These two constructions are illustrated below in (5) and (6). Despite their superficial similarity, I will demonstrate in Section 3 and 4 that the RDs and the Afterthoughts in fact differ not only prosodically, but also in various semantic and pragmatic regards.

(5) *Right Dislocation*
Ek het [hom]$_m$ nie gesien nie, [die man]$_m$.
I have [him]$_m$ not saw not, [the man]$_m$.
'I have not seen him, the man.'

(6) *Afterthought*
Ek het [haar nuwe kêrel]$_p$ gister ontmoet, [Pieter]$_p$.
I have [her new boyfriend]$_p$ yesterday met, [Peter]$_p$.
'I met her new boyfriend yesterday, Peter.'

Additionally, I will show that right dislocation (5) not only serves similar functions to left dislocation (4) in discourse, but that the two constructions also display similar syntactic behaviours despite surfacing on opposite sides of the matrix clause. I accordingly explore the notion that right dislocation

can be analysed as a Fronting & Deletion process, in which the constituent that apparently surfaces in the right edge of the clause in fact sits in the left periphery of a second clause that undergoes PF deletion (e.g., Abe 1999; Ott & De Vries 2015; Shimoyama et al. 2015; Tanaka 2001).

Throughout sections 2, 3, and 4, the constructions introduced above in (2)-(6) will also be compared with similar constructions in Dutch and German, two well-described Germanic languages with close ties to Afrikaans. Although Afrikaans does behave very similarly to German and Dutch, having separated from mainland Dutch during the 17th century, it lacks any overt morphology and a complex case system which allows languages like German their relative ease in identifying the different syntactic roles of arguments when left and right dislocation is used. The 'simplified' nature of Afrikaans is what leads scholars to label it as a partial creolisation of Dutch (de Kleine 1997; Den Besten 1989; Schuhmacher 1974). With the comparisons between these languages, I aim to illustrate how Afrikaans has diverged from Dutch and German and how, despite being morphologically poor in comparison to Dutch and German, the language compensates for this in different ways and still allows for left and right periphery constructions.

Consider below three simple clauses that are rough equivalents in German, Dutch, and Afrikaans. The German example (7) is morphologically elaborate, where both case-marking and subject-verb agreement provide clear indication of the subject of the sentence regardless of its position (7b).
The Dutch example (8) only retains subject-verb agreement, but this is enough to indicate which constituent is intended as the subject despite movement (8b). In Afrikaans (9), neither feature is morphologically transparent, and speakers must rely solely on prosody and context to receive the intended message, both tools that German and Dutch speakers can also access. This juxtaposition makes Afrikaans an interesting language to investigate; in particular how its syntactic operations are marked/encoded in a morphologically opaque system. With this paper, I hope to make Afrikaans a more accessible language for future syntactic analyses.

(7) a. *Neutral SVO*
Die Hunde fangen den Ball.
The.NOM.PL dogs catch.PL the.MASC.ACC ball.
'The dogs catch the ball.' (German)

b. *Fronted Object*
[Den Ball]$_i$ fangen die Hunde ___$_i$.
[The.MASC.ACC ball]$_i$ catch.PL the.NOM.PL dogs ___$_i$.
'The dogs catch the ball.' (German)

(8) a. *Neutral SVO*
De honden vangen de bal.
The dogs catch.PL the ball.
'The dogs catch the ball.' (Dutch)

b. *Fronted Object*
[De bal]$_i$ vangen de honden ___$_i$.
[The ball]$_i$ catch.PL the dogs ___$_i$.
'The dogs catch the ball.' (Dutch)

(9) a. *Neutral SVO*
Die honde vang die bal.
The dogs catch the ball.
'The dogs catch the ball.' (Afrikaans)

b. *Fronted Object*
[Dié bal]$_i$ vang die honde ___$_i$.
[This ball]$_i$ catch the dogs ___$_i$.
'The dogs catch this ball.' (Afrikaans)

In what follows, I lay out the main research questions to be explored and the organisation of the paper.

1.1 Research questions

As introduced above, this paper aims to enable a better understanding of Afrikaans' Ā-syntax and different Ā-operations' used in discourse. To do so, the following questions will be explored (10):

(10) a. What are the different types of left peripheral constructions in Afrikaans and how do they differ from one other in syntactic behaviours?
b. Is leftward fronting identical to *wh*-fronting whereby a *wh*-word and a leftward fronted constituent occupy the same slot in the CP domain?
c. What are the different types of right peripheral constructions in Afrikaans and how do they differ in syntactic behaviours?
d. How much variation and uniformity is there in the Ā-syntax of Afrikaans, Dutch, and German?
e. How can the underlying information structure of Afrikaans' left and right peripheral constructions be examined?
f. What is the design of Afrikaans' left and right peripheries? Namely, what is the hierarchical order between different dislocated constituents in Afrikaans left and right periphery?

To answer these questions, I will be using data from previously published papers on the left and right peripheries of Afrikaans, Dutch, and German. For Afrikaans, I will also use data generated by myself, a native speaker. The variety of Afrikaans I speak is relatively close to the standard Afrikaans taught in schools, however, I grew up surrounded by other varieties spoken in the Western Cape and Northern Cape, with my mother and extended maternal family being from across the Western Cape as well as the Namakwa district in the Northern Cape.

This paper is structured as follows. In the next subsection (§1.2), I present a literature review on previous work on Afrikaans' left and right peripheries. Sections 2 and 3 focus on the left and right periphery of Afrikaans, respectively, examining how the major constructions introduced in §1 are constructed and their similarities with and differences to equivalent constructions in Dutch and German. Section 4 examines the various constructions with specific attention to developing a more nuanced layout for their discourse functions and corresponding Information Structure. The goal is to map a syntax framework to Information Structure counterparts and to determine where the various constructions diverge and overlap in their discourse purposes. Section 4 will also contain an interim summary and a subsection discussing remaining questions and future directions.

1.2 Literature review

Since Rizzi's seminal work, the formal structure of the left periphery has been one of the most well studied aspects in Minimalist syntax. Building on Chomsky's well-accepted proposal that the TP and VP layers consist of multiple functional projections instead of single X-bar projections. Rizzi (1997) extends this reasoning to the CP layer and proposes a cartographic approach to the structure of left periphery: that the left periphery of a clause consisted of more than a single X-bar projection. Rizzi's work has since been further expanded and refined (Beninca & Poletto 2004; Cruschina 2012; Paoli 2007; Rizzi 2004, 2013).

Building on his earlier work, Rizzi (2004) proposes the schematized structure in (11) for natural languages' left periphery, which was revised by Beninca and Poletto (2004) (12). As seen below, the schematized structure in (11) has a reiterated Topic Phrase (TopP) position after the Focus Phrase (FocP), which was deemed unlikely by Beninca and Poletto and removed in (12). The Modal Phrase (ModP) slot is for preposed adverbials (Rizzi 2017), but would be expressed exclusively above the Focus projection. The Force Phrase (ForP) and the position for Interrogative complementisers (Int) is

not relevant to this paper, making (12) a simpler yet more stable foundation from whence to build since there are less preconceived positions.

(11) [ForP [TopP* [Int [TopP* [FocP [ModP [TopP* [FinP [IP]]]]]]]] (Rizzi, 2004)

(12) [TopP [ModP [ContFocP [InfFocP [FinP [IP]]]]] (Beninca & Poletto, 2004)

Beninca and Poletto (2004) also divide the focus projection into contrastive focus (ContFocP) – which would host objects and adverbs – and informational focus (InfFocP), for circumstantial and quantificational adverbs. Although it is still inconclusive whether LF and wh-words can co-occur in the left periphery, multiple positions in the Focus projection are reasonable since they could hold constituents that have different structures or functions. Wh-elements are proposed as solely being capable of InfFocP elements (Beninca & Poletto 2004) and are incompatible with an already active Focus projection (Rizzi 1997).

Afrikaans' Ā-syntax is under-described. To the best of my knowledge, only two papers have been published on its left periphery (Berghoff 2017; Botha & Oosthuizen 2009). Both papers use the frameworks of Rizzi (1997, 2004) and Beninca and Poletto (2004) as their foundations. However, the Botha and Oosthuizen (2009) paper is written in Afrikaans and thus has had limited accessibility to an international audience.

Building on Rizzi's (1997, 2004), and Beninca and Poletto's (2004) series of work, Botha and Oosthuizen (2009) conclude that there are at least two types of left periphery constructions in Afrikaans, one that includes a resumptive pronoun, a syntactical Topic which occurs through 'topicalisation', and one that triggers subject-verb inversion, a syntactical Focus which occurs through 'focalisation'. However, instead of using a bottom-up approach and thoroughly examining Afrikaans first before making comparisons, Botha and Oosthuizen make several assumptions regarding the presumed linear relationship between syntactical Topics and Foci and their Information Structure counterparts. They also make several claims regarding the internal make-up of left periphery constructions without adequate arguments and diagnostic tests.

For example, Botha and Oosthuizen (2009) claim that like the Italian counterparts discussed by Rizzi (2004) and Beninca and Poletto (2004), the syntactical Topic of Afrikaans can also be divided into two types, namely hanging topics (HT) (13) and left-dislocated topics' (14). According to Botha and Oosthuizen (2009), the sole difference between the two constructions are that hanging topics do not have prepositions and that left-dislocated elements do. According to Beninca and Poletto (2004), there is a distinction between these two constructions in Italian and presumably other Romance languages, but there is no evidence of this same distinction in Afrikaans syntax.

(13) *Hanging Topic*
[Arm mense]$_i$, niemand voel iets vir [hulle]$_i$ nie.
[Poor people]$_i$, nobody feels something for [them]$_i$ not.
'Poor people, nobody feels anything for them.' (Botha & Oosthuizen, 2009, p.35)

(14) *Left-dislocated Topic*
*[Vir arm mense]j, niemand voel iets [vir hulle]j nie.
For poor people, nobody feels anything for them not.
'For poor people, nobody feels anything for them.' (Botha & Oosthuizen, 2009, p.35)

(15) *Hanging Topic & Left-dislocated Topic*
?[Die sleutels]$_k$, [in die laai]$_n$, ek het [hulle]$_k$ [daarin]$_{n?}$ gebêre.
?[The keys]$_k$, [in the drawer]$_n$, I have [them]$_k$ [there.in]$_{n?}$ put.away.
? 'The keys, in the drawer, I put them in there.' (Botha & Oosthuizen, 2009, p.35)

They subsequently claim that left-dislocated topics are ungrammatical in Afrikaans, except when they co-occur with hanging topics (15). However, as a native speaker, I would say that (15) is not a good example, regardless of the pied-piped preposition's presence. (15) is badly constructed since the dislocated constituent in the drawer implies location but the resumptive pronoun therein conveys directional movement. The two prepositions therefore convey competing meanings and the two constituents at the start of the sentence do not read like two LDs. Regardless of a phrasal barrier or stress, the second constituent 'in the drawer' sounds more like a relative clause with a deleted 'that' (16a-b). The combination of these two factors results in the two parts of the sentence sounding disconnected. Furthermore, if (15) is acceptable, then there should be no reason for an LD with a preposition not to be at the front or the sole LD (16c). If this were to be the case, these constructions containing prepositions might not be an LD and might be a special kind of Left Dislocation akin to Afterthoughts but in the left periphery. This is an idea to be explored in the future.

(16) a. [Die sleutels wat in die laai is]$_p$, ek het [hulle]$_p$ daar gebêre.
[The keys which in the drawer are]$_p$, I have [them]$_p$ there put.away.
'The keys that are in the drawer, I put them there.'

b. [Die sleutels in die laai]$_p$, ek het [hulle]$_p$ daar gebêre.
[The keys in the drawer]$_p$, I have [them]$_p$ there put.away.
'The keys in the drawer, I put them there.'

c. *Context: 'Where are the keys?'*
[In die laai]$_p$, ek het die sleutels [daar]$_p$ gebêre.
[In the drawer]$_p$, I have the keys [there]$_p$ put.away.
'In the drawer, I put the keys there.'

(14) is also an especially bad example of an LD since what Botha and Oosthuizen interpret as a preposition, 'vir' (for), is perhaps better analysed as a dative case marker in this context (den Besten 1981: 158; Robbers 1997: 17). In the main clause, the 'vir' (for) establishes a relationship between 'iets' (something) and 'hulle' (them) (as seen in 13), but the 'vir' (for) in the LD in (14) fails to reconstruct and connect with the intended constituent, making it both ungrammatical as well as redundant since it does not fulfil any function.

In a similar instance, they claim that the 'then' in (17) is optional, meaning that the 'yesterday' in the left periphery can be either a Topic, if the pronoun is present, or a Focus, if it is absent. For this paper, this means either an LD or an LF respectively.

(17) [Die man]$_i$, (gister)$_j$, watter vrou het [hy]$_i$ [(toe)]$_j$ vermoor?
[The man]$_i$, [yesterday]$_j$, which woman has [he]$_i$ [(then)]$_j$ murdered?
'The man, yesterday, which woman did he murder?' (Botha & Oosthuizen, 2009, p.27)

If the sentence includes 'then', the emphasis should fall on the 'yesterday', as if it is being contrasted with a different day, suggesting that the man has committed multiple murders on different days. If the two left periphery constituents in (17) are both emphasised, thus carrying the same prosodic emphasis, the rest of the sentence would sound disjointed or unfinished without a subsequent 'then' resumptive pronoun. Rather, the sentence would be read as if 'yesterday' was connected to 'the man', the first LD in this sentence. Here, it could mean that the speaker is referring to a specific man that they saw the previous day. For this reading, prosodically, there would be no distinct phrasal border between the two elements, and/or 'yesterday' would be deaccented in relation to 'the man'. Without the resumptive pronoun, the 'yesterday' LD would, again, act as a relative clause rather than an LF construction. In fact, the latter interpretation would be the most natural reading if no context or prosodic cues were given. This reading would hold with or without the presence of 'toe' which, in Afrikaans, can also be read as an emotive pragmatic particle.

In Berghoff (2017), a reviewer also questions the grammaticality of a sentence like (17) if the 'yesterday' is expressed with the prosodic qualities of an LF and no resumptive pronoun. However, Berghoff's paper does not explore this further, and they base their arguments regarding the ordering of CP constituents on the assumption that 'yesterday' is situated within a ContFoc slot.

Overall, in Botha and Oosthuizen's paper, the focus is more on critiquing the theories of Rizzi (1997, 2004) and Beninca and Poletto (2004) by using Afrikaans as a case study than an accurate analysis of the types of left periphery constructions in Afrikaans. Although the framework put forth by Rizzi (1997, 2004), upon which Beninca and Poletto (2004) built their theories, is a good starting point regarding the internal structure of the CP, several of Botha and Oosthuizen's comparisons feel forced and lack adequate motivation. Botha and Oosthuizen (2009) refer to the constructions with resumptive pronouns as 'topicalisation' and the constructions that trigger subject-verb inversion as 'focalisation' based solely on this framework and the given descriptions. Botha and Oosthuizen (2009) take Rizzi (1997, 2004) and Beninca and Poletto's (2004) work concerning the ordering of, and relationship between, 'topic' and 'focus' projections within the CP as given, and force Afrikaans to fit into this mould, instead of thoroughly examining Afrikaans first and then examining where and how it could potentially match the work of the first researchers.

In this paper, I will reanalyse the constructions referred to as 'topicalisation' and 'focalisation' in Botha and Oosthuizen (2009), demonstrating that they are better analysed as LDs (base-generated) and LFs (Ā-moved), respectively. Not only because the 'topicalisation' and 'focalisation' labels imply an automatic assumption about the function of these constructions in discourse, but also because I argue that LDs are not a result of movement but base-generation, and that the LF in Afrikaans, which presumably does result from movement, can hold both 'known' and 'new' information, which are usually associated with either topicalisation or focalisation and not both.

In comparison to the left periphery, the right periphery is decidedly understudied in syntax and when mentioned, is rarely the sole focus of the paper but is studied in conjunction with the left periphery (De Vries 2007, 2009; Fernández-Sánchez & Ott 2020; Kalbertodt et al. 2015; Ott & De Vries 2016). The right periphery is not as productive in the left in most well-studied Germanic and Romance languages, which is likely why it has received less attention. In Afrikaans, the right periphery is virtually undescribed.

The current research on the right periphery is also less conclusive about whether there is a distinction between 'Backgrounding right dislocation' and 'Afterthoughts' given that they are nearly identical in syntax. Both constructions are optional, require a cataphoric correlate in the matrix clause, and occur to the right of a complete matrix clause (Fernández-Sánchez & Ott 2020). The most conclusive evidence differentiating between the two constructions comes from prosody. Constructions that are right dislocated are often produced in the same intonational phrase as the matrix clause, having little to no phrase boundary between matrix and dislocated constituent. On the other hand, Afterthoughts are separated from the matrix clause by a stronger phrase boundary, often produced in a separate intonational phrase (Kalbertodt et al. 2015).

This paper will use the above-mentioned distinctions as guidelines to examine the Afrikaans right periphery and, to my current knowledge, contribute some of the first data and analyses regarding right dislocation and afterthought in Afrikaans.

2. The Left Periphery

2.1 The phenomena

Cross-linguistically, a constituent may surface in the left edge of a clause via two ways – fronting (i.e., Ā-movement) or base-generation. Despite this universality, languages differ from one another regarding how productive their left edge is and how different types of left-dislocated constituents behave. Dutch and German, for example, employ at least four left peripheral constructions (De Vries 2009; Kalbertodt et al. 2015), whereas Afrikaans only has three distinct constructions, as outlined earlier in §1. The goal of this section is to properly analyse these three constructions and compare them with similar constructions in Dutch and German.

In §2.1, I outline and include detailed descriptions of the left periphery constructions available in Afrikaans, namely Left Dislocation (LD, §2.2), Leftward Fronting (LF, §2.3), and *wh*-fronting (§2.4). These descriptions will be followed by syntactic tests to determine the nature of the left periphery constructions (§2.5), including Reconstruction Tests and Movement tests. Lastly, in §2.6, I will provide a comparison of the aforementioned Afrikaans constructions to equivalent and similar constructions available in Dutch and German.

2.2 Left Dislocation in Afrikaans

The first construction to be discussed is characterized by (i) the obligatory presence of a resumptive pronoun and (ii) the absence of subject-verb inversion (18). To remain theory neutral, I will refer to this construction as Left Dislocation (LD). As will be shown in §2.5, this construction features a base-generated constituents in the left periphery. Accordingly, it is equivalent to what is commonly

referred to as hanging topic left dislocation (HTLD) in the syntax literature (e.g., Anagnostopoulou 1997; Cinque 1977; Nolda 2004; Takita 2014).

(18) [My oupa]$_i$, ek het [hom]$_i$ jare laas gesien.
[My grandfather]$_i$, I have [him]$_i$ years last saw.
'My grandfather, I haven't seen him in years.'

Subjects (19), Direct Objects (20), and Indirect Objects (21) are all common constituents to appear as the left-dislocated phrase in an LD[6]. Note the absence of subject-verb inversion and the obligatory resumption in all these examples.

(19) [Die hond]$_k$, *([hy]$_k$) kou die been.
[the dog]k, *([he]k) chews the bone.
'The dog, he chews the bone.' (Subject LD)

(20) [Hierdie ring]i, die man het *([dit]i) gekoop.
[This ring]i, the man has [it]I bought
'This ring, the man bought it. (Direct Object LD)

(21) [Daardie meisie]n, ek het aan *([haar]n) n brief geskryf.
[That girl]n, I have to [her]n a letter wrote.
'That girl, I wrote a letter to her.' (Indirect Object LD)

Adjuncts can also be left dislocated in an LD, but those available for this operation must have a readily available resumptive pronoun. For example, temporal adverbs can be cross-referenced by the resumptive pronouns dan (then (future)) or toe (then (past)) (22); manner adverbs can be cross-referenced by the pronoun so 'like that' (23).[7]

(22) [Maandag]i, die studente moet hulle taak [dan]i inhandig.
[Monday]i, the students must their project [then]i submit.
'Monday, the students must submit their project then.' (adjunct LD - temporal adverb)

(23) [Netjies]j, die meisie skryf [so]j in haar boek.
[Neatly]j, the girl writes [like.that]j in her book.
'Neatly, the girl writes like that in her book.' (adjunct LD - manner adverb)

[6] Here, an interesting fact about the subject LD is noteworthy. Since the subject is originally pre-verbal in neutral sentences, the formal distinction between a neutral sentence and a subject LD would in principle be the presence or absence of a resumptive pronoun in the subject position, as seen in (19). However, as indicated by the comma after the dislocated phrase 'the dog', there is a noticeable pause which, without the resumptive pronoun, might convey something different in discourse, such as that the speaker is unsure, thoughtful, or speculative. Therefore, without the presence of a resumptive pronoun the intended effect of a subject LD is not achieved and (19) will just be a neutral sentence.

[7] Note, however, that manner adverbs are uncommon to surface as the left-dislocated phrase in LDs. The reason for this is discussed in §4.

Other types of adverbs, such as adverbs of degree or frequency or epistemic adverbs, cannot be cross-referenced by a resumptive and therefore cannot act as the left-dislocated phrase in LDs, (24).

(24) a. Ek het haar ongelukkig nie by die partytie gesien nie.
I have her unfortunately not at the party saw not.
'I unfortunately did not see her at the party.' (Unmarked Sentence)

b. Ongelukkig, ek het haar (*so/_) nie by die partytjie gesien nie.
Unfortunately, I have her (*like.that/__) not at the party saw not.
'*Unfortunately*, I did not see her (*like that) at the party.' (adjunct LD - epistemic adverb)

Lastly, multiple LDs are allowed within a single sentence (25). The order of these dislocated constituents tends to follow the canonical word order in main clause (25), although a certain degree of flexibility is allowed. Nevertheless, canonical order is heavily favoured, and any deviance could be seen as speech errors or anticipatory repair strategies.

(25) *Multiple LDs*
[Hierdie ring]$_i$, [daardie vrou]$_j$, [môreaand]$_k$, die man sal [dit]$_i$ vir [haar]$_j$ [dan]$_k$
[This ring], [that woman], [tomorrow.evening], the man will [it] to [her] [then]
gee.
give.
'This ring$_i$, that woman$_j$, tomorrow evening$_k$, the man will give it$_i$ to her$_j$ then$_k$.'

Interestingly, with the use of multiple LDs, whatever discourse effect was intended would be lost or reduced if the periphery is overloaded. Assuming that the Topic projection allows iteration (Rizzi 2004 et seq.), the different LDs could have slightly different interpretations in discourse. Also note the use of 'this' and 'that', hinting at the deictic nature of the dislocated element and that the constituent is closely tied to the present moment and context in which the utterance is being spoken.
The construction in (23) would be difficult to conceptualise without physical aids and is likely to involve pointing at specific objects and participants, rooting these constructs in time-, place-, and participant-sensitive settings.

2.3 Leftward Fronting in Afrikaans

The second construction to be introduced is characterised by obligatory subject-verb inversion and the absence of resumption, (26b-c). I refer to this operation as Leftward Fronting (LF).

(26) a. Ek het die stoel geskop.
I have the chair kicked.
'I kicked the chair.' (unmarked sentence)

b. Die stoel het ek __ geskop.
the chair have I __ kicked.
'The chair I kicked.' (object fronting)

c. *Die stoel ek het __ geskop.
*The chair I have __ kicked.
* 'The chair I have kicked.' (fronting object without S-V inversion)

d. [Die stoel]$_i$, ek het [dit]$_i$ geskop.
[The chair]$_i$, I have [it]$_i$ kicked.
*'The chair, I have kicked it.' (object left dislocation)

Any constituent in a sentence can be fronted, although some are less common than others. Direct objects (26b), indirect objects (27) and adjuncts such as temporal adverbs (28) or adverbs of place (29) may all function as a dislocated phrase in an LF. Locative adjuncts, on the other hand, are less common (29).

(27) Aan haar het ek n brief (*aan) __ geskryf.
To her have I a letter (*to) __ wrote.
'To her I wrote a letter.' (IO fronting)

(28) Vandag bak ek __ koekies.
Today bake I __ cookies.
'Today I bake cookies.' (fronted adjunct (temporal adverb))

(29) Op die plaas ry ek met n trekker (*op) __ rond.
On the farm drive I with a tractor (*on) __ around.
'On the farm, I drive around with a tractor.' (adjunct fronting - locative adverb)

In cases of adjunct fronting, the entire constituent must front as a unit with no preposition stranding allowed, as seen above in (27) and (29). This contrasts with what is observed with the LD (§2.2), where prepositions are uncommon to surface in the left periphery. This asymmetry will be explored in §2.4.

While multiple LDs are allowed in a single clause (§2.1), there appears to be only a single slot available for an LF constituent in Afrikaans, or that only a single LF can enter the CP at a time, since there cannot be multiple Left Fronted constituents in a sentence (30).

(30) *Attempt multiple fronted constituents*
*[Vir die hond]$_i$, [die been]$_j$ het ek __$_i$ __$_j$ gegee.
*[For the dog]$_i$, [the bone]$_j$ has I __$_i$ __$_j$ gave.
*'To the dog, the bone I gave.'

Finally, note that it is difficult to differentiate a Leftward Fronted Subject from a neutral sentence at the phonological level (compare (26a) with (31)). It is therefore difficult to determine whether the subject can be leftward fronted since the subject-verb inversion triggered by fronting an element, technically swaps the V2 verb with the empty slot left over by the moved subject, keeping the sentence in a neutral word order at the PF level.

(31) Ek het __ die stoel geskop.
I have __ the chair kicked.
'I have kicked the chair.' (subject fronting)

Also, as discussed in §1, due to the lack of overt case marking and subject-verb agreement in Afrikaans, the LFs can sometimes lead to ambiguity and confusion. When objects are fronted (26b), the fronted object triggers subject-verb inversion, essentially placing the subject in the objects position (see also 9b). Although the context likely implies that the dog is the object of the sentence, syntactically there is nothing to differentiate this from a sentence with neutral word order. This type of sentence is rooted in context and might include gesturing or over-stressing participants. In cases like these, some speakers might add in a dative case marking (32b) to remove the ambiguity, but the resulting sentence sounds marked and clumsy since the fronted object would technically take the accusative case, a process no longer overtly available for NPs in Afrikaans. This type of sentence would likely result in a further attempt at reparation.

The object-fronting in (26b) is not ambiguous since the subject pronoun *ek* (I) still retains its case, as opposed to the first-person object pronoun 'my' (me). Therefore, object fronting only works efficiently when pronouns are involved (26b) since only personal pronouns in Afrikaans still retain any overt case. This ambiguity is unique to LF constituents since, in the case of LDs, there is no subject-verb inversion and there is a resumptive pronoun that still occupies the necessary space within the main clause (32c).

(32) a. [Die hond] gaan die man __ skop.
[The dog] is.going.to the man __ kick.
'The dog is going to kick the man.'
(intended: 'The dog is going to be kicked by the man.') (Object fronting)

b. ?[Vir die hond] gaan die man __ skop.
?[To the dog] is.going.to the man __ kick.
'The dog the man is going to kick.' (PP fronting)

c. [Die hond]$_j$, die man gaan [dit]$_j$ skop.
[The dog]$_j$, the man is.going.to [it]$_j$ kick.
'The dog, the man is going to kick it.' (Object LD)

Given the facts introduced above, it is clear that the LD and the LF behave differently in syntax. This suggests that they are likely to be two distinct operations that may be able to co-occur. This prediction is borne out. The two phenomena can co-occur in the same clause. In such cases, LDs always precede fronted constituents, (33). The reverse yields in ungrammaticality, (34).

(33) *LD preceding LF*
[Daardie man]k, die ring het ek vir [hom]k __ gegee.
[That man]k, the ring has I to [him]k __ gave.
'That man, the ring I gave to him.'

(34) *Intended: LF preceding LD*
*[Die ring]$_o$, [daardie man]$_p$ ek het vir [hom]$_p$ —$_o$ gegee.
*[The ring]$_o$, [that man]$_p$, I had to [him]$_p$ —$_o$ gave.
*'The ring, that man, I gave to him.'

In section 2.5, I will present further evidence that the two constructions indeed differ from each other in nature – one involves an instance of Ā-movement and the other does not.

2.4 Wh-movement in Afrikaans

In Afrikaans, interrogatives are characterised by subject-verb inversion (35b-c). In *wh*-questions, subject-verb inversion is accompanied by the leftward fronting of the wh-word (35c). As in English, *wh*-fronting is obligatory except in echo-questions, (35d).

(35) a. Jy vang vis.
You catch fish.
'You're catching fish.' (Neutral Sentence)

b. Vang jy vis?
Catch you fish?
'Are you catching fish? / Do you fish?' (Yes-no question)

c. Wat vang jy [__]?
What catch you [__]?
'What are you catching?' (*Wh*-fronting)

d. Jy vang wat?
You catch what?
'You're catching what?' (*Wh-in-situ*)

Wh-fronting resembles the LF in various ways. Not only are both operations available to one constituent per clause (36b), neither can be accompanied by resumption (37) (Haegeman 1994).

(36) a. *Neutral Sentence*
Die dief het die juwele uit die kluis gesteel.
The thief has the jewels out the safe stole.
'The thief stole the jewels from the safe.'

b. *Intended: multiple wh-question*
([wie], [wat])/([wat], [wie]) het [__] [__] uit die kluis gesteel.
([who], [what])/([what], [who]) has [__] [__] out the safe stole.
*'Who, what stole from the safe?'

(37) a. *Neutral Sentence*
Ek het die sleutel verloor.
I have the key lost.
'I lost the key.'

b. *Intended: Wh-fronting with resumption*
Wat het ek (*dit) verloor?
What have I (*it) lost?
'What did I (*it) lose?'

Moreover, similar to the case of the LF, preposition stranding is optional if the wh-word can form a compound. In such cases, the wh-word either carries the preposition, which can either be two free standing morphemes or compounded (38a), with no duplicate remaining in the main clause, or the preposition gets stranded in the main clause, either a free-standing preposition or attached to the verb (38b), with no duplicate moved along with the wh-word into the CP (du Plessis 1977).

(38) a. *Wh-fronting with a pied-piped preposition*
Waaroor/Oor wat gaan die storie?
Where.over/Over what goes the story?
'What is the story about?'

b. *Wh-fronting with a stranded preposition*
Wat gaan die storie oor?
What goes the story over?
'What is the story about?'

Further, just like the case of LF, any constituent with a suitable wh-word replacement can be *wh*-fronted and like LF, the fronting of the pronoun that replaces the subject is difficult to show since there is no evidence of movement in the PF (39). In (39), if the movement occurs as we assume, the '*wie*' (who) must move into the CP before inversion occurs. The blank slot thus left by the moved Subject Wh-word then gets inverted to adhere to the V2 requirement.

(39) *Wh-fronted Subject*
Wie 1[_] het 2[_] die sleutel verloor?
Who 1[_] has 2[_] the key lost?
'Who lost the key?'

Considering all their similarities, we may conclude that the same method of construction by which *wh*-fronting happens, is also responsible for LF. Since *wh*-fronting is such a well-documented and well-researched process, it can be confidently categorised as a movement-based construction. This likely means that LF is also movement-based, as tentatively hypothesised in §2.3.

As predicted, *wh*-fronting can co-occur with LD, with each occupying separate slots in the CP. In such cases, LD always preceding the wh-word (40a), and multiple LDs are possible alongside *wh*-fronting. In contrast, co-occurrence of LF and wh-words is ungrammatical although comprehensible (40b). Accordingly, on a scale of acceptability, (40b) is far more acceptable than (40c). This would support the schematized structure proposed in Beninca and Poletto (2004) that the locus of wh-word is below that for the LF and the LD.

This ordering requirement can be seen in (40c-d): although the meaning of the sentence is relatively clear, the construction sounds incongruous. Rather than purposefully dislocated or moved into the CP, the left periphery in (40d) sounds overloaded and thrown together, meaning the intended discourse purposes of the LD and LF are lost. Either their purposes compete, or the overlap found between the processes involved in creating LF and *wh*-fronted constructions likely compete.

(40) a. *Left Dislocation and wh-fronting*
By die see, wat het jy daar gedoen?
At the sea, what have you there done?
'At the sea, what did you do there?'

b. *Leftward Fronting and Wh-Fronting*
?By die see, wat het jy gedoen?
?At the sea, what have you done?
? 'At the sea, what did you do?'

c. *Leftward Fronting and Wh-Fronting*
*Wat, by die see het jy (daar) gedoen?
*What, at the sea have you (there) done?
* 'What, at the sea, did you do (there)?'

d. *Left Dislocation, Leftward Fronting and Wh-Fronting*
?Die man, vir haar, wat het hy [__] [__] gegee?
?The man, for her, what has he [__] [__] gave?
? 'The man, to her, what did he give?'

In short, despite various similarities between LF and *wh*-fronted constructions, there are enough differences for these two constructions to warrant separate slots. Therefore, although there might be multiple slots available in the left periphery for LF constructions, they appear unlikely to be occupied simultaneously in Afrikaans.

2.5 Left periphery syntax tests

In what follows, I demonstrate through standard diagnostic tests within the Minimalist framework that LDs and LFs are fundamentally different. Through these tests, it becomes clear that LDs are base generated within the CP and that LFs behave much like wh-words and are moved into the CP from the main clause. The methods by which these different types of topics are constructed would explain why the LF is still beholden to the V2 requirement and the LD not, as well as why the LD is repeated with a resumptive pronoun in the main clause since it is not repetition but the original constituent filling the necessary slot within the clause without duplicating the constituent in the left periphery verbatim.

In 2.5.1, the three reconstruction tests consistently do not allow for sentences with LDs to retain their original readings indicating that these elements are outside of the main clause. In 2.5.2, the three island movement tests do not allow for movement from within constituents, making LF constructions, which are posited to occur through movement, ungrammatical but allowing LDs to occur since they are posited to be generated outside of the main clause.

2.5.1 Reconstruction effects

The first reconstruction test is the idiomatic test. The hypothesis is that if a left-dislocated phrase results in the loss of idiomatic reading, the phrase is likely to be base-generated in its spell-out position within the CP zone. Conversely, if the idiomatic reading is retained, it shows that the left-dislocated phrase Ā-moves from its theta-position within the main clause. The presence or absence of idiomatic reading thus serves as a useful test for Ā-movement (Potsdam & Edmiston 2016: 127; Rottman & Yoshida 2013).

The examples below indicate the LDs contain a base-generated left dislocation. As seen in (41), the idiomatic expression ‘to walk two rows of footprints’ is retained in the LF example (41c) but not the LD example (41b). This suggests that the former involves an instance of ¯A movement while the latter does not.

(41) *Idiomatic Test*

a. *Neutral*
Ons stap altyd twee rye spore na wilde partytjies.
We walk always two rows footprints after wild parties.
'We always walk two rows of footprints after wild parties.'
→ *idiomatic reading: We are very drunk after parties.*

b. *LD*
[Twee rye spore]i, ons stap [hulle]i altyd na wilde partytjies.
[Two rows footprints]i, we walk [them]i always after wild parties.
'Two rows of footprints, we always walk them after wild parties.'
→ *idiomatic reading lost*

c. *LF*
Twee rye spore stap ons altyd na wilde partytjies.
Two rows footprints walk we always after wild parties.
'Two rows of footprints we walk after wild parties.'
→ *idiomatic reading retained: We are drunk after parties.*

The same results obtain consistently with idioms. For example, the idiomatic expression 'to make a molehill into a mountain' (to make a small issue out to be larger catastrophe than it truly is) is retained with the LF (42c) while is lost with its LD counterpart (42b).

(42) *Idiomatic Reconstruction Test*

a. *Neutral*
Ek maak maklik 'n berg van 'n molshoop.
I make easily a mountain of a molehill.
'I easily make a mountain of a molehill.'
→ *idiomatic reading: Out of small problems, I easily make massive issues.*

b. *LD*
[n Molshoop]j, ek maak maklik [daarvan]j n berg.
[a molehill]j, I make easily [of.it]j a mountain.
'A molehill, I easily make a mountain of it'
→ *idiomatic reading lost*

c. *LF*
Van n molshoop maak ek maklik n berg.
About a molehill make I easily a mountain.
'Of a molehill, I easily make a mountain.'
→ *idiomatic reading retained: Out of small problems, I easily make massive issues.*

The same observations obtain with quantifier-variable binding test: only the LF shows reconstruction effects; the LD does not. As seen in (43), a leftward fronted pronoun in an LF can be bound by a quantificational subject in the main clause, (43c). In contrast, the left-dislocation in an LD does not reconstruct. Therefore, no bound variable reading is available between the pronoun and the quantificational subject in the LD example (43b).

(43) *Quantifier-variable binding test*

a. *Neutral*
[Elke ma]$_{<i>}$ is vir [haar]$_{<i>}$ kinders lief.
[Every mum]$_{<i>}$ is for [her]$_{<i>}$ children love.
'Every mum$_{<i>}$ loves her$_{<i>}$ children.'

b. *LD*
[Haar kinders]$_{<*i/j>}$, [elke ma]$_{<i>}$ is vir [hulle]$_{<j>}$ lief.
[Her children]$_{<*i/j>}$, [every mum]$_{<i>}$ is for [them]$_{<j>}$ love.
'Her$_{<*i/j>}$ children, every mum$_{<i>}$ loves them.'

c. *LF*
[Vir haar kinders]$_{<i>}$ is [elke ma]$_{<i>}$ _ lief.
[For her children]$_{<i>}$ is [every mum]$_{<i>}$ _ love.
'Her$_{<i>}$ children, every mum$_{<i>}$ loves.'

The same observation obtains with the examples in (44). A left-dislocated phrase in an LD cannot be bound by the quantifier in the main clause (44a), showing the absence of reconstruction effects. A fronted phrase in the LF, on the other hand, can be interpreted in as a variable. Therefore, there is no one-to-one correspondence between 'every woman' and the pronominal phrase 'her garden' in (44a), whereby 'her garden' can only be interpreted as a certain woman's garden. In contrast, in (44b), the bound variable reading (i.e., 'each woman walks in her own garden') is available.

(44) *Quantifier-variable binding test*

a. *LD*
[In [haar]$_{<j/*k>}$ tuin]$_{<i>}$, [elke vrou]$_{<*j/k>}$ stap [daar]$_{<i>}$.
[In [her]$_{<j/*k>}$ garden]$_{<i>}$, [every woman]$_{<*j/k>}$ walks [there]$_{<i>}$.
'In her$_{<j/*k>}$ garden, every woman$_{<*j/k>}$ walks there.'

b. *LF*
[In haar tuin]$_{<i>}$ stap [elke vrou]$_{<i>}$ ___.
[In her garden]$_{<i>}$ walks [every woman]$_{<i>}$ ___.
'In her$_{<j>}$ garden, every woman$_{<j/k>}$ walks.'

The observations above make a testable prediction: a fronted phrase in the LF may be a reflexive pronoun, whereas that in an LD cannot since a pronoun must be properly bound in its theta-position, given Condition A. The expected asymmetry between the LD and the LF is borne out by the examples in (45).

(45) *Reflexive Binding Test*

a. *Neutral*
Hy sien homself in die spieël.
He sees himself in the mirror.
'He$_{<j>}$ sees himself$_{<j>}$ in the mirror.'

b. *LD*
*[Homself], hy sien [hom] in die spieël.
*[Himself], hy sees [him] in the mirror.
'*Himself$_{<j>}$, he$_{<i>}$ sees him in the mirror.'

c. *LF*
Homself sien hy _ in die spieël.
Himself sees he _ in the mirror.
'Himself$_{<j>}$, he$_{<j>}$ sees in the mirror.'

To conclude, the results from these three reconstruction tests show consistently that LDs and LFs are distinctly different. The former contains a base-generated left dislocation, whereas the latter involves an instance of Ā-movement to the left periphery.

2.5.2 Island effects

The conclusion above allows for a second testable prediction: an LF should be sensitive to island conditions since it involves an instance of Ā-movement. In contrast, an LD should be immune to islands since it contains no phrasal movement to the left periphery.

This prediction is borne out by the pair of examples in (46): the LD sentence (46b) is not sensitive to Subject Island, whereas its LF equivalent (46c) displays island sensitivity. This suggests that the latter involves an (intended) movement out of the subject constituent, whereas the latter does not.

(46) *Subject Island Movement Test*

a. *Neutral*
[n Koppie koffie] verbaas Pieter.
[A cup coffee] surprises Peter.
'A cup of coffee surprises Peter.'

b. *LD*
[Koffie], n koppie [daarvan] verbaas Pieter.
[Coffee], a cup [of.it] surprises Peter.
'Coffee, a cup of it surprises Peter.'

c. *LF*
*Koffie verbaas n koppie _ Pieter.
*Coffee surprises a cup _ Peter.
*'Coffee, a cup of surprises Peter.'

Consistent with the results of the Subject Island Movement test, LD constructions (47b) in Afrikaans are immune to complex NP islands, whereas the LF constructions (47c) are not. This, again, shows that the LF is a movement-based construction while the LD contains no movement to the left periphery.

(47) *Complex NP Island Movement Test*

a. *Neutral*
Johan het die nuus, [dat Maria stad toe getrek het], gehoor.
John has the news, [that Mary city to moved has], heard.
'John heard the news that Mary moved to the city.'

b. *LD*
[Maria]i, Johan het die nuus, dat [sy]i stad toe getrek het gehoor.
[Mary]i, John has the news that [she]i city to moved has heard.
'Mary, John heard the news that she moved to the city.'

c. *LF*
*Maria het Johan die nuus dat _ stad toe getrek het gehoor.
*Mary has John the news that _ city to moved has heard.
*'Mary, John heard the news that moved to the city.'

Finally, the same observation obtains with adjunct island tests: extraction from an adjunct shows island sensitivity only in an LF but not an LD. This reinforces the conclusion earlier that the left-dislocated phrase in Afrikaans' LD is base-generated in its spell-out position.

(48) *Adjunct Island Movement Test*

a. *Neutral*
Dawid was kwaad [omdat1 sy vrou vir daardie man gesoen het].
David was angry [because his wife for that man kissed has].
'David was angry because his wife kissed that man.'

b. *LD*
[Maria]$_i$, Johan het die nuus, dat [sy]$_i$ stad toe getrek het gehoor.
[That man]$_i$, David was angry because his wife for [him]$_i$ kissed has.
'That man, David was angry because his wife kissed him.'

c. *LF*
*Vir daardie man was Dawid kwaad omdat sy vrou _ gesoen het.
*For that man was David angry because his wife _ kissed has.
*'That man, David was angry because his wife kissed.'

To conclude, reconstruction effects and island sensitivity reveal that the LDs and the LFs are constructed differently. The LDs pass the reconstruction tests and are immune to islands, while the LF resists to reconstruct and shows island sensitivity. These results point consistently to the conclusion that LFs are movement-based while the LDs features base-generation. Accordingly, the LDs is equivalent to what is commonly referred to as hanging topic left dislocation in the literature.

2.6 The left periphery of Dutch and German

For Dutch, De Vries (2009) summarises and demonstrates the types of left periphery constructions available to Dutch speakers. Like Afrikaans, Dutch is a V2 language with a preferred SVO or SV_2OV_{final} order. A neutral sentence is given in (49).

(49) *Dutch neutral sentence*
Ik ken die jongen niet.
I know the boy not.
'I don't know the boy.'

Dutch and Afrikaans speakers both have access to LDs, LFs and *wh*-questions. In Dutch, LDs are characterised by a constituent to the left of the first argument in a sentence and an anaphoric resumptive pronoun in the matrix clause (50). These constructions are also referred to as 'Hanging Topics' or 'Hanging Topic Left Dislocation' (HTLD) in the Dutch literature (De Vries 2009).

(50) *Dutch HTLD*
[Die jongen]$_i$, ik ken ['m/ ?hem/ ??die/ *deze]$_i$ niet.
[That boy]$_i$, I know [weak.him/ ?him/ DEM$_{dist}$/ DEM$_{prox}$]$_i$ not.
'That boy, I dont know him.' (De Vries, 2009, p.2 (5a))

(51) *Dutch HTLD*
[Joop]$_j$, ken je [die/ ?hem/ ??'m/ *deze]$_j$ niet?
[Joop]$_j$, know you [DEM$_{dist}$/ ?him/ weak.him /DEM$_{prox}$]$_j$ not?
'Joop, don't you know him?' (De Vries, 2009, p.15 (34b))

Dutch HTLDs have a strong preference for the weak version of pronominal form of 'him' (50), except in questions where a distal demonstrative is the preference (51) (De Vries 2009). These options are not available in Afrikaans.

Dutch also allows fronting of matrix internal constituents as in (52), which again, resembles wh-fronting closely (53). De Vries calls LF constructions 'topicalisation', and again, to avoid premature judgement of the construction's Information Structure, I will continue referring to this type of construction as LFs.

(52) *Dutch LF*
Die jongen ken ik __ niet.
that boy know I __ not.
'That boy, I dont know.' (De Vries, 2009, (3a))

(53) *Dutch wh-question*
Wie ken ik __ niet?
Who know I __ not?
'Who don't I know?'

If the above two sentences are taken as a question (53) and an answer (52), one can see that 'who' fits as replacement or substitute for 'the boy', which was originally generated in-situ (49) before being moved to the front. Observing the similarities between Afrikaans and Dutch, one can deduce that the same processes are involved with the various constructions, namely base-generation for Dutch LDs and movement for LFs and *wh*-questions.

A point of divergence between the two languages, however, comes from a fourth construction which Dutch speakers have access to but has been lost in Afrikaans. This construction, referred to as contrastive left dislocation (CLD) by De Vries (2009), has a constituent in the left periphery with an associated distal demonstrative instead of a resumptive pronoun, fronted in the matrix clause (54). The CLD shares some similarities with LDs, in that the constituent now appears in the left periphery and that there is a constituent between it and the obligatory V2. It also resembles LF, in that the demonstrative appears fronted in the main clause and triggers subject-verb inversion.

(54) *Dutch CLD*
[Die jongen]$_i$, [die/*deze]$_i$ ken ik niet.
[The boy]$_i$, [DEM$_{dist}$/*DEM$_{prox}$]$_i$ know I not.
'That boy, I dont know.' (De Vries, 2009, p.3 (6a))

This type of construction can still be found in older Afrikaans nursery rhymes or traditional songs and might still be used in some rural dialects. However, these are relatively fixed linguistic objects and since Afrikaans no longer uses demonstrative pronouns in this way, this construction is not commonly used in standard Afrikaans. According to den Besten (1981), it is possible that the LF construction contains a deleted demonstrative pronoun, however, he does not entertain this potential analysis in his discussion.

Nevertheless, depending on the ultimate purpose of the Dutch CLD construction in the discourse, a potential way for Afrikaans to compensate for its lack of demonstrative pronoun 'die' (the) could be to combine the LD construction with LF (55).

(55) *Afrikaans Direct Object LD and LF*
Daardie seun, hom ken ek __ nie.
The boy, him know I __ not.
'That boy, I dont know him.'

Of the three languages, the German left periphery is the most well-researched, German is also the most morphologically complex with three noun classes, feminine, masculine and neuter, and four cases, nominative, accusative, dative, and genitive. German also has subject-verb agreement and conjugates verbs according to Subject number and person. Like Afrikaans and Dutch, German is a V2 language, making the standard word order SV2OVfinal. In German, there appears to be two different types of Left-dislocation, German Left-dislocation (56) and Hanging Topic Left-Dislocation (57).

(56) *German LD*
Den Peter, [den/ ?ihn] kenne ich gut.
The.ACC.SG Peter, [the.ACC.SG/ him] know I well.
'Peter, I know him well.' (Fernandez-Sanchez & Ott, 2020, p.1)

(57) *German HTLD*
Den Hans, jeder mag ihn.
The.ACC.SG Hans, everyone likes him.
'Hans, everyone likes him.' (Frey, 2004)

The German LD appears very similar to the Dutch CLD construction since the matrix internal correlate is fronted, however, unlike Dutch CLDs, German LDs are not necessarily contrastive (Frey, 2004) and the case of the LD constituent matches the correlate in the main clause. Instead of demonstratives like in Dutch CLD constructions, the matrix internal pronoun for German LDs are weak d-pronouns instead of personal pronouns (Altman 1981) which is similar to weak pronouns in Dutch HTLDs (De Vries 2009). This might only be a strong preference in German (Fernandez-Sanchez & Ott 2020), however, Frey (2004) believes it a crucial element to distinguish between LD and HTLD in German since with strong pronouns, the binding effects that apply to LD constructions, fail like they do for HTLD constructions (Grohmann 2000).

The German LF is nearly identical to the Afrikaans and Dutch LF constructions. Most constituents can be fronted, including NPs (58b), PPs and AdvPs (58c).

(58) a. *Neutral*
Ich werde den Ball sofort werfen.
I will.1SG the.ACC.NEU ball immediately throw.
'I will throw the ball immediately.'

b. *LF Noun Phrase*
Den Ball werde ich [__] sofort werfen.
The.ACC.NEU ball will.1SG I [__] immediately throw.
'The ball, I will throw immediately.'

c. *LF Adverbial Phrase*
Sofort werde ich den Ball [__] werfen.
Immediately will.1SG I the.ACC.NEU ball [__] throw.
'Immediately I will throw the ball.'

With overt subject-verb agreement and case-marking, the examples above are easy to comprehend regardless of which constituent is fronted. Every example in (58) is subtly different and convey different discourse-level, pragmatic information.

In German, wh-words appear even more like LF constructions since 'who' still actively carries case. The case of 'who' is determined by its original position in the sentence, although some verbs and preposition always require a specific case. This can be seen in (59), where the 'who' is marked either with the nominative, accusative or dative case, reminiscent of the *wh*-pronouns in-situ position, and this prompts the case of the answer creating discourse-level connections between separate

utterances. Also note again that the verb continues agreeing with the subject, regardless of its moved position to after the V2.

(59) a. *Nominative 'who'*
Maria liebt dich. [Wer] [__] liebt dich?
Maria.3SG.FEM.NOM love.3SG you.2SG.ACC. Who.NOM [__] loves.3SG you.2SG.ACC
'Maria loves you. Who loves you?'

b. *Accusative 'who'*
Ich liebe Maria. [Wen] liebst du [__]?
I love.1SG Maria. Who.ACC loves.2SG you.2SG.NOM [__]?
'I love Maria. Who do you love?'

c. *Dative 'who'*
Wir helfen den Kindern. [Wem] helfen wir [__]?
We.1PL.NOM help.1PL the.PL.DAT children. Who.DAT help.1PL we.1PL.NOM [__]?
'Immediately I will throw the ball.'

In summary, across the Germanic languages, the LD constructions differ the most syntactically and are also the least productive of the two types. The LF constructions are the most versatile, the most productive and also the most similar in syntax across the three languages discussed. This means that the LF is likely also the most nuanced and diverse when it comes to the constructions underlying Information Structure. This will be demonstrated in Section 4.

3. The Right Periphery

3.1 The phenomena

Even in European linguistics, the right periphery has received much less attention in the literature than the left, as researchers' attention has mainly been on the Left Peripheries of Romance and Germanic languages. The lack of current research on Afrikaans' the right periphery is thus not surprising. However, it is perhaps because of its relative infrequent use that the right periphery in Afrikaans remains remarkably similar to that of Dutch and German, despite Afrikaans' reduced morphological complexity. It is the ways in which the various constructions have been defined, however, that vary and depend on the language and the linguist.

In this paper, the right periphery is defined as everything that surfaces to the right of the matrix clause that is syntactically and semantically dependent on said matrix clause. The following subsections will include descriptions of Right Dislocation (§3.2) and Afterthought (§3.3), using the definitions outlined by Kalbertodt et al. (2015) and those introduced in §1.2. §3.4 will contain the same reconstruction and movement tests used in Section 2.5 to determine the nature of the right periphery constructions, and §3.5 will again include a comparison between Afrikaans right periphery constructions and those equivalent constructions found in Dutch and German.

3.2 Right Dislocation in Afrikaans

In (60)-(62), different types of Right Dislocation (RD) are demonstrated in Afrikaans. RD constructions are used mainly to create cohesive pieces of discourse and to ensure that the information imparted in a conversation follows a logical path. The semantic properties of the RD will be explored more in Section 4, but for now, note that the resumptive pronoun in the main clauses preceding RD constructions can be both cataphoric and anaphoric, since the associated pronoun cataphorically references the RD, whilst simultaneously anaphorically referencing a constituent mentioned before or that is salient within the scope of the larger discourse event.

(60) [Hulle]$_i$ ruik darem maar lekker, jong, [die koekies van jou]$_i$.
[They]$_i$ smell at.least but nice, PAR, [the cookies of yours]$_i$.
'Wow, they smell rather good, your cookies!' (Subject RD)

(61) Ek ken [hom]$_i$ nie, [daardie man]$_i$.
I know [him]$_i$ not, [that man]$_i$.
'I dont know him, that man.' (Direct Object RD)

(62) Ek het [daar]$_i$ my eerste soen gekry, [op daardie bank]$_i$.
I have [there]$_i$ my first kiss got, [on that bench]$_i$.
'I got my first kiss there, on that bench.' (Adjunct (locative) RD)

(63) a. ?Sy het [so] gelyk, [treurig].
?She has [like.that] looked, [forlorn].
? 'She looked like that, forlorn.' (Adjunct (manner) RD)

b. ?Ek het die partytjie [so]$_k$ geniet, [heeltemal]$_k$.
?I have the party [like.that]$_k$ enjoyed, [completely]$_k$.
? 'I enjoyed the party like that, completely.' (Adjunct (degree) RD)

Like LDs, RDs can be created from any constituent with a reasonable pronoun, which means most NPs (59 & 60) and PPs (62) can occur as right periphery constituents. However, although (63a) and (63b) are grammatical, generally AdvP and AdjP are unlikely to occur as RD elements since they might not have suitable pronouns and are unlikely to have been mentioned before in discourse, with their effects usually being restricted to the single clause within which they occur. The exception to this seems to be temporal adverbs (64), which was also the case for LD (see Section 2.2). RDs freely allow prepositions in the right periphery constituent (62).

(64) Ek het haar [toe]$_n$ gesien, [Maandag/eergister]$_n$.
I have her [then]$_n$ saw, [Monday/day.before.yesterday]$_n$.
'I saw her then, Monday/the day before yesterday.' (Adjunct (temporal) RD)

Another similarity between LDs and RDs are that, theoretically, there can be multiple RDs in a sentence. I use 'theoretically' here since the right periphery is relatively unproductive making RDs rare to start with, so two or more constituents purposefully dislocated to the right periphery would

be even less likely. Rather, a combination of an RD and an Afterthought seems more reasonable. An example (65) is still given since it does result in a grammatical sentence, albeit a very clumsy and cluttered one. The second RD could easily be changed to an Afterthought with a change in prosody and intonation.

(65) *Multiple RDs*
[Sy]$_i$ het [dit]$_j$ gister vir Pieter gegee, [Susan]$_i$, [die brief]$_j$.
[She]$_i$ have [it]$_j$ yesterday for him gave, [Susan]$_i$, [the letter]$_j$.
'She gave it to him yesterday, Susan, the letter.'

Furthermore, the two associated constituents involved in the RD construction—the RD and its matrix internal correlate—appear to be connected semantically and prosodically. Like LD, RD does have agreement between the constituents i.e., the type of pronoun matches the type of RD phrase, and the two constituents have a 1:1 relationship, meaning the RD can replace the pronoun in the sentence with the sentence remaining grammatical and without any loss of information. Semantically, the RD is also like the LD in that it draws attention to the constituents involved, because of the unconventional syntactic construction, the repetition of the constituent and the highlighting effect this creates overall. This emphasis is reflected in the prosody of the sentence since the pronoun will carry the main stress in the sentence, perhaps showing some premeditation for the RD to come. Depending on the context and purpose of the RD, it can also mimic the stress or prosodic qualities carried by the matrix internal pronoun, reiterating their connection in the discourse whole.

3.3 Afterthought in Afrikaans

Afterthoughts are the second type of right periphery construction found in Afrikaans. Afterthoughts are nearly identical to RD constructions, but because Afterthoughts can relay both discourse-new information or information previously mentioned in discourse, resumptive pronouns (66) or complete phrases and clauses (67a-c) are options for matrix internal correlates. since they can also take resumptive pronouns as their matrix internal correlates. The examples in §3.2 given for Right Dislocation could also occur as Afterthoughts in different scenarios and with different prosodic deliveries. In these instances, the difference between RDs and Afterthoughts would largely rely on context and prosody.

(66) *Afterthought with Pronoun*
Die hond het [haar] gebyt, [(vir) my suster].
The dog has [her] bit, [(to) my sister].
'The dog has bitten her, my sister.'

When using an NP correlate, the Afrikaans Afterthought can be used to clarify familiar information (67a) or introduce new information into the discourse (67b). (67a) for example, might be differentiating between multiple sisters, whereas (67b) could be elaborating on who 'Mieke' is and why she is important to the speaker or relevant in the discourse. In (67c) it is demonstrated that significantly larger units of information can be Afterthoughts (Wasow 2002).

(67) a. *Afterthought with NP*
Die hond het [my suster]$_n$ gebyt, [(vir) Mieke]$_n$.
The dog has [my sister]$_n$ bit, [(for) Mieke]$_n$.
'The dog has bitten my sister, Mieke.'

b. *Afterthought with NP*
Die hond het [vir Mieke]$_n$ gebyt, [(vir) my suster]$_n$.
The dog has [for Mieke]$_n$ bit, [(for) my sister]$_n$.
'The dog has bitten Mieke, my sister.'

c. *Afterthought with clause*
Ek het [dit]$_n$ met my eie oë gesien, [dat die hond my suster gebyt het]$_n$.
I have [it]$_n$ with my own eyes saw, [that the dog my sister bit has]$_n$.
'I saw it with my own eyes, that the dog bit my sister.'

Another difference between RDs and Afterthoughts are that Afterthoughts tend to act like linguistic repairs (Kalbertodt et al. 2015), whilst RDs seem to have set structures. In Afrikaans, Afterthoughts are used to clarify or correct a potentially ambiguous constituent in the matrix clause, and this can be done either by reiterating known or previously active information in the discourse, or to introduce new information to elaborate or differentiate the associated matrix constituent from other information.

The Afterthought construction can also have pragmatic fillers attached, like 'I meant' or 'You know' (68).

(68) *Afterthought with Pragmatic filler*
Ek het [hulle]$_h$ dan uitgestuur, [die uitnodigings]$_h$, bedoel ek.
I have [them]$_h$ PAR sent.out, [the invitations]$_h$, mean I.
'But I did send them out, the invitations, I mean.'

Finally, like the RDs, the preposition is also available in Afterthought periphery constituents, which sets the dislocation to the right apart from dislocation the left periphery (69-70). As mentioned, both right periphery constructions occur almost exclusively in speech and discourse, with Afterthoughts often being used as a repair strategy, meaning there might be little to no premeditation involved and the resulting structure has a wider range of acceptability. The Afterthought is also prosodically separate from the matrix clause, meaning the added preposition might feel more natural, acting as a reminder of where the RD or Afterthought fits into the original matrix clause, reminiscent of its matrix internal correlates relationship to the other constituents.

(69) *LD with preposition*
[(*vir) Maria]$_i$, ek het die geskenk vir [haar]$_i$ gekoop.
[(*to) Maria]$_i$, I have the gift [to her]$_i$ bought.
'Maria, I bought the gift for her.'

(70) *Afterthought/RD with preposition*
Ek het die geskenk [vir haar]$_j$ gekoop, [(vir) Maria]$_j$. Sy het verjaar.
I have the gift [to her]$_j$ bought, [(to) Maria]$_j$. She has birthday.
'I bought the gift for her, (for) Maria. It was her birthday.'

It is noteworthy that multiple Afterthoughts are usually disallowed, as this makes the sentence denote a confusing scenario where multiple matrix-internal constituents need clarification. This would not be conducive to optimal communication and would likely result in rephrasing. However, it is possible for an RD and an Afterthought to co-occur (65) since the two fulfil different functions in discourse. In such cases, the RD obligatorily precedes the Afterthought, since the prosodic qualities to differentiate the Afterthought from an RD, would separate both constituents from the main clause, either resulting in two constituents that sound completely disconnected from the main clause or that sound more like two Afterthoughts.

As introduced at the beginning of this section, RDs and Afterthoughts behave very similarly in syntax. If the Afterthought in question had a pronoun correlate and did not have a preposition, it would be indistinguishable from an RD except for their function and the prosody of the construction in PF.

3.4 Right periphery syntax tests

In terms of syntactic behaviours, Afrikaans' two right peripheral constructions behave very similarly. Formally, an RD is indistinguishable from an Afterthought, and native speakers rely heavily on prosody and context to differentiate between the two. Both constructions feature a right dislocated phrase that is co-referential with a constituent in the matrix clause, but only the Afterthought may be co-referential with a full NP and co-occur with additional pragmatic phrases such as 'I mean' or 'I think'. Syntactically, however, the distinction between an RD and an afterthought is unclear. This will be seen in this subsection with a detailed discussion of the diagnostics tests that enable this conclusion.

3.4.1 Reconstruction effects

As discussed in §2, given the standard assumption with the Minimalist Program that only Ā-operations show reconstruction effects, if a dislocated phrase can be interpreted in its theta-position, we can conclude that the construction involves an instance of Ā-movement. If, however, the right-dislocated phrase does not reconstruct, we can conclude that it is base-generated in its spell-out position.

The idiomatic test in (71) indicates that both the RD and the Afterthought show no reconstruction effects, given the unavailability of idiomatic expression in both (71b) and (71c).

(71) *Idiomatic Test*

a. *Neutral*
Hy het per ongeluk die aap uit die mou gelaat.
He has per accident the monkey out the sleeve let.
'He accidentally let the monkey out of the sleeve.'
→ *idiomatic reading retained: He accidentally revealed the secret/surprise.*

b. *Right Dislocation*
Hy het per ongeluk dit uit die mou gelaat, die aap.
He has per accident it out the sleeve let, the monkey.
'He accidentally let it out of the sleeve, the monkey.'
→ *idiomatic reading lost*

c. *Afterthought*
Hy het per ongeluk [die aap]/[die kleiner een] uit die mou gelaat. [Die kleiner een]/[die aap], (bedoel ek).
He has per accidental the monkey/the smaller one out the sleeve let. The smaller one/the monkey, (mean I).
'He accidentally let the monkey/the smaller one out of the sleeve. The smaller one/The monkey, (I mean).'
→ *idiomatic reading lost*

Consistent with the results above, the right-dislocated phrase in both constructions cannot be interpreted as a variable bound by the quantificational subject in the matrix clause (72). This again, indicates the absence of Ā-dependency between the matrix pronoun and its equivalent in the right edge.

(72) *Quantifier-variable binding test*

a. *Neutral*
Elke kind$_{<i>}$ gee vir hul ouers$_{<i>}$ drukkies.
Every child$_{<i>}$ gives to their parents$_{<i>}$ hugs.
'Every child gives hugs to their (own) parents.'
Reading: Every child hugs their own children.

b. *Right Dislocation*
Elke kind$_{<i>}$ gee vir hulle$_{<*i/j>}$ drukkies, hul ouers$_{<*i/j>}$.
Every child$_{<i>}$ gives to them$_{<*i/j>}$ hugs, their parents$_{<*i/j>}$.
'Every childs hugs them, their parents.'
→ *Reading: Every child hugs them, a specific person's parents.*

c. *Afterthought*
Elke kind$_{<i>}$ gee vir hulle$_{<*i/j>}$ drukkies, vir hulle *(eie$_{<i>}$) ouers$_{<*i/j>}$, meen ek.
Every child$_{<i>}$ gives to them$_{<*i/j>}$ hugs, to their *(own$_{<i>}$) parents$_{<*i/j>}$, mean I.
'Every child hugs them, their own parents, I mean.'
→ *Reading without (own): Every child hugs them, a specific person's parents.*

The reflexive binding test points to the same conclusion as the idiomatic reconstruction test. Consider (73b-c).

(73) *Reflexive binding test*

a. *Neutral*
Die kat was homself.
The cat washes himself.
'The cat washed itself.'

b. *Right dislocation*
Die kat was hom, homself.
The cat washes him, himself.
'The cat washes it, itself.'
→ *reflexive reading lost*

c. *Afterthought*
Die kat was hom, (vir) homself.
The cat washes him, (for) himself
'The cat washes it, for itself.'
→ *reflexive reading lost*

Given the observations above, we can conclude that neither the RD nor the Afterthought construction involves an instance of Ā-movement. This indicates that both the RD and the Afterthought is base-generated in its spell-out position and be semantically linked to its matrix antecedent through co-indexation.

3.4.2 Island effects

Given the observation above, we would expect both the RD and the Afterthought to be insensitive to island conditions. This prediction is borne out by the tests above. Consider first the examples in (74), which show both the RD and the Afterthought are immune to subject islands.

(74) *Subject Island Test*

a. *Neutral*
Die storie oor Susan het my laat lag.
The story about Susan has me let laugh.
'The story about Susan made me laugh.'

b. *Right dislocation*
Die storie oor haar het my laat lag, (*oor) Susan.
The story about her has me let laugh, (*about) Susan.
'The story about her made me laugh, (the story about) Susan.'

c. *Afterthought*
Die storie oor haar het my laat lag, (oor) Susan, (die meisie wat daar sit).
The story about her has me let laugh, (about) Susan (the girl what there sit).
'The story about her made me laugh, (the story about) Susan, (the girl who sits there).'

Since the reconstruction tests demonstrated that the constructions are likely not movement-based, the results are as expected.[8] The same result obtains with the complex NP island test (75). Again, both constructions show island immunity whereby the right-dislocated phrase can be co-referential with a phrase embedded inside a complex NP.[9]

(75) *Complex NP Island Test*

a. *Neutral*
Ek moes die nuus, dat Johan met Maria gaan trou, by my ma hoor.
I had.to the news, that John with Mary goes marry, at my mother hear.
'I had to hear the news, that John was marrying Mary, from my mother.'

b. *Right dislocation*
?Ek moes die nuus, dat [hy] met Maria gaan trou, by my ma hoor, [Johan].
?I had.to the news, that [he] with Mary goes marry, at my mother hear, [John].
? 'I had to hear the news, that he was marrying Mary, from my mother, John.'

c. *Afterthought*
Ek moes die nuus, dat hy met Maria gaan trou, by my ma hoor, Johan, (bedoel ek).
I had.to the news, that [he] with Mary goes marry, at my mother hear, [John], (mean I).
'I had to hear the news, that he was marrying Mary, from my mother, John (that is).'

[8] Although (74b-c) is grammatical, the sentence relies on appropriate context to be fully acceptable. The RD constituent refers back to the resumptive pronoun in the matrix clause, but the resumptive pronoun cannot be purely cataphoric and must be referring back to something mentioned previously in the discourse.

[9] Note that the RD example here would be more natural under a given context, and the resumptive pronoun must be referring to information that has been mentioned before, for the sentence to make sense. Afterthoughts are more flexible and can be used to introduce new information. This indicates that although the constructions appear very similar, they are distinct and separate types of right periphery constructions.

As predicted, both the RD and the Afterthoughts are insensitive to adjunct islands. Consider (76b-c).

(76) *Adjunct Island Test*

a. *Neutral*
Lisa kan maak net wat sy wil as sy die hele strand besit.
Lisa can make just what she wants if she the whole beach owns.
'Lisa can do whatever she likes if she owns the entire beach.'

b. *Right dislocaiton*
?Lisa kan maak net wat sy wil as sy dit besit, [die hele strand].
?Lisa can make just what she wants if she it owns, [the whole beach]
? Lisa can do whatever she likes if she owns it, the entire beach.'

c. *Afterthought*
Lisa kan maak net wat sy wil as sy die hele ding besit, die strand.
Lisa can make just what she wants if she the whole thing owns, the beach.
'Lisa can do whatever she likes if she owns the whole thing, the beach.'

The results above follow consistently from the conclusion in §3.4.1 that neither construction involves an instance of discourse-driven movement. Proposing that these constructions are instead base generated considering the results of the reconstruction and island tests, would be logical. Yet, although the movement tests are grammatical, the two types of right periphery constructions are not equally as acceptable, suggesting that the solution might lie with some other constraint on a higher linguistic level such as semantics or pragmatics than purely syntax. It is clear though that the right periphery constructions are not movement-based and thus extraction does not occur.

Notice also that the Afterthoughts are more acceptable than the RD constructions, likely due to the flexibility afforded to this construction along with its repair strategy status. It might also stem from the fact that the RD is more likely to be planned, with the aim to add something more about the dislocated constituent or to have it be the discourse topic or discourse focus further along in that particular discourse context.

Additionally, in the case of (75), the constructions also have fewer items between correlates, which was an issue for the Adjunct Island movement test for the left periphery (§2.4), where body language and prosodic cues would have been used to convey the association between correlates that span across the main clause. Despite its 'linguistic repair strategy' status, Afterthoughts are also done purposefully, although clearly for a different semantic reason which will be explored more in §4.

3.5 Afrikaans' right periphery as a mirror of the left

A remaining question of the current analysis concerns the nature of the right-dislocated phrases: Are they base-generated in the right edge of the matrix clause, or are they part of a larger structure independent of the main clause?

Specifically, it remains to be asked whether the Afterthought is indeed a right-dislocated fragment located within the matrix CP, especially considering its prosodic separation from the main clause. The RD, on the other hand, presents a different problem. Since the rest of the discourse in a RD construction has a high chance of being about the dislocated element, without clear prosodic

evidence, it is difficult to determine whether the RD is dislocated from the first matrix clause or if it is in fact a left dislocated item, bound to a proposed second clause.

As mentioned throughout §3.2, the RD is remarkably like the LD in that they both are optional constructions, require a correlate or resumptive pronoun in the matrix clause, that neither triggers subject-verb inversion, and that both have similar prosodic qualities. The LD and RD mirror each other as the two base-generated constituents that remain closest to the clause but on opposite sides. In §2 it will also be shown that both constructions are restricted to 'known' or 'given' information.

Despite their similarities, the LD and RD still surface on opposite sides of their respective matrix clauses. The LD, depending on its function within a particular setting, usually affects the clause that follows and is semantically linked to it through the resumptive pronoun. There is also a high chance of the subsequent sentence to be about the LD. The RD, however, does not hold as significant sway over the preceding matrix clause, despite being connected to matrix-internal correlate. For these reasons, it has been theorised that the RD might not be dislocated from the first matrix clause but that it is in fact a left dislocated item, bound to a second clause deleted in PF.

The 'Right Dislocation as Deletion'-theory has quickly garnered popularity amongst researchers, such as Ott and De Vries (2015) for Dutch and German, and Tanaka (2001) for similar constructions in Japanese. The Deletion Theory helps clarify several questions generated by a base-generation in the right periphery assumption, as well as offered a much 'cleaner' picture for the syntactic relationship between the left and right peripheries since it eliminated the need for RD-specific rules. According to this view, illustrated in (77), the RD attached to the main clause (CP1) is instead a constituent moved to the pre-field of the second clause (CP2). Everything but the left periphery constituent, t, is then deleted from CP2 in the PF to avoid redundancy.

(77) $[_{CP_1}$ ... correlate ...$]$ $[_{CP2}$ XP [~~C ... S V . . .~~ ...]] (Ott & de Vries, 2015)

Whether this theory should be applied to both RD and Afterthoughts was questioned by Shimoyama et al. (2015). Since the two constructions appear superficially so similar, it would be an easy assumption to make. However, whilst the RD is easily reinserted into the preceding matrix clause or a deleted comment, the flexibility surrounding what can be included in Afterthought constituents, makes reconstructing a plausible second clause challenging. Since Afterthoughts are also more flexible with what is easily dislocated and the amount of information it can convey, it does seem likely that the RD and the Afterthought might not arrive at their position in the same way or occupy the same slot within the syntactic framework.

3.6 The right periphery of Dutch and German

De Vries (2007, 2009, 2016) has done a substantial amount of research for the Dutch right periphery from which others (Fernandes-Sanchez & Ott 2020; Ott & De Vries 2016) have been able to build their work in the past decade. He pays specific attention to the Information Structure of the two right periphery constructions available to Dutch speakers, which he refers to as Right Dislocation (RD) and Afterthoughts (2009).

De Vries (2009) characterises RD elements or Backgrounding Right Dislocation (BRD) as he refers to them, by their associated resumptive pronoun co-indexed in the matrix clause (78).

(78) *Dutch BRD*
Ik ken ['m]$_i$ niet, [die jongen]$_i$.
I know [him]$_i$ not [that boy]$_i$
'I dont know him, that boy.' (De Vries, 2009, p.2 (5b))

Furthermore, the Dutch BRD is associated with known or familiar topics and information, whereas the other construction, Afterthoughts are more often used to introduce new information. Another difference is that Afterthoughts are not co-indexed in the matrix clause by a resumptive pronoun but instead by a NP correlate (79 & 80; De Vries 2009: 13).

(79) *Afterthoughts in Dutch*
Hij heeft [zijn zus]$_j$ uigenodigd voor het feest, [Mieke]$_j$.
He has [his sister]$_j$ invited for the party [Mieke]$_j$.
'He invited his sister for the party, Mieke.' (De Vries, 2009, p.3 (6b))

(80) *Afterthoughts in Dutch*
[Een grote, bebaarde man]$_k$ stond op het marktplein, [Barbarossa]$_k$.
[a big bearded man]$_k$ stood on the market.place [Barbarossa]$_k$
'A big, bearded man was standing on the market place, Barbarossa.'

Unlike RD where the dislocated element could directly replace the resumptive pronoun without any loss of information, both the correlate and the Afterthought provide different information and replacing the associated NP with the Afterthought, although grammatical, might result in less information being conveyed. However, for (79) and (80), the Afterthoughts can be (re-)inserted into their respective sentences before or after their in-sentence correlates.

De Vries also states that, prosodically, Afterthoughts receive an independent pitch accent, whereas RD leads to deaccenting. The Dutch examples given in De Vries (2009) also consistently have the Proper Nouns as the Afterthoughts, which he claims is used to host new information. For the German right periphery, the literature is also limited in comparison to that which was available for the left periphery. Unlike the left periphery where the research for the various languages followed similar approaches and featured similar definitions, the literature for German tends towards an analysis that differs substantially from its Dutch counterparts.

According to Kalbertodt et al. (2015), the restriction of resumptive pronoun to RD as mentioned in De Vries (2009), is not present for German. Instead, both constructions can be co-indexed with a resumptive pronoun and both constructions involve information previously mentioned or discussed in the conversation. The biggest difference between RDs and Afterthoughts for German, according to Kalbertodt et al. (2015) is that RDs (81) are usually about established topics, whereas Afterthoughts (82) are more about disambiguating between alternatives.

(81) *German RD - Context*
A: Ich habe gehört, du magst [Peter]$_m$ gern.
A: I have heard, you like Peter eagerly.
'I heard you like Peter a lot.' (Kalbertodt et al. (2015))

German RD
B: Das tue ich. Ich habe [ihn]$_m$ neulich getroffen, [den Peter]$_m$.
B: That do I. I have [him]$_m$.ACC recently met, [the.ACC Peter]$_m$.
'I do. I've met him recently, Peter.' (Kalbertodt et al. (2015))

(82) *German Afterthought - Context*
A: Kennst du [die Frau] und [das Model]?
A: Know you [the.FEM woman] and]the.NEU model]?
'Do you know the woman and the model?'] (Kalbertodt et al. (2015))

German Afterthought
B: Ich habe [sie] eben getroffen. [Das Model], meine ich.
B: I have her just met. The.NEU model, mean I.
'I've just met her. The model, I mean.' (Kalbertodt et al. (2015))

Additionally, in German, another point of differentiation between RD and Afterthought is that the noun genders (word classes) and cases of the RD and associated pronoun must agree (81), whereas the Afterthought and associated pronoun do not require agreement (82) (Kalbertodt et al. 2015). In (81), 'Peter' is a masculine Proper noun, which matches the pronoun 'ihn' in the matrix sentence. In the context given in (82), 'die Frau' is a feminine noun, whereas 'das Model' is a neuter noun. In the Afterthought, the matrix correlate pronoun is feminine, yet refers to the neuter 'das Model' in the right periphery. This distinction is not relevant for Afrikaans, which does not have gender or case that could potentially disagrees, but it does highlight the differences between how (dis-)connected RDs and Afterthoughts are to their respective matrix clauses.

For German RDs, there is also the option of having the cataphoric correlate be a d-pronoun instead of a personal pronoun, which is the preference according to Fernandez-Sanchez & Ott (2020) for both German LDs and RDs (83). This preference is more pronounced in German LD constructions than RDs since in (83) either pronoun is equally as acceptable. Nevertheless, Fernandez-Sanchez & Ott (2020) state that this preference may be present across languages with weak or minimal pro-forms available, which is supported by De Vries' findings for Dutch HTLDs and RDs (2009).

(83) *German RD*
Ich kenne (den/ihn) gut, den alten Professor.
I know (*d*-him/him) well, the.ACC old professor.
'I know him well the old professor.' (Fernandez-Sanchez & Ott, 2020)

The two right periphery constructions are available across all three Germanic languages and despite having very few overt syntactical differences, the tendency is to separate the constructions into separate categories. Furthermore, all three languages show distinct prosodic differences between the two types of constructions. Despite the very different approaches to analysing RD and

Afterthought, them being prosodic different is the main similarity between the assessments of De Vries (2009) and Kalbertodt et al. (2015) for their respective languages' differences between RD and Afterthought.

4. Information Structure of Afrikaans' Left and Right Peripheries

In this section, I investigate how the constructions investigated in §2 and §3 encode information structure in narrow syntax. I will begin with a more traditional approach to Information Structure, reviewing the notion of *topic* and *focus* in the literature with a particular focus on how these terms relate to discourse functions. Here, I depart from previous work on Afrikaans, which tend to use a particular label (e.g., Topic, Focus) without explaining the item's specific use in discourse. The aim is to arrive at a more nuance description of (i) how LD, LF, RD, and Afterthought is used in discourse and (ii) what discourse features are associated with each syntactic device. Throughout the discussion I will revisit Beninca and Poletto's (2004) work on the fine structure of the left periphery, as well as draw from De Vries' work regarding the Information Structure of the Dutch left and right peripheries. Whereas Beninca and Poletto take an approach more focused on the position of the construction within the sentence syntax, De Vries provides a more nuanced breakdown of the discourse functions and characteristics of each construction. Similarly, my goal is to present a more nuanced breakdown of the discourse functions and characteristics of each periphery construction and tie individual constructions back to their slots within the sentence whole.

A *discourse topic* has been traditionally defined as what the rest of the sentence(s) is about (Gundel 1988; Moutaouakil 1989; Rizzi 1997), and as 'provid[ing] the context for the main predication, which is assessed relative to the topic' (Gundel & Fretheim 2004: 181). This is also referred to as *aboutness* in the literature (De Vries 2009; Reinhart 1982). A discourse topic introduces the discourse-context and is usually used in conjunction with a 'comment' that offers up new information about the given topic.

The *discourse topic* is usually discussed in conjunction with the *discourse focus* as the two most salient referents in discourse (Arnold et al. 2013). A *discourse focus* is often defined as carrying the most prominent information in a sentence (Halliday 1967). The *focus* is usually contrasted with the *discourse topic*, with the focus thought to convey new and highlighted information and the topic relating given or assumed and backgrounded information (Arnold et al. 2013; Chafe 1976; Skopeteas et al. 2006). According to Gundel (1988), the comment that follows a discourse topic, usually contains a focus. This focus would be a central part of the proposition and would not have a comment, unlike a *discourse topic*. For syntax, if there is a focus position in the CP it is proposed to occur between the syntax-Topic projection and the finite verb (Beninca & Poletto 2004; Rizzi 1997, 2004).

Instead of differentiating between 'New and 'Given' for Topic and Focus, this paper will follow the scale of 'activation' proposed in Chafe (1976) and Lambrecht (1994) for the following discussion. According to Chafe and Lambrecht, a concept can be 'active' in discourse (meaning that it is salient within the discourse and has been introduced or mentioned before), 'semi-active' (meaning that the information is accessible from within the speaker and addressees peripheral or background consciousness), or 'inactive' (either meaning the information is completely new or has been introduced from within long-term memory). Therefore, the *discourse topic* of a sentence is usually (semi-)active, salient, and specific, as it has usually been introduced previously in the discourse, whereas the discourse Focus can be along any point of the activation scale.

The *discourse topic* is different from how the term *Topic* is used in syntactic studies. The latter often use the term *Topic* to refer to any left-dislocated phrase that bears no clear focus/*wh*-properties. According to the syntax definitions of the Topic projection discussed in §2 (Rizzi, 1997, 2004; Beninca & Poletto, 2004), the LD in Afrikaans is most likely to be a Topic construction, since it requires a resumptive pronoun, it lacks pied-piped prepositions, and precedes the movement-based left periphery constructions. However, the syntax and discourse definitions do not have a one-to-one relationship, and not all *discourse topics* are LDs, and neither are all LDs *discourse topics*. Beninca and Poletto (2004) notes three types of LDs that can be syntax Topics - Topic, Theme, and Contrastive Topic - and they correspond relatively well to some of the discourse functions left periphery constructions can assume. First, they distinguish between Topic and Theme, arguing that the Topic element is present in the shared knowledge of the speaker and hearer but is not accessible in the immediate context that it cannot be recovered (2004: 63). A Theme, however, is an LD element which can be retrieved from the surrounding context. In other words, they argue that the Topic relates semi-active information, whilst the Theme references active information.

4.1 Investigating the Information Structure of Afrikaans' left and right peripheries

According to the definitions discussed above, the response in (84) is a Theme LD within the context of Speaker A's utterance since the information regarding 'Daniel' has been activated. Without the context of speaker A, however, (B) becomes a Topic LD since 'that man' would have to be semi-active and not completely inactive. If it was inactive, nobody would know who Speaker B was referring to.

(84) *Context*
A: Kan jy glo? Daniel het alweer by die baas gaan kla.
A: Can you believe? Daniel has again at the boss go complain.
A: 'Can you believe it? Daniel has complained to the boss again.'

B1: Ugh! Daardie man, ek kan hom net nie verdra nie. Hy (...).
B1: Ugh! That man, I can him just not endure not. He (...).
B1: 'Ugh! That man, I cannot stand him. He (...).' (LD)

B2: Ek kan hom nie verdra nie, daardie man!
B2: I can him not endure not, that man!
B2: 'I can't stand him, that man! (RD)

Considering the similarities between LDs and RDs (§3), the above definition can be extended to include the right periphery. By the same logic, since RDs have a cataphoric resumptive pronoun in the main clause, the RD must contain active information and can only be a Theme. Without the Speaker A Context, the RD would have to be semi-active already for the utterance to make sense. If this were to be tied in with the RD as deletion-theory, one could argue that only LD Themes can be deleted in the PF to be expressed as RDs.

For LDs, Beninca and Poletto (2004) mentions contrastive LDs as well. Contrast means that given options are eliminated, or one element is contrasted with another. These LDs are salient in the discourse and usually involve active information. They may be what the sentence is about but contrast usually plays a larger role in global discourse and exist in juxtaposition to a different

constituent. *contrast* and *aboutness* are therefore unlikely to overlap precisely as characteristics but it is unlikely that any constituent with contrast does not also carry some weak aboutness, and vice versa. This is demonstrated in (85) where, depending on the prosodic emphasis and the rest of the discourse, the same LD can have different functions, prompting different ways to continue the statements. Of course, spontaneous language will never align perfectly with predictions, but these patterns are the most likely and by signalling ahead of the 'comment' what the rest of the utterance is most likely to be about, comprehension time and clarity increases (Yang et al. 2017).

(85) *Context*
A: Waar is my brille?
A: Where is my glasses?
A: 'Where are my glasses?'

B1: JOU brille, ek het HULLE nie gesien nie, maar ek het MARIA s'n gevind.
B1: YOUR glasses, I have THEM not saw not, but I have MARIA poss found.
B2: 'Your glasses, I haven't found them, but I did find Maria's. (LD)

B2: Jou BRILLE, ek het hulle nie gesien nie, maar ek het jou SERP gevind.
B2: Your GLASSES, I have them not saw not, but I have your SCARF found.
B2: 'Your glasses, I haven't seen them, but I have found your scarf.' (LD)

The comment of B2 for example, could easily attach to the Topic of B1 and still make sense but trigger something like 'linguistic dissatisfaction', akin to garden path sentences that often require more time to process correctly. Despite this, there is a general trend that can be observed with these constituents regarding the types of information they can contain. This demonstrates that Information Structure cannot be viewed in isolation but as part of a global discourse to fully understand the nuances of their functions and characteristics (Yang et al. 2017), and although these categories might not exactly match those suggested by Beninca and Poletto (2004), the division between different types is a good place to start.

De Vries investigates the Information Structure of the base-generated Periphery constructions in Dutch. He proposes four information-structural features (86) and investigates the possible combinations of functions that single constructions can convey at a time.

(86) *information-structural features*
[about] - what the sentence is about
[new] - Update information;
[add] - additional information, not part of the main proposition;
[contrast] - activated presupposition of alternatives, plus a choice. (De Vries, 2009, p. 5)

With these proposed features, De Vries presents an elaborate picture of Dutch's Information Structure. His proposal will be reviewed at the end §4.1 in comparison to the Afrikaans facts.

Although De Vries (2009) creates a nuanced grid of the possible IS attributes of the various Dutch periphery constructions, I believe that the 'new vs given' contrast in analyses regarding the IS of languages, since these terms are not antonyms and do not accurately convey different levels of accessibility. Although the scale of activation would be more accurate if elements could be placed on

a scale of salience in relation to other constituents, this is not feasible in the scope of this paper. However, the three levels of activation will be used to describe the IS of Afrikaans.

The other features were discussed in relation to Beninca and Poletto's types of LD constructions, such as [contrast] and [aboutness], which have proven useful and relevant. [add] is especially relevant to the right periphery, where the constituents are not as prominent as those in the left periphery and will be discussed momentarily. For now, however, these features are good a foundation. Classifying peripheral constructions in terms of one or more of these categories should give an idea of how particular the system truly is.

To discuss [add], the right periphery constructions are the most relevant since LDs are unlikely to carry [add]. Because of their prosodic qualities and their position at the front of the sentence, LDs tend to be the more prominent parts of the clause and are usually tied closely to the meaning and purpose of an utterance's proposition. Therefore, LDs potentially could be a combination of [add] and [aboutness] but are unlikely to only carry [add]. In (87), it is demonstrated that if an utterance with a single LD is constructed with the aim to only have it carry [add], the construction will be rejected, and the prosody of the whole sentence will be off. By not highlighting the LD prosodically to signal [aboutness] or [contrast], a different constituent in the main clause will have to carry the [aboutness] feature which competes with the natural prominence afforded the single LD by its position in the sentence. The natural prosodic emphasis of the sentence would see either the LD, 'apples', or its resumptive pronoun carry the main stress with secondary stress on the subject and whichever of the LD or resumptive pronoun does not carry the main stress.

(87) *LD with [add]*
Context: Does Peter like apples?
?Appels, HY hou nie regtig van hulle nie.
?Apples, HE holds not really from them not.
? 'Apples, he doesn't really like them.'

It is possible that when multiple LDs are in the CP, one (or more) of them might solely carry [add], given that only a single LD constituent can carry the [aboutness] or [contrast] function. These [add] LDs would then act similar to RDs and Afterthoughts and would not carry significant prosodic stress to avoid competing with the other LD constituent(s). I hypothesise that the order for multiple LDs would be [add] > [contrast]/[about], with the most important constituent being the closest to the main clause. This order, however, is superseded by the constituents' level of activation since for optimal information processing, the order presumably would be [active] > [semi-active/inactive], which could account for why the LF follows the LD from an Information Structure viewpoint (Arnold et al. 2013; Halliday 1967; Halliday & Hanson 1976).

Continuing to the right periphery, RDs and Afterthoughts always carry [add] since their function is to act as reminders of aforementioned discourse elements. The right periphery constructions 'add' additional information to the discourse and disambiguate or clarify the statement of the main clause. In RDs, the information is active and salient, and all the information conveyed by them, can be found somewhere else in context. For Afterthoughts, this can be the same, but because they can also carry [inactive] information, the [add] function is more relevant since by the very nature of the construction, its function is to 'add' information to the proposition made in the main clause.

Several statements can now be made regarding the information-structural functions of the LD, RD, and Afterthought constructions.

(88)
- LDs can be [aboutness] and [active] or [semi-active].
- LDs can be [contrast] and [active] or [semi-active].
- LDs that carry [aboutness] also carry weak [contrast].
- LDs that carry [contrast] also carry weak [aboutness].
- LDs that carry [aboutness] can also carry [add]

(89)
- RDs carry [add] and [active] or [semi-active].
- RDs that carry [add] can also carry [aboutness].

(90)
- Afterthoughts carry [add] and [active], [semi-active] or [inactive].
- Afterthoughts do not carry [aboutness].
- Can Afterthoughts carry [contrast]?

These statements can be transformed into a rough table (91).

(91) *Table 1: Structural information functions of LDs, RDs, and Afterthoughts*

	Active	Semi-Active	Inactive
Aboutness	LD, RD, *	LD, RD, *	***
Contrast	LD, *, Afterthoughts	LD, *, Afterthoughts	***
Add	?, RD, Afterthought	?, RD, Afterthought	*, *, Afterthought

If the activation scale is taken as a single function, roughly two types of LD - [aboutness] and [contrast], two types of RD - [aboutness] and [add], and two types of Afterthoughts - [contrast] and [add]. Again, this overlap in functions, especially for the right periphery constructions, illustrates how essential the consideration of context is for determining the intentions of the periphery constructions.

The last left peripheral construction to be discussed, the LF, is the most productive of the constructions and unlike the constructions that have been discussed so far, LFs are not restricted to spontaneous spoken word or poetry. Whilst LFs can have some of the characteristics discussed above, what sets them apart the most is that they can contain new information. The LF is also not necessarily what the rest of the sentence is about and is not followed by a 'comment'. Therefore, it cannot be a Topic by IS definition, nor can it be a syntax Topic, since it has no resumptive pronoun, occurs after syntax-Topics, triggers subject-verb inversion and does not have to be prosodically elevated in a sentence (Rizzi 1997). Since LF constructions occur after the LD constructions, which matches the syntactical Topic position, it would be a logical conclusion for them to map to the proposed 'Focus' projection. Beninca and Poletto further breaks down the Focus field into the proposed structure in (92), which hints at the proposed IS functions of constituents that fit into the syntax-Focus position.

(92) [Contr. CP1 adverbs/objects [Contr. CP2 circum./quant. adverbs [Informational CP]]]

As mentioned in §2.3, Afrikaans only allows a single LF construction to occur at a time, regardless of their discourse function or underlying Information Structure. This ban includes *wh*-constructions. This is not the case for Italian (93a), which can have up to two LF constructions (Beninca & Poletto 2004; Rizzi 1997), where Giorgio is a contrastive focus and this book, an informational focus in the order matching the framework above (92). Multiple fronted constituents in Afrikaans offer competition for the V2 requirement since the separate pitch accents and phrase boundary necessary to distinguish between two fronted constituents, trigger anticipation of a resumptive pronoun for the constituent in the first position (93a-b). When denied, this creates dissonance and impedes comprehension.

(93) a. *Multiple LFs in Italian*
A GIORGIO questo libro devi dare.
TO GIORGIO this book you.must give.
'You must give this book to Giorgio.' (Beninca & Poletto, 2004)

b. *Multiple LFs in Afrikaans*
*[(Vir Giorgio(hierdie boek)]/[(Hierdie boek) (vir Giorgio)] moet jy [__] [__] gee.
*[For Giorgio this book][This book for Giorgio] must you [__] [__] give.
*'To Giorgio, this book, you must give.'

Most sentences have an Informational Focus regardless of whether that focus falls on a fronted constituent or an element in its neutral position since information processing is an essential part of the function of sentences (Gundel 1999; Gundel & Fretheim 2004). However, not all sentences have a Contrastive Focus. This would mean that that in a sentence with a *wh*-phrase in the left periphery, it is likely occupying the only syntax-Focus position available in Afrikaans and must be the Informational Focus. This deduction matches Beninca and Poletto (2004) claim that *wh*-words go in the Informational Focus position.

For regular LF constituents, there is an immediate distinction between fronted elements that are stressed and those that are not. The same construction can be syntactically identical, but when realised differently in PF, they can fulfil different discourse functions. Some LF constituents are stressed and accented, without which comprehension might become difficult, whereas other LF constructions are prosodically no different to their realisation in their unmarked position in the original matrix clause. When the LF is stressed or accented, it implies specificity. The constructions are fulfilling a discourse function and conveying information beyond its content (94a & 94d) (Rooth 1992), and one anticipates elaboration, which can be specifically about the LF element or the sentence proposition. However, when the LF is uttered without any significant prosodic emphasis, it usually conveys only the constituent's lexical content (94b & 94c) (Frey 2006) and there is no obligation to elaborate on that specific content since it carries no real prominence.

(94) a. *LF with Prosodic prominence*
TANS speel ek op my rekenaar, maar LATER gaan ek swem.
CURRENTLY play I on my computer, but LATER go I swimming.
'CURRENTLY I am playing on my computer, but LATER I will go swimming.'

b. *LF without Prosodic prominence*
Tans speel ek op my rekenaar en ek probeer soveel as moontlik vergeet van
Currently play I on my computer and I try so.much as possible forget about
my huiswerk.
my homework.
'Currently I am playing on my computer and I'm trying really hard to forget about my homework.'

c. *LF with Prosodic prominence*
DIE PERDE het ek gister geborsel. Lyk hulle nie pragtig nie?
THE HORSES have I yesterday brushed. Look they not beautiful not?
'I brushed the HORSES yesterday. Don't they look beautiful?

d. *LF without Prosodic prominence*
Die perde het ek GISTER geborsel. Ek gaan dit nie WEER doen nie.
The horses have I YESTERDAY brushed. I am it not AGAIN do not.
'I brushed the horses YESTERDAY. I am not going to do it AGAIN.

This also applies to writing since, although stress or pitch accents cannot be conveyed with the medium, the standard assumption is to read the LF as a prototypical Subject unless indicated otherwise with an accent (é/è) on the vowel or printed in bold or italics. For the framework, Beninca and Poletto (2004) suggest a 'Scene Setting' position below the Topic position. However, without syntactic proof of a difference between constituents in the Focus projection and a proposed Scene Setting slot they do not include it in their syntactic model but mention that it warrants future examination. Either way, since only a single LF construction can occupy the Focus projection at a time in Afrikaans, this distinction is difficult to investigate syntactically. However, a Scene Setting LF would explain the reason for the prosodic differences between the identical sentences given in (94a-b) and (94b-c).

Regardless of the terminology, if these LFs without prosodic prominence (94b, 94d) were to be expressed in terms of the information-structural functions used in (91), they could be along any point of the activation scale, would [add] additional information to the main proposition, and carry no [aboutness] or [contrast]. This type of LF is used often in opening remarks to start paragraphs or new pieces of discourse, for example the typical 'once upon a time'-start would be this type of LF. They can also be used anywhere in the discourse. It is often used as an anchoring discourse element, used to root the discourse in a particular time or place, or as a topic from which to continue. Interestingly, De Vries mentions something similar, which he refers to as frame-setting, which can be preposed prepositional phrases, adverbs or other constituents that can be used to set up a specific spatio-temporal frame.

Both left periphery constructions can carry contrast, but different contexts prompt a different arrangement of information-structural functions and take different periphery constructions more easily. When the constituents in question are active and salient within the discourse, if a left

periphery construction is to be used, an LD would be more appropriate, acting as clarification or to pick out the correct constituent. If the constituent is not prompted or salient within previous discourse, an LF construction would be more appropriate since this would also allow for the introduction of [inactive] information. LF constructions are more common and flexible, suitable for a wider variety of contexts. For example, (96a) is unlikely, whereas (95a) and (95b) are relatively equally acceptable but with a different weight of emphasis given to the contrasting constituents. In (96a), the LD and corresponding matrix-internal pronoun carry more weight than the contrasting constituent in the second clause, whereas in (96b) the two contrasting constituents, 'apples' and 'pears' carry relatively equal importance.

(95) *Context: Does Maria like apples or pears? ('apples' and 'pears' are active)*

a. *LD with [active] and [contrast]*
APPELS, Maria hou die meeste van HULLE, maar sy eet ook pere.
APPLES, Maria keeps the most from THEM, but she eats also pears.
'Apples, Maria likes them the most, but she also eats pairs. '

b. *LF with [active] and [contrast]*
?Van APPELS hou Maria die meeste, maar sy eet ook PERE.
?From APPLES keeps Maria the most, but she eats also PEARS.
'Maria likes apples the most, but she also eats pears.'

(96) *Context: Does Maria like apples? ('apples' is active)*

a. *LD with [inactive] and [contrast]*
?Nee. PERE, sy hou van hulle.
?No. PEARS, she keeps from them.
? 'No. Pears, she likes them.'

b. *LF with [inactive] and [contrast]*
Nee. Van PERE hou sy.
No. From PEARS keeps she.
'No. She likes pears.'

The equivalent for the [aboutness] carrying LD would be an LF with prosodic prominence. This is the type of LF that is commonly referred to as an IS 'Focus'. The fronting for this type of LF is completely optional since the *in-situ* position of the constituent can carry the same information-structural functions, which is one of the key differences between LF and obligatory *wh*-fronting. Does this 'Focus' LF also contain [aboutness] or does it carry a different function that is only similar to [aboutness] but not the same? If the LF 'Focus' does contain [aboutness], why would speakers ever need to use an LD with [aboutness] since the LF is more natural and efficient?

There are two main reasons that would provide adequate motivation for having both LD and LF constructions. The first concerns the activation scale, and the second, information processing. First, one of the main differences both syntax and IS papers give to juxtapose Topic and Focus, is their respective associations with 'given' (active) and 'new' (inactive) (Skopeteas et al. 2006). This is certainly relevant since only LFs can be 'inactive' and for very salient and 'active' information, LDs would be more appropriate than LFs. This is demonstrated in (97), with (97a-b) containing the most active information and (97c-d) the least active. Although none of the constructions are

ungrammatical, some are more (or less) appropriate in each situation depending on the context and their functions. Although LD rarely, if ever, contain inactive material, choosing the most appropriate construction between (97c) and (97d) is easier than choosing the correct response for [active] constituents (97a-b). If (97a-b) were uttered unprompted, the LF construction would have been favoured.

(97) *Active Context: What happened to the window?!*

a. *LD with [active] and [aboutness]*
[Die venster], ek het per ongeluk my bal [deur [dit]]/[[daardeur]] geskop.
[The window], I have per accident my ball [through [it]]/[[through.there]] kicked.
'The window, I accidentally kicked my ball through it.'

b. *LF with [active] and [aboutness?]*
?[Deur dit]/[Deur die venster] het ek per ongeluk my bal [_] geskop.
?[Through it]/[Through the window] have I per accident my ball [_] kicked.
? 'Through it/Through the window, I accidentally kicked my ball.'

c. *LD with [inactive] and [aboutness]*
?My bal, ek het dit per ongeluk [__] daardeur geskop.
?My ball, I have it per accident [__] through.there kicked.
? 'My ball, I accidentally kicked it through the window.'

d. *LF with [inactive] and [aboutness?]*
My bal het ek per ongeluk [__] daardeur geskop.
My ball have I per accident [__] through.there kicked.
'My ball, I accidentally kicked it through the window.'

The second difference has to do with the context. Spontaneous speech rarely contains a series of overly simple sentences but is woven together and connected by common threads and themes into a larger discourse of interconnected thoughts, ideas, and events. This is where these periphery constructions help to clarify utterances, to ensure the intended message is communicated and received, and to convey something beyond just the bare lexical content of individual words. They are intended to help process multiple prominent constituents or information-heavy sentences.

The LD might carry [aboutness] but given the resumptive pronoun in its corresponding comment (i.e., the matrix clause), its prominence is spread out across the entire utterance. The LD acts as a primer that prompts the rest of the comment but does not add any new information to the discourse since it can only convey [active] or [semi-active] information. By having a base-generated LD with [aboutness], the speaker ensures that their audience knows which constituent is most relevant, but it also allows for another constituent to be emphasised as well without causing undue competition between [aboutness] constituents. In (98), (98b) and (98c) can only successfully emphasise one constituent without overloading the sentence, whereas (98d) and (98e) give the opportunity for the sentence to still be about 'that man' but by fronting 'him' or 'in front of everyone', both constituents can be emphasised without causing competition in the midfield where there is space for a focus. If both carry prosodic emphasis whilst still in-situ, like in (98c) or even (98a), processing is hindered by the competing constituents and the sentence sounds 'cluttered'.

(98) a. *Neutral sentence*
Kyk daar! Maria het daardie man toe voor almal uitgevra.
Look there! Maria has that man PAR before everyone asked.out.
'Look there! Maria asked that guy out in front of everyone.'

b. *LF with [semi-active] and [aboutness]*
Kyk daar! Vir daardie man het Maria toe voor almal uitgevra.
Look there! For that man has Maria PAR before everyone asked.out.
'Look there! That guy, Maria asked him out in from of everyone.'

c. *LD with [semi-active] and [aboutness]*
Kyk daar! Daardie man, Maria het hom toe voor almal uitgevra.
Look there! That guy, Maria has him PAR before everyone asked.out.
'Look there! That guy, Maria asked him out in from of everyone.'

d. *LD with [semi-active] and [aboutness] & LF with [active] and [aboutness?]*
Kyk daar! Daardie man, vir hom het Maria toe voor almal uitgevra.
Look there! That guy, for him has Maria PAR before everyone asked.out.
'Look there! That guy, Maria asked him out in from of everyone.'

e. *LD with [semi-active] and [aboutness] & LF with [semi-/inactive] and [aboutness?]*
Kyk daar! Daardie man, voor almal het Maria hom toe uitgevra.
Look there! That guy, before everyone has Maria him PAR asked.out.
'Look there! That guy, in front of everyone Maria asked him out.'

The last two examples (98d-e) indicate the need to postulate another function - [focus], given that although the fronted resumptive pronoun in (98d) might carry some [aboutness] from its association and proximity to its LD correlate, the same cannot be said for the LF in (98e) which does not carry [aboutness]. Therefore, it is likely that the fronted resumptive pronoun of an LD and other prosodically emphasised LF constructions carry [focus] since although they carry emphasis, they are not necessarily the most important constituents in the sentence nor what the sentence is about.

The table of information-structural functions can now be revised to include [focus] and LF constructions (99). The table does well to reflect the functions of LDs, RDs, and Afterthoughts, but is lacking in the descriptive power to fully encompass how the LF construction operates.

(99) *Table 2: information-structural functions of LDs, RDs, Afterthoughts, and LFs*

	Active	Semi-Active	Inactive
Aboutness	LD, LF?, RD, *	LD, LF, RD, *	*, LF,*,*
Contrast	LD, LF, RD?, Afterthoughts?	LD, LF, RD?, Afterthoughts?	*, LF, *,*
Add	LD?, LF?, RD, Afterthought	LD?, LF, RD, Afterthought	*, LF, * Afterthought
Focus	*, LF, *, *	*, LF, *, *	*, LF, *, *

Although De Vries' approach to the informational-structural functions of the Dutch left and right peripheries, it can now be somewhat compared to the above table for Afrikaans functions (100). De Vries does not elaborate on the Dutch equivalent of the LF which, if the above discussion on Afrikaans

LFs is to be taken as a frame of reference, it is highly likely that Dutch's equivalent structure is similarly complex.

(100) *Table 3: Dutch information-structural functions as adapted from de Vries (2009)*

	CLD	HTLD	BRD	Afterthought
contrast	yes	no	no	no
add	no	yes	yes	yes
about	?	yes	?	?
new	?	no	no	yes

For level of activation, the Dutch and Afrikaans constructions agree that Afterthoughts are the most likely to contain [inactive] or [new] information. However, what the activation scale allows rather than a binary of [new] and [!new], is to show overlap between the functions of constructions, conveying the notion that multiple functions are considered simultaneously before the speaker chooses the construction they think would best convey whatever it is they want to communicate.

Other key differences between Afrikaans and Dutch include that Afrikaans (HT)LDs can carry contrast since it is the only left-dislocation construction available to speakers, whereas Dutch speakers have both contrast-carrying CLDs and non-contrastive HTLDs. According to De Vries', BRDs do not carry [contrast] or [aboutness], whereas I am not so sure since the function of an Afrikaans RD is to reiterate something important and salient within the matrix clause, which is usually also prosodically emphasised. This means that the Afrikaans RD will carry some of the qualities, or at least mimic the qualities, of the matrix-internal correlate.

These tables (99 & 100) show that the information-structural functions of the two languages are still remarkably similar but also that Afrikaans has changed somewhat to accommodate for the lack of distinction between CLDs and HTLDs available in Dutch, by combining the functionalities of the two types of Dutch constructions into that of the (HT)LD. In other words, the loss of an additional construction in Afrikaans did not mean a loss of functionality. Rather the language adapted to be more flexible to allow for a greater range of function for the single base-generated LD construction remaining. It could be interesting to see if and how these factors might affect the productivity of the various constructions in their respective languages. For example, since Dutch has more specialised left-periphery constructions compared to Afrikaans that has fewer with a wider range of functional acceptability, which language would use peripheral constructions more often in spontaneous speech?

4.2 Interim summary: Ordering and grouping of periphery constructions

The cartographic approach to the left periphery presents a 'fine structure' for various types of discourse-related Ā-elements located in the CP zone. Syntax and semantics therefore must agree, and, in line with the cartographic programme, attempts have been made to map syntax to Information Structure and vice versa (Beninca & Poletto 2004; Fanselow & Lenertová 2011; Rizzi 1997, 2004).

From the discussion above, it is evident that although there is a loose correlation between the syntax-Topic and -Focus projections and the discourse topic and focus, these functions alone are inadequate

to fully explain the motivation behind all periphery constructions since not all LDs are discourse topics and neither are all LFs discourse foci. Rather, it is a mixture of information-structural functions and discourse context that allow and select appropriate periphery constructions. The order of these constructions follows a set semantic path to allow for optimal information processing and which may differ cross-linguistically likely influenced by the overarching word order of individual languages. For Afrikaans, a SOV language, I hypothesise that priority is given to level of activation, with the least active constituents appearing last in either periphery (102). The other functions can fall along points on this scale, some functions overlapping and others causing competition that when activated, do not allow other constructions to enter their respective slots. These constructions are selected based on the functional needs of the speaker and the speaker-hearer context: the speaker's intention with the utterance and the assumed knowledge of the hearer (103).

(101) *Table 4: Mapping of information-structural functions onto peripheral syntax for Afrikaans*

Left Periphery	Main Clause	Right Periphery
LD, LF/*wh*-word	Main Clause	RD, Afterthought
Active, semi-active, inactive	Main Clause	active, semi-active, inactive
[add], [contrast/about], [focus/add/contrast/*wh*-word]	Main Clause	[about], [add]

(102) [[[active], [semi-active],[inactive]] [main clause] [[active], [semi-active],[inactive]]]

(103) [[[add], [contrast/about], [focus/add/contrast/*wh*-word]] [main clause] [[about], [add]]]

4.3 Remaining questions and future directions

Before concluding the paper, I will briefly discuss remaining questions of this study and lay out a few possible directions for future studies of Afrikaans' Ā-syntax.

The information-structural framework presented in this paper is neither a perfect nor an exhaustive description of all possible discourse-configurations and features available in Afrikaans. The competition between certain functions, as well as the synergistic relationship between the [aboutness] carrying LD (discourse topic) and the [focus] carrying LF (discourse focus) certainly require more attention.

Furthermore, another logical continuation would be to further explore the effects of prosody on the respective periphery constructions, as well as to explore the connection between syntax and Information Structure from a psycholinguistic focus. It would be interesting and worthwhile to test the claims made in this paper regarding syntax and information structure in Afrikaans by devising experiments to prompt certain constructions and to gather acceptability judgements from other native speakers. Experiments to study the different constructions' effect on information processing would also be worthwhile.

Two questions regarding the particulars of Afrikaans syntax also remain. First, the adpositions in the various dislocated constituents warrant further exploration. Although there is a tendency to exclude adpositions in the LD, there are potential exceptions. If there is a trend throughout the exceptions, this would indicate a distinction between hanging topics and left-dislocated topics that is available in other Germanic languages, albeit more conclusively. It is likely that acceptability for the inclusion of

pre- and post-positions in LDs and RDs will vary across Afrikaans dialects and will also be situation dependent. For example, prepositions that are directional are easier to reject than those prepositions that indicate location. There is unfortunately no space to explore this contrast further within the scope of this paper.

Second, there is the matter of the similarities between the Dutch CLD, the German LD, and the combination of the Afrikaans LD and its corresponding resumptive pronoun as LF. Do they have the same information-structural functions and do the equivalent constructions across the languages occupy similar peripheral slots within their respective languages? Are these all the same type of construction with slightly different appearances? This study direction might look at older Afrikaans documents to see whether similar constructions were used in original versions of the language when it was still closer to Dutch.

5. Conclusion

This paper has provided a sketch of Afrikaans' Ā-syntax through an investigation of five specific constructions associated with the language's left and right peripheries. With the aid of a series of diagnostics available under the Minimalist framework, I have established in §2 that Afrikaans possesses two distinct types of left dislocations, LDs and LFs, that are equivalent to what is commonly referred to as hanging topic left dislocation (HTLD) and a Focus construction, respectively, in the syntax literature. The LD features a base-generated constituent, whereas the LF shows the hallmarks of Ā-moved topics. I have also established in §3 that Afrikaans employs two distinct types of right-dislocated phrases — the Right Dislocation and the Afterthought — that serve different functions in discourse and behave distinctly in prosody.

Finally, in §4, I explored each of the five constructions' functions in discourse, demonstrating that there is a relationship between syntax and Information structure albeit not a linear, one-to-one relation. The functions of the LD and the LF overlap, and so do those of the RD and Afterthought, with the most suitable construction being selected on a case-by-case basis depending on the perspective of the speaker and assumed knowledge of the addressee. Information Structure therefore shapes the choices available to a speaker in syntax and syntax is a tool used to express a speaker's perspective and signal IS properties to communicate effectively. Because specific syntactic structures rely so heavily on the immediate context of the participants, a study in syntax – especially in topics related to the left and right periphery – should not try to isolate structures from their discourse context. The cyclical nature of language, of the different sub-fields of Linguistics influencing and affecting the fields above and below, indicates that they should not and cannot be wholly separated.

To the best of my knowledge, the descriptions and analyses presented here constitute the first combined systematic investigation of Afrikaans' left and right peripheries. These discussions will hopefully serve as a preliminary starting point for future formal analyses of Afrikaans syntax and the information structure of the language.

6. Appendix: List of abbreviations

ACC	–		Accusative	case
DAT	–		Dative	case
DEM		–		Demonstrative
FEM	–	Feminine	noun	class
MASC	–	Masculine	noun	class
NEU	–	Neutral	noun	class
NOM	–		Nominative	case
PAR	–		Pragmatic	particle
PL		–		Plural

SG – Singular

7. References

Abe, Jun 1999. *Directionality of Movement: A Case of Japanese Right Dislocation*. Ms. Nagoya University.

Anagnostopoulou, Elena 1997. Clitic left dislocation and contrastive left dislocation. In Elena Anagnostopoulou, Henk van Riemsdijk & Franz Zwarts (eds.), *Materials on Left Dislocation*. John Benjamins Publishing Company. 151-192.

Altmann, Hans 1981. *Formen der „Herausstellung" im Deutschen*. Niemeyer.

Arnold, Jennifer E., Elsi Kaiser, Jason M. Kahn & Lucy K. Kim 2013. Information structure: Linguistic, cognitive, and processing approaches. Wiley Interdisciplinary Reviews. *Cognitive Science* 4(4): 403-413.

Beck, Sigrid & Remus Gergel 2015. *Contrasting English and German Grammar: An Introduction to Syntax and Semantics*. De Gruyter Mouton.

Beninca, Paola & Cecilia Poletto 2004. Topic, Focus and V2: Defining the CP sublayers. In Luigi Rizzi (ed.), *The Cartography of Syntactic Structures: The Structure of CP and IP*. Oxford University Press. Vol 2: 52-75.

Berghoff, Robyn 2017. Movement in the Afrikaans left periphery: A view from anti-locality. *Stellenbosch Papers in Linguistics* 48: 35-50.

Botha, Morné & Johan Oosthuizen 2009. Die struktuur van die linker-sinsgrens in Afrikaans [The structure of the left periphery in Afrikaans]. *Stellenbosch Papers in Linguistics Plus* 37: 1-68.

Chafe, Wallace L. 1976. Givenness, contrastiveness, definiteness, subjects, topics, and point of view. In Charles N. Li (ed.), *Subject and Topic*. Academic Press. 25-55.

Cinque, Guglielmo 1977. The movement nature of left dislocation. *Linguistic Inquiry* 8: 397-412.

Cruschina, Silvio 2012. *Discourse-Related Features and Functional Projections*. Oxford University Press.

de Kleine, Christa 1997. The verb phrase in Afrikaans: Evidence of creolization? In Arthur K. Spears & Donald Winford (eds.), *The Structure and Status of Pidgins and Creoles: Including Selected Papers from the Meeting of the Society for Pidgin and Creole Linguistics*. John Benjamins. 289-307.

Den Besten, Hans 1981. Marking WH movement in Afrikaans. In Pieter Muysken (ed.), *Generative Studies on Creole Languages*. De Gruyter, Inc. Vol 6.

Den Besten, Hans 1989. From Khoekhoe foreigner talk via Hottentot Dutch to Afrikaans: The creation of a novel grammar. In Martin Pütz & René Dirven (eds.), *Wheels Within Wheels*. Peter Lang. 207-254.

De Vries, Mark 2007. Dislocation and backgrounding. *Linguistics in the Netherlands* 24: 235-247.

De Vries, Mark 2009. The left and right periphery in Dutch. *The Linguistic Review* 26(2-3): 291-327.

du Plessis, Hans 1977. WH movement in Afrikaans. *Linguistic Inquiry* 8(4): 723-726.

Fanselow, Gisbert & Denisa Lenertová 2011. Left peripheral focus: mismatches between syntax and information structure. *Natural Language and Linguistic Theory* 29(1): 169-209.

Fernández-Sánchez, Javier & Dennis Ott 2020. *Dislocations*. Language and Linguistics Compass 14(9).

Frey, Werner 2004. Notes on the syntax and the pragmatics of German Left Dislocation. In Horst Lohnstein & Susanne Trissler (eds.), *The Syntax and Semantics of the Left Periphery*. De Gruyter Mouton. 203-234.

Gundel, Jeanette K. 1988. Universals of topic-comment structure. In Michael Hammond, Edith A. Moravcsik & Jessica R. Wirth (eds.), *Studies in Syntactic Typology*. Benjamins. 209-239.

Gundel, Jeanette K. 1999. Topic, focus and the grammar pragmatics interface. In Jim Alexander, Na-Rae Han & Michelle M. Minnick (eds.), Proceedings of the 23rd Annual Penn Linguistics Colloquium. *Penn Working Papers in Linguistics*. Vol 6(1): 185-200.

Gundel, Jeanette K. & Thorstein Fretheim 2004. Topic and focus. In Laurence Horn & Gergory Ward (eds.), *The Handbook of Pragmatics*. Basil Blackwell. 175-196.

Haegeman, Liliane M.V. 1994. *Introduction to Government and Binding Theory*. 2nd edn. Blackwell.

Halliday, Michael A.K. 1967. Notes on transitivity and theme in English: Part 2. *Journal of Linguistics* 3(2): 199-244.

Halliday, Michael A.K. & Ruqaiya Hasan 1976. *Cohesion in English*. Longman.

Kalbertodt, Janina, Beatrice Primus & Petra B. Schumacher 2015. Punctuation, Prosody, and Discourse: Afterthought vs. Right Dislocation. *Frontiers in Psychology* 6(1803).

Kayne, Richard S. 1984. *Connectedness and Binary Branching*. Foris Publications.

Lambrecht, Knud 1994. *Information Structure and Sentence Form: Topic, Focus, and the Mental Representations of Discourse Referents*. Cambridge University Press.

Lee, Chungmin, Matthew Gordon & Daniel Büring 2007. *Topic and Focus Cross-Linguistic Perspectives on Meaning and Intonation*. Springer.

Moutaouakil, Ahmed 1989. *Pragmatic Functions in a Functional Grammar of Arabic*. Foris Publications.

Nolda, Andreas 2004. Topics detached to the left: on left dislocation, hanging topic, and related constructions in German. *ZAS Papers in Linguistics* 35(2): 423-448.

Ott, Dennis & Mark De Vries 2016. Right-dislocation as deletion. *Natural Language & Linguistic Theory* 34(2): 641-690.

Paoli, Sandra 2007. The fine structure of the left periphery: COMPs and subjects. *Lingua* 117(6): 1057-1079.

Pollock, Jean-Yves 1989. Verb movement, universal grammar and the structure of the IP. *Linguistic Inquiry* 20: 365-424.

Potsdam, Eric & Daniel Edmiston 2016. Extraposition in Malagasy. In Henrison Hsieh (ed.), AFLA 22: *The Proceedings of the 22nd Meeting of the Austronesian Formal Linguistics Association*. Australian National University. 121-138.

Rizzi, Luigi 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.), *Elements of Grammar*. Kluwer. 281-337.

Rizzi, Luigi 2004. Locality and left periphery. In Adriana Belletti (ed.), *The cartography of Syntactic Structures. Structures and Beyond*. Oxford University Press. Vol 3: 223-251.

Rizzi, Luigi 2013. Notes on cartography and further explanation. *Probus* 25(1): 197-226.

Rizzi, Luigi & Giuliano Bocci 2017. Left periphery of the Clause: Primarily Illustrated for Italian. In Martin Everaert & Henk C. van Riemsdijk (eds.), *The Wiley Blackwell Companion to Syntax*. Wiley. 1-30.

Robbers, Karin B.M. 1997. *Non-finite Verbal Complements in Afrikaans: A Comparative Approach*. Holland Academic Graphics.

Rottman, Isaac & Masaya Yoshida 2013. Sluicing, Idioms, and Island Repair. *Linguistic Inquiry* 44(4): 651-668.

Shimoyama, Junko, Alex Drummond, Bernhard Schwarz & Michael Wagner 2015. Movement and ellipsis in afterthought right-dislocation, sluicing, and fragments. *Proceedings of CLA 2015*. Canadian Linguistic Association. 1-14.

Skopeteas, Stavros, Ines Fiedler, Samantha Hellmuth, Anne Schwarz, Ruben Stoel, Gisbert Fanselow, Caroline Féry & Manfred Krifka 2006. *Questionnaire on information structure (QUIS): Reference manual. Interdisciplinary Studies on Information Structure*. Universitätsverlag Potsdam. Vol 4.

Takita, Kensuke 2014. Pseudo-right dislocation, the bare-topic construction, and hanging topic constructions. *Lingua* 140: 137-157,

Tanaka, Hidekazu 2001. Right-dislocation as scrambling. *Journal of Linguistics* 37: 551-579.

Schuhmacher, Wilfried W. 1974. Is Afrikaans a creolized language?. *Journal Zambezia* 3(2): 105-107

Heeringa, Wilbert, Febe de Wet & Gerhard B. van Huyssteen 2015. Afrikaans and Dutch as closely-related languages: A comparison to West Germanic languages and Dutch dialects. *Stellenbosch Papers in Linguistics Plus* 47(1): 1-18.

van Rensburg, Christo 2019. The First Afrikaans. *Critical Arts* 33(4-5): 10-19.

Wasow, Thomas 2002. *Postverbal Behavior*. CSLI.

Yang, Xiaohong, Xiuping Zhang, Cheng Wang, Ruohan Chang & Weijun Li 2017. The interplay between topic shift and focus in the dynamic construction of discourse representations. *Frontiers in Psychology* 8(2184): 1-9.

New Zealand Identity in (Social) Media:
Who is a New Zealander in the Wake of COVID-19?

Bryer Oden

1. Introduction

The status of who does and does not count as a 'New Zealander' has come into focus in the wake of the COVID-19 pandemic, where public discourse has contributed to a divide between those within and those outside of the country. Successfully claiming an identity as a New Zealander involves indexing shared understandings and beliefs that are recognisably 'Kiwi'. Enacting these shared understandings is a dynamic process, whereby an individual works with others to construct and co-construct a projection of themselves into the social world: 'identity is a discursive construct that emerges in interaction' (Bucholtz & Hall 2005: 587). To access the values and behaviours that individuals (believe they) are orienting to, discourse analytic researchers are increasingly making use of metapragmatics and metadiscourse, i.e., the explicit discourse from individuals 'about what speech *does* in a particular context' (Marra & Dawson 2021: 489). This discourse works to communicate to interlocutors 'what the norms are in a particular context' and attempts to create mutual 'sociocultural understanding' (Marra & Dawson 2021: 489). In order to contribute to this trend, my research focuses specifically on how explicit discussions of identity work reflect widespread 'Big D' Discourses within New Zealand (Gee 1999). This approach allows for an examination of how individuals orient to and feel accountable to social norms as a 'tacit social contract' that both parties are aware of (Critchley 2007: 20).

New Zealand's Prime Minister Jacinda Ardern has actively promoted a conceptualisation of those within New Zealand as being a 'Team of 5 Million' working together against the virus. However, this identity positioning has indirectly 'Othered' (Greenbank 2014) the population of one million New Zealanders living overseas, a sentiment reflected in the news media.[10] As a reaction to being excluded from this national team, many New Zealanders abroad questioned the makeup of national identity, reflecting on this cleavage between those within and outside of New Zealand. These discussions were foregrounded in the Facebook group "Team of 6 Million - Kiwis Against Quarantine Fees",[11] a group created for New Zealanders to come together to reject the imposition of quarantine fees for returning New Zealanders. In this case, it is possible to view quarantine fees as a type of 'litmus test' for who counts as a New Zealander; to charge an individual to return to their homeland could be considered symbolic of being a social and/or political outsider. This Facebook group was then used as a vehicle for Kiwis abroad to demonstrate and (re)negotiate what it means to be a New Zealander in this time of crisis. I choose to implement these discussions from within the group as the central focus of my analysis.

[10]For example the headlines: "Being benched by the Team of Five Million" (Walters 2020); "Stop 'Kiwi-bashing' and welcome back the brain gain from overseas" (Gower 2020); "We should be welcoming Kiwis returning due to COVID-19, not abusing them" (Longley 2020).

[11] https://www.facebook.com/groups/367648494219248, henceforth noted as "Team of 6 Million."

Social media is increasingly recognised as a salient space for analysing identity work, in particular Facebook, which 'allows users to interact in many ways' (Mak & Chui 2014: 168). During the peak of COVID-19, the physical limitations and social distancing requirements meant that online groups functioned as one of the only spaces where individuals could safely gather to hold open discussions within the 'public sphere' (Habermas 1989). Focussing on online discussion allows for a demonstration of how social media interactions can act as a rich site for identity work (Tyree & Kirby 2016), including discussions of shared values, in which micro level linguistic and discursive strategies are used to index the wider imagined community of New Zealand.

2. What is a New Zealander anyway?

Rather than a fixed, essentialist category, a New Zealand identity (if a singular identity could ever encompass all New Zealanders), is a constantly evolving construct, arguably changing over time as we (re)negotiate shared characteristics, values, and beliefs. This necessarily 'imagined' national identity faces the ensuing 'identity struggles' (Norton 1995) of being both upheld and rejected by different New Zealanders, bringing both the government and citizens to pose the question: who should be allowed here the most?

Researchers from a range of disciplines, including linguistics, have studied the elements that comprise a recognisable New Zealand identity, and have used the lens of the 'Imagined Community' (Anderson 1983; Norton 2000; Wenger 1998) to highlight the social aspects perceived as being important to New Zealanders as a whole. The imagined community is a conceptualisation that addresses the sense of unity felt within a nation; despite the fact that the country's inhabitants do not necessarily interact (as they would need to in order to be defined as a Community of Practice (Wenger 1998)), they are still bound by a sense of belonging. This concept of (spatial and political) belonging (Antonsich 2010) explains why, despite heterogeneity and diverse, multicultural backgrounds, New Zealanders may understand themselves as part of a whole who share similar experiences and perspectives.

This belonging can be shown through the role that egalitarianism plays in New Zealand society (Holmes, Marra & Lazzaro-Salazar 2017; Woodhams 2019). The 'pursuit of egalitarianism', Nolan's take on our national shared values, refers to New Zealanders' supposed dislike of overt displays of hierarchy and power, favouring a more collective and collaborative approach to communication and relational work (see also Holmes, Marra & Vine 2011). Egalitarianism has been noted to be 'a distinctive ethos that has defined the country since its colonial origins' (Woodhams 2019: 67), suggesting that it continues to be both recognised and generally upheld by New Zealanders to this day. However, it has been suggested that egalitarianism instead functions as a 'sociocultural "myth"' (Nolan 2007, described in Woodhams 2019: 69). Nolan (2007) argues that, in reality, New Zealand society does not actually adhere to the values of egalitarianism, but rather fantasises about and continuously reproduces the myth of co-existing under equal circumstances. In my research I examine how this 'myth of egalitarianism' manifests itself within online interactions and the ways in which participants uphold or reject traditional New Zealand identities in their metadiscussions.

3. The Impact of Egalitarianism

Egalitarianism also accounts for other 'traditional' aspects of a New Zealand identity. Tall Poppy Syndrome (TPS) for example, arguably fits under this umbrella as it works as 'an enforcement mechanism which keeps self-promoting discourse in check' (Holmes et al. 2017: 1). This accounts for the sanctioning of individuals who appear to be boasting about their achievements, thus not adhering to the shared value of humility. Similarly, kindness fits in at a more micro level of abstraction. The mantra of being kind is disseminated throughout the nation, in particular via Prime Minister Jacinda Ardern's 'catchphrase' which explicitly encourages New Zealanders to 'Be Kind' (Howie 2020). Adherence to TPS and/or being kind act as discourse level mediators that work to suggest that individuals treat each other equally, aligning to the (culturally Christian) philosophy of 'do unto others as you would have them do unto you'. It is then surprising to note that this 'Golden Rule' of kindness has not yet been discussed as a facet of New Zealand identity, despite its presence within media narratives, including the labour government being internationally heralded as 'Ardern's "kind" New Zealand' (BBC 2020).

Recognising these egalitarian behaviours as shared social norms provides us with tools for interpreting and identifying the discourse strategies that individuals can select from to show that they do or do not identify as New Zealanders. By discursively placing emphasis on egalitarianism, TPS, and kindness, individuals are engaging in 'performativity' i.e., the act of performing or 'doing belonging' within a group (Antonsich 2010: 652) to show that they are indexing their status as a New Zealander.

It is important to note that orienting to these tenets does not always operate as a claim to belonging; evident aversion to these values can also work to purposefully distance oneself from being a New Zealander. Summarising seminal thinking on performativity by Judith Butler, Anita Brady and Tony Schirato (2011: 4) explain that 'what is of particular importance in these repetitions of identity performance that fail (that is, do not perform that repetition properly) is the extent to which, in order to engage confusion, the refusal must utilise the tools of recognition in order to disturb their recognisability'. This allows us to consider that whether someone is implementing these core values as a way to uphold New Zealand societal norms or purposefully disrupt them, is it necessary for the individual to first understand and recognise them in order to be able to utilise them meaningfully.

As noted, I align with recent calls to pay greater attention to metapragmatic and metadiscourse approaches (King 2019). Exploring how interlocutors discuss what being a New Zealander means relies on signals that are found 'within the stream of discourse as a way to access the doxa (Bourdieu 1977) of a situation, or the taken-for-granted norms and beliefs in any particular community' (Marra & Dawson 2021: 489). Within my data, there are examples of individuals explicitly making claims to national identity, and of members calling out others who are failing to successfully portray themselves as part of the wider imagined community. This policing of social norms online solidifies the idea that New Zealanders each project 'the image of their communion' (Anderson 1983: 6) in their minds and hold one another accountable for reproducing or failing to reproduce this image successfully. My data allows for an exploration of these discourse strategies that express a direct social commentary on being part of the New Zealand ingroup.

4. Facebook Discussion as Online Data

Online discourse offers data which exhibits a 'broad range of traits at the very informal end of the linguistic spectrum, which can be compared with naturally occurring speech' (Rafi 2017: 257). This discourse acts as a valuable resource for sociolinguistic research, as posts and comments within Facebook groups can be viewed as 'situated literacy practices, which are deeply embedded in the...writers' everyday lived experiences' (Lee 2011: 1), providing us with information about an individual's cultural values and beliefs. Tufekci discusses the concept of cyberspace as being a 'digitally networked public sphere' (2017: 6), describing a zone where there is a 'complex interaction of publics, online and offline, all intertwined, multiple, connected, and complex, but also transnational and global' (Tufekci 2017: 6). This public sphere, whereby access is granted to anyone with the relevant technologies, facilitates an understanding of online spaces as sites for both personal and political discussion.

Tufekci notes that this digital space affords 'the power of networked dissent' (2017: 21); Facebook becomes a platform that offers opportunities to connect individuals who are passionate about certain topics and issues. In the case of my research, the "Team of 6 Million" group allows for discussion of the ways that people feel separated from New Zealand, offering a space for New Zealanders both within and outside of the country to react to anti-abroad sentiments. The data includes instances of conflict, aligning those who agree with the quarantine fees policy as 'being unlike New Zealanders', and those who disagree as matching a 'traditional' perception of New Zealanders who are empathetic and kind.

My ethically motivated approach to collecting data[12] involved contacting the individual members in the group whose data I wished to use for their consent. As the group is categorised as a 'private group', alongside the fact that it had recently been archived (meaning that members could no longer comment, post or interact within the group), seeking individual consent was necessary. The group has 4700 members, and the participants that I received explicit permission from represent a microcosm of the group at large. The excerpts of hand-selected online data that I use consist of a variety of comments and posts made by members of the group between July and November 2020, and they each exhibit metapragmatic discussions of identity. The data has been de-identified to protect the participants in a way that allows appropriate attribution of an individual's content but is also not overly accessible to members of the public who may wish to locate this data at its original source. I have followed Kerry's (2020: 104) recommendation of using a 'surname lightly masked with the first letter kept, then an asterisk covering the rest to protect the participants' privacy' in order to achieve this de-identification.

In analysing the online discourse, I use an Interactional Sociolinguistics informed approach to Social Constructionism (see also Holmes et al. 2011). Interactional Sociolinguistics (Gumperz 1982, 1999) aims to link micro (linguistic) and macro (societal) levels of analysis to offer a nuanced, contextualised interpretation. Applying this approach within a Social Constructionist lens focussed on identity as a dynamic co-construct allows me to consider not only how identity work is being carried out, but *why;* knowing the social context of a situation

[12] Ethics approval number #0000029132

is crucial to understanding what the identity work is intending to achieve. As Eckert explains (in regards to style), every choice is 'the result of an interpretation of the social world and of the meanings of elements within it, as well as a positioning of the stylizer with respect to that world' (2018: 146). Comprehending the world in question is key to fully acknowledging the ways in which discourse is being used to index certain identities.

5. Themes

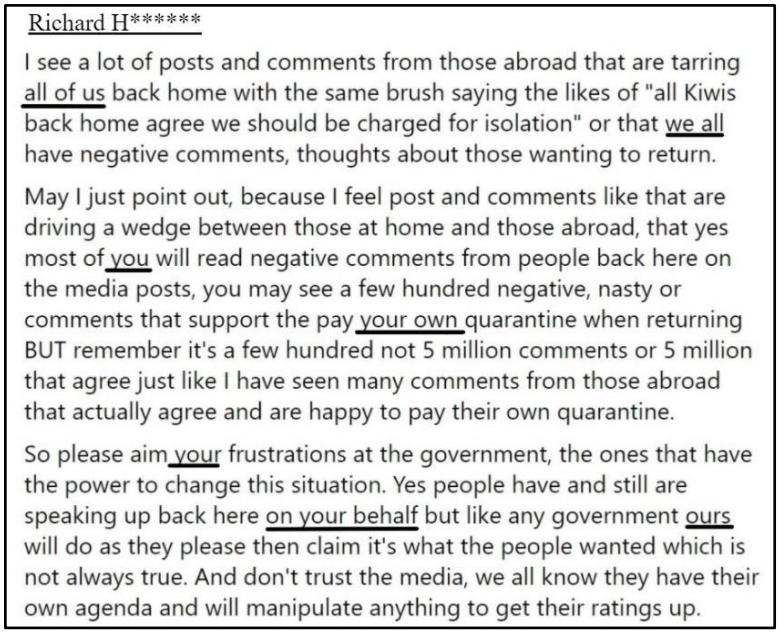
From the data collected, I identified three recurring themes that were prevalent within the discussion space. The most prominent theme was the orientation towards the concept of 'Team'; many participants acted and reacted to being socially organised in a group that worked together collectively. This was realised by multiple sets of teams, although the primary distinction was between the Team of 5 Million and the Team of 6 Million. However, within the group, smaller teams of all kinds also emerged, including, but not limited to, the team of those who wish to avoid quarantine fees, the team of those who wish to reconnect with their (perhaps waning) sense of New Zealand identity, the team of those who wish to continue to push 'foreigners' outside of New Zealand, and the team of those who wish to construct themselves as being better New Zealanders than others.

These team boundaries were constructed via the use of pronouns and other micro level details, for example the regular use of us/them categories. One participant explicitly stated that there is a divide *between kiwis at home and kiwis overseas* (Kiren E, [Extract 1]), showing that members were aware of the formation of two distinct teams. Another participant, Richard H, exemplifies this in his post (Example 1), where he uses *us*, *we all* and *a government like ours* when talking about domestic New Zealanders.

Example 1

Post[13]

[13] In-text excerpts of data are labelled as 'Example 1', 'Example 2', etc, whereas excerpts that are located within the appendix are demarcated as [Extract 1], [Extract 2], etc.



Richard H******

I see a lot of posts and comments from those abroad that are tarring all of us back home with the same brush saying the likes of "all Kiwis back home agree we should be charged for isolation" or that we all have negative comments, thoughts about those wanting to return.

May I just point out, because I feel post and comments like that are driving a wedge between those at home and those abroad, that yes most of you will read negative comments from people back here on the media posts, you may see a few hundred negative, nasty or comments that support the pay your own quarantine when returning BUT remember it's a few hundred not 5 million comments or 5 million that agree just like I have seen many comments from those abroad that actually agree and are happy to pay their own quarantine.

So please aim your frustrations at the government, the ones that have the power to change this situation. Yes people have and still are speaking up back here on your behalf but like any government ours will do as they please then claim it's what the people wanted which is not always true. And don't trust the media, we all know they have their own agenda and will manipulate anything to get their ratings up.

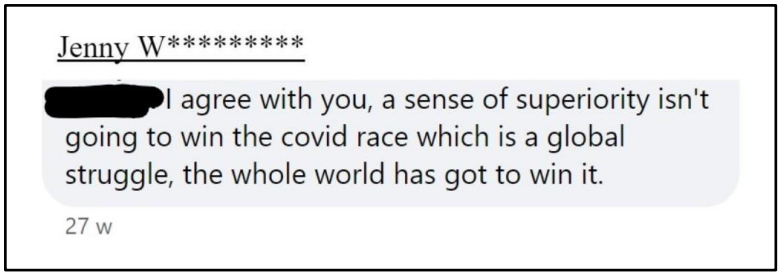
In contrast to this, he chooses to refer to those New Zealanders he frames as outgroup members through the second-person plural referent *you*, *most of you,* and *your own*, in this case referring to New Zealanders overseas. This strategic use of pronouns functions to create two separate kinds of New Zealanders, marking the boundary between local and returning New Zealanders.

Participants continue to demonstrate that they are aware of this us/them mentality, criticising the way people use *us* to talk about domestic New Zealanders, and *them* to talk about those overseas. Participants state, *I agree - us and them is awful* (Jenny W, [Extract 2]), and use double voicing (seen through the employment of quotation marks) to call out individuals for saying phrases such as *why should WE pair [sic] for THEIR holiday* (Slarti B, [Extract 3]).

This idea of orienting to opposing teams aligns with the stereotype of a national propensity for sport and competition, which may be founded by 'rugby's mythical and popularized role in defining New Zealand identity' (Jackson & Hokowhitu 2002: 127), as the idea of teaming up against one another is underpinned by sporting metaphors. Explicitly addressing sporting competition, one participant attempts to undermine the team of domestic New Zealanders by accusing them of not adhering to TPS (through the suggestion that *a sense of superiority* is unacceptable), referring to Covid as a *race* to be won. She stated:

Example 2

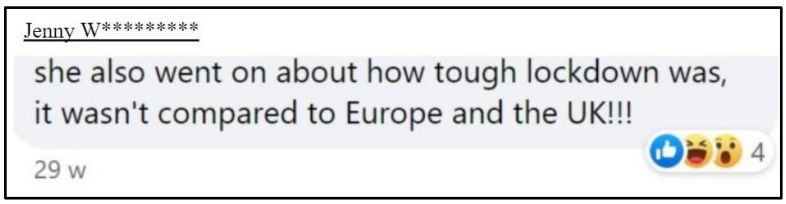
Comment



Here, Jenny W claims that winning this *race* requires unity through the formation of a singular team, namely, *the whole world*. However, in a different post, she makes use of the competition metaphor to actively distance New Zealand from other countries and purposefully create opposing teams. In the example below she describes a person who said that lockdown in New Zealand was difficult, rebutting their argument by saying that New Zealand's lockdown was not actually *tough* when compared to other countries' lockdowns.

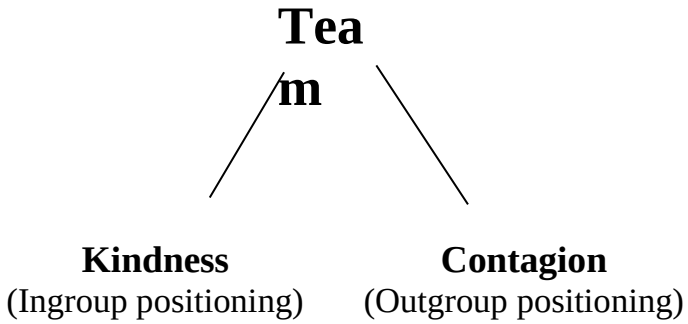
Example 3

Comment



This highlights how despite complaining about separate teams, the participant also continues to foster the creation of these separate teams when it benefits her; orienting to teams allows her to feel successful and included by creating her own team in retaliation for being excluded from the original team.

This orientation to teams dominates the data. Beneath the umbrella of 'Team,' I recognise two dichotomous subcategories: the expected orientation to the positive notion of 'Kindness', and the contrasting category represented by a focus on 'Contagion'. These orientations are methods that participants employed to actively include or exclude others, mediating who belongs and who does not.



6. Kindness

The notion of kindness being an important shared value was supported by many excerpts within the data, with individuals often being rewarded for their compassionate behaviour. Members encouraged this kindness by expressing gratitude, which can be seen where Kiren E thanks another member:

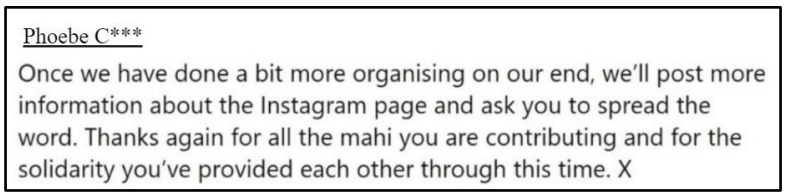
Example 4

Comment

This extract illustrates a recognisable pattern of positively highlighting instances of kindness (c.f. Fletcher 1999 on expressing approval as a strategy for creating teams). Interestingly, two of the admin participants also offer thanks, but in different ways: Phoebe C thanks the group directly, focussing on solidarity:

Example 5

Post



Whereas Alexis H, another admin member, makes a similar point but uses a noticeably different strategy: depersonalising the message. In her post, she notes that she enjoys interacting in a group that *provides a safe haven for NZers abroad to show solidarity and provide support* (Alexis H, [Extract 4]). By expressing a more abstract description of kindness (describing the group as *a safe haven* and space for showing *solidarity*, albeit using the same term as Phoebe C), she calls on her moderator role, stating this behaviour as a general rule. These mentions of values pertaining to 'kindness' suggest that kindness is a perceived national characteristic, and therefore a defining feature of what it means to be a New Zealander.

Conversely, members were also called out for their *absence* of kindness, seemingly with the effect of enforcing social accountability for shared national values. Angouri and Locher (2017: 225) note the role of accountability between ingroup members, citing Angouri (2012) and Marra (2012) who report that 'negatively marked talk' (in this case, being unkind), 'is actively

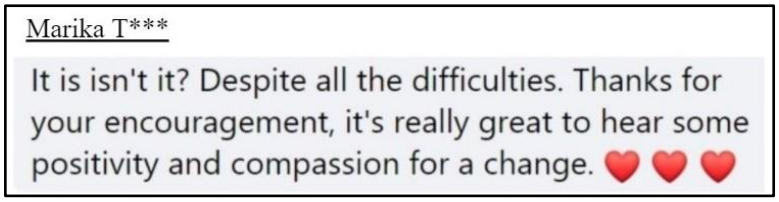
avoided or sanctioned as inappropriate'. This aligns with the conceptualisation of negative-positive categories by French philosopher Derrida, described by Pinkus (1996):

> In Derrida's view of presences and absences, the defining of one category in positive terms - and the 'other' as what the dominant group is 'not' - and analysing what is not said as much as what is, one can see glimpses of the workings of… hegemony.

These comparisons highlight (in)appropriate behaviour, which members sanction within the group. This sanctioning demands that other users meet 'normative expectations of appropriate or politic behaviour' (Locher & Watts 2005: 10). In this sense, the "Team of 6 Million" Facebook group serves a 'watchdog function', which offers 'a window for raising the level of discourse, for engaging the public, and reconstructing a public sphere' (Coronel 2008: 15) by 'exposing wrongdoing' (Coronel 2008: 6) and explicitly outlining how New Zealanders should and should not behave. Many participants noted that they had seen comments that were *negative* and *nasty* (Richard H, [Extract 5]), which contained *vitriol* (Marika T, [Extract 6]) and *hate* (Kiren E, [Extract 7]) directed at Kiwis abroad. While expressing her opinions on quarantine fees, one participant felt the need to add the statements *I would also appreciate no attacks please - could really use some aroha and support from those at home* (Kiren E, [Extract 8]) and *pls support me if people get mean* (Kiren E, [Extract 9]) to her post, in order to encourage kindness and implicitly highlight that other participants may not have been polite to each other previously. This can also be seen as a way that users are implementing 'internet style speech,' for example *pls*, to communicate with each other in an online way. Lee (2011: 13) states, 'media users continuously make sense of various linguistic and non-linguistic resources that they have created and come across on different platforms, and they generate suitable text-making practices for different purposes and audiences'. Another participant cynically uses the term *for a change* in her comment in Example 6, which can be interpreted as a purposeful criticism of those dispelling ideologies of separation and hatred.

Example 6

Comment



In the same vein, another participant issues the statement, *we are here to be united, not divided - and it has been sad for us to witness a decline in this kaupapa over the past few days* (Alexis H, [Extract 10]). Through the evident aversion to apathy and rudeness, we can see how users are co-constructing the identity of a New Zealander to orbit around, and thus orient to, kindness. It is particularly interesting to note the choice of the lexical item *kaupapa,* which is seen in Māori culture as a way 'to value each and every person in New Zealand' and promote 'communal values' (Jackson 2017). This sends the message that Alexis H is not only

encouraging kindness but encouraging it in a way that is specific to a New Zealand context, and therefore part of a New Zealand identity.

This discourse also reflects an interesting phenomenon known as 'pluralistic ignorance', defined by Tufekci as 'the feeling of imagining oneself to be a lonely minority when in fact there are many people who agree with you, maybe even a majority' (2017: 25). The majority of the domestic New Zealanders within my data seemed to paint other domestic New Zealanders as being widely opposed to free quarantine, despite the fact that many actually made claims stating otherwise. A participant exemplifies this in one post, stating: *every person i have talked to about it here at home has spewed vitriol*.

Example 7

Comment

Slarti B*******
Im a kiwi living in wellington, and like many things have been blissfuly unaware of this fee. Its disgusting and im sorry this burden is being placed on you all.
Whats worse tho, is that every person i have talked to about it here at home has spewed vitriol "they should have come come home" "why should WE pair for THEIR holiday" " they dont even pay tax" like there is some high horse anger bullshit ive never really seen across all party and social lines.
My love to you all, get home safe... for how ever fuckingong u choose to stay

This demonstrates that regardless of what the reality may be, some users are distancing themselves from a supposed majority of other New Zealanders, presumably in order to show that they are New Zealanders who are *not* violating Tall Poppy Syndrome, (i.e., not on their aforementioned *high horse*). This can be accounted for by the fact that the group was created to challenge quarantine fees, so we would expect alignment from those in the group and a contrast with non-members. The same user also states, *The problem of the majority supporting this decision, is the lack of will opposing it, making it much harder to change* (Slarti B, [Extract 11]). This feeds into similar narratives such as 'Not all men' and 'Not like other girls', where others are put down to highlight one's own likeability (see Janckila 2019; Kurpershoek 2018). In this situation, New Zealanders are actively distancing themselves from 'other New Zealanders' who want to charge quarantine fees. It is likely that this is occurring in order for the individual to gain more status and respect for themselves within the group by appearing to adhere to the societal value of kindness, in order to fit in with the internalised belief system of the imagined community.

7. Contagion

In stark contrast to the inclusive focus of kindness, 'contagion' was a recurring theme in the data. Scholars who have researched contagion describe narratives of disease as functioning to outcast 'a particular group due to a perceived deviant characteristic, marginalising them from an imagined ingroup community' (Neyland 2019: 12). In this case, the narrative of

disease works to enforce a greater social divide between domestic New Zealanders and 'contagious' returning New Zealanders, highlighting points of social and political difference which are often expressed under the guise of health concerns. As the group consisted largely of New Zealanders abroad, much of the discourse surrounding contagion appeared to be a reaction to the narrative that individuals from overseas are returning to New Zealand and bringing the virus with them. We see an interesting parallel with research in the field on anti-immigrant discourse, e.g., towards sex workers: in Neyland's research, the media treated those entering New Zealand from overseas as 'vectors of moral and/or medical contagion, positioning them as a threatening Other to 'decent people' and frequently linking them to vermin' (2019: 11).

This is not dissimilar to the discourse that occurred in the Facebook group, which exhibited returning New Zealanders' responses to being accused of being detrimental to the country's health. One participant posted, *I feel strongly that returnees are being blamed for covid escaping into the community* (Jenny W, [Extract 12]), defending returning New Zealanders by stating that *a lone traveller coming in and self isolating and being tested, is not going to spread it* (Jenny W, [Extract 13]). This participant also places a large value on *trust* throughout the content she shared, stating *if there was more trust and respect for returnees, the facilities wouldn't have to be so heavily guarded* (Jenny W, [Extract 12]) (see Kusmierczyk (2017) on the importance of trust for enacting an appropriate social identity). These statements are responses to claims about New Zealanders abroad bringing the virus back to New Zealand, which the participant feels is an accusation of returning Kiwis not being trustworthy enough to be seen as deserving New Zealanders.

8. Discourses of Exclusion

The ideology that those from overseas are contagious and dangerous, and therefore should be excluded from the team, appears to stem from the deeply ingrained values of 'cleanliness' and 'purity' that exist within New Zealand's national self-perception. Slogans and campaigns such as 'Clean, Green New Zealand', and '100% Pure New Zealand', feed into this idealistic natural image of New Zealand (see also Kaefer 2014; Kidner 2015), influenced by values such as tiaki, which encourage the protection of our whenua and taonga.

Kaefer (2014: 152) describes how '*Clean, green* has taken a dominant role in NZ's national consciousness', explaining that the perception of New Zealand as a desirable, pristine Arcadia (Coyle & Fairweather 2005, cited in Kaefer 2014: 149) has since been entextualised as a 'national identifier' (Pawson 1997, cited in Kaefer 2014: 151). In addition to this, Kaefer (2014) summarises Bührs and Bartlett's ideas, who suggest that the idea of being clean and green 'equally stands for a friendly population and a land little affected by industrial pollution, overpopulation, traffic congestion, noise or urban decay' (1993: 151). These ideals appear to incorporate health and quality of life as being important elements of our 'national identifier', an image of health which is now being threatened by the virus. These ideologies account for local New Zealanders feeling vulnerable about New Zealanders abroad, as they could be seen to represent a rise in future cases of COVID-19 by returning from countries seen as 'more dangerous' than '100% Pure' New Zealand.

I therefore suggest that New Zealanders are using narratives of contagion to mediate who has access to their ingroup. Individuals labelled as 'too high risk' are, as a result, excluded from making claims on New Zealand identity. The notion of New Zealand as a haven seems to reflect who belongs: being 'pure and clean' has since transcended the environmental context, and '100% Pure New Zealand seems to be no longer limited to a clean and green image but more concerned with presenting the notion of a pure New Zealand culture' (Campelo et al. 2011: 7).

It is at this intersection of 'moral and medical' contagion that a xenophobic rhetoric bleeds into the discussion. As Humpage states, 'New Zealand people and institutions demonstrate an intolerance to difference, theorised here as a form of xenophobia that inhibits the economic, social, and political integration of participants' (2019: 38) In the context of COVID-19, this xenophobia against those from your own country has the opportunity to manifest itself under the guise of being concerned for the health of vulnerable communities within New Zealand. Sundstrom and Kim describe this phenomenon as 'Civic Ostracism' (2014: 25), stating that:

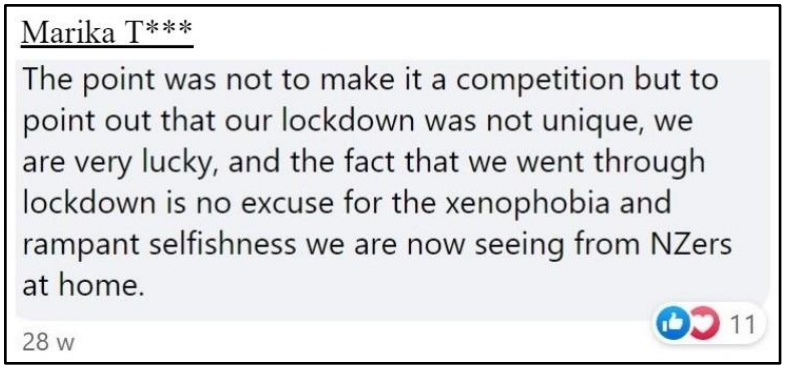
> Full civic ostracism may take the form of exile or intra-territorial sequestering, amounting to a kind of refugee rightlessness… One of the central ways in which xenophobia as civic ostracism is expressed is the attribution of the cultural alienness of a subject or the felt sense that the subject does not rightly belong to the nation. (2014: 25)

By imposing ideologies of vermin and plague upon returning New Zealanders, local New Zealanders are working to renegotiate the identities of Kiwis abroad as not meeting the criteria of 'cleanliness and purity' upheld throughout our physical and social spaces, thus deeming them as outsiders who no longer have access to the team. This discrimination and positioning against other New Zealanders is working to destabilise the unity of the imagined community, as Sundstrom and Kim state, 'xenophobia matters because group life does, and civic exclusion and subordination establishes an impoverishing, often stable, form of group life' (2014: 23).

In Example 8, a participant makes an explicit mention of this xenophobia, and she later describes how this attitude is *vilifying* returning New Zealanders (Marika T, [Extract 6].

Example 8

Comment



It is important to acknowledge here that throughout the group, the returning New Zealanders identify that they are being excluded from the team and are using the online space to defend themselves and criticise those within New Zealand for not being kind and welcoming. This results in returning New Zealanders actively forming and orienting to their own "Team of 6 million". From this, we can see how despite contestation and disagreement, the New Zealanders in the group still highlight the importance of 'team'; whether they are in the team or not, they are constantly orienting to it as the norm (c.f. claims of viability by Butler 1991), even if as a result the new team is a retaliation against the original.

9. A 'New Zealander' in the wake of Covid-19

Contextually, COVID-19 has facilitated isolation, separation, and conflict amongst communities both within and outside New Zealand. The affordances of online platforms such as Facebook offers an especially useful tool with which to analyse metapragmatic discourse, helping to reveal contestation around New Zealand's imagined community during this time of crisis and fear.

The data demonstrates that constructing a New Zealand identity is a complex and dynamic discursive process, signalled through the recognition of shared values. By orienting to team, kindness and contagion, New Zealanders are highlighting their egalitarian ideals. However, in a bid to foster this egalitarianism, many of the interactions involve forming separate groups and opposing one another over who constitutes a New Zealander. This social divide encapsulates the 'myth of egalitarianism', highlighting the lack of equality created through exclusionary Discourses. Pearson (2014, cited in Woodhams 2019: 72) describes this phenomenon, stating:

> Egalitarianism is basically an equal opportunity model, but this is always hedged by ideas about who you think are inside these boundaries—and such models, of course, are based on a core assumption of competition. There is concern about equal conditions for the runners in the race, assuming you have the right credentials to compete, but there are always winners and losers.

In this case, earning the right credentials to compete involves Othering specific New Zealanders in order to claim one's own ingroup status. Tajfel and Turner state:

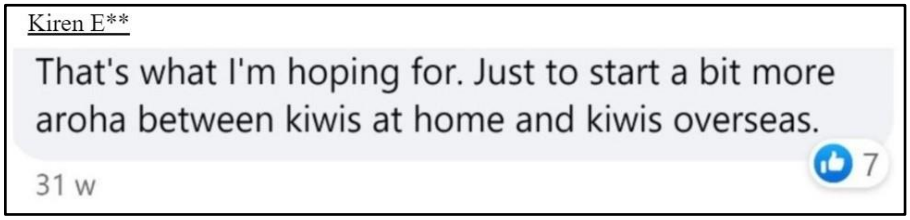
> the mere perception of belonging to two distinct groups - that is, social categorization per se - is sufficient to trigger intergroup discrimination favouring the ingroup. In other words, the mere awareness of the presence of an out-group is sufficient to provoke intergroup competitive or discriminatory responses on the part of the in-group. (1986: 281)

This competition and division reflects the egalitarian myth more than ever. The pandemic has worked as a catalyst to expose the concept that New Zealand identity is never static, but rather in a process of constant (re)negotiation by those who merit access to the ingroup. As the data has demonstrated, it is the orientation to a shared New Zealand identity that becomes the shared New Zealand identity itself, shaping how New Zealanders see themselves as an equal (or inequal) collective.

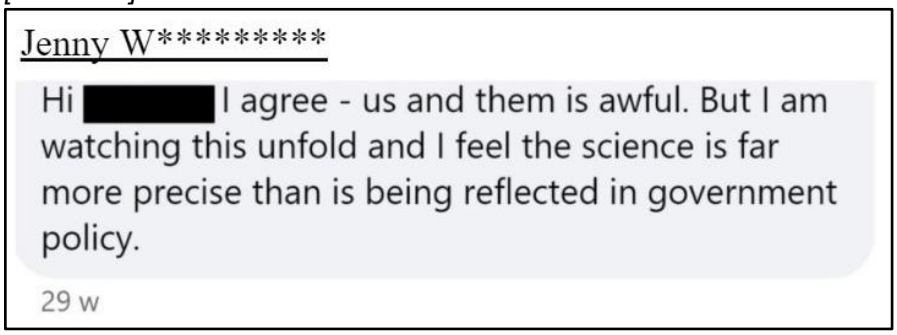
10. Appendix

Screenshots of Facebook posts with reactions and comments.
Note that names have been partially disguised following Kerry (2020).

[Extract 1] Comment



[Extract 2] Comment



[Extract 3] Post

Slarti B*******

Im a kiwi living in wellington, and like many things have been blissfuly unaware of this fee. Its disgusting and im sorry this burden is being placed on you all.
Whats worse tho, is that every person i have talked to about it here at home has spewed vitriol "they should have come come home" "why should WE pair for THEIR holiday" " they dont even pay tax" like there is some high horse anger bullshit ive never really seen across all party and social lines.
My love to you all, get home safe... for how ever fuckingong u choose to stay

[Extract 4] Post

Alexis H*****

First up, while we think it's important that this FB page provides a safe haven for NZers abroad to show solidarity and provide support, we think it's important to remind everyone of our kaupapa and to revisit why we are all here (especially for any new members). This page is

[Extract 5] Post

Richard H*******

May I just point out, because I feel post and comments like that are driving a wedge between those at home and those abroad, that yes most of you will read negative comments from people back here on the media posts, you may see a few hundred negative, nasty or comments that support the pay your own quarantine when returning BUT remember it's a few hundred not 5 million comments or 5 million that agree just like I have seen many comments from those abroad that actually agree and are happy to pay their own quarantine.

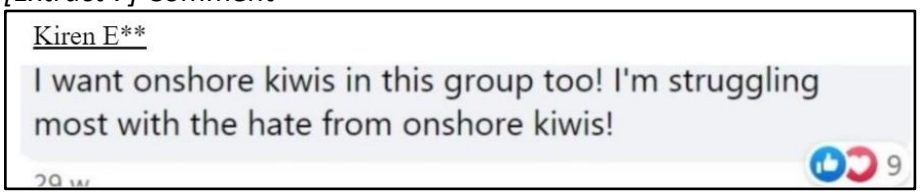
[Extract 6] Comment


Marika T***

I'm living in NZ and I constantly hear people say that returning kiwis should pay, vilifying all of them based on the few who escaped, or saying that we should close the boarders altogether. There is a reason why people overseas are feeling defensive. I live here and the vitriol directed at those overseas is making me wonder what type of country I live in. Yes, we are all in this together, but the divide was first caused by those at home. And now you are angry at them for feeling betrayed or for venting in a website that should be a safe place for them to vent in?

30 w · Edited 4

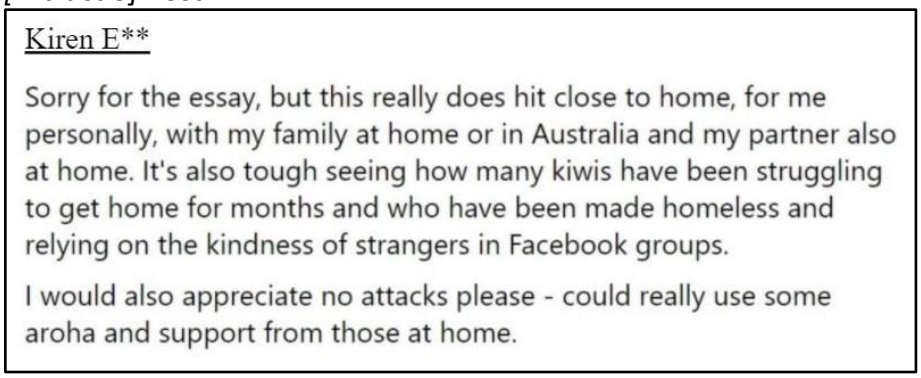
[Extract 7] Comment


Kiren E**

I want onshore kiwis in this group too! I'm struggling most with the hate from onshore kiwis!

29 w 9

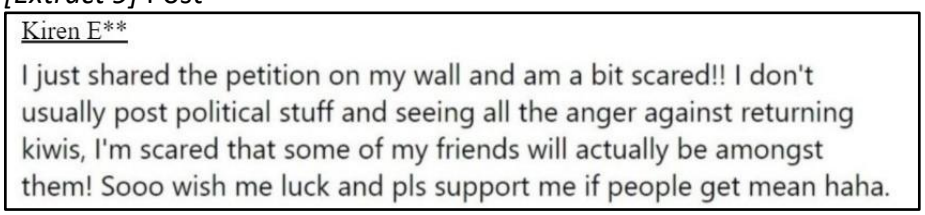
[Extract 8] Post


Kiren E**

Sorry for the essay, but this really does hit close to home, for me personally, with my family at home or in Australia and my partner also at home. It's also tough seeing how many kiwis have been struggling to get home for months and who have been made homeless and relying on the kindness of strangers in Facebook groups.

I would also appreciate no attacks please - could really use some aroha and support from those at home.

[Extract 9] Post


Kiren E**

I just shared the petition on my wall and am a bit scared!! I don't usually post political stuff and seeing all the anger against returning kiwis, I'm scared that some of my friends will actually be amongst them! Sooo wish me luck and pls support me if people get mean haha.

[Extract 10] Post

Alexis H*****

Government's response to managing and containing Covid-19. This is not a page that stands for abuse, racism or the peddling of misinformation - we are here to be united, not divided - and it has been sad for us to witness a decline in this kaupapa over the past few days.

[Extract 11] Comment

Slarti B*******

The problem of the majority supporting this decision, is the lack of will opposing it, making it much harder to change.

30 w 8

[Extract 12] Post

Jenny W*********

I would like to post this article for people of the six million to read. I feel strongly that returnees are being blamed for covid escaping into the community, whereas in fact it is govt policy of not providing adequate PPE to frontline staff. Also, if there was more trust and respect for returnees, the facilities wouldn't have to be so heavily guarded, barricades and staffed and then there would be a possibility of opening up more facilities. Also, these facilities surely need to be in low population areas, not in Central Auckland and Christchurch, which cause alarm and worry to neighbouring communities? What do others think? Could this be put to the govt?

[Extract 13] Comment

Jenny W*********

UK, the virus was introduced by 10K people. It spreads in families and social groups, so a lone traveller coming in and self isolating and being tested, is not going to spread it. I feel the legislation is clumsy and ill thought out as has been said. The fees unfair. If they insist on fees, well there could be a sliding scale of reasons for coming here, not just a yes/no. Business travel could pay

11. References

Anderson, Benedict 1983. *Imagined Communities: Reflections on the Origin and Spread of Nationalism.* Verso.

Angouri, Jo 2012. Managing disagreement in problem solving meeting talk. *Journal of Pragmatics* 44: 1565-1579.

Angouri, Jo & Miriam Locher 2017. Interpersonal pragmatics and workplace interaction. In Meredith Marra & Paul Warren (eds.), *Linguist at Work: Festschrift for Janet Holmes.* Victoria University Press. 217-232.

Antonsich, Marco 2010. Searching for belonging - An analytical framework. *Geography Compass* 4(6): 644-659.

BBC 2020. NZ Election: The people left behind in Ardern's "kind" New Zealand. BBC. https://www.bbc.com/news/world-asia-54444643 (5 March 2021).

Bourdieu, Pierre 1977. *Outline of a Theory of Practice* (Richard Nice, Trans.). Cambridge University Press. Vol 9.

Brady, Anita & Tony Schirato 2011. *Understanding Judith Butler*. Sage

Bucholtz, Mary & Kira Hall 2005. Identity and interaction: A sociocultural linguistic approach. *Discourse Studies* 7(4-5): 585–614.

Bührs, Ton & Robert V. Bartlett 1993. *Environmental Policy in New Zealand: The Politics of Clean and Green?.* Oxford University Press.

Butler, Judith 1991. Imitation and gender insubordination. In Diana Fuss (ed.), *Inside Out: Lesbian Theories, Gay Theories*. Routledge. 13-31.

Campelo, Adriana, Robert Aitken & Juergen Gnoth 2011. Visual rhetoric and ethics in marketing of destinations. *Journal of Travel Research* 50(1): 3-14.

Coronel, Sheila S. 2008. *The Media as Watchdog: The Role of the News Media in the Governance Reform Agenda*. Paper presented at Harvard-World Bank Workshop, Harvard Kennedy School.

Coyle, Fiona & John Fairweather 2005. Challenging a place myth: New Zealand's clean green image meets the biotechnology revolution. *Area* 37(2): 148-158.

Critchley, Simon 2007. Humour as practically enacted theory, or, why critics should tell more jokes. In Robert Westwood & Carl Rhodes (eds.), *Humour, Work, and Organisation.* Routledge. 17-33.

Eckert, Penelope 2018. *Meaning and Linguistic Variation: The Third Wave in Sociolinguistics*. Cambridge University Press.

Fletcher, Joyce K. 1999. *Disappearing Acts. Gender, Power, and Relational Practice at Work*. MIT Press.

Gee, James Paul. 1999. *An Introduction to Discourse Analysis: Theory and Method*. Routledge.

Gower, Patrick 2020. Stop 'Kiwi-bashing' and welcome back the brain gain from overseas. Newshub. https://www.newshub.co.nz/home/opinion/2020/07/patrick-gower-stop-kiwi-bashing-and-welcome-back-the-brain-gain-from-overseas.html (28 July 2021).

Greenbank, Emily 2014. Othering and voice: How media framing denies refugees integration opportunities. *Communication Journal of New Zealand* 14(1): 35-58.

Gumperz, John J. 1982. *Discourse Strategies*. Cambridge University Press.

Gumperz, John J. 1999. On interactional sociolinguistic method. In Srikant Sarangi & Celia Roberts (eds.), *Talk, Work and Institutional Order: Discourse in Medical, Mediation and Management Settings.* Mouton De Gruyter.

Habermas, Jürgen 1989. *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society* (Thomas Burger, Trans.). MIT Press.

Holmes, Janet, Meredith Marra and Bernadette Vine 2011. *Leadership, Discourse, and Ethnicity.* Victoria University Press.

Holmes, Janet, Meredith Marra & Mariana Lazzaro-Salazar 2017. Negotiating the tall poppy syndrome in New Zealand workplaces: Women leaders managing the challenge. *Gender and Language* 11(1): 1-29.

Howie, Cherie 2020. Be kind: How Jacinda Ardern's catchphrase spread from the Beehive to the living room and beyond. NZ Herald. https://www.nzherald.co.nz/nz/be-kind-how-jacinda-arderns-catchphrase-spread-from-the-beehive-to-the-living-room-and-beyond/KVD6M3NUTNHTKQ4DB4XHZVZSZA/ (4 October 2021).

Humpage, Louise 2020. New Zealanders returning from overseas: How their experiences of xenophobia could help us respond to superdiversity. *Kōtuitui: New Zealand Journal of Social Sciences Online* 15(1): 38-53.

Jackson, Steven J. & Brendan Hokowhitu 2002. Sport, tribes, and technology: The New Zealand All Blacks haka and the politics of identity. *Journal of Sport and Social Issues* 26(2): 125-139.

Jackson, Willie 2017. The true meaning of Kaupapa Māori. *Waatea News.* https://www.waateanews.com/waateanews/x_news/MTU3Njc/Opinion/The-true-meaning-of-Kaupapa-Maori (2 March 2021).

Janckila, Brilynn, 2019. Boys will be boys, girls will be not like other girls: A symbolic convergence theory examination of “other girls”. Unpublished Master’s thesis. St Cloud State University.

Kaefer, Florian 2014. Credibility at stake? News representations and discursive constructions of national environmental reputation and place brand image: The case of clean, green New Zealand. Unpublished PhD thesis, University of Waikato.

Kerry, Victoria J. 2020. Stance, same-sex marriage and space: An analysis of self-referencing on Youtube. Unpublished PhD thesis, Massey University.

Kidner, Keeley 2015. Beyond greenwash: Environmental discourses of appropriation and resistance. Unpublished PhD thesis, Victoria University of Wellington.

King, Brian W. 2019. Language and embodied sexuality. In Kira Hall & Rusty Barrett (eds.), *The Oxford Handbook of Language and Sexuality.* Oxford University Press. 1-22.

Kurpershoek, Vera 2018. Not all memes are feminist tools for activism: An analysis of the subversive potential of the feminist 'not all men' meme. Unpublished Bachelor's thesis. Utrecht.

Kuśmierczyk, Ewa 2014. Trust in action: Building trust through embodied negotiation of mutual understanding in job interviews. In Katja Pelsmaekers, Geert Jacobs, & Craig Rollo (eds.), *Trust and Discourse: Organizational perspectives*. John Benjamins Publishing Co. 11-44.

Lee, Carmen K. M 2011. Micro-blogging and status updates on Facebook: Texts and practices. In Crispin Thurlow & Kristine Mroczek (eds.), *Digital Discourse: Language in the New Media.* Oxford University Press. 1-19.

Locher, Miriam & Richard J. Watts 2005. Politeness theory and relational work. *Journal of Politeness Research* 1(1):9-33

Longley, Mark 2020. We should be welcoming Kiwis returning due to COVID-19, not abusing them. Newshub. https://www.newshub.co.nz/home/new-zealand/2020/07/opinion-we-should-be-welcoming-home-kiwis-returning-due-to-covid-19-not-abusing-them.html (24 July 2021).

Mak, Bernie Chun Nam & Hin Leung Chui 2014. Impoliteness in Facebook status updates: Strategic talk among colleagues "outside" the workplace. *Text & Talk* 34(2): 165-185.

Marra, Meredith 2012. Disagreeing without being disagreeable: Negotiating workplace communities as an outsider. *Journal of Pragmatics* 44(12): 1580-1590.

Marra, Meredith and Shelley Dawson 2021. Workplace and institutional discourse. In Michael Haugh, Dániel Z. Kádár and Marina Terkourafi (eds.), *Cambridge Handbook of Sociopragmatics*. Cambridge University Press. 475-495.

Neyland, Matilda 2019. The sexual other: Discursive constructs of migrant sex workers in New Zealand media. Unpublished Master's thesis. Victoria University of Wellington.

Nolan, Melanie 2007. The reality and myth of New Zealand egalitarianism: Explaining the pattern of a labour historiography at the edge of empires. *Labour History Review* 72(2): 113–134.

Norton, Bonny 1995. Social identity, investment, and language learning. *TESOL Quarterly* 29(1): 9-31.

Norton, Bonny 2000. *Identity and Language Learning: Gender, Ethnicity, and Educational Change*. Longman/Pearson Education

Pawson, Eric 1997. Branding strategies and languages of consumption. *New Zealand Geographer* 53(2): 16-21.

Pearson, David 2000. The ties that unwind: Civic and ethnic imaginings in New Zealand. *Nations and Nationalism* 6(1): 91-110.

Pinkus, Jenny 1996. Subject Positions and Positioning. Massey University. https://www.massey.ac.nz/~alock/theory/subpos.htm (9 March 2021).

Rafi, Muhammad Shaban 2017. Bilingualism and identity construction in the digital discourse. *Journal of Multicultural Discourses* 12(3): 254–271

Sundstrom, Ronald R. & David Haekwon Kim 2014. Xenophobia and racism. *Critical Philosophy of Race* 2(1): 20-45.

Tajfel, Henri & John C. Turner 1986. The social identity theory of intergroup behaviour. In Stephen Worchel & William G. Austin (eds.), *Psychology of Intergroup Relations*. Nelson-Hall. 7-24.

Team of 6 Million - Kiwis Against Quarantine Fees 2020. Facebook. https://www.facebook.com/groups/367648494219248 (2 March 2021).

Tufekci, Zeynep 2017. *Twitter and Tear Gas: The Power and Fragility of Networked Protest*. Yale University Press.

Tyree, Tia C. M. & Morgan D. Kirby 2016. #THOTsBeLike: The Construction of the THOT Female Sexual Stereotype in Social Media. In Kehbuma Langmia & Tia C. M. Tyree (eds.), *Social Media: Culture and Identity*. Lexington Books. 3-25.

Walters, Laura 2021. Being benched by the Team of Five Million. Newsroom. https://www.newsroom.co.nz/being-benched-by-the-team-of-five-million (15 January 2021).

Wenger, Etienne 1998. *Communities of Practice: Learning, Meaning, and Identity.* Cambridge University Press.

Woodhams, Jay M. 2019. *Political Identity in Discourse: The Voices of New Zealand Voters.* Springer.

An Historical Analysis of /s/-Retraction in New Zealand English

Reuben Sanderson

Abstract

There remains considerable debate in the phonetic literature regarding the influence of lexical frequency on sound change. Recently, a new study by Todd et al. (2019) has emerged which proposes a listener-based model in order to account for conflicting patterns of frequency effects in different sound changes. Key to this is the observation that high frequency words are more robustly recognised in the face of acoustic ambiguity, and therefore more likely to undergo change. In this paper, I aim to extend Todd et al.'s research by exploring /s/-retraction in NZE. In so doing I will both expand our theoretical understanding of this sound change in NZE and investigate whether the claims made by Todd et al. are consistent with this sound change. Making use of the extensive time depth of the ONZE corpus, I illustrate that /s/-retraction has spread to the /st/ context in NZE and that high frequency words are changing faster than low frequency words, as predicted by Todd et al.. This suggests that the effects of acoustic ambiguity between /s/ and /ʃ/ are not moderated by the phonotactic constraint in English that /ʃ/ does not occur in the contexts under consideration and that a retracted-/s/ in these contexts can therefore only be interpreted as /s/. The findings of this paper provide further supporting evidence in favour of a hybrid model of exemplar theory in which both abstractions (i.e., phonemes) and phonetic exemplars contribute to the representation of language.

1. Introduction

A moderate consensus has been reached in the sociophonetic literature that language knowledge consists of both abstract representations (e.g., phonemes) and episodic traces of stored memory (e.g., exemplars; Foulkes & Hay 2015; Pierrehumbert 2016; Todd et al. 2019). There are two main ways in which this framework departs from traditional generative models: the first is that it assumes that exemplars of stored tokens of speech may extend beyond individual phonemes to include linguistic information at the word and phrasal level as well as social information about the speaker (e.g., age, gender, social class etc.; Hay et al. 2006; Pierrehumbert 2001, 2016); and the second is that the stored exemplars which correspond to a particular phoneme are not just one abstracted phoneme but a cloud of similar memory traces. However, there remains considerable debate in the field concerning the exact relationship between these different levels of representation. One of the most long-standing discussions concerns the effect of lexical frequency on sound change. In stark contrast to the Neogrammarian position of regular and purely phonetically-conditioned sound change, exemplar theory predicts that sound changes spread through the lexicon from high to low frequency words in physiologically motivated changes and from low to high frequency words in non-physiologically motivated changes (such changes will be explained below; see also Phillips 1984; Pierrehumbert 2001). The notion that lexical frequency has an effect on sound change is a matter of considerable debate, complicated further by the fact that a number of studies have emerged in recent years which have presented apparently conflicting findings on exactly *how* it has an impact (Bermúdez-Otero et al. 2015; Hay & Foulkes 2016; Hay et al.

2015). These studies present numerous examples of sound changes which do not change according to the predictions of exemplar theory. To account for this issue, Todd et al. (2019) propose a computational model that addresses the findings of these studies by making the listener central to sound change (the exact details of this model will be elaborated upon in Section 2.2). This paper aims to add to this ongoing discussion by investigating how lexical frequency affects the rate of change of /s/-retraction in a corpus of New Zealand English (NZE). /s/-retraction is an ongoing sound change which involves the speaker palatalizing /s/ such that it is realized with a more 'esh-like' (i.e., /ʃ/) pronunciation in certain phonetic contexts, most notably /str/ as in *street*.

2. Literature review

2.1 Frequency effects on sound change

One of the most dominant theories of sound change in linguistics is that of the Neogrammarian hypothesis. The central tenet of this theory is that 'sound change is *regular* and *purely phonetically conditioned*' (Hale 2008: 343, emphasis in original). A regular sound change is defined by Labov as the 'gradual transformation of a single phonetic feature of a phoneme in a continuous phonetic space' (2010: 260). The important caveat that such changes are also purely phonetically conditioned entails that individual words have no impact on how the change spreads. According to the Neogrammarians, sound change does not spread through the lexicon word-by-word but affects all words containing the appropriate phonetic context simultaneously i.e., regular sound changes are phonetically gradual and lexically abrupt (Guy 2003). Underlying this approach is a considerable amount of theory from generative phonology which regards the form-based entries in the mental lexicon to be specified in terms of abstract representations of sounds i.e., phonemes (Pierrehumbert 2002). The existence of prelexical linguistic abstraction is most evident in research on language acquisition, particularly of young children. Children are able to learn up to 10 new words a day (Bloom 2000) and even children as young as two can learn a new word, and remember it, after just one exposure (Bloom 2000; Storkel 2001). Without the aid of phonological 'building blocks' to facilitate the learning process, the ability to acquire new words so rapidly is difficult to explain (Pierrehumbert 2006: 521).

However, there is also a large body of work that convincingly argues that listeners also store perceptual information about the word beyond the phonemic level along with social information concerning the speaker. At the extreme end of this approach, Goldinger (1998) proposes a usage-based model in which the cognitive representation of language consists entirely of stored tokens of heard speech. In this theory, the frequency of the word is central to sound change. In physiologically motivated sound changes, in which a phonetic bias such as lenition causes a sound change in a defined phonetic context, Goldinger's theory proposes that this sound change will affect high frequency words first. This is because such changes are claimed to evolve from the 'iteration of articulatory biases' (Phillips 1984; Todd et al. 2019: 2). These biases act as an influencing force which slightly adjusts the phonetic qualities of a target phoneme. Because high frequency words are produced more often than low frequency words, they are also more frequently subjected to these phonetic biases and so they change at a faster rate than low frequency words (Bybee 2007; Pierrehumbert 2001). Perhaps the

most well-known illustration of this hypothesis is Bybee's (2007) study of t/d-deletion in Chicano English which shows that higher frequency words exhibited higher rates of final t/d-deletion (e.g., *told* and *felt*).

However, this argument has received some criticism from scholars who argue that observed frequency effects on sound changes such as t/d-deletion may be attributed to a more general stationary effect of frequency whereby more frequent words are phonetically reduced even when no longitudinal sound change is occurring (Hay et al. 2015). To account for this, a number of studies have recently emerged which analyse frequency effects on *rates* of change (Bermúdez-Otero et al. 2015; Hay & Foulkes 2016; Hay et al. 2015). By analysing the rate at which high and low frequency words change, these studies make a convincing argument in favour of a 'non-stationary' effect of word frequency that cannot be dismissed as simple phonetic reduction. Yet the findings presented in these studies do not consistently agree on how the frequency of words affects the sound changes in question: Bermúdez-Otero et al. (2015) argue that for /t/-glottalling in Manchester, high frequency words are more advanced but change at the same rate as low frequency words; Hay & Foulkes (2016) claim that high frequency words change faster in a /t/-voicing/tapping change in New Zealand English (NZE); and Hay et al. (2015) claim that low frequency words change faster in the NZE front vowel chain shift. These results challenge exemplar models which predict a consistent effect of frequency on sound changes across the board. To account for this, Todd et al. (2019) propose a computational model which predicts such variations by making the listener central to sound change.

2.2 A listener-based model of sound change

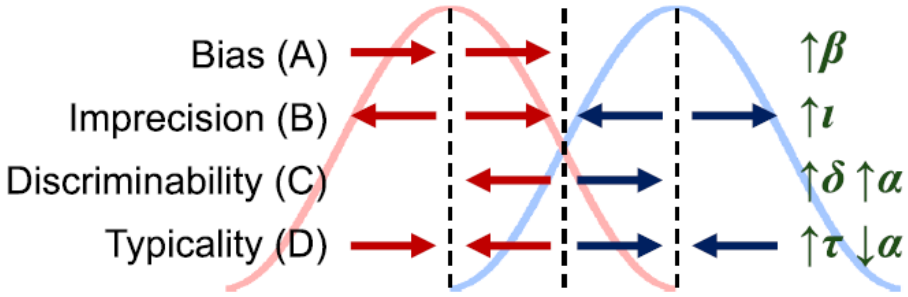
The model proposed by Todd et al. (2019) draws inspiration from Ohala (1993, 2012) who challenges the long-standing view that sound change arises from effects of the speaker modifying their speech to make it clearer for their perceived listener. Ohala argues that sound change is caused by misperceptions or hypo-correction of particular sounds in certain phonological environments. In Todd et al.'s model, this argument is extended to account for sound change as a result of 'gradient perceptual robustness' in an exemplar space (2019: 2). Todd et al. argue that production bias (such as that seen in physiologically motivated changes) and natural articulatory errors on the part of speakers may result in listeners re-interpreting one phoneme as another. However, these biases do not affect all words equally. As mentioned previously, empirical evidence does not support the predictions of early research on exemplar theory that high frequency words change first in physiologically motivated sound changes. Multiple different effects of frequency have been reported in the literature. Todd et al. argue that acoustic ambiguity may account for this disparity. They note that high frequency words are more likely to be recognized than low frequency words in acoustically ambiguous contexts. They go on to predict that:

> High-frequency words change at the same rate as low-frequency words when a phoneme moves without encroaching on the acoustic space of another, with no bearing on acoustic ambiguity; faster than low-frequency words when a phoneme moves toward another, potentially increasing acoustic ambiguity; and slower than low-frequency words when a phoneme moves away from another, potentially decreasing acoustic ambiguity. (2019: 2)

To make their model applicable to empirically observed sound changes, Todd et al. address four key factors influencing sound change: movement in a direction; shape of the phoneme distribution; distance between two phonemes; and degree of overlap between two phonemes (when two phonemes are involved in the sound change). To ensure that all four of these factors are reflected in the model, the authors include four competing forces: intrusive; spreading; repulsive; and squeezing (see Figure 1 for a visualisation of these effects; see Todd et al. (2019: 4) for a more in-depth discussion of the theoretical foundations of their model). The intrusive force encourages movement and is included in the model as bias. Bias marginally shifts the target phoneme in a given direction representing the influence of external factors like articulatory reduction. The spreading force increases the width of the distributions of each phoneme involved in the sound change. It is included in the model as imprecision, reflecting natural acoustic variation in speech production. The third force is the repulsive force which pushes one phoneme away from the other. It is included in the model as discriminability which reflects how likely a target is to be stored in memory based on how similar it is to other targets of the same phoneme. The final force is the squeezing force which counters the increase of skewness caused by the repulsive force and is included in the model as typicality. Typicality reflects results from speech perception which suggest that tokens which more accurately reflect other examples of the same phoneme are more strongly represented in memory (Clopper et al. 2016; Todd et al. 2019).

Figure 1

Diagram of the various forces which influence sound change



Note. Taken from Todd et al. 2019: 8.

The central claim in Todd et al.'s model is that high frequency words are more easily recognized in acoustically ambiguous contexts as they are more robustly represented in the mental lexicon. As a result, they are not 'repelled' away from the other phoneme as much by the repulsive force when production bias encourages them to 'intrude' upon that phoneme's acoustic space. This explains their claim that high frequency words move faster than low frequency words when a phoneme moves towards the acoustic space of another.

Following Todd et al.'s claims, the extensively researched NEAR/SQUARE merger in NZE in which /eə/ (SQUARE) is moving to /iə/ (NEAR) should be led by high frequency words (Gubian et al. 2019) as there is a clear increase in acoustic ambiguity. However, as Gubian et al. (2019)

illustrate, this is not the case. Instead, they find a marginally significant interaction between age and lexical frequency which indicates low frequency words are leading this sound change, although these results may in part be attributed to using data with a much smaller time depth than those referred to in Todd et al.'s (2019) paper. In light of this conflicting evidence, I propose to explore the effects of the rate of frequency on another recognised sound change in NZE, /s/-retraction.

/s/-retraction differs from the other sound changes on which Todd et al. (2019) base their model in a number of ways. Firstly, while /s/ does infringe on the acoustic space of /ʃ/ in this sound change (suggesting that this sound change is of the second kind described above, and thereby predicting that high frequency words will change faster than low frequency words), it must be noted that there exists no legal cluster of /ʃCr/[14] or /ʃC/ in English (except for variant pronunciations of loan words like *spritz* and *spiel*). As a result, this sound change does not result in any ambiguity in meaning, unlike the /t/-tapping change of Hay and Foulkes (2016) in which words like *matter* may be pronounced as *madder* (Todd et al. 2019: 3). That is, listeners are unlikely to confuse /s/ with /ʃ/ in the contexts in which (as we will see below) /s/-retraction has been shown to occur, because of phonotactic constraints on the distribution of /ʃ/ in these contexts. This lack of ambiguity suggests that this sound change is more appropriately classified as the first kind of sound change described above in which high and low frequency words change at the same rate. In other words, although this sound change results in an increase in acoustic ambiguity, the phonotactic constraints (not considered by Todd et al.) may make it an exception to Todd et al.'s predictions that high frequency words will change faster. Another deviation is that /s/-retraction does not appear to have an active 'Pushee'. Todd et al.'s model explicitly describes a sound change where a Pusher encroaches on the phonetic space of a Pushee. An aversion to acoustic ambiguity then encourages the repulsive force which separates the phonemes. However, in the case of /s/-retraction, the phonetic space of /ʃ/ does not appear to move as /s/ moves towards it (Smith et al. 2019) which suggests that the phonotactic distributions of /s/ and /ʃ/ mean that /ʃ/ is not providing the repulsive force. It is unclear what influence this will have on the impact of lexical frequency.

In examining the implications of phonotactics in Todd et al.'s model in the context of a sound change not previously considered by them, I aim to extend the application of this model to new areas and add to the body of literature concerning listener-based theories of sound change. In the following section, I will review the social and linguistic factors which influence the progress of /s/-retraction in various dialects of English.

2.3 Social factors influencing /s/-retraction

/s/-retraction has been observed at various stages of completion, either impressionistically or through empirical data, in English dialects all across the world from New Zealand (Hay et al. 2008; Lawrence 2000; Warren 2006), to Australia (Stevens & Harrington 2016; Stevens et al. 2019), various parts of the United Kingdom (Bass 2009; Stuart-Smith et al. 2019) and North America (Baker et al. 2011; Durian 2007; Gylfadottir 2015; Rutter 2011; Shapiro 1995; Stuart-Smith et al. 2019). Early research mostly relied on impressionistic data making use of Rapid

[14] /C/ in this context refers to either /p/, /t/, or /k/.

Anonymous Surveys (see e.g., Bass 2009; Labov 1984) and radio and television broadcasts (Lawrence 2000; Shapiro 1995). Recent studies that draw on earlier works, providing supporting evidence for /s/-retraction as an ongoing sound change in progress. In New Zealand, research suggests that this is a comparatively recent innovation (Hay et al. 2008), although evidence for this is limited to either impressionistic reports (Lawrence 2000) or small-scale corpus studies (Hay et al. 2008; Warren 2006)[15]. To my knowledge, there exists no longitudinal corpus study of /s/-retraction in New Zealand which investigates the influence of lexical frequency on the spread of this sound change.

While there exists a substantial body of evidence which suggests that /s/-retraction is more pronounced amongst younger, working-class speakers (Bass 2009; Hay et al. 2008; Stuart-Smith et al. 2019) the impact of gender on this sound change remains unclear. For instance, some studies have argued that there is no gender influence on /s/-retraction (Gylfadottir 2015; Hazenberg 2017; Stevens & Harrington 2016)[16], while others have claimed that men lead this change (Bass 2009; Hay et al. 2008; Warren 2006) and yet others claim that women lead (Smith et al. 2019; Wilbanks 2017). Conflictingly, in what is perhaps the largest study of this kind, drawing data from five corpora across North America and Scotland, Stuart-Smith et al. (2019) argue that women exhibit more /s/-retraction in the /str/ context than men, while men exhibit more retraction in /sp/, /sk/, /spr/ and /skr/ clusters. These inconsistent results may be attributed in part to differences in 'stylistic context and speech setting' (Wilbanks 2017: 301). As mentioned previously, the progress of /s/-retraction varies from dialect to dialect (Stevens & Harrington 2016; Stuart-Smith et al. 2019), and it may also be the case that the significance of the social variables varies from region to region.

2.4 Phonetic motivations for /s/-retraction

There continues to be much debate in the field regarding the phonetic motivations for /s/-retraction. Some have claimed that it is the result of long-distance assimilation, and that it is the following /r/ that causes the effect, despite the intervening /t/ (Shapiro 1995). However, Lawrence (2000) points out that in instances where /t/ is elided (resulting in /sr/ as in *la[sr]ace*), retraction of /s/ does not occur. Instead, he suggests that local assimilation of /s/ to an affricated /tr/ is more likely, particularly given that we would expect assimilation to be more pronounced between adjacent targets than in long-distance contexts. Note, however, that Lawrence's example of *la[sr]ace* involves an intervening word boundary between /s/ and /r/. In word-internal cases, Warren (2006) reports numerous cases in which retraction of /s/ does occur in contexts where /t/ is elided. Warren suggests instead that /s/-retraction may have multiple causes whereby 'the articulatory configuration used by one group of speakers is then reinterpreted as a different configuration by another group of speakers' (2006: 1; see also Bauer & Warren 2004). This may also explain how /s/-retraction has spread from the /str/ cluster to other phonetic contexts in which this change has been reported like /s{p,t,k}/, /s{p,t,k}r/, and /stj/ (Janda & Joseph 2003). However, because this change has been most

[15] Hay et al. (2008) collapse the affrication of /tr/, /dr/, and /str/ in their analysis so the extent to which /s/ specifically is retracted in their data set is unclear.

[16] Todd et al. (2019) make the assumption that change emerges from neutral initial conditions thereby rendering the influence of gender null at this stage. The lack of significant effects of gender in Stevens & Harrington (2016) may therefore be linked to their claim that /s/-retraction is still at a very early stage in Australia.

widely observed in /str/ clusters (e.g., *street* or *strange*) most scholars agree that this context is the source of the change (Janda & Joseph 2003).

In order to provide more empirically grounded evidence for this argument, Baker et al. (2011) conducted a production experiment with students from the University of Arizona. Using the centroid frequency (or Centre of Gravity, henceforth COG) of the sibilant in question as a measure of its place of articulation (/s/ has a notably higher COG than /ʃ/; see Section 3.2 for further discussion of this), the authors found that /r/ had a 'depressing effect' on the COG of sibilants in 'non-retractors' (defined by the authors as participants who retracted /s/ in /str/ clusters less than 35% of the time). They suggest that this provides evidence for the influence of /r/ on /s/-retraction at the *initiation* of the sound change i.e. that the /str/ context is indeed the source of this change and /s/-retraction has since spread to other contexts. This argument is supported by articulatory data (explored in greater depth in Mielke et al. (2010)) which shows that the degree of coarticulation of /s/ varies according to speakers' tongue shape when producing /r/. Although all speakers in the experiment produced a bunched /r/, there was still some variation within this overarching category. Those speakers who produced /r/ with a more similar tongue shape to /s/ exhibited greater degrees of coarticulation in /str/ clusters (Baker et al. 2011). The influence of /r/ on the retraction of /s/ is further evidenced by a number of studies which show a greater lowering of COG in /sCr/ clusters than in /sC/ contexts where no /r/ is present (Stevens & Harrington 2016; Stuart-Smith et al. 2019). However, the extent to which /r/ has an influence on /s/-retraction in NZE is currently unclear. Also unclear is the extent to which lexical frequency influences this change as research in this area is very limited. To my knowledge only three authors have explored lexical frequency and /s/-retraction (Gylfadottir 2015; Phillips 2001; Wilbanks 2017). Phillips (2001) claims that the sound change is more advanced in high-frequency words. She ran an experiment in which 30 informants from Georgia read out a word list which contained 16 instances of initial /str/ in words of various frequencies. While almost all the speakers pronounced these words with a clear /s/ realization, two speakers showed marked variation between their pronunciation of *straight* and *strait*, both of whom pronounced *straight* with distinctly lower spectral peaks (more akin to the pronunciation of /ʃ/) than *strait*. Phillips suggests that this difference is caused by lexical frequency, since *straight* has a much higher lexical frequency than *strait* according to Carroll et al. (1971). This is, clearly, a bold claim to make on the basis of just two speakers' articulation of one word pair. To further call into question the previous claim, two subsequent Labovian variationist sociolinguistic studies have found no indication of an effect of lexical frequency on /s/-retraction (Gylfadottir 2015; Wilbanks 2017). Given the paucity of research in this area, there is room for more investigation into the relationship between /s/-retraction and lexical frequency, particularly in New Zealand English for which there are as yet no studies exploring this relationship.

2.5 Research goals

In light of the findings reviewed above, this study aims to make two contributions. First, I conduct the first analysis of /s/-retraction in New Zealand to compare the rates of retraction in different consonant clusters over time. In doing so, I explore the role of /r/ on /s/-retraction in NZE and investigate whether /s/-retraction initiated in /sCr/ clusters before spreading to /sC/, as has been observed elsewhere in the literature. My second, and primary, goal of this study is to expand on the work of Todd et al. (2019) by investigating whether the predictions

of their model apply to a different kind of sound change, /s/-retraction. In particular, I ask whether a lack of semantic ambiguity resulting from /s/-retraction influences the impact of lexical frequency or whether acoustic ambiguity is as central to the process as Todd et al. suggest.

3. Methodology

3.1 The origins of New Zealand English Corpus

The data for this research comes from a longitudinal corpus of NZE, the Origins of New Zealand English (ONZE; Gordon et al. 2007). The ONZE corpus constitutes a historical record of New Zealand English from 1850 to the present day. Because of the significant time depth of the corpus (at 136 years it currently represents the corpus with the greatest time depth known to the author), the ONZE corpus is uniquely suited to answering questions regarding long-term sound change patterns (Hay et al. 2015). It is made up of three separate corpora – the Mobile Unit (MU), Intermediate Archive (IA), and Canterbury Corpus (CC) – each created in different ways for different purposes. The first corpus, MU, was recorded in the 1940s and consists of interviews with the elderly born between 1851 and 1910 intended to be broadcast on national radio. The poor quality of these recordings means that there is very little useful acoustic information over 5000Hz. Because previous research on sibilants has shown that frequency values up to 10,000Hz are helpful for accurately measuring place of articulation (Thomas 2009) this dataset was removed from analysis, resulting in the elimination of 69 speakers out of a total of 576.

The second corpus, IA, was recorded in the 1990s of people born between 1890 and 1930. It is made up of interviews conducted mostly with descendants of the original participants in the MU corpus. The final corpus, CC, was recorded from 1994 until the present day by students at the University of Canterbury. Unlike the other two corpora, it was deliberately created with the intent of being used in linguistic research. As such, it contains equal proportions of men and women, younger and older speakers (20-30 and 45-60) and people of different social classes (professional and non-professional). Participants of the Canterbury Corpus were asked to read the NZE word list (Maclagan & Gordon 1999) before being engaged in conversation for half an hour by a student interviewer aiming for as close to casual speech as possible.

Since the speech alignment software used in the ONZE corpus (The HTK-Toolkit; Young et al. 2006) requires at least 5 minutes of spontaneous speech for accurate alignments, and the word list data is typically only 3-4 minutes long, there were many inaccuracies in the alignment process of this data subset. Close analysis of this data revealed that some tokens were recorded as having negative durations while others were up to 1200ms long, far exceeding the mean token length (101ms). Therefore, all the word list data was removed from analysis (n = 2961). This left a total of 68,080 tokens (CC = 48,145; IA = 19,935) remaining before the removal of outliers. All speakers analysed in ONZE were born in New Zealand and none had spent significant amounts of time outside of the country at the time of recording.
All recordings have been down-sampled to 22khz and time-aligned with phoneme-level transcriptions (for details see Hay et al. 2015), allowing the corpus to be searched for targeted

tokens in specified contexts. Following Koenig et al. (2013) and Chodroff and Wilson (2017), tokens were high-pass filtered with a cut-off of 550Hz to remove low frequency ambient noise along with any lower harmonics related to voicing . All tokens under 40ms were excluded from analysis as these are unlikely to be fully articulated and will therefore be unreliable (Hazenberg 2017: 106).

3.2 Acoustic analysis

One common method used to distinguish between /s/ and /ʃ/ is spectral peak measurement (Hazenberg 2017; Rutter 2011). The spectral peak refers to the 'frequency at which the maximum energy is expended in the spectrum of the fricative' (Hazenberg 2017: 96). Because /s/ is produced with the tongue further forward in the mouth than /ʃ/, it involves a shorter anterior cavity, resulting in higher frequencies (around 4 to 5 kHz compared to 2.5-3 kHz for /ʃ/; Jongman et al. 2000). However, as Hazenberg (2017) notes, sibilants often contain more than one spectral peak and there is great variation amongst speakers, and even between utterances from the same speaker, as to which peak has the greatest amplitude. A more consistently reliable and widely used method of analysis is that of spectral moments (Jongman et al. 2000), one of which was used in the present study.

Spectral moments are measures of the distribution of frequency of a fricative, in this case /s/ and /ʃ/. There are four spectral moments: centre of gravity, variance, skewness, and kurtosis. However, both variance and kurtosis have been shown to be unreliable indicators of the effect of age on /s/ (Taylor et al. 2020) and so will not be used in the present study. While skewness has been shown to be a reliable measure (Hazenberg 2017; Jongman et al. 2000) time constraints meant that only centre of gravity was able to be fully analysed in the present study. Centre of gravity refers to the mean of the frequency of the spectrum (Thomas 2009: 110).

In this study, centre of gravity measurements of /s/ and /ʃ/ were automatically extracted using a Praat script[17] in three different contexts:

(1) /s/ and /ʃ/ in pre-vocalic, stressed, word initial position

(2) /s{p,t,k}r/

(3) /s{p,t,k}V/

The first context was created to get a measure of each speaker's 'canonical' /s/ and /ʃ/ pronunciation (c.f. Stevens & Harrington 2016). There exists much discussion in the literature on the importance of not directly comparing /s/ production across speakers but rather comparing the degree to which each speaker retracts /s/ in different contexts (Baker et al. 2011; Gylfadottir 2015; Rutter 2011; Stevens & Harrington 2016). This is because each speaker will have their own unique target for /s/ and /ʃ/; comparing across speakers only reveals each speaker's sibilant targets rather than the effect of sound change on those targets. To account for this, some authors conduct modelling not on raw COG values, but on

[17] Many thanks go to Robert Fromont for his assistance in extracting the ONZE samples and Paul Warren for the Praat script used to get the COG data.

'retraction ratio' (Baker et al. 2011; Stuart-Smith et al. 2019; Wilbanks 2017). This is a value between 0 and 1 which represents the degree to which the COG of /s/ in a given cluster is closer to a speaker's mean COG value of pre-vocalic /s/ (closer to 1) or pre-vocalic /ʃ/ (closer to 0). However, this approach was not possible in the current study as the /s/ data was too unreliable and frequently resulted in many speakers that had mean /s/ and /ʃ/ values which were too similar. This meant that in many cases the process of calculating retraction ratios produced negative values and values which greatly exceeded 1 as the COG of a given /s/ in a cluster lay beyond that speaker's /s/ and /ʃ/ space.

Further observation of the data suggested that there were more issues with the forced-alignment process that had not previously been addressed by the removal of the MU and word list data. While a close examination of the original recordings was not possible because ethical considerations precluded full access, I was able to inspect some brief excerpts in Praat. This revealed that in some cases, poor recording quality had caused issues with the forced-alignment software. This typically consisted of background noise being included as part of the fricative. These errors were more prevalent in the pre-vocalic /s/ context than pre-consonantal /s/. A more expansive overview of each speakers' mean /s/ and /ʃ/ values revealed very few outliers of /ʃ/ as compared to /s/ which suggested that this issue mainly concerned pre-vocalic /s/ and not pre-vocalic /ʃ/. I therefore decided that the pre-vocalic /s/ values were too unreliable to be used as a measure of speakers' average COG of /s/. As such, rather than using retraction ratio as a measurement of the space between speaker's average /s/ and /ʃ/ pronunciations, I calculated retraction ratio as a function of how close the COG of a particular token is to that speaker's canonical /ʃ/ pronunciation. A ratio higher than 1 indicates that a token has a higher COG than that speaker's mean pre-vocalic /ʃ/ while a ratio lower than 1 indicates that a token is lower than that speaker's mean pre-vocalic /ʃ/. This strategy is not without its own issues. There is the unlikely but entirely feasible possibility that /ʃ/ is retreating from an encroaching /s/. If this is the case then the ratio would remain relatively unchanged.

I used the logged values of this equation following comparisons that showed that the log values were a better fit to a normal distribution than the raw values. The other two contexts (/s{p,t,k}r/ and /s{p,t,k}/) are used to test the influence of /r/ on /s/-retraction which has been known to have a 'depressing' effect on the value of COG (Baker et al. 2011). A fourth context was also tested, /stj/, as some research has shown this context also causes /s/-retraction (Warren 2006). However, preliminary modelling revealed that there were insufficient tokens (only 694 spread over 166 speakers) to perform reliable statistical analysis, and so this context was subsequently dropped.

From the ONZE corpus, COG values were measured at 1/3, 1/2, and 2/3 of the way through the sibilant. The extraction of COG values at multiple timepoints throughout the fricative was done to capture the development of frication noise. Previous studies have shown that the spectral moments of /s/ change over the course of the fricative such that a dynamic approach to analysis provides more reliable results (Koenig et al. 2013; Stevens & Harrington 2016). This is an especially important consideration in light of the research goals of the present study which aims to explore the coarticulatory effects of the following consonant. During a-priori screening of the data for outliers, the first timepoint was revealed to be highly inaccurate and so it was removed from analysis. Since the coarticulatory effect that is the focus of this study,

i.e., of a following context, is likely to be more prevalent in the latter parts of the fricative (Stevens & Harrington 2016), the removal of these datapoints should not greatly influence the final results.

3.3 Data screening

While forced-alignment technology is invaluable to linguistic research, some errors are unavoidable. In some cases, the automatic transcription erroneously included words that did not contain a desired consonant cluster (e.g., *firemen*). These were removed by hand, as well as all the tokens which had missing COG values (this amounted to 13% of the total data being removed). In addition to the aforementioned removal of datapoints, further steps were taken to reduce the potential impact of possible segmentation errors caused by the forced-alignment software. In cases where access to the data was made possible, exceptionally high duration values were checked over by hand and re-segmented if found to be inaccurate. When access was not permitted, values with durations over 900ms were removed. This was based on an overall analysis of the distribution of the data which suggested that values up to 900ms may still be accurately segmented.

Following this process, remaining outliers were eliminated using a combination of minimal a-priori screening followed by model criticism (see e.g., Baayen & Milin 2010). First, impossibly extreme values of COG were removed for each speaker by hand following accepted psycholinguistic practice. Then, following Baayen (2008: 207), a linear regression model with random effects only was used to determine outliers, defined as values with standardized residuals greater than 2.5. This process ensures the most reliable results while still maximally retaining data. Furthermore, to ensure that the measurement of speakers' canonical pronunciation was as accurate as possible, and following Wilbanks (2017), I also removed all speakers who had fewer than 5 tokens of /ʃ/ in pre-vocalic position. I do concede however, that without access to the original recordings, and the time necessary to hand-correct them, some errors will remain. The final results should be interpreted with this in mind. After the data was cleaned, the total number of speakers was 428 and the total number of fricative tokens was 15,007 (/skr/ = 235, /spr/ = 120, /str/ = 1972, /sk/ = 3388, /sp/ = 2372, /st/ = 6920).

3.4 Statistical modelling

I ran two linear mixed effects models (Baayen 2008) using the *lme4* package (Bates et al. 2014) in R on two separate data sets. The first model (M1) was originally fit to a data set containing all tokens of pre-consonantal /s/. This data set was later reduced to just /st/ and /str/ clusters due to a paucity of tokens in the other contexts (see Section 4.1). This model (M1a) was used to address my first research question regarding the phonetic origins of /s/-retraction in NZE. The second model (M2) was run on just /s/ preceding the /tr/ cluster and was used to address my second research question regarding the effect of lexical frequency on /s/-retraction. Ideally, one model would be used to answer both of these questions. However, substantial variation in the number of data points in each consonant cluster means that effects of lexical frequency, particularly in the higher ranges, are driven largely by the /sC/ context (and /st/ in particular). This means that my second research question cannot be accurately answered using a model which runs on a data set containing /s/ in every context. Considering that this

sound change is widely recognised as primarily concerning /s/ preceding /tr/ clusters (Baker et al. 2011), and there are very few tokens of /spr/ and /skr/, I chose to run the second model on just the /str/ data set in order to more accurately investigate the influence of lexical frequency.

Both models used retraction ratio as the dependent variable. Linguistic fixed factors for each model included: duration of the fricative; timepoint (COG measured at 1/2 and 2/3 through the fricative); and stress (either strong or weak). Initially, three levels of stress were analysed - primary, secondary, and none. However, too few tokens with secondary stress were available and so the primary and secondary levels were collapsed into one level: strong. Stress was calculated at the lexical level by the automatic transcription system. Position (word initial or medial) and lexical frequency were also included. Position was included as previous research suggests that COG of /s/ in /str/ clusters reduces in medial position (Wilbanks 2017). M1 also included onset as a fixed effect with three levels: /sC/; /sCr/; and /str/. Previous research has shown that /s/-retraction may vary according to the following consonant (Stevens & Harrington 2016). However, there were insufficient numbers of /s/ in each individual context to examine this effect in any depth and so I opted to collapse these contexts into those presented above, following Stuart Smith et al. (2019).

In line with Hay et al. (2015), lexical frequency was measured as the log of the total word count of each unique word in the dataset after lemmatisation and after hand-correction of misspellings or alternative transcriptions. These counts range from 1 to 2309 (mean = 525, median = 134, sd = 760). As the authors note, this produces similar results to more standard frequency measures but with increased rates for certain words which are more local to New Zealand like *shear* and *sheep*. This makes the method more localized and accurate for these groups of speakers than other measures of frequency (Hay et al. 2015).

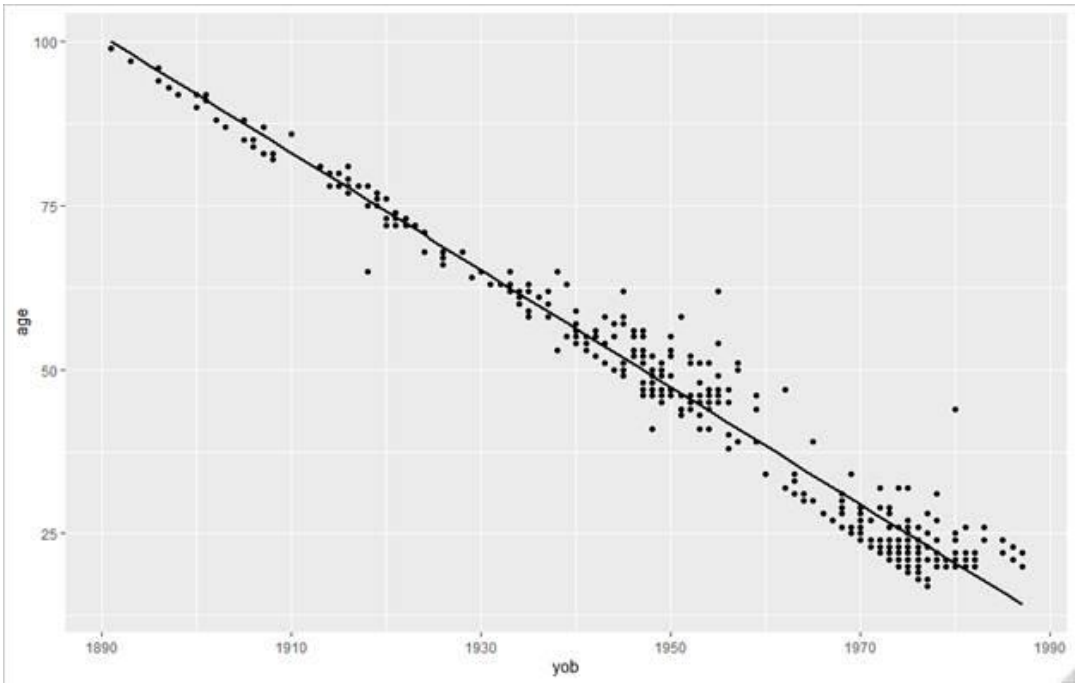
Social factors in each model included: age (i.e., age at time of recording); year of birth; and sex. Year of birth had a non-linear effect which was modelled using *restricted cubic splines* from the *rms* library (Harrell 2013). While post-hoc model comparison produced a model with 5 knots as the best fit for M1, when interactions with year of birth were plotted, they produced highly unrealistic extreme values. There were also unmotivated swings in the slope of the interactions which did not match anything previously observed in the literature. I therefore decided to use 3 knots to model year of birth. This is the same number as that used in Hay et al. (2015) who also analyse the ONZE corpus and so are likely to model the same non-linearities in year of birth. This decision is supported by model comparisons of model M2, which showed that year of birth was best modelled using 3 knots.

Year of birth was included in the model as a proxy for change in progress in line with well-established sociolinguistic practice (Bailey et al. 1991). However, as a result of the different goals of the different subparts of the corpus, the speakers born the earliest were also all much older at time of recording than the more recently recorded participants. Research shows that as people age, the value of COG in their pronunciation of /s/ reduces (Taylor et al. 2020). This aging effect can cause issues with the apparent time hypothesis (Bailey et al. 1991), as only including year of birth when modelling the ONZE corpus runs the risk of confusing the progress of the sound change with the influence of age on fricative realization. Therefore, speaker age was also included in the modelling to ensure that this aging effect was well

accounted for. However, during preliminary visualisation of the data, it was seen that there was high correlation between age and year of birth, as shown in Figure 2.

Figure 2

The inverse relationship between age and year of birth.



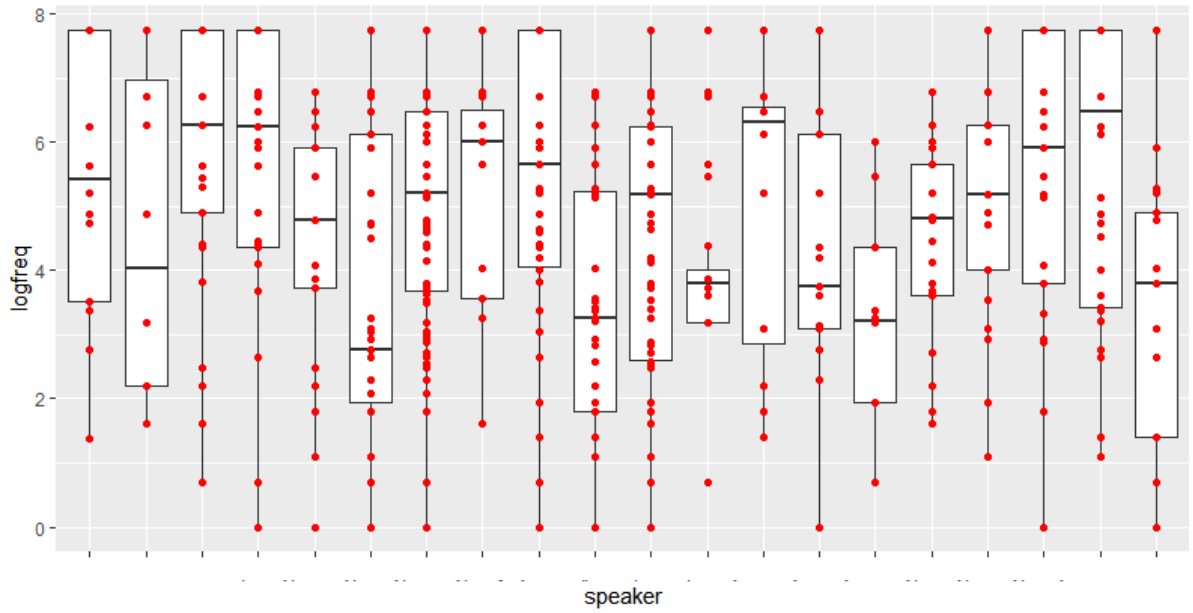
Note. As year of birth increases, age decreases with very few exceptions.

To reduce the impact of this correlation, a simple linear model of the participant data was used to predict age from year of birth, and the resulting residuals for age were extracted from that model. These residuals indicate the values of the age factor that are not predicted by the year of birth factor.

Random effects for both models included word and speaker. Linguistic factors (e.g., lexical frequency and duration) were also included as random by-speaker slopes following Hay et al. (2015). However, the complexity of this random effects structure caused numerous complications in the modelling process. Further inspection of the data revealed large amounts of variation in each of these factors across speakers. An example of this spread is shown in Figure 3 which plots the logged values of lexical frequency against a random sample of 15 speakers.

Figure 3

Plot of the logged values of word frequency by a random sample of 15 speakers



This variation suggests that including word frequency as a random by-speaker slope is likely to produce untrustworthy results as it is based on different subsets of items for different speakers, of which some subsets will be very small. The paucity of data in many of these speakers causes issues with the random effects structure which typically require lots of data in order to provide accurate estimates of slope (Harrison et al. 2018). Furthermore, unbalanced representations of data across groups, as is the case with Figure 1, can cause a model to become unstable (Harrison et al. 2018: 7). Similar amounts of variability were also found in duration and, for M1, in onset and so these variables were also removed. Position and stress meanwhile were more evenly represented across speakers and so were retained as random by-speaker slopes in both models. Model fit was guided by Akaike Information Criterion and Bayeesian Information Criterion. Both models were fit with every theoretically justified effect and interaction included with each variable being removed through the step() function if it proved not significant. The significance of the predictors in the parsimonious models returned by step() were confirmed by means of model comparisons using anova(). Estimates, significance levels and standard errors for each model are presented in the appendix. Significance levels are given using Satterthwaite's approximations for the degrees of freedom using the lmer test library.

4. Results

4.1 Output of Model 1

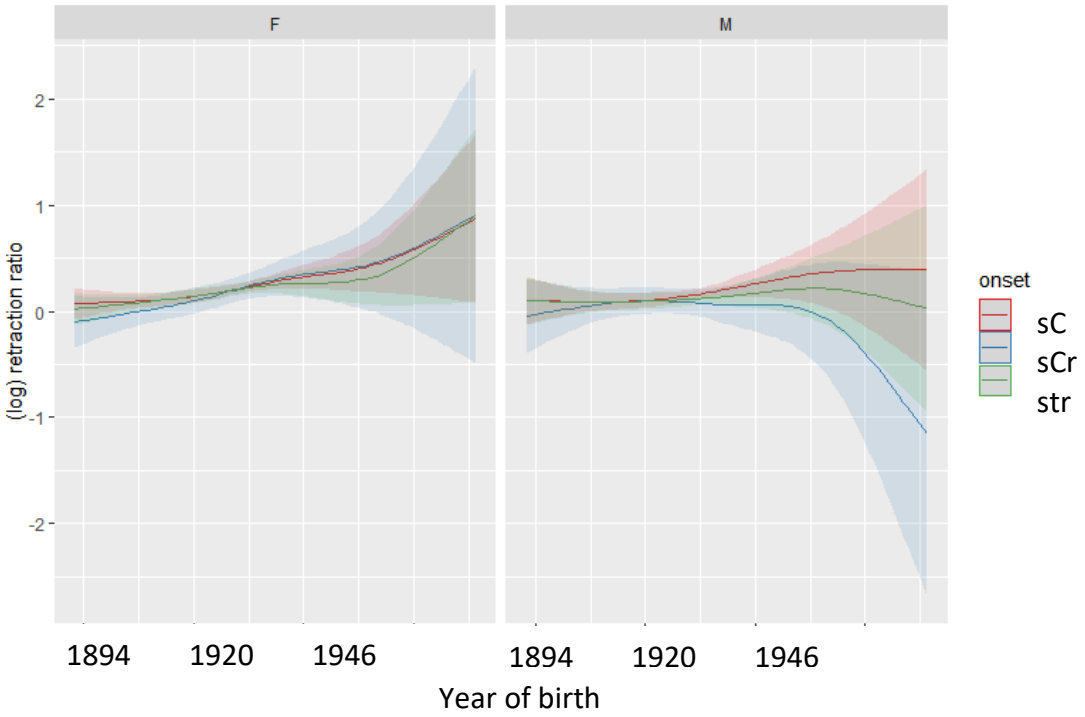
The final structure of M1 is:

Model M1: ratio ~ age + duration*timepoint + year-of-birth*timepoint + year-of-birth*onset*frequency + year-of-birth*onset*position + year-of-birth *onset*sex + onset*position*sex + (1 + position + stress | speaker) + (1 | orthography)

The results of model comparisons using the anova function on M1 suggest that /s/-retraction is advancing amongst males in phonetic contexts with a following /r/. By contrast, /s/ appears to be taking on higher COG values over time (as reflected in higher retraction ratios) amongst female speakers in all contexts. The retracting effect in male speakers is especially pronounced in the /spr/ and /skr/ clusters (coded in the model as /sCr/; see Figure 4). However, recall that these contexts have an especially small number of tokens compared to the other phonetic contexts. This paucity of data can be seen in the unusually large confidence intervals of the /sCr/ slope (Figure 4).

Figure 4

Plot of the interaction between year of birth, onset, and sex



Note. Ratio increases over time in all contexts for females while for males, the presence of /r/ causes a drop in retraction ratio amongst younger speakers. Note that year of birth in the model was scaled and centred.

Visualisations of other significant interactions also showed extreme deviations in the slope of the /sCr/ context (and larger confidence intervals, particularly in the later years of birth), compared to the other two contexts. This suggests that the results for /sCr/ may be less reliable than those for other onset types. Given the relatively small number of /sCr/ tokens (see above), this is not entirely surprising. I therefore concluded that I would get more accurate results concerning the effect of /r/ on /s/-retraction if these /sCr/ contexts were removed from the analysis. To ensure consistency in the effect of the following consonant on /s/, I also removed the /sp/ and /sk/ contexts, leaving onset with only two levels: /st/ and /str/. These had 7,116 and 2,026 tokens, respectively. I then ran the step() function on the full version of a model with just these tokens, and with all fixed effects and interactions included. Step() returned the following model:

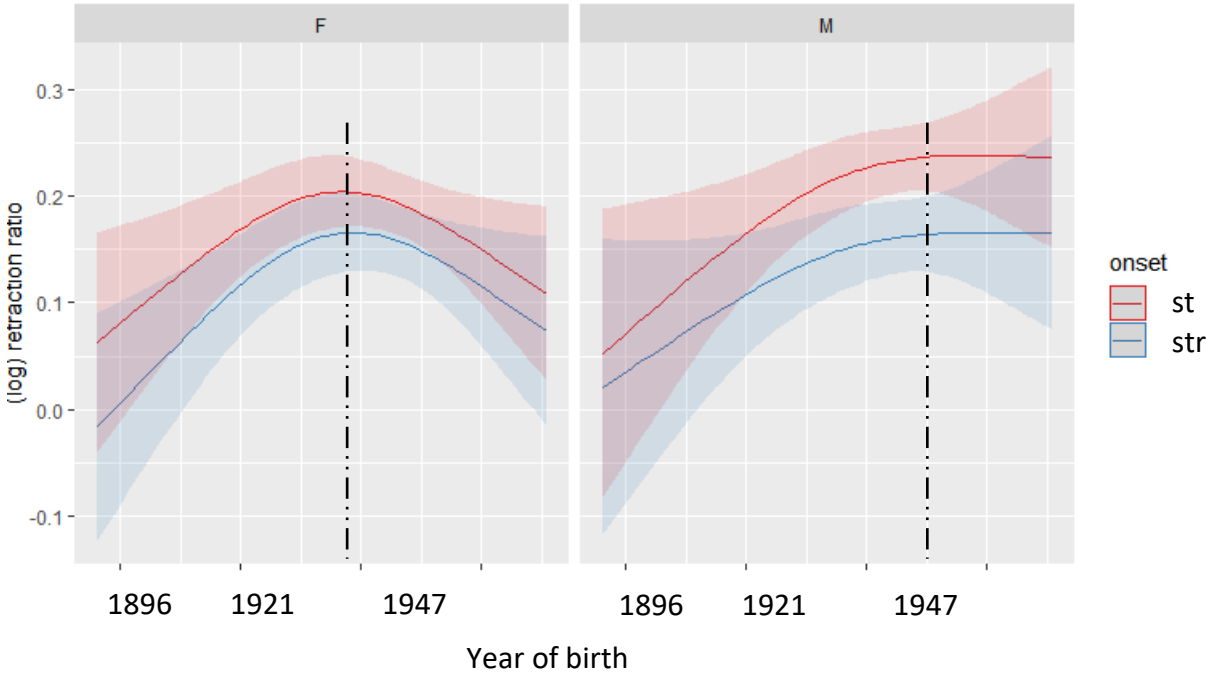
Model M1a: ratio ~ age + duration + year-of-birth *timepoint + timepoint*onset + year-of-birth *onset*frequency + stress*position + year-of-birth *onset*sex + (1 + position + stress | speaker) + (1 | orthography).

All further discussion in this section concerns model M1a. As this model is primarily concerned with investigating the influence of following /r/ on /s/-retraction, the focus of the discussion here is on the significant interactions involving onset. A more in-depth analysis of /s/-retraction will be presented in the context of model M2, which explicitly investigates the context in which /s/-retraction is most advanced.

Of greatest relevance to my first research question is the significant interaction in M1a between year of birth, onset and sex ($F(2, 16991) = 7.92$, $p < 0.001$; see Figure 5).

Figure 5

Plot of the interaction between year of birth, sex, and onset in M1a



Note. While retraction ratio rises amongst the earliest born speakers, it plateaus in the male speakers and decreases in the female speakers. This effect is more pronounced in the /str/ context. The dashed lines indicate the point in time at which retraction ratio peaks in male and female speakers. Note that year of birth in the model was scaled and centred.

Retraction ratio gradually increases over time for both males and females in the earliest born speakers. This is most likely a consequence of the fact that the earliest born speakers were also the oldest at time of recording and therefore showed age-related lowering of COG of /s/ (Taylor et al. 2020). In female speakers, retraction ratio begins to decrease in the mid 1940s (see dashed line in Figure 5) but the difference in the amount of retraction between /st/ and /str/ clusters remains constant. In male speakers, retraction ratio continues to increase until the 1960s, with the /str/ context increasing at a slower rate, at which point it remains

constant. That /s/ preceding /tr/ clusters remains more retracted than preceding /t/ at all years of birth suggests that /r/ does have a 'depressing' effect on COG of /s/ in NZE. However, because /s/ changes at similar rates and in both /st/ and /str/ clusters, it does not appear to have 'spread' to /st/ from /str/. That is, based on the results of this model, I cannot say that /str/ is the source of /s/-retraction in NZE but that instead, this sound change has occurred simultaneously in both /st/ and /str/ contexts and the influence of a following /r/ increases this retracting effect. However, the difference in increasing rates of retraction in /st/ and /str/ contexts for males does suggest that there may be some evidence of spread here. This point will be discussed further in Section 5.1.

There was also a significant interaction of onset with timepoint ($F(1, 15413) = 10.85$, $p < 0.0001$). Post-hoc analysis using the emmeans () function[18] indicates that while /s/ showed less retraction at timepoint 3 than at timepoint 2 in the /st/ context (est. diff. = -0.025, SE = 0.002, $p < 0.001$), there was no such difference in the /str/ context (est. diff. = -0.005, SE = 0.005, $p = 0.25$). It is unclear why /s/ preceding /st/ would be more retracted earlier in the cluster.

4.2 Output of Model 2

The second model only involves the /str/ context. The final structure of M2 is:

Model M2: ratio ~ age + position + duration*timepoint + timepoint* year-of-birth + year-of-birth *frequency + (1 + position + stress | speaker) + (1 | orthography).

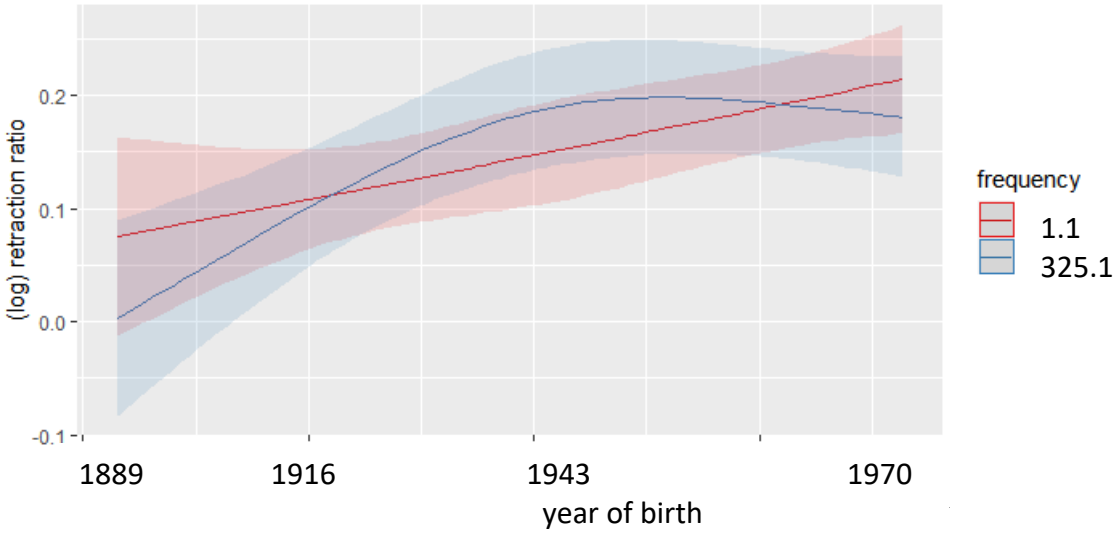
Note that while the step() function did not include position in the best fit version of M2 (an anova test returns: $F(1, 221)$, 1.02, $p = 0.3144$), I retained it in the final model due to the strong theoretical justification of the effect it has on /s/ (Wilbanks 2017). The estimate for position is negative (-0.0163), which indicates that /s/ is more retracted in word-medial contexts. Residualised age was significant in M2 ($F(1, 325) = 19.08$, $p < 0.001$) in much the same way as M1.

Figure 6 plots the significant interaction between year of birth and lexical frequency from M2 ($F(2, 2162) = 4.92$, $p = 0.0074$).

Figure 6

Plot of the interaction between year of birth and log of lexical frequency (scaled)

[18] This was conducted on a version of M1a in which year of birth was coded as a linear predictor, as emmeans cannot run when the model includes the non-linear coding year of birth.



Note. High frequency words change faster at all years of birth. Note that year of birth in the model was scaled and centred.

The interaction term goes in the same direction as the year of birth coefficient (see summary of model output in appendix), indicating that high frequency words change faster than low frequency words. Intriguingly, this change is not linear (although that is perhaps to be expected considering the non-linear effect of year of birth), with retraction ratio increasing amongst the earliest born speakers until around 1960 in Figure 6. At this point, while retraction ratio continues to trend upwards in low frequency words, it begins to drop in high frequency words. This outcome of frequency is the same as that predicted by Todd et al. (2019) for sound changes where a phoneme encroaches on the acoustic space of another, increasing acoustic ambiguity. This indicates that these lexical frequency effects are observed even when phonotactic distributions of /s/ and /ʃ/ mean that the acoustic ambiguity (/s/ sounding like /ʃ/) should not result in lexical ambiguity. No significant effect of sex in M2 suggests that this change is identical across genders.

That /s/-retraction is only advanced in high frequency words provides further support for Warren's (2006) suggestion that this change is a recent innovation in NZE and has not yet spread to low frequency words. This does call into question the validity of my previous argument that /s/-retraction is spreading *faster* in high frequency words than in low frequency words. If we are still in the infancy stage of this sound change then it may be that low frequency words have not had a chance to change yet (which may be the case considering retraction is still increasing in low frequency words; see Figure 6). Further monitoring of this sound change is needed to observe whether there remains a trend of high frequency words changing at a faster rate once the sound change is more advanced.

While timepoint was not significant as a simple fixed effect based on the results of an anova test on M2 ($F(1, 3010) = 2.19$, $p = 0.1389$), there was a marginally significant interaction with year of birth ($F(2, 3011)$, $p = 0.0458$). In this interaction as well, the interaction term went in the same direction as the year of birth coefficient suggesting that timepoint 3 changed faster than timepoint 2. This fits with the theory that /s/-retraction is caused by coarticulation of the following /tr/ cluster, as the COG of /s/ closer to that cluster is more strongly affected by that coarticulatory effect. There was also significant effect of duration ($F(1, 3072) = 39.53$, p

< 0.0001) with longer words retracting less. This interacted with timepoint (F(1, 3011) = 8.90, p = 0.0029). Since the interaction term goes in the opposite direction to the coefficient, this indicates that timepoint 3 retracted more in longer words.

5. Discussion

5.1 Implications for /s/-retraction in New Zealand English

Based on the outputs of M1a and M2, /s/-retraction appears to be progressing in NZE although it is still at quite an early stage. Unfortunately, I currently have no reliable way of measuring speakers' canonical /s/ pronunciations. This means that the following discussions of /s/-retraction relate only to comparisons of speakers' /s/ in /str/ and /st/ contexts to their average /ʃ/ pronunciation. I cannot measure how different this is from those speakers' pre-vocalic /s/ pronunciations. As a result, it is unclear whether recently born speakers are also producing more retracted /s/ in pre-vocalic contexts. It is possible that /s/-retraction in /st/ also coincides with a gradual retraction of pre-vocalic /s/ in NZE speakers or that, as mentioned above, /ʃ/ is also changing which would affect the ratio calculation. It is clear that more research is needed to further explore this issue.

That I found evidence of /s/-retraction occurring in /str/ contexts in NZE is not surprising given the literature on this sound change already in NZE and the strong phonetic justification for its initiation (see e.g., Smith et al. 2019). However, /s/-retraction also appears to be affecting /s/ in /st/ contexts (at least in female speakers, as shown in Figure 5). This finding fits with other studies on /s/-retraction which have explored this sound change in /sC/ clusters (Stevens & Harrington 2016; Stuart-Smith et al. 2019). However, there is no immediately obvious phonetic explanation for why /s/ would retract in the /st/ context. Stevens and Harrington tentatively suggest that a 'slightly retracted tongue tip' may sufficiently increase the cavity 'in front of the noise source' (2016: 126) to reduce COG of /s/. While there is no laboratory evidence of tongue tip movement in /st/ contexts, McAuliffe et al. (2001) argue on the basis of evidence from electropalatography that in production of pre-vocalic /t/, for some speakers the tongue made 'extension of contact into the anterior, post-alveolar zone'. If this extension into the post-alveolar zone in the production of /t/ was anticipated in the production of /s/, this may cause sufficient retraction to produce /s/ in an /ʃ/-like fashion. However, more articulatory research is needed to confirm this hypothesis. Smith et al. (2019) report laboratory analysis of speakers' lip and tongue shapes, however, as their focus is specifically related to the effect of /r/ on sound change, they only analyse /str/ contexts, making it difficult to contrast their findings. While there is currently no strong argument for a phonetic explanation for /s/-retraction in /st/ contexts, there may be a phonological explanation. Baker et al. (2011) suggest that /s/-retraction originates in /str/ clusters before spreading to other contexts. It is possible that speakers have interpreted retraction in /str/ as a sound change affecting /s/ before /t/ in other contexts, including /st/. However, this theory is complicated by the fact that /st/ appears to change at the same point in time as /str/ (Figure 5). If /s/-retraction was indeed spreading from /str/ to /st/ then we would logically expect there to be a 'lag' in which speakers only retracted /s/ in /str/ contexts before later also retracting in /st/. However, as mentioned previously, while /s/ retracts in both contexts simultaneously amongst female speakers, increasing separation of retraction ratio between /st/ and /str/ is

observable amongst male speakers. This may indicate that they are lagging behind female speakers not just in the general progression of the sound change but also in the spread of the sound change from /str/ to /st/ contexts. However, more research in this area is needed to confirm these findings.

Another possible explanation is that reduced articulatory effort in the pronunciation of /s/ in certain contexts encourages a reduction of COG. A significant effect of duration in my study, in which retraction ratio increases with longer durations, provides evidence in support of this theory. Phoneme duration is widely recognised as one of the strongest indicators of articulatory reduction (Lindblom 1963; van Son & Pols 1999; Xu & Prom-on 2019). For example, in a study on consonant reduction, van Son and Pols (1999) show that fricatives had reduced duration in casual, spontaneous speech compared with read speech. Intriguingly, COG was also reduced in spontaneous speech.

It was surprising that there was no significant effect of position in M2 ($F(1, 221) = 1.02$, $p = 0.3144$), since an effect of position has often been reported in the literature. Although not significant, word-medial /s/ in my study in both /st/ and /str/ clusters tended to have a lower retraction ratio than in initial position, which does agree with the widely accepted claim that word-medial /str/ clusters are more highly retracted than in word initial contexts (Gylfadottir 2015; Wilbanks 2017). Consonants in medial position, including /s/, typically have shorter durations than in initial position (Umeda 1977; in my own study, initial mean duration lengths for /s/ is 115ms compared to 100ms for /s/ in medial position). This suggests that reduced articulatory effort in medial position, as indicated by shortened phoneme duration, also encourages a reduction in COG of /s/, reflecting the connection between duration and COG found by van Son and Pols (see above). Wilbanks (2017) offers an alternative explanation for the effect of position found in his study, suggesting that the importance of initial position over medial as part of lexical retrieval processes discourages the sound change in this context (Aschenbrenner et al. 2017; Marslen-Wilson & Zwitserlood 1989; Nooteboom 1981). However, as there is no permittable word-initial cluster of /ʃC/ or /ʃCr/, barring the rare exceptions of loan words like *spiel* and *spritz*, then it is unlikely that word recognition would be greatly affected by /s/-retraction in these contexts, as there are no alternatives with which to confuse it[19].

A lack of a significant effect of sex in M2 suggests that /s/-retraction does not vary by gender in NZE. This conflicts with Warren's (2006) claims that /s/-retraction is more advanced amongst men than women. It also conflicts with the generally accepted theory in sociolinguistics that women lead sound change. That /s/-retraction is a comparatively recent change in NZE however may explain why no gender effect has been found. As mentioned previously, Todd et al. (2019: 2) assume that sound change starts from neutral initial conditions which suggests that for a recent sound change such as this one, insufficient time has passed for a social influence of gender to take effect (although based on the increasing separation of /st/ and /str/ amongst males (Figure 5), it is likely that gender will eventually emerge as a significant effect).

[19] This explanation is compatible with my own theory regarding articulatory reduction of course. It may be the case that both accounts are true and work in tandem to reduce COG in medial position.

While it may at first glance appear that the graphs (Figure 5 in particular) suggest /s/ was once fully retracted amongst speakers, or at least, much more retracted than at present, it is likely that this is the result of the reducing effect of age on COG not being fully addressed in the model. Recall that there are no measurements of younger speakers' /s/ pronunciations at the earliest years of birth. This makes for an unbalanced sample. Without the ability to measure younger speakers' /s/ realizations at these earlier time points, it is impossible to accurately determine whether /s/ was once full retracted in NZE. Nor are there any studies, as far as the author is aware, which investigate /s/ pronunciation in the speech of those regions from which recent arrivals to New Zealand emigrated from. Complications arising from this issue will be discussed further in section 5.3.

5.2 Implications for a theory of sound change

My findings support a theory of sound change in which, for changes where one sound encroaches on the acoustic space of another, high frequency words change faster than low frequency words (Todd et al. 2019). This holds true even with the lack of ambiguity (resulting from the phonotactic constraints) in the sound change presented here. This suggests that semantic constraints do not have a strong influence on the storage of phonemes in the exemplar space. This is intriguing as one of the central hypotheses of Todd et al.'s (2019) research is that the perceptions of the listener drive sound change. If this is the case, then we would naturally expect that a phoneme would be stored differently by the listener if it occurred in a phonotactically unlicensed context. One possible explanation for this is that pre-vocalic /s/ is acting as a 'brake' on /s/-retraction. The robust storage of pre-vocalic /s/ may encourage /ʃ/-like tokens of /s/ in /str/ contexts to be re-interpreted as /s/-like. This provides support for versions of exemplar theory which include a level of phoneme representation as this would suggest that the /s/ in the /str/ context is connected in the exemplar space to the /s/ in the pre-vocalic /s/ background. It is unclear how to explain this connection without making use of a phonemic level of representation.

How then do we explain the lack of a significant effect of lexical frequency in the research of Gubian et al. (2019)? Compared with the analysis of the short front vowels as reported in Todd et al., the analysis of NEAR/SQUARE in Gubian et al. (2019) has an additional layer of complexity in that the vowels being examined are diphthongs that by definition include a trajectory in the vowel space and not simply point targets. Todd et al.'s model, by their own acknowledgement, can capture vowel changes on a single plane, but struggle to account for shifts of direction, such as the centralization of KIT in their analyses of short front vowels, and also I would argue for changes that might involve the re-orientation of diphthong trajectories. Therefore, it is not clear how their model would predict frequency effects of these kinds of changes. Furthermore, Todd et al. suggest that their results are unlikely to apply to every observable sound change but that patterns may emerge over time as more research in this area is conducted which fit with their findings.

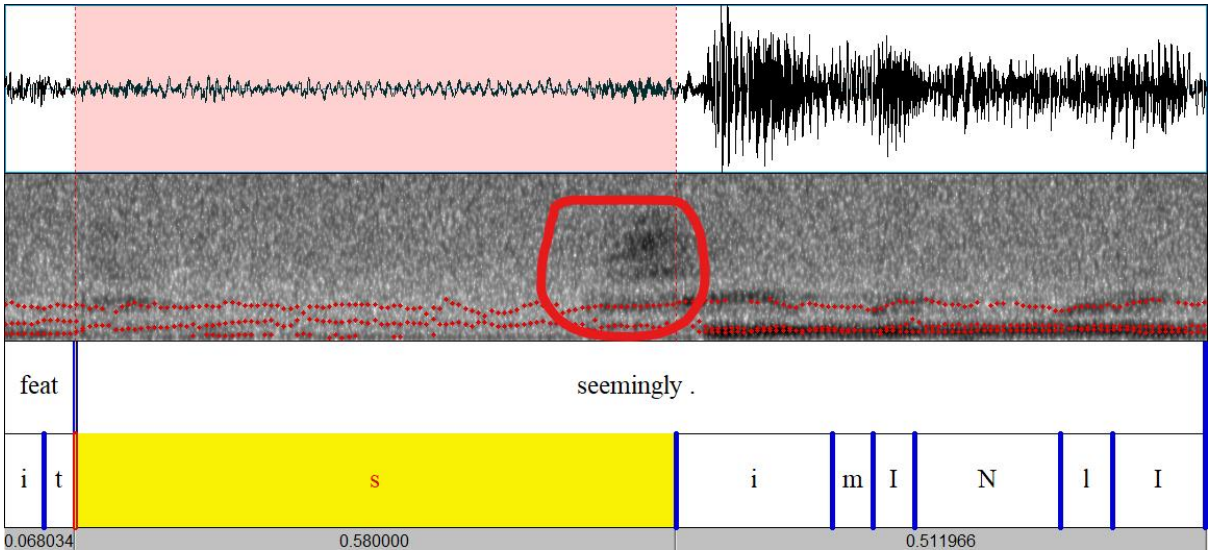
5.3 Complications with the modelling process

As mentioned previously in this paper, I encountered many complications throughout the data analysis and modelling process. Many of these have centred on the data I have used in

this study, drawn from the ONZE corpus. For example, the reduced quality of many of the recordings has been problematic, particularly for the analysis of fricatives. This issue has mostly caused problems with the forced-alignment process. Personal observation of a small subset of the recordings revealed a large amount of background noise, particularly in the recordings from the IA corpus which were conducted in the early 1990s. While this largely does not pose a problem for automatic segmentation at the offset boundary between /s/ and the following phoneme, it can frequently cause mistakes whereby the background noise is interpreted as part of the onset of /s/ (F. Schiel, personal communication, May 27, 2020)[20]. As such, when COG was measured at halfway through the fricative, this point often ended up being located during periods of background noise as seen in Figure 7.

Figure 7

A screenshot of a Praat script from an excerpt of the ONZE corpus



Note. The outline in red indicates the band of high amplitude noise that identifies where the /s/ should have been segmented.

As this noise has little to no high amplitude peaks in the higher frequencies, this error typically reduces the value of COG. Occasionally, I encountered mismatched segmentations and was thereby forced to re-segment the entire excerpt. It is unclear to what extent these errors pervade the rest of the data, and without access to the original recordings, this is not an issue I was able to resolve. While rare in the excerpts I inspected, it is unknown how much this issue affected the results of the data, or whether it unduly affected certain samples of the data over others. One approach to dealing with these errors is to remove all tokens below 2000kHz (Smith et al. 2019). While this may eliminate some accurate tokens, this is unlikely as most sources agree that average values of COG for /ʃ/ is within the 2.5-3kHz range (Jongman et al. 2000). In future research, it would be of great benefit to the researcher to ensure that they have complete access to the original recordings before beginning their analysis to ensure that any such errors encountered in the process are able to be successfully remedied.

[20] Subsequent to running the analysis, I discovered through personal communication from Jen Hay that fricatives in the IA corpus are particularly unreliable.

Another issue concerns the uneven distribution of speakers across age groups in the ONZE corpus as a result of the different goals of the developers of each subpart. This issue has largely caused issues during the modelling process. As illustrated in Figure 2, there is a very strong correlation between age and year of birth. In speakers born before the median year of birth (1948), there are none younger than 45 who will likely already exhibit some degree of age-induced COG reduction (Taylor et al. 2020). All the younger speakers who we can predict to have no age-induced reduction of COG in their productions of /s/ are clustered towards the highest year of birth. As such, there are not enough people of the same age across the different years of birth to accurately test whether effects of sound change are instead just effects of the aging process on COG. This is not as significant a problem for other research using the ONZE corpus which analyses phonemes such as vowels which do not change significantly as a result of effects of aging (e.g., Hay et al. 2015). However, even with the extensive steps taken in this study to account for this problem, there remains the issue that without recordings of any younger people born at the same time as the oldest speakers (an unfortunate impossibility as no recordings of a sufficiently high quality required for phonetic analysis could be made at that time), then we have no evidence for how younger people spoke then. With only older groups of people being recorded, the data will be heavily skewed towards reduced COG in the earliest born speakers. This suggests that the admittedly small effect of year of birth found in my study could in fact be much greater if only more younger speakers born earlier were able to be recorded. It is also possible that other effects would be revealed as significant if a more balanced sampling of data were able to be analysed. In future research on /s/-retraction, it may be beneficial to reduce the time-depth of the focus of study in order to acquire a more balanced sample.

6. Conclusion

In this paper, I have set out to further explore the progress of /s/-retraction in NZE in order to determine whether this sound change is spreading from /sCr/ clusters to /sC/ clusters as found in other dialects around the world. While I was ultimately unable to provide reliable evidence for this sound change preceding /p/ and /k/, I did illustrate that /s/-retraction is advancing in NZE in both /st/ and /str/ clusters. It is clear however, that more research on the acoustic origins of this sound change in NZE is needed.

I have also conducted the first study of lexical frequency on /s/-retraction in NZE. Including an effect of lexical frequency in my analysis was done in order to expand the predictions made by Todd et al. (2019) to new sound changes. I illustrated that high frequency words changed at a faster rate than low frequency for this sound change. This finding confirms the arguments made by Todd et al. and also suggests that semantic ambiguity does not play a role in token discriminability in exemplar theory. The lack of an influence of semantic ambiguity provides further support for a hybrid model of exemplar theory in which both abstract and episodic levels of representation are included.

7. Appendix

7.1 Summary of statistical models

M1a	Estimate	Std Error	df	*t* value	*p* value
Intercept	0.185411	0.035662	714.017830	5.20	<0.0001
residualised age	0.042942	0.009396	402.989319	4.57	<0.0001
duration	0.026806	0.001511	17419.37444	17.74	<0.0001
timepoint	0.040069	0.006205	15421.2092	6.46	<0.0001
rcs(yob_cs, 3)’	0.043156	0.035677	588.328664	1.21	0.22690
rcs(yob_cs, 3)’’	-0.043144	0.042009	623.030763	-1.03	0.30481
onset	0.001089	0.021466	7860.985402	0.05	0.95955
sex	0.006748	0.045059	411.999996	0.15	0.88103
stress	0.007095	0.022043	976.326583	0.32	0.74762
position	-0.025301	0.014682	656.219706	-1.72	0.08532
timepoint*rcs(yob,3)’	0.019060	0.005821	15415.66104	3.27	0.00106
timepoint*rcs(yob,3)’’	-0.018926	0.007231	15424.36413	-2.62	0.00887
timepoint*interact	-0.019094	0.005797	15413.44943	-3.29	0.00099
sex*rcs(yob,3)’	0.013086	0.052089	396.203249	0.25	0.80177
sex*rcs(yob,3)’’	0.019757	0.057299	406.081644	0.34	0.73041
onset*rcs(yob,3)’	0.013425	0.011435	16945.12079	1.17	0.24040
onset*rcs(yob,3)’’	-0.000691	0.014938	16470.31309	-0.05	0.96308
onset*sex	-0.035248	0.018002	16462.34326	-1.96	0.05025
stress*position	-0.052539	0.023987	924.610867	-2.19	0.02875
onset*sex*rcs(yob,3)’	-0.034824	0.016136	17088.96935	-2.16	0.03092
onset*sex*rcs(yob,3)’’	0.011669	0.020875	16816.49759	0.56	0.57618

M2	Estimate	Std Error	df	*t* value	*p* value
Intercept	0.15883	0.03915	1336.07557	4.06	<0.0001
residualised age	0.03744	0.00857	325.05295	4.37	<0.0001
duration	0.06274	0.00998	3072.28343	6.29	<0.0001
timepoint	0.01613	0.01089	3009.55707	1.48	0.1389
rcs(yob, 3)’	0.04674	0.04023	882.47189	1.16	0.2456
rcs(yob, 3)’’	-0.02747	0.03961	1142.82102	-0.69	0.4882
frequency	0.02131	0.01062	215.66779	2.01	0.0461
position	-0.01695	0.01681	221.31119	-1.01	0.3144
duration*timepoin	-0.01151	0.00386	3010.99088	-2.98	0.0029
timepoint*rcs(yob,	0.02031	0.01068	3009.31085	1.90	0.0572
timepoint*rcs(yob,	-0.01353	0.01123	3009.99836	-1.20	0.2284
rcs(yob,	0.02326	0.00821	1832.57004	2.83	0.0047
rcs(yob,	-0.02679	0.00856	2047.80400	-3.13	0.0018

8. References

Aschenbrenner, Andrew J., David A. Balota, Alexandra J. Weigand, Michele Scaltritti & Derek Besner 2017. The first letter position effect in visual word recognition: The role of spatial attention. *Journal of Experimental Psychology: Human Perception and Performance* 43(4): 700–718.

Baayen, Harald R. 2008. *Analyzing Linguistic Data: A Practical Introduction to Statistics Using R*. University Press.

Baayen, Harald R. & Peter Milin 2010. Analyzing reaction times. *International Journal of Psychological Research* 3(2): 12–28.

Bailey, Guy, Tom Wikle, Jan Tillery & Lori Sand 1991. The apparent time construct. Language *Variation and Change* 3(3): 241–264.

Baker, Adam, Diana Archangeli & Jeff Mielke 2011. Variability in American English s-retraction suggests a solution to the actuation problem. *Language Variation and Change* 23(3): 347–374.

Bass, Michael 2009. Street or Shtreet? Investigating (str-) palatalisation in Colchester English. *Estro: Essex Student Research Online* 1(1): 10–21.

Bates, Douglas, Martin Mächler, Ben Bolker & Steve Walker 2014. *Fitting Linear Mixed-Effects Models using lme4*. ArXiv:1406.5823 [Stat]. http://arxiv.org/abs/1406.5823

Bermúdez-Otero, Ricardo, Maciej Baranowski, George Bailey & Danielle Turton 2015. A constant rate effect in Manchester /t/-glottalling: High-frequency words are ahead of, but change at the same rate as, low-frequency words. *Paper presented at 2nd Edinburgh symposium on historical phonology*. Edinburgh.

Bloom, Paul 2000. *How Children Learn the Meanings of Words*. MIT Press.

Bybee, Joan 2007. *Frequency of Use and the Organization of Language*. Oxford University Press.

Carroll, John B., Peter Davies & Barry Richman 1971. *The American Heritage Word Frequency Book*. Houghton Mifflin.

Chodroff, Eleanor & Colin Wilson 2017. *Structured Variation in the Phonetics of English and Czech Sibilant Fricatives*. 91st Annual Meeting of the Linguistic Society of America, Austin, TX.

Clopper, Cynthia G., Terrin N. Tamati & Janet B. Pierrehumbert 2016. Variation in the strength of lexical encoding across dialects. *Journal of Phonetics* 58: 87–103.

Durian, David 2007. Getting [ʃ]tronger every day?: More on urbanization and the socio-geographic diffusion of (str) in Columbus, OH. *University of Pennsylvania Working Papers in Linguistics* 13(2): 65–79.

Foulkes, Paul & Jen B. Hay 2015. The emergence of sociophonetic structure. In Brian MacWhinney & William O'Grady (eds.), *The Handbook of Language Emergence*. Wiley Blackwell. 292–313

Goldinger, Stephen D. 1998. Echoes of echoes? An episodic theory of lexical access. *Psychological Review* 105(2): 251–279.

Gordon, Elizabeth, Margaret Maclagan & Jen B. Hay 2007. The ONZE corpus. In Joan C. Beal, Karen P. Corrigan & Hermann L. Moisl (eds.), *Creating and Digitizing Language Corpora: Diachronic Databases*. Palgrave Macmillan UK. Vol 2: 82–104

Gubian, Michele, Jonathan Harrington, Mary Stevens, Florien Schiel & Paul Warren 2019. Tracking the New Zealand English NEAR/SQUARE merger using functional principal components analysis. *Interspeech* 2019. 296-300.

Guy, Gregory R. 2003. Variationist approaches to phonological change. In Brian Joseph & Richard D. Janda (eds.), *The Handbook of Historical Linguistics*. 1st edn. John Wiley & Sons, Incorporated. Vol 21: 369-400.

Gylfadottir, Duna 2015. Shtreets of Philadelphia: An acoustic study of /str/-retraction in a naturalistic speech corpus. *University of Pennsylvania Working Papers in Linguistics* 21(2): 88-97.

Hale, Mark 2008. Neogrammarian sound change. In Brian D. Joseph & Richard D. Janda (eds.), *The Handbook of Historical Linguistics*. 1st edn. John Wiley & Sons, Incorporated. 343-368.

Harrell, Frank E. 2013. Rms: Regression modeling strategies (3.6-3) [R package]. <http://CRAN.R-project.org/package=rms(2013)>

Harrison, Xavier A., Lynda Donaldson, Maria E. Correa-Cano, Julian Evans, David N. Fisher, Cecily E. D. Goodwin, Beth S. Robinson, David J. Hodgson & Richard Inger 2018. A brief introduction to mixed effects modelling and multi-model inference in ecology. *PeerJ* 33: 47-94.

Hay, Jen B. & Paul Foulkes 2016. The evolution of medial /t/ over real and remembered time. *Language* 92(2): 298–330.

Hay, Jen B., Elizabeth Gordon & Margaret Maclagan 2008. *New Zealand English*. Edinburgh University Press.

Hay, Jen B., Janet B. Pierrehumbert, Abby J. Walker & Patrick LaShell 2015. Tracking word frequency effects through 130 years of sound change. *Cognition* 139: 83–91.

Hay, Jen B., Paul Warren & Katie Drager 2006. Factors influencing speech perception in the context of a merger-in-progress. *Journal of Phonetics* 34(4): 458–484.

Hazenberg, Evan 2017. Liminality as a lens on social meaning: A cross-variable analysis of gender in New Zealand English. Unpublished PhD Thesis, Victoria University of

Wellington.

Janda, Richard D. & Brian D. Joseph 2003. Reconsidering the canons of sound-change: towards a "big bang" theory. In *Historical linguistics 2001: Selected papers from the 15th international conference on historical linguistics, Melbourne*. John Benjamins. 205.

Jongman, Allard, Ratree Wayland & Serena Wong 2000. Acoustic characteristics of English fricatives. *The Journal of the Acoustical Society of America* 108(3): 1252–1263.

Koenig, Laura L., Christine H. Shadle, Jonathan L. Preston & Christine R. Mooshammer 2013. Toward improved spectral measures of /s/: Results from adolescents. *Journal of Speech, Language and Hearing Research (Online)* 56(4): 1175–1189.

Labov, William 2010. *Principles of Linguistic Change: Cognitive and Cultural Factors*. Wiley-Blackwell. Vol 3.

Lawrence, Wayne P. 2000. /str/-->/str/: Assimilation at a Distance?. *American Speech* 75(1): 82–87.

Lindblom, Björn 1963. Spectrographic study of vowel reduction. *The Journal of the Acoustical Society of America* 35(11): 1773–1781.

Marslen-Wilson, William & Pienie Zwitserlood 1989. Accessing spoken words: The importance of word onsets. *Journal of Experimental Psychology: Human Perception and Performance* 15(3): 576–585.

McAuliffe, Megan J., Elizabeth C. Ward & Bruce E. Murdoch 2001. Tongue-to-palate contact patterns and variability of four English consonants in an /i/ vowel environment. *Logopedics Phoniatrics Vocology* 26(4): 165–178.

Nooteboom, Sieb G. 1981. Lexical retrieval from fragments of spoken words: Beginnings vs endings. *Journal of Phonetics* 9(4): 407–424.

Ohala, John 1993. The phonetics of sound change. In Charles Jones (ed.), Historical Linguistics: Problems and Perspectives. *Longman*. 237-238.

Ohala, John 2012. The listener as a source of sound change: An update. In Maria-Josep Solé & Daniel Recasens (eds.), *Initiation of Sound Change: Perception, Production, and Social Factors*. John Benjamins Publishing Company. 21-35.

Phillips, Betty S. 1984. Word frequency and the actuation of sound change. *Language* 60(2): 320–342.

Phillips, Betty S. 2001. Lexical diffusion, lexical frequency, and lexical analysis. In Joan Bybee & Paul J. Hopper (eds.), *Frequency and the Emergence of Linguistic Structure*. John Benjamins Publishing Company. Vol. 45: 123-136.

Pierrehumbert, Janet 2001. Exemplar dynamics: Word frequency, lenition and contrast. In Joan Bybee & Paul J. Hopper (eds.), *Frequency and the Emergence of Linguistic*

Structure. John Benjamins Publishing Company. Vol. 45: 137-158.

Pierrehumbert, Janet 2002. Word-specific phonetics. In Carlos Gussenhoven & Natasha Warner (eds.), *Laboratory Phonology 7*. De Gruyter, Inc. 101-141.

Pierrehumbert, Janet 2006. The next toolkit. *Journal of Phonetics* 34(4): 516–530.

Pierrehumbert, Janet 2016. Phonological representation: Beyond abstract versus episodic. *Annual Review of Linguistics* 2(1): 33–52.

Rutter, Ben 2011. Acoustic analysis of a sound change in progress: The consonant cluster /stɹ/ in English. *Journal of the International Phonetic Association* 41(1): 27–40.

Shapiro, Michael 1995. A case of distant assimilation: /Str/ → /ʃtr/. *American Speech* 70(1): 101–107.

Smith, Bridget J., Jeff Mielke, Lyra Magloughlin & Eric Wilbanks 2019. Sound change and coarticulatory variability involving English /ɹ/. Glossa: *A Journal of General Linguistics* 4(1): 63.

Stevens, M. & Jonathan Harrington 2016. The phonetic origins of /s/-retraction: Acoustic and perceptual evidence from Australian English. *Journal of Phonetics* 58: 118-134.

Stevens, Mary, Jonathan Harrington & Florian Schiel 2019. Associating the origin and spread of sound change using agent-based modelling applied to /s/-retraction in English. *Glossa: A Journal of General Linguistics* 4(1): 8.

Storkel, Holly L. 2001. Learning new words: Phonotactic probability in language development. *Journal of Speech, Language & Hearing Research* 44(6): 1321-1337.

Stuart-Smith, Jane, Morgan Sonderegger, Rachel Macdonald, Jeff Mielke, Michael McAuliffe & Erik Thomas 2019. Large-scale acoustic analysis of dialectical and social factors in English /s/ retraction. In Sasha Calhoun, Paola Escudero, Marija Tabain & Paul Warren (eds.), *Proceedings of the 19th International Congress of Phonetic Sciences, Melbourne. Canberra, Australia: Australasian Speech Science and Technology Association Inc.* 1273-1277.

Taylor, Sammi, Christopher Dromey, Shawn L. Nissen, Kristine Tanner, Dennis Eggett & Kim Corbin-Lewis 2020. Age-related changes in speech and voice: Spectral and spectral measures. *Journal of Speech, Language, and Hearing Research* 63(3): 647-660.

Thomas, Erik 2009. *Sociophonetics: An Introduction*. Palgrave Macmillan.

Todd, Simon, Janet B. Pierrehumbert & Jen B. Hay 2019. Word frequency effects in sound change as a consequence of perceptual asymmetries: An exemplar-based model. *Cognition* 185: 1–20.

Umeda, Noriko 1977. Consonant duration in American English. *The Journal of the Acoustical Society of America* 61(3): 846–858.

van Son, Rob J. J. H. & Louis C. W. Pols 1999. An acoustic description of consonant reduction. *Speech Communication* 28(2): 125–140.

Warren, Paul 2006. /s/-retraction, /t/-deletion and regional variation in New Zealand English /str/ and /stj/ clusters. In Paul Warren and Catherine I. Watson (eds.), *Eleventh Australasian International Conference on Speech Science and Technology*. Australasian Speech Science and Technology Association Inc. 466–471.

Wilbanks, Eric 2017. Social and structural constraints on a phonetically-motivated change in progress: (Str) retraction in Raleigh, NC. *University of Pennsylvania Working Papers in Linguistics* 23(1).

Xu, Yi & Santitham Prom-on 2019. Economy of effort or maximum rate of information? Exploring basic principles of articulatory dynamics. *Frontiers in Psychology* 10: 2469-2491

Young, Steve, Gunnar Evermann, Dan Kershaw, Gareth Moore, Julian Odell, Dave Ollason, Dan Povey, Valtcho Valtchev & Phil Woodland 2006. *The HTK Book (for HTK Version 3.4)*. Cambridge University Engineering Department.

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