UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Ōtautahi | Christchurch
9-11 December
2024

Linguistic Society of New Zealand
Conference 2024

Programme and Abstract Booklet

Te Kāhui Roro Reo • New Zealand Institute of Language Brain & Behaviour

Linguistic Society of New Zealand

Welcome to the New Zealand Linguistic Society Conference ● 2024

It brings me great delight to welcome my fellow linguists to what is always a highlight of our year, the conference of the Linguistic Society of New Zealand!

2024 has been a year of resettling and recovery, after the devastating cuts to linguistics programmes across many of our universities in 2023.

Through these tumultuous times, what continues to unite us is our passion for language, in all its forms.

What better way to celebrate our resilience, solidarity and collegiality than to come together to nerd out over linguistics, as only we can?

I wish us all a joyful few days together at this conference, and hope that we emerge energised, refreshed, and ready for whatever lies ahead- after the summer break!

Julia de Bres
President, Linguistic Society of New Zealand

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Nau mai, haere mai

We are delighted to welcome you to Ōtautahi/Christchurch for the 2024 Annual Conference of the Linguistic Society of New Zealand.

The organisation of this conference was distributed across a large team from the New Zealand Institute of Language, Brain and Behaviour, and the Department of Linguistics, ably herded by Emma Parnell. We are grateful to Emma, and to the students, postdocs and faculty who have contributed to the (hopefully) smooth running of this event!

Thank you for joining us for this conference- an annual opportunity for us to celebrate our small, but amazing community. Linguistics in Aotearoa has long punched well above its weight, and despite our small number, the work presented at this conference is always fantastic. So enjoy catching up with each other, drink some coffee, stick your nose outside and enjoy some Christchurch air, and – above all, enjoy learning about and supporting each other's work.

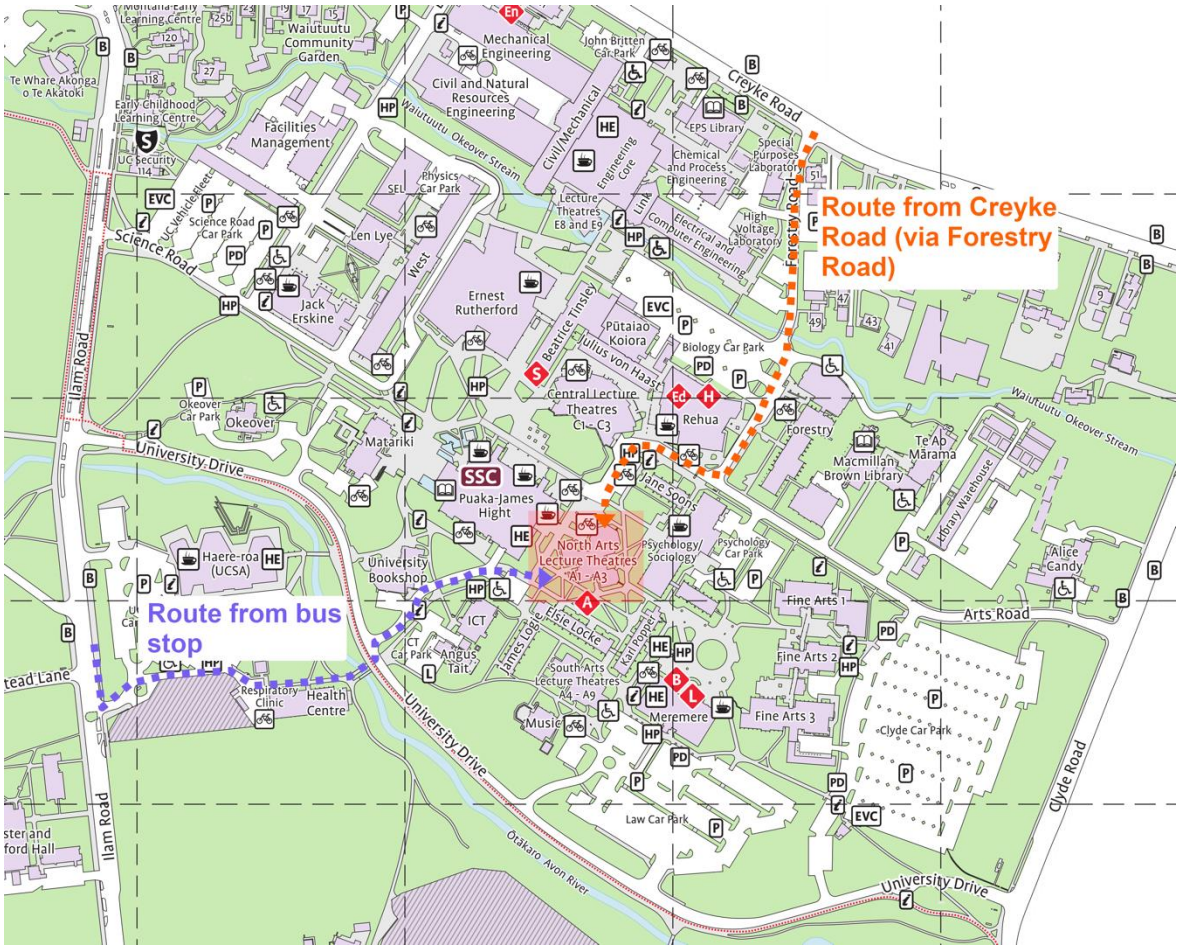
Whaowhina te kete mātauranga.

Ngā mihi,
Jen Hay
On behalf of a very large organizing committee.

If you need assistance or have questions during the conference your main point of contact is Emma – [emma.parnell@canterbury.ac.nz] or text / whatsapp 021 262 5134

Conference venue ●
North Arts, University of Canterbury

If you are catching a taxi or uber to the University of Canterbury ask them to drop you on Forestry Road (due to the large amount of road closures around the campus because of road works)



Presenting your talk

ALL presenters will be required to have their presentation loaded onto a pen drive before the conference begins.

All presenters should test their talk in the final 15 minutes of the break BEFORE their session starts. The Chair will be in the room to assist you.

Wifi at the conference

Use the UC Visitor network

Username: uc1544
Password: 07053

Quiet space ● Elsie Locke 203

If you need a break from the conference and don't want to be outside, please feel free to use the Brain Box. This is located across from the conference venue in the Elsie Locke Building, room 203.

Please remember that this space is designated quiet, so limited talking.

Conference dinner

The conference dinner is at Corianders City, 222 St Asaph Street, starting at 6pm.

Sarah, Robert, Elena and Heeju will lead a contingent of people who wish to catch the bus. You will need the exact fare of $4 in cash or if you have a metrocard the price is $2.

If you would rather uber or taxi it is about a 15 minute journey from campus.

We have been provided with a dedicated waiter at the dinner. They will take drink orders and bring them to the table. You will be required to pay for your own drinks at the end of the meal. The dinner is an Indian buffet, and your dietary requirements have been passed to the chef.

New Zealand Linguistic Conference 2024 ● Monday 9th December			
8:15am • Conference registration starts • North Arts Foyer		8:45am • Conference Welcome • North Arts A1	
9:00am – 10:00am	Plenary ● North Arts A1 **Meredith Marra** University of Canterbury *The Linguistic In Crowd: A sociopragmatics of belonging*		
10:00am – 10:10am	Tribute to Margaret Maclagan • North Arts A1		
10:10am - 10:30am	Morning Tea • North Arts Foyer		
	North Arts • A1 Chair: Meredith Marra	**North Arts • A2** Chair: Elena Sheard	**North Arts • A3** Chair: Heeju Hwang
10:30am - 11:00am	*"He said [my] leadership style is motherly!": Gender, leadership, and workplace identities in a sports organisation* •Stephanie Foxton	*Ol narafala lanwis: The role of cross-language comparisons for young Vatlongos community members in Vanuatu* •Eleanor Ridge	
11:00am - 11:30am	*It takes a village: discourses of family support for transgender young people in Aotearoa* •Julia de Bres	*The status of e/ka/hoko in Rapa Nui* •Catherine Lee, Saurov Syed, Magdalena Covarrubias	*An analysis of communication style of learners of Japanese as participants in conversation: from the perspective of the role of listener and speaker* •Kaori Doi
11:30am - 12:00pm		*The glottal stop in Central Palawano* •Hannah Fleming	*The differential effects of approach to pre-task on L2 English learners' reading attention: An eye-tracking study* •Justin Harris
12:00pm - 12:30pm	*I'm Not Driving, I'm Travelling: A corpus-assisted discourse analysis of the language of pseudolaw in Aotearoa* •Megan Dykes & Stephen Skalicky	*Indonesian discourse markers (DMs): A case study of an Indonesian migrant community in Sydney, Australia* •Syarif Hidayat Nasir	*A look into the metacognition of low, mid, and high L2 proficiency level learners towards spaced and massed practice of English idioms* •Kamal Heidari
12:30pm - 1:15pm	Lunch • North Arts Foyer		

	North Arts • A1 Chair: Joshua Wilson Black	North Arts • A2 Chair: Jeanette King	North Arts • A3 Chair: Sarah van Eyndhoven
1:15pm - 1:45pm	*Comparing perception of New Zealand English listeners from free classification and pairwise rating tasks* •Elena Sheard, Joshua Wilson Black, Lynn Clark, Robert Fromont, Jen Hay	*A semantic and kaupapa Māori description of te reo: Beyond linguistic theory* •Michael W Taiapa	*The relation between MLU, code-switching and proficiency in Japanese-Brazilian Portuguese bilingual children in Japan* •Mineko Shirakawa
1:45pm - 2:15pm	*Exploring the role of the 'leader-lagger' vowel continuum in the perception of social meaning in New Zealand English* •Cassandra Bahr, Hana Pearce, Ruey Fern Tan, Jen Hay, Abby Walker, Elena Sheard	*The presence of te reo Māori loanwords in Aotearoa primary school classrooms* •Jessie Burnette, Andreea Calude, Hēmi Whaanga	*Translanguaging practices among teenage learners in Saudi Arabia: Implications for identity and education* •Areej Alharbi
2:15pm - 2:45pm	*Impact of vocoded speech and acoustic environments on speech intelligibility: A pilot study* •Epri Wahyu Pratiwi, C. T. Justine Hui, Yusuke Hioka	*The passive suffix in te reo Māori: A comparative analysis with other East Polynesian languages* •Forrest Panther	
2:45pm -3:15pm	Afternoon Tea • North Arts Foyer		
	North Arts • A1 Chair: Sarah van Eyndhoven	North Arts • A2 Chair: Gia Hurring	North Arts • A3 Chair: Heeju Hwang
3:15pm - 3:45pm	*The prosody of Heritage Language Samoan: How individual experiences shape the linguistic repertoire* •Sasha Calhoun, Corinne Seals, Toaga Christina Alefosio, Niusila Faamanatu-Eteuati	*nzilbb.vowels: A new tool for quantitative research on vocalic covariation* •Joshua Wilson Black	*Implicit knowledge of morphological processes in Māori by non-speakers of Māori* •Wakayo Mattingley, Forrest Panther, Jen Hay, Jeanette King, Simon Todd, Peter J. Keegan
3:45pm - 4:15pm	*Examining Autistic speech production and perception: A two-phase approach* •Sara Christey	*New sound changes in the NZE diphthong space* •Brooke Ross, Elaine Ballard, Catherine Watson	*On de inside Mandarin nominals* •Luyi Zhu
4:15pm - 4:45pm	*An exploratory study of the acoustic correlates of lexical stress in Cebuano using a perceptual task* •Janus Cabazares	*Variation and change in the production of te reo Māori closing sequences* •Kirsten Culhane, Jen Hay, Simon Todd, Márton Sóskuthy, Forrest Panther, Jeanette King, Peter Keegan	
6:00pm	Dinner • Coriander's City		

New Zealand Linguistics Conference 2024 ● Tuesday 10th December			
8:45am – 9:45am	Plenary ● North Arts A1 **Carmel O'Shannessy** Australian National University *When ordinary processes lead to unusual outcomes: The emergence of the mixed language, Light Warlpiri*		
9:45am – 10:00am	Morning Tea • North Arts Foyer		
	North Arts • A1 Chair: Meredith Marra	**North Arts • A2** Chair: Lynn Clark	**North Arts • A3** Chair: Elena Sheard
10:05am - 10:35am	*"Us chemists" vs. "Those biologists": Career identity construction through relational talk* •Ashleigh Hume	*Mother Tongue: The desire of Pākehā parents to foster childhood bilingualism and an alternative worldview through raising their tamariki in Māori-immersion schooling* •Elsa Wright	*SCOTIA - towards the Scottish Corpus of Original Texts from Immigrants to Aotearoa: first steps and findings* •Sarah van Eyndhoven
10:35am - 11:05am	*Discursive constructions of family support by trans Asian young people in Aotearoa* •Tara Ravi	*Acquisition of ambiguous comparatives in English and Japanese* •Ryosuke Hattori	*Investigating lexical deployment and structural dynamics in AI and human-generated texts* •Matthew Durward
11:05am - 11:35am	*Referring to one's own group stereotypes in anchoring utterances: A sociocognitive approach to the pragmatics of social interaction* •Masataka Yamaguchi & Kaori Hata	*Incidental acquisition of vocabulary: The effects of imagery versus glossing* •Mahnaz Aliyar, Haijuan Yan, Anna Siyanova-Chanturia	*Productive knowledge of Chinese grapheme form: Beyond perception and lexical similarity* •James Myers
11:35am - 12:05pm	*Doing power in public meetings: Focusing on the discursive strategies of volunteer chairs* •Kazuyo Murata	*Definition placement and spacing of retrieval practice role in learning L2 multi-word expressions* •Mojtaba Tadayonifar, Irina Elgort, Anna Siyanova-Chanturia	*Portuguese Baila verses and anti-colonial subaltern ideology in Ceylon Coast: A case study on Hugh Nevil manuscripts* •Achinthya Bandara
12:05pm - 1:30pm	Lunch • North Arts Foyer		

12:30pm – 1:15pm	AGM • North Arts A1		
Tuesday 10th December			
	North Arts • A1 Chair: Gia Hurring	**North Arts • A2** Chair: Heeju Hwang	**North Arts • A3** Chair: Forrest Panther
1:30pm - 2:00pm	*Pronoun Shifting in YouTube breast cancer narratives: An inclusive perspective* •Sara Malik, Andreea S. Calude, Joseph Ulatowski	*A VP-manner adjunct analysis for bei-pai-jingcha type of sentences: Implications for Chinese short passives* •Zi-chun Lin & Jen Ting	*'My takatāpui whānau weave worlds together': An exploration of the Indigenous gender and sexuality term takatāpui for rangatahi Māori* •ia Morrison-Young
2:00pm - 2:30pm	*Imagining a perfect woman: A linguistic analysis of gender stereotypes within image generative AI* •Carla Moriarty	*Nominal appositives as reduced copular clauses* •Ning Zhang	*Passive formation in te reo Māori: An experimental study* •Penny Harris
2:30pm - 3:00pm	*Critically investigating metadiscourse in New Zealand environmental sustainability reports using corpus linguistics* •Pakkawan Udomphol	*Wh-questions in Niuean: The paradigm of locative PPs* •India Frith	*Common social emotions in te reo Māori speech: Insights from te reo Māori speaker feedback* •Himashi Rathnayake, Jesin James, Gianna Leoni, Ake Nicholas, Catherine Watson, Peter Keegan
3:00pm - 3:30pm		*Foreign-accented English in NZ films* •Yutai Watanabe	*When your maunga is a mountain but your moana is not a sea; Insights from the perception of synonymy of te reo Māori loanwords and New Zealand English lexical equivalents* •Niklas Alexander Pohl, Andreea Calude, Hēmi Whaanga, Eline Zenner, Laura Rosseel
3:30pm - 3:50pm	Afternoon Tea • North Arts Foyer		
	North Arts • A1 Chair: Sarah van Eyndhoven		**North Arts • A3** Chair: Jen Hay
3:50pm - 4:20pm	*Exploring the perception of phonological covariation in New Zealand English* •Gia Hurring		*Towards a syntactic typology of grammatical politeness* •Charlie Shirreffs
4:20pm - 4:50pm	*R-Sandhi in New Zealand English* •Donald Derrick & Matthias Heyne		*Does acoustic modulation within bigrams predict probabilistic distribution of bigrams in English?* •Peiman Pishyardehkordi

New Zealand Linguistics Conference 2024 ● Wednesday 11th December		
Postgraduate Workshop Day • North Arts A1		
9:00am - 10:30am	Introduction to the LaBB-CAT corpus management system	
10:30am - 11:00am	Morning tea • North Arts Foyer	
11:00am - 12:30pm	R & Rstudio	
12:30pm - 1:30pm	Lunch • North Arts Foyer	
1:30pm – 3:00pm	Doing historical sociolinguistics in New Zealand (A1)	Data visualisation in R (A3)

NZ Linguistics Society ● Travel scholarship recipients

Congratulations to the following NZ based students who received a travel scholarship from the NZ Linguistics Society.

The scholarship recipients were chosen by the abstract reviewers.

- Kamal Heidari, Victoria University of Wellington
- Megan Dykes, Victoria University of Wellington
- Mahnaz Aliyar, Victoria University of Wellington
- Stephanie Foxton, University of Canterbury
- Pakkawan Udomphol, Massey University
- Luyi Zhu, The University of Auckland
- Himashi Rathnayake, The University of Auckland

NZLS organising committee

Jen Hay	Emma Parnell
Lynn Clark	Joshua Wilson Black
Forrest Panther	Jeanette King
Sarah van Eyndhoven	Elena Sheard
Wakayo Mattingley	Gia Hurring
Heeju Hwang	Penny Harris

Abstract reviewers

Thank you to the following reviewers

Lynn Clark	Meredith Marra
Jen Hay	Donald Derrick
Heeju Hwang	Elena Sheard
Joshua Wilson black	Jeanette King
Wakayo Mattingley	Sarah van Eyndhoven
Gia Hurring	Forrest Panther

The organising committee would also like to extend their gratitude to Tony Fisher and Alan Koeninger for their assistance.

Plenary Speaker

Monday 9th December
North Arts – A1
9:00am – 10:00am

The Linguistic In Crowd: A sociopragmatics of belonging

Meredith Marra
University of Canterbury

Belonging is central to social wellbeing. Negotiating belonging with others is arguably an interactional achievement involving linguistic, sociolinguistic, and importantly, sociopragmatic competence. Navigating social meaning in interaction brings together skills in enacting and interpreting the shared practices of a community, ranging from engagement in group-appropriate humour and small talk, to disagreeing and challenging ideologies.

In this talk I traverse the various research projects of the Language in the Workplace team that examine belonging, inclusion, and boundary crossing. Together these projects highlight the relevance of sociopragmatics to an understanding of the enactment of belonging. Since pragmatic differences typically slide under the radar, recognising their contribution needs to be an active project to which (socio)linguists can make an impactful contribution.

Plenary Speaker

Tuesday 10th December
North Arts – A1
8:45am – 9:45am

When ordinary processes lead to unusual outcomes: The emergence of the mixed language, Light Warlpiri

Carmel O'Shannessy
Australian National University

The emergence of the mixed language, Light Warlpiri, spoken in northern Australia, raises key questions about sociolinguistic contexts of language change and emergence, and about the cognitive processing by child speakers in complex language contact situations. Light Warlpiri systematically combines the nominal structure of Kriol and English, and also shows structural innovation. The language emerged through a two-stage process where, firstly, adults code-switched in a consistent pattern when speaking to young children as part of a baby talk register and, secondly, the young children internalised the mixed input as a single system, and added innovations in the verbal auxiliary system, introducing new structure that is not in the source language. This prompts the question of whether multilingual change in progress seen in the emergence of contact languages is qualitatively different from that in other kinds of language acquisition situations. In this talk I trace the sociolinguistic and processing factors in the emergence of Light Warlpiri and some of its unusual features, the sociolinguistic factors that support the emergence of new structures and languages, and how bilingual child speakers use language to construct aspects of their identities in their language.

Monday 9th December

Session One ● North Arts A1

10:30 am – 12:30pm

Session Chair • Meredith Marra

Talks presented by:

- Stephanie Foxton
- Julia de Bres
- Megan Dykes and Stephen Skalicky

North Arts A1 ● 10:30am – 11:00am

"He said [my] leadership style is motherly!": Gender, leadership, and workplace identities in a sports organisation

Stephanie Foxton, University of Canterbury

The linguistic construction of leadership has often been the focus in research into workplace communication. Within this field, gender and leadership remain of substantial interest, especially given the continuing under-representation of women in leadership positions. Using the concepts of the gender order (Connell, 1987; Eckert & McConnell-Ginet, 2013) and the culture order (Holmes, 2018), this paper aims to examine the linguistic strategies used by women leaders in a regional sports organisation to establish, enact and maintain their leadership within their respective teams.

Using approaches from Linguistic Ethnography, particularly those developed by the Wellington Language in the Workplace Project, and working in collaboration with a regional sports organisation in New Zealand over a period of five months, analysis draws on a dataset comprised of ethnographic fieldnotes, workplace documents, and ca. 25 hours of audio-visual recordings of naturally occurring workplace interactions (e.g., office small talk and team meetings) alongside follow-up interviews with participants. By focusing on the strategies used by women in leadership roles in both large team meetings and smaller one-to-one interactions, this research not only highlights how leadership identities are discursively and socially constructed by women, but also how they are challenged by men within the organisation.

Analysis of the video and audio recordings show that women leaders are often questioned when giving directives and are interrupted or spoken over in team meetings. Initial findings suggest that women use various linguistic strategies, such as humour, to negotiate membership and establish their leadership within the team. Moreover, they draw upon "traditional" heteronormative understandings of gender roles, like motherhood, to further legitimise their positions. By investigating the day-to-day construction of leadership and gender identities within a sports organisation, we can better understand how these hierarchical orders impact on workplace norms and behaviours.

References

- Connell, R. 1987. *Gender and power: Society, the person and sexual politics*. Stanford: Stanford University Press.
- Eckert, P & McConnell-Ginet, S. 2013. *Language and gender*, 2nd edn. Cambridge: Cambridge University Press.
- Holmes, J. 2018. Negotiating the culture order in New Zealand workplaces. *Language in Society* 47(1). 33–56. https://doi.org/10.1017/s0047404517000732

North Arts A1 ● 11:00am – 11:30am

It takes a village: discourses of family support for transgender young people in Aotearoa

Julia de Bres, Massey University

It takes a village: discourses of family support for transgender young people in Aotearoa We know that family support promotes the health and wellbeing of transgender youth, but we know less about what this support looks like in practice. International research focuses mainly on parents' views of raising transgender children, but family support extends beyond parenting to extended and chosen family, and expressions of family support vary across cultural groups. Research to date often involves thematic analysis of interviews, missing important insights that can be gained from a discourse analysis approach.

Our Marsden Fund research project (2023-2026) centres the perspectives of transgender young people, whose views on family support have been neglected. We use the method of reflective drawing, asking participants to draw and discuss their experiences in interview. A mixed-gender and mixed-ethnicity research team is interviewing twelve transgender young people (3 Māori, 3 Pacific, 3 Asian and 3 Pākehā) who identify as having experienced support from at least some of their family (including biological, extended and/or chosen family). These young people are being invited to draw their experience of family support and to list their family support network and describe how these people have supported them. With the young people's permission, the team is then interviewing up to five of these family members per participant (60 in total), who are being invited to draw and discuss their experience of supporting the young person.

In this presentation, we will discuss the results of our project to date. Using verbal and visual discourse analysis, we will identify how participants of different cultural backgrounds, genders, and family roles discursively construct their experiences of receiving and providing family support in their drawings and interviews. We will focus especially on discourse of family members who have been neglected in previous research, including aunts, grandparents, siblings, best friends, and even pets! The results will provide valuable insights for those who seek to be part of the village that raises a transgender child.

North Arts A1 ● 12:00pm – 12:30pm

I'm Not Driving, I'm Travelling: A corpus-assisted discourse analysis of the language of pseudolaw in Aotearoa

Megan Dykes, Victoria University of Wellington
Stephen Skalicky, Victoria University of Wellington

Frivolous, flawed, vexatious, unintelligible, and *plainly unsound legally*: These are the words judges have used to describe pseudolegal arguments put forward in New Zealand courts[1]. Pseudolaw refers to the use of legal argumentation that appears legitimate but is false, due to its misinterpretation and distortion of codified law and legal precedent (Netolitzky, 2021). Pseudolegal argumentation imitates the language and structure of legal reasoning without engaging in the norms, principles, or methods that underlie legal reasoning (Young et al., 2023). The phenomenon is well-documented in countries such as Canada, the USA, and the UK, and is associated with communities known as *Sovereign Citizens and Freemen on the Land* (Netolitzky, 2021). Existing research has begun interrogating the claims and arguments used in pseudolaw in Aotearoa (Young et al. 2023), while other research has explored the sociocultural underpinnings and historical roots of pseudolaw in general (e.g. Arnold & Fletcher, 2023; Netolitzky, 2021). Despite the recognition that pseudolaw relies upon deliberated, idiosyncratic use of language, little attention has been paid to the linguistic strategies of pseudolaw adherents.

The goal of this project is to analyse pseudolaw from a linguistic perspective using both corpus linguistic and computational methods. The project specifically investigates the use of legalese in pseudolegal documentation in comparison with genuine legal instruments. A corpus of pseudolegal documentation from Aotearoa authors is collected alongside New Zealand legislation and other legal documents. The two corpora are compared across lexical and morphosyntactic features associated with legalese, such as long, complex sentences and the frequent use of compound adverbs like *hereby* or *hereinafter*, passive constructions, and bi- and multinomial expressions (Fanego et al., 2017; Tiersma, 1999). The use of legalese in pseudolaw will be analysed within the context of the broader pseudolaw phenomenon and the claims adherents make about language, namely their overt disapproval of legalese and its confusing, exclusionary nature.

By comparing pseudolaw to genuine legal instruments, I will find to what extent pseudolaw adherents imitate the linguistic features of genuine law. This project complements the work of legal scholars in understanding pseudolaw and developing strategies to address its increasing popularity. Moreover, the unique legal landscape of Aotearoa makes this analysis of interest in New Zealand specifically, as well as to the wider disciplines of linguistics, legal research, and legal practice.

References

- Arnold, B. B., & Fletcher, E. M. (2023). Whose constitution: Sovereign citizenship, rights talk, and rhetorics of constitutionalism in Australia. *Jindal Global Law Review*, 14(1), 99–122. https://doi.org/10.1007/s41020-023-00189-w
- Fanego, T., Rodríguez-Puente, P., López-Couso, M. J., Méndez-Naya, B., Núñez-Pertejo, P., Blanco-García, C., & Tamaredo, I. (2017). The Corpus of Historical English Law Reports 1535–1999 (CHELAR): A resource for analysing the development of English legal discourse. *ICAME Journal*, 41(1), 53–82. https://doi.org/10.1515/icame-2017-0003
- Netolitzky, D. J. (2021). A Revolting Itch: Pseudolaw as a Social Adjuvant. *Politics, Religion & Ideology*, 22(2), 164–188. https://doi.org/10.1080/21567689.2021.1924691
- Tiersma, P. M. (1999*). Legal language*. University of Chicago Press. Young, S., Hobbs, H., & McIntyre, J. (2023).
- The Growth of Pseudolaw and Sovereign Citizens in Aotearoa New Zealand Courts. New Zealand *Law Journal*, 6–10.

1 See *Bracken v R* [2022] NZCA 237; *Tamihere v The Commissioner of Inland Revenue* [2017] NZHC 2949; *Underhill v Police* [2012] NZHC 3363

Monday 9th December

Session Two ● North Arts A2

10:30 am – 12:30pm

Session Chair • Elena Sheard

Talks presented by:

- Eleanor Ridge
- Catherine Lee, Saurov Syed and Magdalena Covarrubias
- Hannah Fleming
- Syarif Hidayat Nasir

North Arts A2 ● 10:30am – 11:00am

Ol narafala lanwis: The role of cross-language comparisons for young Vatlongos community members in Vanuatu

Eleanor Ridge, Massey University

Vatlongos is one of ~140 Indigenous languages of Vanuatu, where Bislama, an English-lexifier creole, is the shared national language, and English and French are colonial languages used in education (François et al. 2015). Within this dense network of languages, traditional and contemporary patterns of multilingualism can support maintenance of Indigenous languages in the face of pressure to shift to Bislama, English and French (Walworth et al. 2021). This paper will explore ways that young speakers of Vatlongos make comparisons with other language communities when thinking about their own and their communities' patterns of language use. These comparisons are particularly important in contexts where Vatlongos is most endangered, as they open up different imagined futures for language reclamation on a personal and community level.

Vatlongos is spoken by around 3000 people living in rural Southeast Ambrym, and in and around Vanuatu's urban centres, including Mele Maat, a peri-urban community that relocated from Ambrym in the 1950s. Vatlongos is most severely endangered in the Mele Maat community, where decreasing intergenerational transmission of Vatlongos to children has been observed since 1991 (Tonkinson 1967). While children in Mele Maat tend to learn and use Bislama as their primary language, and have at best passive knowledge of Vatlongos, many go on to acquire or activate Vatlongos as teenagers or young adults, partly due to exposure to peers in other language groups who do know their own Indigenous language.

This research is based on interviews exploring language attitudes and language maintenance strategies with 40 young Vatlongos community members living in Southeast Ambrym and in Mele Maat. This presentation will focus on explicit comparisons with other language groups, who young people are exposed to via migration, education, friends, family members, marriage and other relationships. These comparisons are used for various rhetorical purposes to praise, excuse or condemn Vatlongos community language practices, while holding open the possibility of different patterns of language use. This imaginative practice is especially important for young people in Mele Maat who were less likely to self-report fluency in Vatlongos or regular use of Vatlongos for a range of everyday purposes.

This paper will also examine the use of key concepts in Bislama for drawing parallels between languages, especially *lanwis* ('language') – used interchangeably to describe all Vanuatu languages in opposition to Bislama, English and French – and *manples* (lit. man-place) – used to describe the Indigenous people of an area and their close relationship to land.

References

- François, Alexandre & Franjieh, Michael & Lacrampe, Sébastien & Schnell, Stefan. 2015. The exceptional linguistic density of Vanuatu. *The Languages of Vanuatu: Unity and Diversity* (Studies in the Languages of Island Melanesia (SLIM) 5), 1–21. Asia-Pacific Linguistics Open Access.
- Tonkinson, Robert. 1967. Bob Tonkinson's Vanuatu recordings. Paradisec. (doi:10.26278/9SHJB819) (http://catalog.paradisec.org.au/collections/RT1)
- Walworth, Mary & Dewar, Amy & Ennever, Thomas & Takau, Lana & Rodriguez, Iveth. 2021. Multilingualism in Vanuatu: Four case studies. *International Journal of Bilingualism* 25(4). 1120–1141.

North Arts A2 ● 11:00am – 11:30am

The status of e/ka/hoko in Rapa Nui

Catherine Lee, The University of Auckland
Saurov Syed, The University of Auckland
Magdalena Covarrubias, The University of Auckland

Rapa Nui (Austronesian) is an understudied and endangered language spoken on the island of Rapa Nui (Easter Island / Isla de Pascua). Within its morphemic inventory are a group of particles – *e, ka*, and *hoko*- which precede cardinal numerals. These particles each have a slightly different usage and semantic connotation- *e* is neutral, *ka* is used for counting, and *hoko* is used for humans. Cardinal numerals in Rapa Nui must be preceded by one of these three particles. These particles have simply been called 'number particles' in existing literature (Kieviet 2017). In this paper, we explore the nature of these elements in detail, and propose that the precise category of these elements is of 'numeral classifiers'.

This proposal is based on the syntactic-semantic properties and distribution of these elements. From a functional-typological standpoint, Rapa Nui patterns identically to other numeral classifier languages in lacking obligatory number morphology. Cross-linguistically, numeral classifier languages tend to lack obligatory number morphology (Downing 1996, Vittrant & Tang 2021), and therefore the function of numeral classifiers is theorised to be 'individualising' bare nominals to allow quantisation (Vittrant & Tang 2021, Hundius & Kölver 1983). The obligatoriness of *e/ka/hoko* before cardinal numerals in Rapa Nui, a language which lacks obligatory plural morphology, is anticipated under such an analysis. In addition, the semantic and pragmatic distinctions between *e, ka*, and *hoko* are in line with typological expectations. Classifiers generally denote an intrinsic feature of the nominal (Wang & Walther 2023), and default/unmarked classifiers such as e are attested in the majority of classifier languages (Downing 1996); the presence of *hoko* and *e* is therefore in line with cross-linguistic trends. Whilst *ka* denotes a discourse function as opposed to an inherent feature, a link between numeral classifier usage and discourse functions has been well established cross-linguistically – for example, creativity in classifier choice in Japanese (Jarkey & Komatsu 2019) and definite/indefinite interpretations through word order variation in Bangla (Dayal 2012). This kind of word order variation is also seen in Rapa Nui, where prenominal Classifier + Numeral results in an indefinite interpretation.

This precise characterization of *e/ka/hoko* as numeral classifiers has important consequences for developing a formal syntactic account of Rapa Nui nominals, suggesting the existence of (i) a Classifier Phrase/CLP inside the Determiner Phrase/DP, and (ii) possible phrasal movement resulting in the observed word-order variation.

North Arts A2 ● 11:30-12:00pm

The glottal stop in Central Palawano

Hannah Fleming, Otago University

This paper discusses the phonemic status and phonotactic behaviour of glottal stops within lexical roots in Central Palawano, a member of the Palawano language cluster in the Philippines. As is common in Austronesian languages, Central Palawano lexical roots are typically bisyllabic; most roots fit into the schema $C_1V(C_2).C_3V(C_4)$. Phonetic glottal stops occur in all of these consonant positions. In some of these positions, minimal pairs between /ʔ/ and Ø make the phonemic status of the glottal stop easy to demonstrate, but in others, notably C_1 position, minimal pairs do not exist.

In western Austronesian languages more widely, documented cases of a contrast between a root-initial /ʔ/ and an initial Ø are vanishingly rare. Blust (2020) claims that in languages without such a contrast, the initial glottal stop is non-phonemic, added only to supply an obligatory syllable onset. Meanwhile Thiessen (1981) claims that initial [ʔ] and Ø are in free variation in Palawano and in neighbouring Molbog.

Based on new field data, this paper argues that in Central Palawano, [ʔ] and Ø are not in free variation; instead, phonemic root-initial glottals can be elided in fluent speech, much like the uncontroversially phonemic glottals which occur in C_4 or C_2. Additionally, patterns of glottal stop elision and the existence of a handful of lexical roots containing vowel-initial syllables suggest that onsets are not actually obligatory in this language.

The behaviour of root-initial glottal stops in affixed forms also suggests that they have some kind of phonological reality: among other things, initial glottal stops are retained when a root is prefixed, and they participate in 'glottal hopping' (term from Zeitoun 2007). This last phenomenon is motivated by a preference for glottal stops to occur in the coda of the penultimate syllable of a word.

The conclusion of this paper is that the glottal stop is phonemic in all four consonant positions in the typical Central Palawano root, and that a preference for certain word shapes rather than a strict phonotactic constraint underlies both the near-absence of vowel-initial roots and the phenomenon of glottal hopping. The data presented in this paper underline the importance of considering the details of individual language varieties; even closely-related, geographically-adjacent language varieties can differ in ways that undermine a one-size-fits-all analysis.

References

- Blust, Robert. 2020. Response to Comments on "The Resurrection of ProtoPhilippines." *Oceanic Linguistics*, 59(1/2), 450-479.
- Thiessen, Henry Arnold. 1977. The Phonemic Consequences of Two Morphophonological Rules in Molbog. *Studies in Philippine Linguistics* 1(2).
- Thiessen, Henry Arnold. 1981. *Phonological Reconstruction of Proto-Palawan.* National Muesum of the Philippines.
- Zeitoun, Elizabeth. 2007. *A Grammar of Mantauran Rukai*. Institute of Linguistics, Academia Sinica.

North Arts A2 ● 12:00pm – 12:30pm

Indonesian discourse markers (DMs): A case study of an Indonesian migrant community in Sydney, Australia

Syarif Hidayat Nasir, The University of Sydney

This project investigates the types and interpretations of Indonesian Discourse Markers (DMs) such as loh, kan, sih, ih, kok, dong, yuk, etc spoken by Indonesians in Sydney, Australia. Although DMs have paid interest, there has no much study ever performed on Indonesian DMs, particularly in overseas communities. This fills the gap by pursuing the following goals: identifying the varieties of Indonesian DMs uttered by Indonesians when they are interacting within their Indonesian community in Sydney; examining possible interpretations of these spoken DMs; investigating the motivations of uttering these DMs; and expanding the literature on Indonesian DMs spoken by Indonesians, and particularly establishing such cases spoken by Indonesians in overseas. This adopted an Interactional Linguistic (IL) approach involving Indonesian-born speakers who have been living in Sydney and are routinely involved within their Indonesian community. Their activities are recorded using a video recorder, supplemented by an audio recorder.

Monday 9th December

Session Three ● North Arts A3

11:00 am – 12:30pm

Session Chair • Heeju Hwang

Talks presented by:

- Kaori Doi
- Justin Harris
- Kamal Heidari

North Arts A3 ● 11:00am – 11:30am

An analysis of communication style of learners of Japanese as participants in conversation: From the perspective of the role of listener and speaker

Kaori Doi, Institute of Technologists

This study investigates the communication style of learners of Japanese focusing on the role of "speaker" and "listener." The study analyze the conversational interaction between non-native speakers of Japanese (NNSJ) and between NNSJ and native speakers of Japanese (NSJ).

A great number of studies have analyzed how speakers or listeners use conversation strategies to communicate effectively: for example, backchannels and conversation repairs. Backchannel (Aizuchi in Japanese) is one of the strategies that shows "listenership" and conducts a variety roles in conversation. Conversation repair and correction are the strategy that reduce the misunderstanding between participants in conversation and clarify the contents in conversation. Researchers were inspired by Schegloff, Jefferson and Sacks (1977) and have analyzed repairs from a variety of aspects. Previous studies in ELF have frequently reported self-repairs as one of the clarification strategies, which raises explicitness in the current speaker's utterance in interaction (Kauer 2011, Mauranen 2007). Most of studies analyze such strategies in conversation by native speakers and others investigate them in the context of second language acquisition: interaction between a teacher and a student. However, not many studies have focused on conversation between non-native speakers of Japanese (NNSJs).

This study analyzes characteristics of conversation strategies as both "listener" and "speaker" in conversation by learners of Japanese and demonstrates how participants use strategies as "speaker" or "listener" from the perspective of effective communication. The study also compare conversation by NNSJs with the one by NNSJ and NSJ (native speaker of Japanese) and indicates the difference between them.

The data in this study consists of interactions videotaped and transcribed in which Japanese university students talk freely in English. This focuses on moments in which difficulty is managed to communicate in only in Japanese and analyze the strategies for it.

The present study revealed that learners of Japanese use variety of strategies in conversation in order to communicate effectively as "listener" or "speaker." NNSJs use repetition and repairs together with hand gestures and head nodding as clarification strategies for effective communication. This study also indicated the difference in the strategies to communicate with each other effectively between conversation by NNSJs and the one by NNSJ and NSJ.

North Arts A3 ● 11:30am – 12:00pm

The differential effects of approach to pre-task on L2 English learners' reading attention: An eye-tracking study

Justin Harris, Kindai University

When teaching reading or using reading texts in foreign and second language classrooms, teachers have several options for how to introduce a target text (Nation & Macalister, 2020). In some cases, importance is placed on the pre-teaching of challenging vocabulary or language that may hinder learners' full comprehension of the text. In other cases, teachers may emphasize a 'meaning first' approach, such as the case with task-based language teaching (TBLT), in which learners are encouraged to read and attempt to comprehend the text, and then to consider language later (for example, Willis & Willis, 2007). Such approaches may use prediction activities prior to reading.

This presentation outlines an eye-tracking study exploring the differential effect of pre-reading activities on the attention of 60 Japanese university students to a written text. Participants were divided into two groups. The first group completed a vocabulary building activity based on words from the target reading text that had been selected as potentially challenging for them. The second group completed a discussion activity, in which learners in pairs considered questions related to an article that they would subsequently read. This is reflective of a TBLT approach to reading. Following this, both groups read the same passage while their eye movements were measured using Gazepoint 3 HD Professional eye tracking devices. Results showed that learners in the TBLT condition focused more on reading the text as a whole, with fewer fixations on specific vocabulary items or questions. Learners in the vocabulary condition ultimately spent longer fixating on the vocabulary items, and also had more frequent saccades within the text, between questions, and areas of the text which contained answers. This suggests that they may have focused more on language and comprehension questions than in reading in a natural way. Participant interviews with 30 of the participants provided further insights about learners' approaches to reading. Finally, the presenter will outline some of the issues to consider when using eye tracking to investigate educational approaches. This will include an outline of the research design process, which involved a pilot study with a separate cohort of 10 learners.

References

- Nation, I.S.P., & Macalister, J. (2020). *Teaching ESL/EFL Reading and Writing* (2nd Ed), Routledge.
- Willis, D., & Willis, J. (2007). *Doing task-based teaching*. Oxford University Press.

North Arts A3 ● 12:00pm – 12:30pm

A look into the metacognition of low, mid, and high L2 proficiency level learners towards spaced and massed practice of English idioms

Kamal Heidari, Victoria University of Wellington

Metacognition in education simply refers to learners' thinking about their own learning. Metacognition involves learners' knowing themselves as a learner; that is, knowing their own strengths and weaknesses as a learner. If, for example, one knows that one reason for their poor speaking ability is their underuse, overuse, or misuse of MWEs, then they are metacognitively cognizant of their own learning and can adapt their learning accordingly to maximize the quality of their own learning. Despite its importance, it has not been adequately addressed in L2 learning studies, especially MWEs ones. Given the challenging nature of MWEs, specifically opaque idioms, for L2 learners, knowing about L2 learners' metacognition about idioms and the effects of different spacing schedules on their learning can substantially contribute to improving the L2 language pedagogy. Furthermore, inquiring into the metacognition of L2 learners from different proficiency levels can also help to maximize the effectiveness of learning process. The present study sought the perspectives of 81 English L2 learners (27 low- , 29 mid-, and 25 high-proficiency ones) who learned 40 opaque idioms explicitly via flashcard technique through either spaced or massed practice. After the participants experienced spaced and massed practice over five sessions (for spaced practice) and one session (for massed practice), the researcher ran a close-ended questionnaire to all the participants and a semi-structured interview with 26 volunteers to delve into their perspectives about the treatment they received. The results showed that unlike the low-proficiency and mid-proficiency learners who had false metacognition and metamemory on spacing, the high-proficiency learners did not.

Monday 9th December

Session Four ● North Arts A1

1:15pm – 2:45pm

Session Chair • Joshua Wilson Black

Talks presented by:

- Elena Sheard, Joshua Wilson Black, Lynn Clark, Robert Fromont and Jen Hay
- Cassandra Bahr, Hana Pearce, Ruey Fern Tran, Jen Hay, Abby Walker and Elena Sheard
- Epri Wahyu, C.T. Justine Hui and Yusuke Hioka

North Arts A1 ● 1:15pm – 3:45pm

Comparing perception of New Zealand English listeners from free classification and pairwise rating tasks

Elena Sheard, University of Canterbury
Joshua Wilson Black, University of Canterbury
Lynn Clark, University of Canterbury
Robert Fromont, University of Canterbury
Jen Hay, University of Canterbury

Previous research on covariation in New Zealand English (NZE) has established, by means of Principal Component Analysis (PCA), that NZE speakers are systematically leaders or laggers (or in the middle) of a set of ongoing vowel changes (KIT, DRESS, TRAP, FLEECE, LOT, NURSE) and the relationship between their back vowels (THOUGHT, START, STRUT) varies predictably (Brand et al. 2021; Wilson Black et al. 2023; Hurring et al. Under review). Here, we investigate if the covariation underpinning these vowel clusters is accessible to listeners and whether different methodologies produce the same results.

To achieve this, we ran two perceptual tasks. In the first task, New Zealand English listeners (n = 133) rated individual pairs of audio stimuli from 38 QuakeBox (Walsh et al. 2013) participants (Pakeha women between the age of 46 and 55) on a continuous scale from 'not similar' to 'similar'. In the second 'free classification' task (cf. Clopper 2008), listeners (n = 117) were presented with multiple audio stimuli and asked to make, and label, groups of speakers they thought sounded similar (Donhauser and Klein 2023; see Figure 1). We applied Multidimensional Scaling (MDS) analyses to the results from both tasks, in each case producing two dimensions of perceptual similarity for which the 38 stimuli have individual scores.

Previous research has documented significant correlations between MDS results from forced categorisation and free classification tasks (e.g., Clopper and Pisoni 2007). Here, the first-Dimension scores from each task significantly correlate with each other, as do the second-Dimension scores from each task. Based on regression trees, the first dimensions are most strongly predicted by position in the leader-lagger continuum (although mediated to different extents by speed and pitch) and the second dimensions are most strongly predicted by speed and pitch, pointing to similar results across both tasks. The labels from the free classification task then reveal an overlap between actual and perceived speed and pitch and point to laggers being perceived as higher SES than (slow) leaders.

References

- Brand, James, Jen Hay, Lynn Clark, Kevin Watson, and Márton Sóskuthy. 2021. 'Systematic covariation of monophthongs across speakers of New Zealand English', *Journal of Phonetics*, 88: 101096.
- Clopper, Cynthia G. 2008. 'Auditory free classification: Methods and analysis', *Behavior research methods,* 40: 575-81.
- Clopper, Cynthia G, and David B Pisoni. 2007. 'Free classification of regional dialects of American English', *Journal of Phonetics*, 35: 421-38.
- Donhauser, Peter W, and Denise Klein. 2023. 'Audio-Tokens: a toolbox for rating, sorting and comparing audio samples in the browser', *Behavior research methods*, 55: 508-15.
- Hurring, Gia, Josh Wilson Black, Jen Hay, and Lynn Clark. Under review. 'How stable are patterns of covariation across time?', *Language Variation and Change.*
- Walsh, Liam, Jen Hay, Derek Bent, Jeanette King, Paul Millar, Viktoria Papp, and Kevin Watson. 2013. 'The UC QuakeBox Project: Creation of a community-focused research archive', *New Zealand English Journal*, 27: 20-32.
- Wilson Black, Joshua, James Brand, Jen Hay, and Lynn Clark. 2023. 'Using principal component analysis to explore co-variation of vowels', *Language and Linguistics Compass*, 17.

Figures

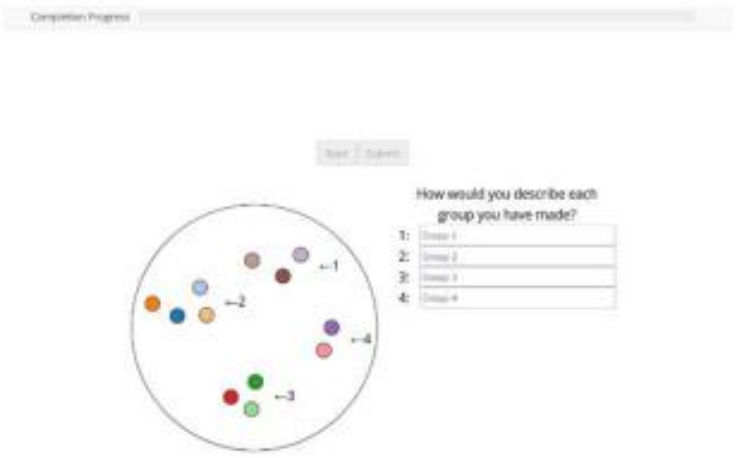


Figure 1 The online Free Classification task

North Arts A1 ● 1:45pm – 2:15pm

Exploring the role of the 'leader-lagger' vowel continuum in the perception of social meaning in New Zealand English

Cassandra Bahr, University of Canterbury
Hana Pearce, University of Canterbury
Ruey Fern Tan, University of Canterbury
Jen Hay, University of Canterbury
Abby Walker, Virginia Tech
Elena Sheard, University of Canterbury

Brand et al (2021) and Hurring et al (under review) identify subsystems of vowels that work together in New Zealand English. We concentrate on one of those subsystems: the 'leader-lagger' continuum. This continuum includes the realization of a set of vowels that have undergone change, specifically: DRESS, TRAP, KIT, NURSE, LOT, FLEECE. Speakers who are 'leaders' in any of these changes are likely to be leaders in all of them. The analysis assigns each speaker a numeric score that indicates the degree to which they are 'leaders' or 'laggers' for this set of vowels.

Sheard et al (2024) examined whether the 'leader-lagger' position of a speaker is socially relevant in perception. Listeners were played excerpts from the Quakebox corpus, asked to group similar voices together, and provide the groups with descriptive labels. Listeners rated speakers who share realizations of these vowels as more similar than speakers who do not. Laggers were labeled as having less strong NZ accents, and as being less rural and of higher social class. However, Sheard et al.'s methodology does not tell us whether it is specifically the realization of the vowels that creates this percept. Our experiment (in progress) is designed to test this question.

We play Sheard et al.'s stimuli to a new set of listeners, and ask them to rate the speakers on a scale between two personae – a 'broad' persona, and a 'less broad' persona. We anticipate that these ratings will replicate the association found in Sheard et al, with voices from 'laggers' heard as less broad.

Across conditions, we then systematically obscure segments with white noise. To explore the degree to which the leader-lagger vowels are *necessary* for this social percept, we compare broadness ratings for stimuli with only the leader-lagger vowels obscured to ratings of stimuli with only the non-leader-lagger vowels obscured. To determine whether the leader-lagger vowels are *sufficient* for this social percept, we compare ratings to stimuli with only the leader-lagger vowels audible, to those with only other vowels audible.

Our analysis directly compares broadness responses across the different manipulations to the responses to the unmodified stimuli. In each case, we examine the strength of the relationship between the speakers' leader-lagger vowel subsystem and their perceived 'broadness'. In doing so, we isolate the degree to which the leader-lagger continuum is directly associated with perceived speaker broadness, and the extent to which other speech characteristics may also be involved.

North Arts A1 ● 2:15pm – 2:45pm

Impact of vocoded speech and acoustic environments on speech intelligibility: A pilot study

Epri Wahyu Pratiwi, The University of Auckland
C. T. Justine Hui, The University of Auckland
Yusuke Hioka, The University of Auckland

Listening to speech in an environment with reverberation can be challenging for cochlear implant (CI) users, notably affecting their speech intelligibility compared to individuals with normal hearing. Even mild reverberation can reduce speech intelligibility for CI users. This study investigates the effects of vocoded speech, which simulates CI listening conditions, on speech intelligibility in various acoustic environments. Speech materials from The University of Canterbury Auditory-Visual Matrix Sentence Test (UCAMST) were used. The speech was processed through an 8-channel vocoder to simulate CI sounds. The study replicated acoustic environment in a seminar room and a chapel at 2 and 5 meters distance using a 32-loudspeaker array, with speech originating from the front of the participant. These stimuli were then played to normal hearing (NH) participants. The subjective measurement used in this study was word correct count. The experiment included 100 stimuli, with ten different conditions repeated ten times. Preliminary analyses showed vocoded speech significantly decreased speech intelligibility, especially in larger rooms and greater distances. Future research will involve CI users and varied acoustic environments to validate these findings further.

Monday 9th December

Session Four ● North Arts A2

1:15pm – 2:45pm

Session Chair • Jeanette King

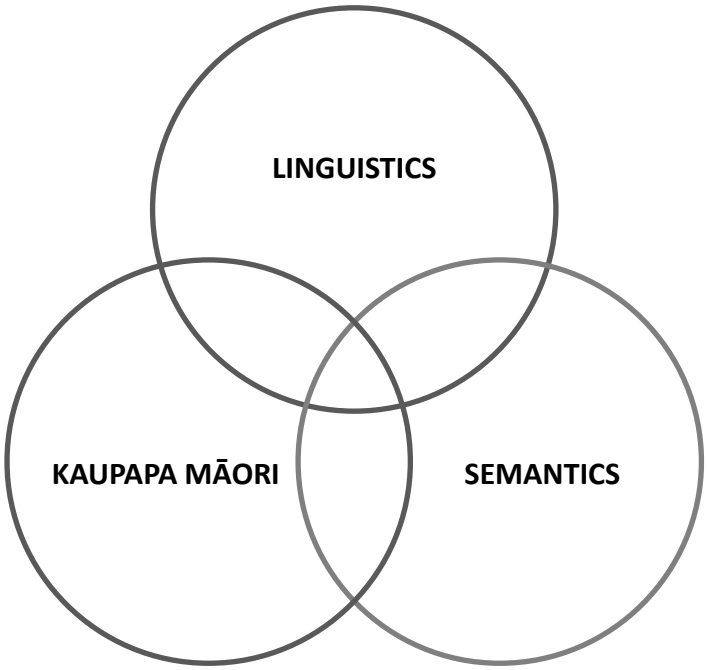
Talks presented by:

- Michael W Taipa
- Jessie Burnette, Andreea Calude and Hēmi Whaanga
- Forrest Panther

A semantic and kaupapa Māori description of te reo: Beyond linguistic theory

Michael W Taiapa, University of Waikato

Linguistic theory, to a large extent, has characterized and continues to characterize much of how te reo Māori has been described in educational materials designed for use in second language teaching and learning contexts. A linguistic approach very often investigates the rules of language by isolating and then describing minute lexical units of language at the sentence level of phonology, morphology, and syntactic structures. Arguably, however, this approach tends to be inadequate for explaining how to use te reo for meaningful and useful communication in daily social interactions. Semantic theory attempts to explore the meaning of language in the context in which it occurs by identifying a range of possible cohesive devices that signal syntactic relationships in te reo beyond the sentence level. Kaupapa Māori theory (which I am currently developing) places an emphasis on the usage of language as determined by the functions of te reo at differing polysemic levels. In general, this holistic approach (i.e. the use of linguistic, semantic and Kaupapa Māori ideas) attempts to rethink the way in which te reo Māori could be described in an integrated way. It puts forth a standard framework of reference that makes use of rules, meaning, and usage of te reo as expressed at various levels of sentence analysis. Arguably, this approach could allow for a description of te reo that is more appropriately adapted to the pedagogic context and one that is communicatively oriented. This approach could play a critical role in the area of Māori language descriptive theorizing. Although the proposed framework is mainly concerned with language description rather than language teaching, it could provide a basis for the design of course syllabuses and development of educational resources. It is in no way presented as a definitive model for a description of te reo Māori.



A tablature view of a holistic and integrated approach to describe the Māori language

Example Sentence	Linguistics	Semantics	Kaupapa Māori
Because he was sick, he stayed home. I tōna māuiuitanga, ka noho ia ki te kāinga.	To talk about the reason for something that happened, is happening or will happen, we might use the English subordinate conjunction *'Because'* and Māori equivalent *'I'* to introduce a subordinate clause to say these things.	To talk about the reason for something that happened, is happening or will happen, we might use the English cohesive device *'Because'* and Māori equivalent *'I'* to signal a relationship called Reason-Result. In the first phrase *'Because'* and *'I'* signal the reason for something (i.e. he was sick) and the second phrase tells us the result (i.e. he stayed home).	The English phrase *'Because'* and Māori equivalent *'I'* is used in sentence types that express a reason-result relationship for something that happened, is happening or will happen. Other phrases that express the same function include, i te mea, nā te mea, nō te mea etc. They can be used in the middle of a sentence or at the beginning with different word classes, such as possessives in the example sentence. The tense is determined by context.

North Arts A2 ● 1:45pm - 2:15pm

The presence of te reo Māori loanwords in Aotearoa primary school classrooms

Jessie Burnette, University of Waikato
Andreea Calude, University of Waikato
Hēmi Whaanga, University of Waikato

Language contact between te reo Māori and English has resulted in one of the central features of New Zealand English (NZE): the integration of loanwords from the Indigenous, donor language, te reo Māori, into a dominant Lingua Franca (Hay et al., 2008). Previous works have analysed the presence and presentation of these loanwords across a number of mediums. Our study, however, examines data directed at a previously unexamined demographic: primary school-aged children.

We aim to establish which loanwords children are regularly exposed to, and thus examine a most relevant domain: the classroom. Considering the linguistic landscape of classrooms (schoolscapes) offers insight into the language use that occurs within them. Further, the classroom is educational in the traditional sense, but also in the developmental sense, in the acquisition of broader social meaning. Previous schoolscapes research has highlighted not only their pedagogical importance, but their influence in the construction and transmission of language ideologies (Pzymus and Huddleston 2021; Brown 2012), making these particularly valuable spaces to study.

This study presents a schoolscape investigation of nine Waikato classrooms by analysing loanwords arising in educational artefacts directed at primary-aged children (7-11) in an English-medium school setting. We make the following contributions: (1) a systematic schoolscape method for analysing contact-induced language phenomena; (2) quantitative and qualitative analyses of loanwords identified in our data; (3) a detailed taxonomic expansion of te reo Māori loanword categories (semantic and syntactic) in present day NZE.

In this talk, we ask the following questions:

> RQ1) What type of te reo Māori (loan)words are children regularly exposed to through schoolscapes in A/NZ?
>
> RQ2) What is their distribution across schools/classrooms/years?

We find that, in the classes examined, children encounter both high levels of exposure to te reo Māori (loan)words and high levels of variation in the types of words present. On average, children encounter one te reo Māori token for every ten English tokens. As in previously identified trends (Macalister, 2006b), most loanwords found are nouns belonging to semantic categories pertaining to the environment, place names and social culture items. However, we also identify prominently occurring words and word types that have not previously been identified in corpora. We show that, within classrooms, children regularly encounter a landscape richer in te reo Māori (loan)words than previously seen, but also one characterised by substantial variation.

North Arts A2 ● 2:15pm – 2:45pm

The passive suffix in te reo Māori: A comparative analysis with other East Polynesian languages

Forrest Panther, University of Canterbury

In Te Reo Māori (East Polynesian, *Aotearoa*/New Zealand), the passive form of a verb is marked through the use of a suffix (Bauer 1993; Biggs 1998; Harlow 2007). There are at least 17 different forms of this suffix (Harlow 2001, Table 1), although several forms are quite rare. The motivations behind the variation in the passive suffix has been the subject of much previous research (e.g. De Lacy 2004; Hohepa 1967; Blevins 1994, among many others). In particular, research has found that there is a 'default' suffix form, which occurs when another suffix form isn't expected to occur, particularly: (i) on loanwords; (ii) in 'passive harmony' constructions, in which a modifier takes a suffix along with the verb it modifies – *whakaaturia tonu**tia*** 'still being shown' (Bauer 1993; Harlow 2007). For most Māori speakers this default suffix is *-tia*, but in some dialect areas, *-hia* and *-ngia* occur.

Other East Polynesian languages have passive suffixation, with patterns that have not been described in Māori. As an example, Hawai'ian also has a default suffix form: 'ia (Table 2, Elbert & Pukui 2001). This form is in fact a clitic, rather than a suffix; it always occurs at the end of a verb phrase, and it co-exists with irregular suffix-forms, that may only follow the verb within the verb phrase. For any verb, clitic may mark the passive, but for verbs that have a suffixed form, that form may also be used. Evidence of a similar clitic pattern exists in South Cook Island Māori (Nicholas 2016) and Tahitian (Lazard & Peltzer 2000). In Manihiki, the default suffix form has completely replaced all irregular forms (Olesen 2020).

In this paper, I will lay out these and other features of variation in the passive suffix across the East Polynesian languages, and conduct a comparative analysis with Māori. I will show that there is evidence within a spoken Māori corpus (Boyce 2006) of patterns demonstrating a development towards a situation similar to that seen in the East Polynesian languages with a cliticised passive suffix, in: (i) 'double-marked' constructions, in which there is an irregular suffix that is compounded by a regular suffix form, e.g. *whāi-a-**tia*** 'chased'; (ii) passive harmony constructions without a passive marked lexical verb: *whakaatu tonu**tia*** 'still shown'. I will then conclude with the implications of these patterns on how we understand the role of this suffix in Māori grammar.

References

- Bauer, Winifred. 1993. Maori. Routledge
- Biggs, Bruce. 1998. Let's learn Maori: a guide to the study of the maori language. Auckland University Press
- Blevins, J. 1994. A phonological and morphological reanalysis of the maori passive. Te Reo 37. 29–53.
- Boyce, Mary Teresa. 2006. A corpus of modern spoken māori. Te Herenga Waka — Victoria University of Wellington dissertation.
- Cablitz, G. H. (2006). Marquesan: A grammar of space. Mouton de Gruyter.
- Elbert, S. H., & Pukui, M. K. (2001). Hawaiian grammar. University of Hawaii Press.
- Harlow, Ray. 2001. A maori reference grammar. Longman.
- Harlow, Ray. 2007. Maori: a linguistic introduction. Cambridge University Press.
- De Lacy, Paul. 2004. Maximal words and the Māori passive. In McCarthy, John J. (ed.), Optimality theory: a reader. Blackwell.
- Hohepa, Patrick Wahanga. 1967. A profile-generative grammar of Maori. Indiana University Publications in Anthropology & Linguistics, Memoir 20.
- Lazard, G., & Peltzer, L. (2000). Structure de la langue tahitienne (Vol. 15). Peeters Publishers.
- Nicholas, S. (2016). Ko te Karāma o te Reo Māori o te Pae Tonga o Te Kuki Airani: A Grammar of Southern Cook Islands Māori.
- Olesen, A. V. (2020). A Grammar of the Manihiki Language (Doctoral dissertation, University of Newcastle, NSW, Australia).
- Walworth, M. E. (2015). The language of Rapa Iti: Description of a language in change (Doctoral dissertation, University of Hawai'i at Manoa)

Suffix	Verb	Definition	Suffix	Verb	Definition
-a	tuhi**a**	'written'	-na	tuku**na**	'released'
-hia	wero**hia**	'punctured'	-nga*	kai**nga**	'eaten'
-hina*	roko**hina**	'overcome'	-ngia	pā**ngia**	'struck'
-hanga*	roko**hanga**	'overcome'	-ria	mau**ria**	'taken up'
-ia	hinga**ia**	'knocked over'	-rina*	whakaatu**rina**	'shown'
-ina	hua**ina**	'called'	-tia	whakamāori**tia**	'explained'
-kia	hopu**kia**	'seized'	-whia*	whao**whia**	'filled'
-kina*	wete**kina**	'undone'	-whina*	whao**whina**	'filled'
-mia	aru**mia**	'followed'			

Table 1: Passive suffix forms in Māori. Asterisked forms are very rare.

Language	Subgroup	Default Suffix Form	Other Forms	Status
New Zealand Māori	Tahitic	tia/hia/ngia	Yes	Suffix
Hawai'ian	Marquesic	'ia	Yes	Clitic
Manihiki	Tahitic	hia	No	?
Marquesian	Marquesic	'ia	?	?
Rapa Iti	Tahitic	'ia	?	?
South Cook Island Māori	Tahitic	'ia	Yes	Clitic
Tahitian	Tahitic	hia & a[a]	?	Clitic
Tuamotu	Tahitic	-hia	?	?

Table 2: A summary of the passive suffix in other Polynesian languages, according to: (i) the default suffix form; (ii) whether there are other forms of the passive suffix apart from the default suffix form; (ii) whether the passive suffix is a clitic. '?' indicates that the information available in the sources is under-determinative.

Monday 9th December

Session Four ● North Arts A3

1:15pm – 2:15pm

Session Chair • Sarah van Eyndhoven

Talks presented by:

- Mineko Shirakawa
- Areej Alharbi

North Arts A3 ● 1:15pm – 1:45pm

The relation between MLU, code-switching and proficiency in Japanese-Brazilian Portuguese bilingual children in Japan

Mineko Shirakawa, University of Canterbury

In this talk, I draw on data from two Japanese-Brazilian Portuguese (BP) bilingual children's longitudinal speech samples to discuss Mean Length of Utterance (MLU) and code-switching as measures of language proficiency. The Japanese and BP speech samples were collected in Japan over the course of one year, in the Japanese daycare centres attended by the two children and in their family homes.

This study is part of a PhD project that aimed to examine factors affecting bilingual children's acquisition of Japanese morpho-syntax. Proficiency was considered as a possible factor, because balanced bilingualism is rather exceptional in bilingually raised children (Meisel, 2007). The language sample recordings were transcribed using CHAT (cf. MacWhinney, 2000) and JCHAT (cf. Oshima-Takane et al., 1998), and analysed using CLAN (cf. MacWhinney, 2000). I focused on MLU in words (MLUw) rather than MLU in morphemes (MLUm) (Brown, 1976), because when examining proficiency in bilingual speakers of typologically different languages, MLUw is considered to minimize the morphosyntactic differences (cf. De Houwer, 2009; Müller & Hulk, 2001).

The MLUw values for the Japanese and BP data produced by the children demonstrate the challenge of comparing typologically different languages, as utterances conveying the same content in the two languages may require different numbers of words. Since MLUw measurements fail to take this into account, they do not necessarily reflect differences in proficiency.

Code-switching may give an indication of proficiency and lexical gaps (cf. Cantone, 2007). However, the results of my study suggest that the setting and interlocutors may have affected the children's production. Both children used Japanese in the BP sample collection sessions that took place at their home with their parents who understand everyday-level Japanese, but they never used BP in the Japanese sample collection session at the daycare centre with me. The children are likely to have been sensitive to the recording environment, topic, toys and elicitation tools, as well as the person they communicated with. (cf. Demuth, 1996; Finestack et al., 2014; Miyata et al., 2013). This highlights the importance of improving our understanding of the influence of settings and interlocutors on bilingual speakers.

MLU and code-switching are useful tools for understanding bilingual children's behaviour, but there are other means of assessing language proficiency, preference, and knowledge, and it is best to adopt a holistic approach that draws on various measurements suited to the research goal (Silva-Corvalán and Treffers-Daller, 2016).

References

- Brown, R. (1976). *A first language: The early stages*. Penguin Books Ltd.
- Cantone, K. F. (2007). Code-switching in Bilingual Children. Springer. https://doi.org/https://doi.org/10.1007/978-1-4020-5784-7
- De Houwer, A. (2009). *Bilingual first language acquisition*. Multilingual Matters.
- Demuth, K. (1996). Collecting spontaneous production data. In D. McDaniel, C. McKee, & H. S. Cairns (Eds.), *Methods for Assessing Children's Syntax* (pp. 3-22). The MIT Press.
- Finestack, L. H., Payesteh, B., Disher, J. R., & Julien, H. M. (2014). Reporting child language sampling procedures. Journal of Speech, Language, and Hearing Research, 57(6), 2274-2279.

- MacWhinney, B. (2000). *The CHILDES project: Tools for analyzing talk*. Third Edition. In Lawrence Erlbaum Associates. http://childes.psy.cmu.edu/
- Meisel, J. M. (2007). The weaker language in early child bilingualism: Acquiring a first language as a second language? Applied Psycholinguistics, 28(3), 495-514.
- Miyata, S., MacWhinney, B., Otomo, K., Oshima-Takane, Y., Hirakawa, M., Shirai, Y., Sugiura, M., & Itoh, K. (2013). Developmental sentence scoring for Japanese. *First Language*, 33(2), 200-216.
- Müller, N., & Hulk, A. (2001). Crosslinguistic influence in bilingual language acquisition: Italian and French as recipient languages. *Bilingualism: Language and Cognition*, 4(1), 1-21.
- Oshima-Takane, Y., MacWhinney, B., Sirai, H., Miyata, S., & Naka, N. (1998). *CHILDES for Japanese.* Second Edition. The JCHAT Project. Chukyo University.
- Silva-Corvalán, C., & Treffers-Daller, J. (2016). Digging into dominance: A closer look at language dominance in bilinguals. In C. Silva-Corvalán & J. Treffers-Daller (Eds.), *Language dominance in bilinguals: Issues of measurement and operationalization* (pp. 1-14). Cambridge University Press.

North Arts A3 ● 1:45pm – 2:15pm

Translanguaging practices among teenage learners in Saudi Arabia: Implications for identity and education

Areej Alharbi, Victoria University of Wellington

Translanguaging, leveraging multiple linguistic resources, is vital in multilingual educational contexts. This study focuses on teenage learners in Saudi Arabia, a complex sociolinguistic environment where Arabic and English coexist. Understanding translanguaging practices in this setting is of utmost importance because it helps to reveal how students navigate and negotiate their linguistic identities, enhance their learning experiences, and engage with a rapidly globalising world (García & Wei, 2014; Cenoz & Gorter, 2018). Additionally, it can provide valuable insights into language education and identity formation (Wei, 2018; Menken & García, 2016).

This project investigates the contexts of and motivations for translanguaging among teenage learners at a Saudi Arabian high school, including exploring its connection to identity negotiation and its relationship to the attitudes of both learners and teachers towards this practice. A qualitative research approach was employed, involving semistructured interviews and classroom observations. Participants included teenage learners and experienced teachers from a public girls' high school in Jeddah. The data were analysed using interactional sociolinguistics to understand the contextual social meanings and discursive identity negotiations connected to translanguaging practice and pedagogy (García & Lin, 2017).

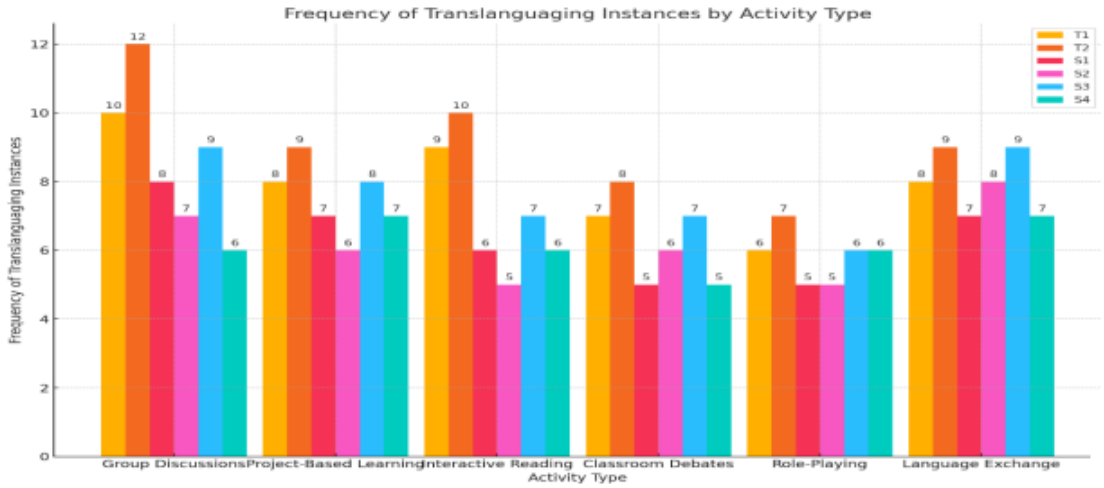
Preliminary analysis reveals that translanguaging enhances comprehension and engagement among learners in the educational setting and plays a pivotal role in discursive identity negotiation. Translanguaging helps teenagers in this study navigate and negotiate their cultural and personal identities, as will be presented at the conference.

These findings contribute to the literature showing how incorporating translanguaging into educational strategies can support cultural identity negotiation and academic success in multilingual contexts. This presentation will conclude with recommendations for how educators and policymakers can incorporate translanguaging into educational spaces as a dynamic and culturally relevant pedagogical tool.

References

- Cenoz, J., & Gorter, D. (2018). The role of translanguaging in the construction of multilingual identities. *International Journal of Bilingual Education and Bilingualism*, 21(6), 715-730.
- García, O., & Lin, A. M. Y. (2017). Translanguaging in bilingual education. In O. García, A. M. Y. Lin, & S. May (Eds.), *Bilingual and multilingual education* (pp. 117-130). Springer. https://doi.org/10.1007/978-3-319-02258- 1_9
- García, O., & Wei, L. (2014). *Translanguaging: Language, bilingualism and education*. Palgrave Macmillan.
- Menken, K., & García, O. (2016). Negotiating language policies in schools: Educators as policymakers. Routledge. 5. Wei, L. (2018). Translanguaging as a practical theory of language. *Applied Linguistics*, 39(1), 9-30. https://doi.org/10.1093/applin/amx039

Chart 2: Impact on Engagement and Understanding:



Monday 9th December

Session Seven ● North Arts A1

3:15pm – 4:45pm

Session Chair • Lynn Clark

Talks presented by:

- Sasha Calhoun, Corrine Seals, Toaga Christina Alefsio and Niusila Faamanatu–Eteuati
- Sara Christey
- Janus Cabazares

North Arts A1 ● 3:15pm – 3:45pm

The prosody of Heritage Language Samoan: How individual experiences shape the linguistic repertoire

Sasha Calhoun, Victoria University of Wellington
Corinne Seals, Victoria University of Wellington
Toaga Christina Alefosio, Victoria University of Wellington
Niusila Faamanatu-Eteuati, Victoria University of Wellington

Heritage Language (HL) speakers have an interconnected linguistic repertoire, reflecting linguistic features of their different languages as well as novel forms, which vary with frequency of language use (Putnam & Sánchez, 2013). Within HL research, there is relatively less work on prosody, although this is growing (e.g. Delais-Roussarie, 2015). We present the findings of a study looking at phrasal prosody of four HL speakers of Samoan in Aotearoa New Zealand. We present a descriptive analysis of productions from a picture task, together with a discursive analysis of interviews with the speakers about their language use and attitudes. We report interesting differences between the speakers in terms of their language experiences and the features of their phrasal prosody.

The picture task was from Calhoun (2015), which looked at the phrasal prosody of Home Country (HC) speakers of Samoan. Participants took part in pairs, with one person asking questions about simple events in pictures only the other person could see (see (1)). These aimed to prompt responses with focus on different constituents. The answer responses were analysed starting from the scheme developed in Calhoun (2015) to describe HC Samoan phrasal prosody. The interviews, with each participant separately, were conducted by one of the authors, a HL Samoan speaker.

Two of the participants, Alofa and Lupe (pseudonyms) showed many similarities to the phrasal prosody of HC Samoan described in Calhoun (2015), including a distinctive rise-fall boundary (L+H-) (see Figure 1). We also tentatively identify a novel feature, a high pitch plateau (H+!H*), which may mark backgrounded information for both speakers. Alofa and Lupe are both generation-2 HL speakers, born in Aotearoa. They both spoke in the interview of greatly expanding their Samoan use in recent years, through confidence and experience gained in university courses, including an emphasis on oratory. The other two speakers, Rosita and Leilani, showed less characteristic HC Samoan features, and for Leilani, some potential English-contact features. They are both generation1.5 speakers, who moved from Samoa to Aotearoa as school aged children. While they are both also studying Samoan at University, they expressed regret at speaking Samoan less, and being less fluent, than when they were younger.

We discuss these findings in relation to a framework of HL as an interconnected linguistic repertoire.

(1) (a)

‘O	le	ā	le	mea	na	tupu	analeilā
PRES	DET	what	DET	thing	PAST	happen	earlier

‘What happened earlier?’ (prompting **Broad Focus**)

(b)

‘O	ai	na	tosoa	le	maea	analeilā
PRES	who	PAST	pull-ES	DET	rope	earlier

‘Who pulled the rope earlier?’ (prompting **Subject Focus**)

(c)

‘O	le	ā	le	mea	na	toso	e	Sione	analeilā
PRES	DET	what	DET	thing	PAST	pull	ERG	Sione	earlier

‘What did Sione pull earlier?’ (prompting **Object Focus**)

(d) **PICTURE:** *character called Sione pulling a rope.*

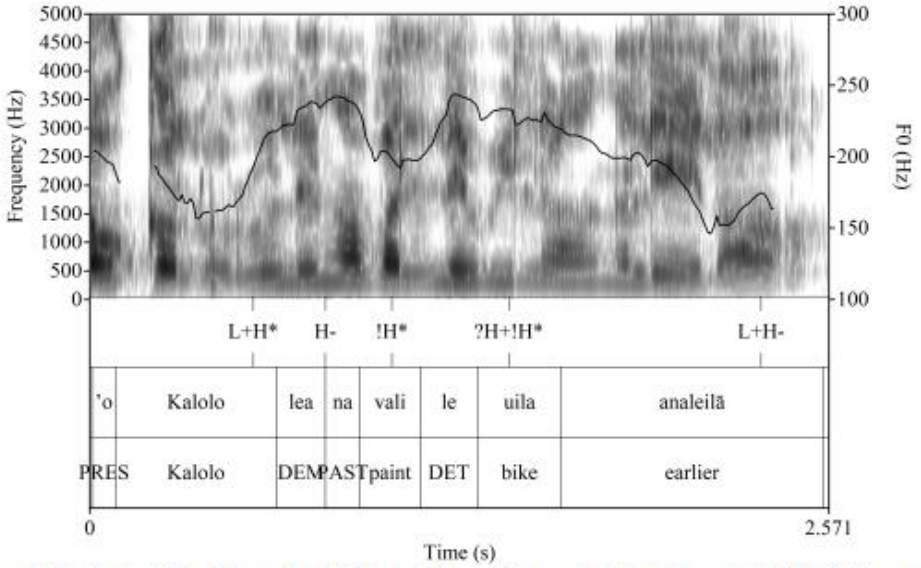


Figure 1: Typical subject focus for Alofa and Lupe: ‘It was Kalolo who painted the bike earlier’, showing tentative !H+H high plateau and L+H- boundary.*

References

- Calhoun, S. (2015). The interaction of prosody and syntax in Samoan focus marking. *Lingua*, 165, 205–229. https://doi.org/10.1016/j.lingua.2014.11.007
- Delais-Roussarie, E., Avanzi, M., & Herment, S. (Eds.). (2015). *Prosody and language in contact*: *L2 acquisition, attrition and languages in multilingual situations.* Springer. https://link.springer.com/book/10.1007/978-3-662-45168-7
- Putnam, M. T., & Sánchez, L. (2013). What’s so incomplete about incomplete acquisition? *Linguistic Approaches to Bilingualism*, 3(2), 478–508. https://doi.org/10.1075/lab.3.4.04put

North Arts A1 ● 3:45pm – 4:15pm

Examining Autistic speech production and perception: A two-phase approach

Sara Christey, University of Canterbury

This study investigates differences in vowel production between autistic and nonautistic/control individuals and explores the effects of lowering the "autistic mask" on speech in New Zealand. The research is divided into two phases: the first focusing on speech production analysis through interviews, and the second examining speech perception.

Phase 1: 8 autistic and 8 control participants engaged in tasks such as reading short stories aloud at the beginning and end of the interview, retelling the stories in their own words, and discussing their interests. Researchers carried out acoustic analysis on the participants' speech using Praat, LaBB-CAT, and RStudio to identify any fundamental differences between autistic and non-autistic groups, alongside any potential observable shifts as participants became more comfortable and potentially lowered their "autistic mask". The analysis focused on identifying specific patterns in vowel distribution, articulation, and consistency. By comparing the speech samples taken from the stories at the beginning and end of the interview, this study aims to understand how comfort levels and the "autistic mask" might influence speech production.

Phase 2: 56 autistic participants listened to 2 blocks of 16 audios featuring 7-8 lines from the stories extracted from the Phase 1 interviews. Participants then rated the speakers on a fourpoint scale, ranging from "Likely Autistic" to "Likely Not Autistic." This phase examined whether autistic participants could accurately identify other autistic individuals based on speech characteristics alone and whether their accuracy improved when the audio clips featured less "masked" speech.

We fit a mixed effects regression model to the perception data and found a highly significant effect of neurotype. The listeners were much more likely to identify and autistic speaker as being autistic than they were to falsely identify a control participant as such. Although there was a slight trend for accuracy to be higher in the unmasked condition, this was not significant.

In ongoing work, we are examining the acoustic differences between the autistic and control participants. Preliminary inspection of the vowel plots indicates that there are differences in vowel production and speech rate between the autistic and non-autistic groups – specifically, the autistic group's vowel distributions tend to be smaller than those of the control group. There is a significant effect of pitch, with autistic participants using less pitch movement across each phrase than the control participants.

These findings highlight the importance of further research into the dynamics of autistic speech production and perception.

North Arts A1 ● 4:15pm – 4:45pm

An exploratory study of the acoustic correlates of lexical stress in Cebuano using a perceptual task

Janus Cabazares, University of Canterbury

Discussions of the acoustic features of lexical stress in Cebuano have provided varying descriptions. Wolff (1962) lists length as a separate phoneme that combines with loudness. While Zorc (1977) and Wolff (1972), in a later work, showed contrast between stress and length. In Tagalog, a related language, Moriguchi (1982) isolates syllable length as the primary indicator of accent. Klimenko et al. (2010) through a perception test showed that duration is primarily linked to the perception of stress in Tagalog. Pitch then ranks second. However, intensity was found significant to stress only in the statistical test.

This study aims to explore these points about lexical stress in Cebuano, an Austronesian language in the Philippines. Using Praat, the vowel duration, pitch, and intensity were measured for seven (7) paroxytonic and oxytonic minimal pairs. The data were from six (6) native speakers (3 males and 3 females). The three prosodic features were then modified to test their contribution to phonemic stress through a perceptual task participated by thirty-four (34) native speakers.

The data showed that the penultimate vowel of the oxytonic word is invariably shorter than the succeeding vowel and its corresponding vowel in the paroxytonic word of the minimal pair. Typically, the vowel of the ultima in the oxytonic word is longer, and higher in pitch and intensity than its corresponding vowel in the paroxytonic word. Pitch also correlates with stress but with less regularity than duration. Lastly, intensity is also associated with stress but with the least consistency.

In the perceptual task, the results showed that reducing the length of the penultimate vowel of the paroxytonic word affect the phonemic stress compared to increasing the length of its counterpart vowel in the oxytonic word. Pitch and intensity may contribute to altering phonemic stress. When pitch is modified, and the length and intensity is unaltered, fewer participants perceived a change of phonemic stress. The same result is true for the modification of intensity. Thus, the value of the features of the penultimate vowel of the oxytonic word, its shortness, low pitch, and low intensity plays a crucial role in phonemic stress in Cebuano.

References:

- Agoncillo, A., Galang, M., & Tejerero, K. (2011). Automatic word level lexical stress labelling for Filipino speech (Unpublished bachelor's thesis). University of the Philippines Diliman, Quezon City.
- Andrew, M. N. (1964). An introduction to Cebuano. Ann Arbor, MI: The University of Michigan, Rotary Press.
- Bird, S., & Wang, Q. (2019). Ling 380: Acoustic phonetics lab manual. Department of Linguistics, University of Virginia.
- Klimenko, S., San Juan, M., & Javier, J. (2010). Stressed out with stress- Perceptual recognition of acoustic correlates of stress in Tagalog. Paper presented at the First Philippine Conference Workshop on Mother-Tongue-Based Multilingual Education, Capitol University, Cagayan de Oro City, Philippines. February 18-20, 2010.
- Lewis, M. P., Simons, G. F., & Fennig, C. D. (Eds.). (2013). Ethnologue: Languages of the world (17th ed.). Dallas, TX: SIL International. Retrieved from http://www.ethnologue.com
- Moriguchi, T. (1982). Some notes on accent in Kbalan: A minority aboriginal language in Formosa. Journal of Asian and African Studies, 24, 1-23.
- Newton, B. (1991). Cebuano and generative phonology. Philippine Quarterly of Culture and Society, 19(4), 253-263. University of San Carlos Publications.
- Reid, L. (1973). Diachronic typology of Philippine vowel systems. In T. A. Sebeok (Ed.), Current trends in linguistics 11: Diachronic, areal, and typological linguistics (pp. 485-506). The Hague, Netherlands: Mouton and Co.
- Tanangkingsing, M. (2009). Cebuano reference grammar (Unpublished PhD dissertation). National Taiwan University, Taipei City.
- Wolff, J. U. (1962). A description of Cebuano Visayan: Texts, analysis and vocabulary. New Haven, CT: Yale University.
- Wolff, J. U. (1972). A dictionary of Cebuano Visayan. New York, NY: Cornell University, Southeast Asia Program and Linguistic Society of the Philippines.
- Zorc, D. (1977). The Bisayan dialects of the Philippines: Subgrouping and reconstruction (Doctoral dissertation). Cornell University, Ithaca, NY

Monday 9th December

Session Eight ● North Arts A2

3:15pm – 4:45pm

Session Chair • Gia Hurring

Talks presented by:

- Joshua Wilson Black
- Brooke Ross, Elaine Ballard and Catherine Watson
- Kirsten Culhane, Jen Hay, Simon Todd, Márton Sóskuthy, Forrest Panther, Jeanette King and Peter Keegan

North Arts A2 ● 3:15pm – 3:45pm

nzilbb.vowels: A new tool for quantitative research on vocalic covariation

Joshua Wilson Black, University of Canterbury

This paper presents the nzilbb.vowels package for the R programming language (R Core Team 2024). The package provides a set of tools for the quantitative analysis of vocalic data, with a special focus on vocalic covariation. It provides generalised and reusable implementations of a series of analyses developed in previous papers by teams at NZILBB (Sheard et al. 2024; Sheard and Wilson Black 2024; Wilson Black, Hay, et al. 2023; Brand et al. 2021; Wilson Black, Brand, et al. 2023). The functions and data packaged together in nzilbb.vowels offer a significant increase in the robustness and reproducibility of quantitative research on vocalic covariation. The package will be available on CRAN (the Comprehensive R Archive Network) by the date of the conference (the Comprehensive R Archive Network).

In the presentation I will set out both the tools implemented in the package and the overall design strategy and process for moving from R code produced in the course of a particular research project to a general purpose package which can be used by other researchers. The latter will be of interest to those working in other areas of linguistics who may wish to make their code available to other researchers.

I will discuss the package's implementation of Lobanov 2.0 normalisation (Brand et al. 2021), bootstrapped confidence intervals for PCA loadings (Wilson Black, Brand, et al. 2023), rotation methods for comparing PCA across data sets (Sheard and Wilson Black 2024), and testing for numbers of MDS dimensions (Wilson Black, Brand, et al. 2023).

At the design level, I emphasise the division of data generation and plotting, implemented across all of the functions mentioned above. Plots generated by the package, provide a convenient way for researchers to produce conventional plots (e.g. Figure 1). Separate data generation functions mean that they can generate entirely distinct plots, if they prefer, or hand the data to be plotted over to another piece of software entirely. I will also provide some pointers for producing adequate tests for your code and how to share it with others, using both GitHub and CRAN.

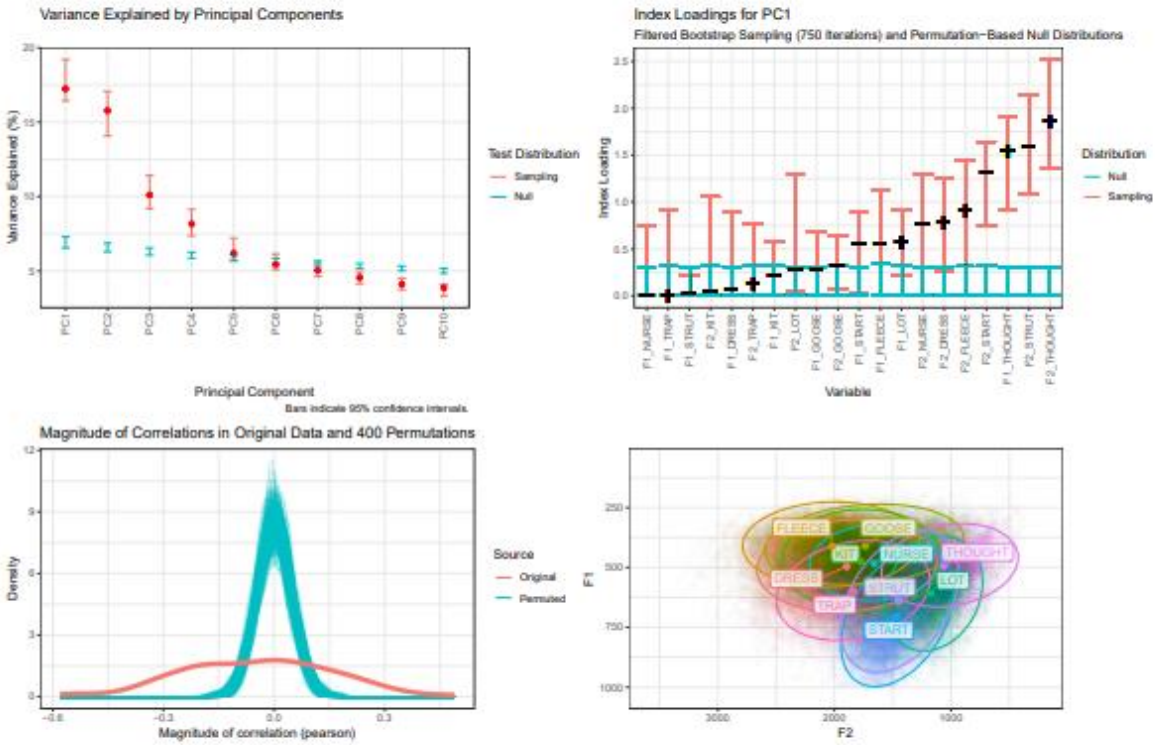


Figure 1: Example plots from `nzilbb.vowels` plotting functions.

References

- Brand, James, Jen Hay, Lynn Clark, Kevin Watson, and Márton Sóskuthy. 2021. "Systematic Co-Variation of Monophthongs Across Speakers of New Zealand English." *Journal of Phonetics* 88: 101096. https: //www.sciencedirect.com/science/article/pii/S0095447021000711
- R Core Team. 2024. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.
- Sheard, Elena, Jen Hay, Robert Fromont, Joshua Wilson Black, and Lynn Clark. 2024. "Covarying New Zealand Vowels Interact with Speech Rate to Create Social Meaning for NZ Listeners." Presented at the 19th Conference on Laboratory Phonology, Hanyang University, June 29.
- Sheard, Elena, and Joshua Wilson Black. 2024. "Rotating Principal Components to Explore Change over the Lifespan in New Zealand English Monophthongs." Presented at the Eighteenth International Conference on Methods in Dialectology, La Trobe University, July 4. https://joshua.wilsonblack.nz/slides/methods/.
- Wilson Black, Joshua, James Brand, Jen Hay, and Lynn Clark. 2023. "Using Principal Component Analysis to Explore Co-variation of Vowels." *Language and Linguistics Compass* 17 (1): e12479. https://doi.org/10. 1111/lnc3.12479
- Wilson Black, Joshua, Jennifer Hay, Lynn Clark, and James Brand. 2023. "The Overlooked Effect of Amplitude on Within-Speaker Vowel Variation." *Linguistics Vanguard* 9 (1): 173–89. https://doi.org/10.1515/lingvan2022-0086

North Arts A2 ● 3:45pm – 4:15pm

New sound changes in the NZE diphthong space

Brooke Ross, The University of Auckland
Elaine Ballard, The University of Auckland
Catherine Watson, The University of Auckland

Recent work on New Zealand English (NZE) suggests there are new sound changes occurring in the NZE vowel space (Ross, Ballard, & Watson, 2021, 2022, 2023). These changes – including the lowering and retraction of the DRESS, TRAP, and NURSE vowels appear to be emerging from New Zealand's largest and most linguistically diverse city, Auckland. Initially we postulated that these new sound changes might be indicative of a developing regional accent. However, further research using data collected from speakers in a regional city, Nelson, suggests this is not the case (Ross et al., 2023). Work so far has predominantly focussed on the monophthong space, but this study expands the acoustic vowel analysis to the diphthong space. With this analysis we can investigate whether diphthong changes previously noted among young Auckland speakers, such as the loss of broad diphthong variants (Ross, 2018), can be found outside Auckland. This analysis looks at approximately 10,000 diphthong tokens extracted from sociolinguistic interviews with participants from two centres, Auckland (n=67), and Nelson (n=18). Participants are all New Zealand English speakers and have been stratified by age (U25 and 40+) and gender. The transcribed recordings underwent forced alignment using WebMAUS (New Zealand English service) (Kisler, Reichel, & Schiel, 2017). Formant tracks were calculated using *forest* in the EMUR package (Winkelmann, Harrington, & Jänsch, 2017) in R (R Core Team, 2024). Phoneme boundaries and formant tracks were hand checked and corrected where necessary using the EMU-web-app (Winkelmann & Raess, 2014). For the analysis formant tracks were extracted between two hand labelled targets labelled based on the criteria in Watson, Harrington & Evans (1998). The results of the Auckland analysis support earlier findings. The 40+ Auckland speakers use standard variants of the NZE diphthongs. The Auckland speakers aged U25, however, overall use less broad variants of FACE, GOAT, PRICE, and MOUTH. Furthermore, pronunciations of FACE and GOAT appear to be moving towards "new" more monophthongal pronunciations. As expected, the 40+ Nelson speakers also use standard NZE diphthong variants. Notably, however, some younger Nelson speakers use variants of FACE, GOAT, and PRICE, which are closer to Auckland U25 speakers that their 40+ counterparts. However, these differences are not as large as for the U25 Auckland speakers. This could be indicative of these sound changes spreading to parts of NZ outside Auckland and may provide further evidence that Auckland is the nucleus for these new sound changes occurring in NZE.

References

- Kisler, T. and Reichel U. D. and Schiel, F. (2017). Multilingual processing of speech via web services. *Computer Speech & Language*, 45, 326–347.
- R Core Team (2023). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL https://www.r-project.org/
- Ross, B., Ballard, E., & Watson, C. (2021). New Zealand English in Auckland: A Papatoetoe snapshot. *Asia-Pacific Language Variation*, 7(1), 62-81.
- Ross, B., Ballard, E., & Watson, C. (2022). Young Aucklanders and New Zealand English vowel shifts. In Rosey Billington (Ed.), *Proceedings of the Eighteenth Australasian International Conference on Speech Science and Technology* (pp. 186-190). Australasian Speech Science and Technology Association.
- Ross, B., Ballard, E., & Waston, C. (2023). Front vowel lowering in New Zealand English: investigating a regional sound change. Proceedings of the 20th International Congress of Phonetic Sciences (pp. 3671-3675).
- Ross, B. (2018). An acoustic analysis of New Zealand English vowels in Auckland. [Master's Thesis, Victoria University of Wellington]. Open Access Te Herenga Waka-Victoria University of Wellington.
- Watson, C., Harrington, J., & Evans, Z. (1998). An acoustic comparison between New Zealand and Australian English vowels. Australian journal of linguistics, 18(2), 185-207.
- Winkelmann, R., Harrington, J., & Jänsch, K. (2017). EMU-SDMS: Advanced speech database management and analysis in R. *Computer Speech & Language*, 45, 392-410.
- Winkelmann, R. & Raess, G. (2014). Introducing a web application for labeling, visualizing speech and correcting derived speech signals. *Proceedings of the Ninth International Conference on Language Resources and Evaluation* (LREC'14), 4129-4133.

North Arts A2 ● 4:15pm – 4:45pm

Variation and change in the production of te reo Māori closing sequences

Kirsten Culhane, University of Canterbury,
Jen Hay, University of Canterbury,
Simon Todd, University of California, Santa Barbara
Márton Sóskuthy, The University of British Columbia
Forrest Panther, University of Canterbury,
Jeanette King, University of Canterbury,
Peter Keegan, University of Auckland

This study examines the production of the closing sequences /ai ae ei ao au oi ou/ in te reo Māori. Within morphemes, they are described as diphthongs; two vowel qualities produced with no syllable boundary [1]. However, when closing sequences arise at a morpheme boundary, e.g. /whak**a-i**ti/ "belittle, lit. CAUS-small", they are described as hiatuses; two vowels which belong to different syllables [2, 3].

Previous research has shown that the targets of the closing sequences have shifted (due to contact with NZE) and has documented /ae/ ~ /ai/ and /au/ ~ /ou/ mergers for younger speakers [5, 6]. However, the extent to which the sequences are diphthong- or hiatus-like in their production and how this may have changed overtime is yet to be investigated. It is also yet to be investigated to what extent morpheme boundaries effect their production.

Our study addresses this. Using data from the MAONZE corpus [7], which contains recordings from three generations of speakers, we examine if morpheme boundaries influence the production of the closing sequences. We also examine if there has been change overtime, and if other linguistic factors like stress also influence their production.

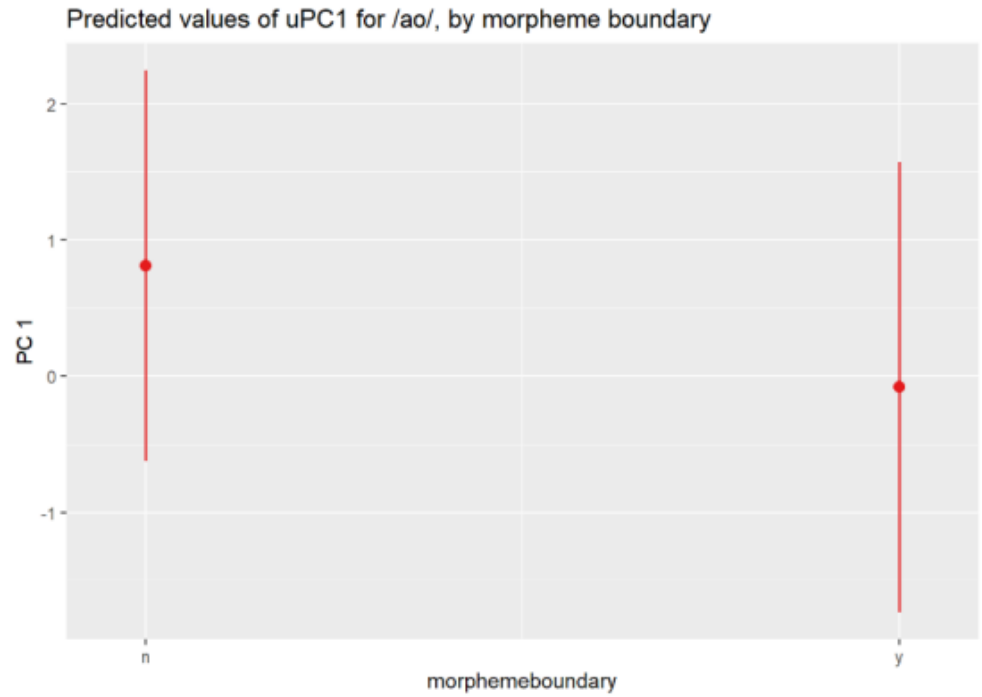
To do this, we employed a bottom-up approach. Firstly, we used functional principal components analysis (fPCA) [8] to quantify formant, intensity, and pitch trajectories. Then, we used a 'uniting' functional principal components analysis to identify patterns of covariation amongst the features identified by the fPCA. Lastly, we ran linear mixed-effects regression models on the PCA scores to identify which factors underpin the patterns of covariation observed.

We find that the closing sequences vary considerably in their production. Covariation between formant, duration, and intensity trajectories form a clear continuum of variation between hiatus and diphthong-like realisations.

The regression analysis identifies a morpheme boundary effect as described in the literature, for /ai/ and /ao/. This can be seen in Figure 1 for /ao/, where low PC1 scores correspond to hiatus-like realisations, and high PC1 scores correspond to diphthong-like realisations. Our analysis reveals that prosodic environment and stress also affect their production. We also find that hiatus-like realisations are reducing over time; with contemporary speakers having more diphthong and monophthong-like realisations than historical speakers.

The findings of this study indicate that that morpheme boundaries do indeed affect the production of the closing sequences, but that other linguistic factors also play a role, and that their production has changed over time.

Figure 1



References

- K.L. Sands, Patternings of vocalic sequences in the world's languages. Doctoral Dissertation, University of California, Santa Barbara, 2004.
- R. Harlow, *Māori: A linguistic introduction*. Cambridge: Cambridge University Press, 2007.
- W. Bauer, *Māori*. USA and Canada: Routledge, 1993.
- S.D. Stein, Simon David. *The phonetics of derived words in English: Tracing morphology in speech production.* Walter de Gruyter GmbH & Co KG: Berlin, 2022.
- R. Harlow, P. Keegan, J. King, M. Maclagan, and C. Watson, "The changing sound of the Māori language," in Variation in indigenous minority languages, J. N. Stanford and D. R. Preston, Eds. Amsterdam: John Benjamins, 2009, pp. 129–152.
- C. I. Watson, M. A. Maclagan, J. King, R. Harlow, and P. J. Keegan, "Sound change in Māori and the influence of New Zealand English," Journal of the International Phonetic Association, vol. 46, no. 2, pp. 185–218, 2016.
- J. King, M. Maclagan, R. Harlow, P. Keegan, and C. Watson, "The MAONZE corpus: Establishing a corpus of Māori speech," New Zealand Studies in Applied Linguistics, vol. 16, no. 2, pp. 1–16. 2010.
- M. Gubian, F. Torreira, and L. Boves, "Using functional data analysis for investigating multidimensional dynamic phonetic contrasts". Journal of Phonetics vol. 49, pp. 16–40, 2015.

Monday 9th December

Session Nine ● North Arts A3

3:15pm – 4:15pm

Session Chair • Heeju Hwang

Talks presented by:

- Wakayo Mattingley, Forrest Panther, Jen Hay, Jeanette King, Simon Todd and Peter J Keegan
- Luyi Zhu

North Arts A3 ● 3:15pm – 3:45pm

Implicit knowledge of morphological processes in Māori by non-speakers of Māori

Wakayo Mattingley, University of Canterbury
Forrest Panther, University of Canterbury
Jen Hay, University of Canterbury
Jeanette King, University of Canterbury
Simon Todd, University of California, Santa Barbara
Peter J. Keegan, The University of Auckland

Previous research shows that non-speakers of Māori in New Zealand have well-developed phonotactic intuitions and proto-lexical (i.e., wordform) knowledge of Māori from statistical patterns in the language through regular incidental exposure (Mattingley et al., 2024; Oh et al., 2020; Panther et al., 2023). They are also able to morphologically segment Māori words in a similar way to fluent speakers of the language (Panther et al., 2024). While we know that protolexical knowledge is built regardless of whether ambient exposure to the language occurs in childhood or adulthood (Mattingley et al., under review), we do not know the degree to which morphological knowledge of Māori differs across non-speakers of Māori under different lifetime exposure conditions.

The present study expands on the work of Panther et al. (2024) who show that non-speakers of Māori possess knowledge of specific morphemes in Māori. Using data from new experiments, we report on two new participant groups: 'migrants' who spent their early childhood overseas and moved to New Zealand later in life and 'expats' who spent their early childhood in New Zealand, but subsequently moved overseas. We explore their implicit morphological knowledge of Māori. Specifically, we consider the degree to which they are aware of core morphological processes in Māori: the nominalising suffix *-Canga* (C = consonant), and the causative prefix *whaka-,* among others (Harlow, 2007). We determine whether our participants are able to identify morphological boundaries in Māori words that have common and regular affixes or word parts. The morphological knowledge of migrants and expats is compared with local adults. In this paper, we will present preliminary findings from these experiments.

References

- Harlow, R. (2007). *Māori: A linguistic introduction*. Cambridge: Cambridge University Press.
- Mattingley, W., Hay, J., Todd, S., Panther, F., King, J., & Keegan, P. (2024). Ongoing exposure to an ambient language continues to build implicit knowledge across the lifespan. *Linguistic Vanguard.* https://doi.org/10.1515/lingvan-2023-0137
- Mattingley, W., Panther, F., Hay, J., Todd, S., King, J., & Keegan, P. (under review). Implicit learning across the lifespan: NZ migrants build a Māori proto-lexicon, NZ expats retain one. *Language Leaning and Development*.
- Oh, Y., Todd, S., Beckner, C., Hay, J., King, J., & Needle, J. (2020). Non-Māori-speaking New Zealanders have a Māori proto-lexicon. *Scientific Reports*, 10(1), 1–9.
- Panther, F., Mattingley, W., Todd, S., Hay, J., & King, J. (2023). Proto-lexicon size and phonotactic knowledge are linked in non-Māori speaking New Zealand adults. *Laboratory Phonology*, 14(1). 1-27.
- Panther, F., Mattingley, W., Todd, S., Hay, J., King, J., & Keegan, P. J. (2024). Morphological segmentations of non-Māori speaking New Zealanders match proficient speakers. *Bilingualism: Language and Cognition*, 27(1). 1-15.

North Arts A3 ● 3:45pm – 4:15pm

On de inside Mandarin nominals

Luyi Zhu, The University of Auckland

Background *de* is a functional marker widely used in Mandarin to mark an associative modification relation combining two independent constituents (Li&Thompsom1981; Sproat&Shih1986). There are different usages of *de*: (i) GEN-*de* where *de* functions as a possessive/genitive relationship marker; (ii) CP-*de* where *de* marks a relative clause (RC); (iii) AP-*de* where *de* plays the role of an adjectival associative marker (AP). There is a fixed order among the three usages of *de*, i.e., GENP-*de* > RC-*de* > AP-*de* (Huangetal.2009; Hsu2014; Li2023).

Existing analyses There exist two ways of analysing *de*: (i) Huang (1982/1988) claims that *de* is a modifier-marker for XP in [XP *de* N] and *de* is inserted at PF. Later, Huang et al (2009) argue that parallel to Num/CL/N, prenominal *de* is an adjectival functional head: [XP *de*] is a head-final DeP headed by *de* with a pre-*de* XP to provide categorical values for XP-*de*. (ii) Zhang (2015) claims that [AP *de* N] is a FP headed by *de* with AP as the Specifier and N as its complement. Different from Huang (1982/1988) and Huang et al(2009), Zhang(2015) recognizes DeP as a phrase in the spine of the Mandarin nominal.

Issues with existing analyses The analyses in Huang (1982/1988) and Huang et al (2009) entail that DeP is not a projection in the spine of the nominal structure – however, it is not clear how DeP connects with other constituents. Additionally, that DeP can appear in other positions such as before DEM or between DEM and Q remain an issue for this approach. For Zhang (2015), at least two challenges remain: (i) the fixed rule of *de*-s can be violated in certain environments and AP-*de* can appear uncanonically before RC-*de* or GEN-*de*; (ii) there are other possible uncanonical positions for AP-*de* related with focus/topic readings.

Solution: We propose that DeP is located at the Specifier of aP. There are three layers of aP in a fixed order: $aP_{\text{-GENP}}$ > $aP_{\text{-RC}}$ > $aP_{\text{-AP}}$. There are also FocPs and TopPs inside a Mandarin nominal. We argue that there are nominal-internal phrasal movements that can target the DeP (which can be AP-*de*/RC-*de*/GENP-*de*) and move it to FocP or TopP driven by [+Foc] or [+Top] features. That is, the ordering GENP-*de* > RC-*de* > AP-*de* is fixed in the underlying structure, but there can be deviations if one of the DeP moves due to Foc/Top-movement. This analysis resolves the issues with previous analyses.

Day Two

Tuesday 10th December

Session One ● North Arts A1

10:05am – 12:05pm

Session Chair • Meredith Marra

Talks presented by:

- Ashleigh Hume
- Tara Ravi
- Masataka Yamaguchi and Kaori Hata
- Kazuyo Murata

North Arts A1 ● 10:05am – 10:35am

"Us chemists" vs. "Those biologists": Career identity construction through relational talk

Ashleigh Hume, Victoria University of Wellington

Since the 1980s, the landscape of work has begun to change. Rather than committing to one career path for an entire lifetime, it is becoming increasingly common for people to change jobs frequently and for new careers to emerge, trends that have been strengthened by the pandemic and the rapid advance of AI. This variety and fluidity of work experiences has implications when it comes to establishing a consistent 'career identity' across employment contexts. While professional identity has been researched previously in workplace studies, career identity as a concept is less explored, and linguistic treatments are rare. Further, and important to this study's goals, little is known about what it 'looks like' in practice.

This study harnesses these affordances and seeks to expand understandings of career identity and how it becomes salient through talk. Specifically, I use interactional data taken from the novel context of a morning tea quiz, where the main form of talk is relational and focused on the topics in the quiz. I take a discourse analysis approach to see how career identity construction relates to three concepts: career trajectory, expertise, and current position, and how these are affected by the norms surrounding the quiz.

In this presentation, I take the opportunity to zoom into community norms and humour to show how these affect career identity construction in the relational context. I make the case that community norms are upheld by humour, and suggest that the quiz norms are affected by wider New Zealand norms. The findings of the study contribute to the wider field of identity construction in the workplace and the focus on relational talk highlights the importance of career identity to people's everyday lives in these rapidly evolving times.

References

- Angouri, Jo & Meredith Marra (eds.) 2011. *Constructing Identities at Work*. Palgrave MacMillan.
- Antaki, Charles & Susan Widdicombe (eds.) 1998. *Identities in Talk*. SAGE Publications. Bucholtz and Hall 2005. Identity and interaction: a sociocultural linguistic approach. Discourse studies 7(4–5): 585–614.
- Holmes, Janet & Nicky Riddiford 2010. Professional and personal identity at work: achieving a synthesis through intercultural workplace talk. *Journal of Intercultural Communication* 10(1).

North Arts A1 ● 10:35am – 11:05am

Discursive constructions of family support by trans Asian young people in Aotearoa

Tara Ravi, Victoria University of Wellington

My research explores discursive constructions of positive family support by trans Asian young people in Aotearoa. Rainbow Asian diaspora inhabit a unique intersection that is neglected by mainstream rainbow literature (Tan et al., 2023).

As Tangata Tiriti, or People of the Treaty (Tan, 2023), Asian New Zealanders' lives are shaped by Western, Māori, and Asian cultures. Therefore, my approach synthesises Western discourse analysis concepts, Māori knowledge, and Asian histories and cultural values. Though Asians are chronically underrepresented in national surveys of rainbow people, such as Counting Ourselves (Veale et al., 2019) and The Identify Survey (Fenaughty et al., 2022), what these surveys have found is alarming. Trans Asian people are almost twice as likely than the average trans person to have a family member cease communicating with them permanently or for an extended period after they come out as trans, and more than twice as likely to be sent to conversion therapy by their family (Veale et al., 2019). For reasons such as these, the majority of respondents to the Adhikaar Report, a survey of LGBTQ+ South Asians in New Zealand, reported that they had never come out to their families (Bal & Divakalala, 2022).

My goal is to address these disparities of trans acceptance in New Zealand's Asian communities by gaining qualitative insights, from the grassroots level, on Asian-centred approaches to supporting trans young people. I am working with three trans Asian young people of varying cultural heritages, and their self-selected greatest supporters. My data collection involves the participants drawing pictures of their experience of receiving or giving familial support, and then reflecting on these drawings in extended interviews. I am conducting a multimodal discourse analysis of the drawings and interviews, looking for common themes in the narratives of individuals, and within and between families. I hope this work can inform culturally appropriate resources for Asian families to understand trans identities and learn how to support their young trans family members.

In my presentation, I will discuss my research findings to date, including the discourses that participants engage with, the metaphors they invoke, and the specific supportive behaviours they describe.

References

- Bal, V., & Divakalala, C. (2022). Community is Where the Knowledge is: the Adhikaar Report. Adhikaar Aotearoa.
- Fenaughty, J., Ker, A., Alansari, M., Besley, T., Kerekere, E., Pasley, A., Saxton, P., Subramanian, P., Thomsen, P. & Veale, J. (2022). Identify survey: Community and advocacy report. Identify Survey Team.
- Tan, K. K. H. (2023). Talking About Race and Positionality in Psychology: Asians as Tangata Tiriti. Journal of the New Zealand College of Clinical Psychologists, 33(1), 107–111.
- Tan, K., Roy, R., Ker, A., & Fenaughty, J. (11 Aug 2023). An ecological analysis of hope amongst Asian rainbow young people in Aotearoa New Zealand, Culture, Health & Sexuality. https://doi.org/10.1080/13691058.2023.2242443
- Veale, J., Byrne, J., Tan, K., Guy, S., Yee, A., Nopera, T., & Bentham, R. (2019). Counting ourselves: The health and wellbeing of trans and non-binary people in Aotearoa New Zealand. University of Waikato: Transgender Health Research Lab.

North Arts A1 ● 11:05am – 11:35am

Referring to one's own group stereotypes in anchoring utterances: A sociocognitive approach to the pragmatics of social interaction

Masataka Yamaguchi, Kobe City University of Foreign Studies
Kaori Hata, Osaka University

This paper empirically explores the ways in which social interaction is analysed from a sociocognitive-theoretical perspective (van Dijk 2008, 2009). It particularly focuses on how interactants create "common ground" (Clark 1996) by invoking stereotypes of their own groups while "anchoring" their utterances (Clark 2021) in interaction. Our point is to argue that we can illuminate the process of "grounding" or the creation of common ground, by analytically focusing on how interactants are interactionally aligned.

Specifically, we analyse two sets of interaction taken from a video-recorded conversation and a talk show on the radio in which interactants collaboratively tell stories by referring to their own group's stereotypes. The first set derives from a video-recorded conversation between two American expatriates in Japan in which they are instructed to talk about "What surprised you?" By focusing on how they create common ground by invoking the stereotypes of Americans ("loud, rude, and fat"), we also show the phenomenon known as "the chameleon effect" by which they unconsciously imitate the communicative behaviour of the interlocutor, linguistically (e.g., syntactic parallelism) and nonlinguistically (e.g., gaze and posture) (Chartrand & Bargh 1999).

The second data set is taken from the NPR program *All Things Considered* broadcast on 19 March in 2021 on the tragic event of the "spa shootings" in Atlanta, Georgia. In the interaction, two Asian American women, Ailsa Chang and Nancy Wang Yuen, collaboratively and collectively remember "sexual stereotypes of Asian women" that are represented by certain adjectives (e.g., "submissive, fetishized, exoticized") and noun phrases (e.g., "exotic lotus flowers, dragon ladies, temptresses"), among others. By revealing the ways in which these stereotypes emerge in analysing the interaction, we show the two interactants use the same syntactic constructions while listing the stereotypes, which is also seen as an instance of the chameleon effect.

In conclusion, we argue that it is useful to further explore "the process by which speakers and addressees anchor utterances to individual entities in their common ground" (Clark 2021) in which they create "aligned mental representations" (Pickering & Garrod 2013). In doing so, we will be able to better understand the cognitive aspects of discourse, which have been relatively neglected in discourse studies. We hope that this paper is an empirical case study in an attempt to rectify the "anticognitive trend" (van Dijk 2009).

References

- Chartrand, T. L., & Bargh, J. A. (1999). The chameleon effect: the perception–behavior link and social interaction. *Journal of Personality and Social Psychology,* 76(6), 893–910.
- Clark, H. H. (1996). *Using language.* Cambridge University Press.
- Clark, H. H. (2021). Anchoring utterances. *Topics in Cognitive Science*, 13(2), 329-350.
- Pickering, M. J., & Garrod, S. (2013). An integrated theory of language production and comprehension. *Behavioral and Brain Sciences*, 36(04), 329-347.
- Van Dijk, T. A. (2008). *Discourse and context: A sociocognitive approach*. Cambridge University Press.
- Van Dijk, T. A. (2009). *Society and discourse: How social contexts influence text and talk.* Cambridge University Press

North Arts A1 ● 11:35am – 12:05pm

Doing power in public meetings: Focusing on the discursive strategies of volunteer chairs

Kazuyo Murata, Ryukoku University

Meetings are a central focus of research in the workplace discourse study. Chairing meetings is one of the most popular research topics in meeting discourse and previous research has indicated that power in meetings is typically under the control of the chair (Bilbow 1998, Drew and Sorjonen 1997). Although most studies focus on intragroup interaction between members of the same company or organisation (Asmuβ and Svennevig 2009), Lazzaro-Salazar et al. (2015) investigate volunteer chairs of small focus groups in public meetings. They analysed the authentic meeting data from an interactional sociolinguistic perspective, demonstrating how the arbitrary assignment of chairs influenced and facilitated small group discussions through a range of discursive practices. They also showed how the position of chairs in decision-making is inherently influential and powerful.

With regard to Japanese public meetings, Murata (2013) analysed authentic public meeting data of over 60 hours and found that (professional) facilitators of small group discussions play an important role in democratic negotiation, managing the discussion and participants' relationships. She also argued that one of the most important characteristics of facilitators is to be neutral in the discussion.

This presentation examines how the power of the chair is enacted in public meetings from an interactional sociolinguistic perspective. More specifically, I analyse authentic Japanese public meetings focusing on the linguistic behaviour of volunteer chairs in comparison with professional facilitators. The data set comprises two public meetings held over a period of approximately two months to discuss a multifunctional facility to be built in a suburb of the city. The participants were a random sample of about 50 citizens. Each of the two meetings was approximately two hours in duration and adopted a ‘World Café’ style approach. The participants were divided into 10 groups and no specific chair was appointed in each group. However, it was found that in many groups volunteer moderators facilitated the discussions.

The results of the analysis show that the linguistic behaviour of the volunteer facilitators was very similar to that of the professional facilitators. However, the most significant difference between the linguistic behaviour of the volunteer facilitators and that of the professional facilitators was whether they were neutral in the discussion. Volunteer chairs tended to steer the discussion towards topics of interest to them. I would also like to point out that the number of participants in small groups can affect the chair's power of enactment.

References

- Asmuβ, Birte, and Jan Svennevig. 2009. “Meeting Talk: An Introduction.” *Journal of Business Communication* 46 (1): 3–22.
- Bilbow, Grahame. 1998. “Look Who’s Talking: An Analysis of “Chair-talk” in Business Meetings.” *Journal of Business and Technical Communication* 12: 157–197.
- Drew, Paul, and Marja-Leena Sorjonen. 1997. “Institutional Dialogue.” In Discourse as Social Interaction: Discourse Studies 2 – A Multidisciplinary Introduction, ed. by Teun van Dijk, 92–118. London: Sage.
- Lazarro-Salazar, Mariana Virginia, Meredith Marra, Janet Holmes and Bernadette Vine. 2015. “Doing Power and Negotiating through Disagreement in Public Meetings.” Pragmatics and Society. 6 (3): 444-464.
- Murata, Kazuyo. 2013. “Characteristics and Effects of Linguistic Behaviours in Public Meetings Facilitators.” (in Japanese) The Japanese Journal of Language in Society: 16 (1): 49-64.

Tuesday 10th December

Session Two ● North Arts A2

10:05am – 12:05pm

Session Chair • Lynn Clark

Talks presented by:

- Elsa Wright
- Ryosuke Hattori
- Mahnaz Aliya, Irina Elgort and Anna Siyanova–Chanturia
- Mojtaba Tadayonifar, Irina Elgort and Anna Siyanova–Chanturia

North Arts A2 ● 10:05am – 10:35am

Mother Tongue: The desire of Pākehā parents to foster childhood bilingualism and an alternative worldview through raising their tamariki in Māori-immersion schooling

Elsa Wright, University of Canterbury

What motivates non-indigenous (Pākehā) adults to learn the endangered language of our country's tangata whenua? What is their perceived role in supporting language revitalisation and (re)normalisation? Recent research has begun to explore the increase in non-heritage learners of the Māori language (Berardi-Wiltshire & Bortolotto, 2022; Te Huia 2020). However, little is known about Pākehā parents who choose Māori-medium schooling for their tamariki. This project explores the experiences of non-Māori whānau in level 1 or 2 (full) immersion schooling and their hopes for contributing to the revitalision of Te Reo Māori. The data for this project comes from interviews with 13 parents of children in kura kaupapa or rumaki classroom units from around the motu. All were women and all self-identified as Pākehā. Some had been learning the Māori language themselves for over 30 years, including through bilingual units in the 1990s. Others had limited fluency and were only a few years into the journey.

This talk will discuss the parents' stories through a qualitative research approach that used NVivo and a Reflexive Thematic Analysis of interview transcripts. Part one of the research summarises the responses to these three research questions:

- What has motivated adults of non-Māori ethnicity to choose Te Reo Māori as the language of schooling for their non-Māori children?
- How have the attitudes of others assisted these whānau in their bilingual language endeavours?
- What contribution do these parents believe their language choices will make towards the revitalisation of the Māori language?

Part two of the research discusses how the data was coded and meta-themes from these women's experiences emerged. Two striking recurring themes were (1) the parents' fears of 'taking a space' away from Māori students, and (2) the deep commitment required to ride out the discomfort and challenges within a 'broken system' of education. Another fascinating discovery was that 12/13 parents hoped that their children would speak Te Reo Māori as a first language in the home – should they later become parents themselves.

Finally, this paper will engage with Joshua Fishman's framework for Reversing Language Shift (Fishman, 1991), as well as the ZePA/KoPA model of 'right shifting' individuals and entities towards accepting and supporting Te Reo Māori (Higgins & Rewi, 2014).

References

- Berardi-Wiltshire, A., & Bortolotto, M. C. (2022). Learning Māori in the workplace: Non-Māori learners' assessment of the value of te reo. *International Journal of Bilingual Education and Bilingualism*, *25*(9), 3463–3474. http://doi.org/10.1080/13670050.2022.2063685
  Fishman, J. A. (1991). *Reversing language shift: Theoretical and empirical foundations of assistance to threatened languages*. Multilingual Matters Ltd.
- Higgins, R. & Rewi, P. (2014). ZePA—Right-shifting: Reorientation towards normalisation. In R. Higgins, P. Rewi, & V. Olsen-Reeder (Eds.), *The value of the Māori language: Te Hua o te reo Māori* (pp. 7-32). Huia Publishers.
- Te Huia, A. (2020). Aspirations for bilingualism in Aotearoa New Zealand: Pākehā motivations for learning te reo Māori. *New Zealand Journal of Psychology (Christchurch. 1983)*, *49*(3), 23–32. https://www.psychology.org.nz/application/files/7216/1541/4547/Te_Huia_23-32.pdf

Acquisition of ambiguous comparatives in English and Japanese

Ryosuke Hattori, Kobe Gaikun University

English mainly has two types of comparative constructions, i.e. phrasal comparatives, where *than* takes a noun phrase as its complement, as in (1), and clausal comparatives, where *than* selects a clause complement, as in (2). There are, however, some apparent phrasal comparatives that can actually have underlying clausal structures based on their interpretations, adverbial comparatives (ADVs; where degrees of adverbs are compared instead of adjectives) as shown in (3a) and attributive comparatives (ATTs; where the adjective appears in front of the noun as an attributive modifier) as shown in (4a). It is assumed that the clausal reading is derived from the covert clausal structure (Lechner 2004), as in (3b, 4b).

Spontaneous production studies like Hohous et al. (2014) show that children acquire ATTs (First of Repeated Use: 4;04) before ADVs (FRU: 5;06). Furthermore, using the Intermodal Preferential Looking task (Hirsh-Pasek and Golinkoff 1991), Hattori et al. (2023) found that children performed better in ATTs than in ADVs. Importantly, they claim that children's delay in acquiring ADVs is caused by the ambiguity found in ADVs, as they can have alternative phrasal readings as in (3c) while this is not available in ATTs as shown in (4c).

Interestingly, not only ADVs but also ATTs show such ambiguity in Japanese, as shown in (5). This means both can optionally have the underlying clausal structures in the complement of *yori* 'than'. If the ambiguity causes the delay in acquisition, the acquisition of both ADV and ATT in Japanese would be delayed, and thus ATTs would not be necessarily acquired before ADVs in Japanese, contrary to the case in English.

Thus, in this study, I searched through the spontaneous production Japanese corpora from the CHILDES (Child Language Data Exchange System; MacWhinney 2000) database, to confirm this hypothesis. The analyzed corpora are listed in Table 1. As a result, I found 6 utterance samples of ADV, an example of which is shown in (6). The names and the ages of the children at the time of the other utterances are follows: Sumihare 4;11, 5;05, Nanami 4;08, Ayumi 5;01, 5;04. The result shows that Japanese children did not utter ATTs by the end of the recording period of the corpora. Thus, ATTs are not acquired before ADVs, as predicted. The result thus suggests that the ambiguity of the sentence is a crucial factor in delaying children's acquisition.

Examples and Tables:

(1) Mary is taller than him. (2) This table is longer than that door is wide.

(3) a. The lion is jumping higher than the bear. (ADV)

b. Clausal reading: The lion is jumping higher than [the bear ~~is jumping *d* high~~]. (=how high the bear jumps) *d* = degree

c. Phrasal reading: The lion is jumping higher than [the bear]. (=the height of the bear)

(4) a. The bird is building a taller tower than the ant. (ATT)

b. Clausal reading: The bird is building a taller tower than [the ant ~~is building *d* tall tower~~]. (=the ant's tower)

c. Unavailable Phrasal reading: the bird is building a taller tower than [the ant]. (=the height of ant)

(5) a. Lion-san -wa [kuma-san] yori taka-ku jampu-sita. (Japanese-ADV)

Lion-Mr. -Top bear-Mr. than high-Adv jump-Past

Clausal reading: "Mr. Lion jumped higher than how high Mr. bear jumped."

Phrasal reading: "Mr. Lion jumped higher than the height of Mr. bear."

b. Tori-san -wa [ari-san] yori takai tou -o tate-ta. (Japanese-ATT)

bird-Mr. -Top ant-Mr. than high tower -Acc build-Past

Clausal reading: "Mr. bird built a taller tower than the ant's tower."

Phrasal reading: "Mr. bird built a taller tower than the height of the ant." Available

Table 1: List of the analyzed corpora

Child	*Collected by*	*Age span*	*# of child utterances*
Aki	Miyata (1995)	1;5.7 - 3;00	74,725
Nanami	Miyata, Nisisawa (2009)	1;1.29 - 5;0.17	57,568
Tomito	Miyata, Nisisawa (2010)	2;11.27 - 5;1.23	29,335
Asato	Miyata, Nisisawa (2009)	3;0.01 - 5;00.27	25,347
Sumihare	Noji (1973-77)	0;1.18 – 6;11.12	40,000
Taro	Hamasaki (2002)	2;2.3 - 3;4.22	15,144
Ryo	Miyata (1995)	1;4.03 - 3;00.30	38,473
Ayumi	Ogawa (2016)	0;09 – 6;02	22,671

(years;months:days)

(6) Boku-ra [otochan] yori hayo-o okiru -yo. (Sumihare, 4;08)

I -Plural father than early-Adv wake-up -Cop

"We get up earlier than daddy ~~gets up *d* early~~."

References

- Hattori, Ryosuke, Karina Bertolino, Letitia Naigles and Willian Snyder. 2023. Hikakukoubun no kakutoku: senkouchuushihou o mochiita kenkyuu (Acquisition of comparatives: an IPL study) [written in Japanese]. *Humanities and Sciences* 54. 1-14.
- Hohaus, Vera, Sonja Tiemann and Sigrid Beck. 2014. Acquisition of comparison constructions. *Language Acquisition* 21(3):215-249.
- Hirsh-Pasek, Kathryn and Roberta M. Golinkoff. 1991. Language Comprehension: A New Look at Some Old Themes. *Biological and Behavioral Determinants of Language Development*, 301-320, Lawrence Erlbaum Associates, Inc.
- Lechner, Winfried. 2004. Ellipsis in comparatives. Berlin: De Gruyter.
- MacWhinney, Brian. 2000. *The CHILDES project: Tools for analyzing talk.* Third Edition. Mahwah, NJ: Lawrence Erlbaum Associates.
- Nisisawa, Hiro Yuki & Miyata, Susanne. 2009. MiiPro- Nanami Corpus. Pittsburgh, PA: TalkBank.
- Noji, Junya. (1973-77). *Yooji no gengo seikatsu no jittai I-IV.* Bunka Hyoron Shuppan.

North Arts A2 ● 11:05am – 11:35am

Incidental acquisition of vocabulary: The effects of imagery versus glossing

Mahnaz Aliyar, Victoria University of Wellington
Haijuan Yan, Victoria University of Wellington
Anna Siyanova-Chanturia, Victoria University of Wellington

While existing literature has acknowledged the facilitative role of combining text and pictures in second language learning, little attention has been devoted to exploring the contribution of reading comics, which offer abundant textual and pictorial cues, to incidental lexical development (Aliyar & Peters, 2022; Mayer, 2014). The present study endeavours to address this research gap by examining the impact of comic imagery on incidental vocabulary acquisition and comparing it with the effects of glossing on the incidental learning of unfamiliar words. Furthermore, by investigating the incidental acquisition of words supported by both imagery and in-text glossing, the study seeks to ascertain whether a combination of imagery and glossing within the text yields superior benefits for incidental vocabulary acquisition compared to either form of support alone.

Eighty Chinese learners of L2 English, having an upper-intermediate proficiency level, engaged in leisure reading of the English comic "Kampung Boy, Yesterday and Today" (Lat, 1993) during their free time. To explore the effects of repetition, 40 participants read the comic once within a week, while the remaining 40 read it twice over a two-week period. The target vocabulary items consisted of 20 unknown Malay words, presented with imagery support, intext glossing, or as control items devoid of any textual or pictorial support. Participants underwent three vocabulary assessments immediately post-reading and again three weeks later, including a form recognition checklist, a meaning recall task, and a multiple-choice meaning recognition test. Given that the target items were from a language unknown to the participants, no pretest was administered. This study carries important pedagogical implications regarding the efficacy of incorporating comic books into instructional practices to facilitate incidental acquisition of new vocabulary.

References

- Aliyar, M., & Peters, E. (2022). Incidental acquisition of Italian words from comic books. *Reading in a Foreign Language*,34 (2), 349–376. Available at http://hdl.handle.net/10125/67429
- Lat (1993). *Kampung boy, yesterday and today.* Kuala Lumpur: Berita Publishing. ISBN 967- 969-307-4
- Mayer, R. (2014). *The Cambridge handbook of multimedia learning* (Cambridge Handbooks in Psychology). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9781139547369.002

North Arts A2 ● 11:35am – 12:05pm

Definition placement and spacing of retrieval practice role in learning L2 multi-word expressions

Mojtaba Tadayonifar, Victoria University of Wellington
Irina Elgort, Victoria University of Wellington
Anna Siyanova-Chanturia, Victoria University of Wellington

Exposure to language input such as through reading and listening is a typical method of learning multi-word expressions (MWEs). Yet, this method can be slow. Therefore, finding strategies to enhance learning from input is crucial for language acquisition. In the present study, 80 Iranian learners of English as a foreign language read short texts with 28 figurative English phrasal verbs (PVs), repeated three times. In a counterbalanced experimental design, we manipulated definition placement (before/after text) and the spacing of retrieval practice (short/long lag). Learning was measured via immediate and delayed gap-fill and meaning generation post-tests. Mixed effects regression analysis showed that providing definitions after reading resulted in greater learning outcomes than presenting definitions before reading under both short and long spacing conditions. Retrieving PVs under the long spacing further increased this advantage. The results contribute to our understanding of how contextual learning and retention of MWEs from reading can be supported.

Tuesday 10th December

Session Three ● North Arts A3

10:05am – 12:05pm

Session Chair • Elena Sheard

Talks presented by:

- Sarah van Eyndhoven
- Matthew Durward
- James Myers
- Achinthya Bandara

North Arts A3 ● 10:05am – 10:35am

SCOTIA - towards the Scottish Corpus of Original Texts from Immigrants to Aotearoa: first steps and findings

Sarah van Eyndhoven, University of Canterbury

During 1815-1930 an estimated 3.25 million Scots left their homeland for various colonial destinations (McCarthy, 2012). Of these, New Zealand was the most far-flung, and yet Scots emigrated there in numbers well above their population ratio (Bueltman, 2011). Originally portrayed as assimilators who quickly blended into their new surroundings, recent literature has highlighted their strong and ongoing links to the 'homeland' and the dense social networks they established and maintained with other Scots upon arrival in New Zealand. Yet how this may be reflected in their language use has received little attention (though see Bonness, 2019 for Irish migrant writing). Written Scots was, by the nineteenth century, extremely limited among the middling classes that made up most of New Zealand's Scottish immigrants, but this did not mean it had disappeared altogether. Certain lexis, expressions and spellings may have remained an indispensable part of their repertoire, serving as pragmatic or nostalgic literary devices (see Cruickshank, 2012; Dossena, 2013, 2019). At the same time, the Scots were coming into contact with migrants from other regions or those already established in New Zealand, as well as the indigenous Māori population. Moreover, many attempted to forge a new life for themselves, which may have encouraged identity shift. It is feasible that this change may have been accompanied by the adoption of new and local lexis. However, there is currently no corpus of correspondence from New Zealand's early Scottish migrants, prohibiting detailed linguistic analysis. To explore this uncharted linguistic landscape, a corpus of personal writings from the first waves of Scottish settlers is being compiled and digitised. This aims to become a fully-online, text-searchable database of early written New Zealand English, and this talk will outline this process and its methodological and analytical challenges. This is followed by a preliminary glimpse into the vestiges of Scots, New Zealand English colloquialisms and te reo Māori these writings contain, and a consideration of how this might correlate with certain sociolinguistic factors such as gender, region and the personal histories of these migrants. This highlights the potential of this material to explore the intersection between language and identity within a historical setting, whilst providing fresh insight into a fundamental development in New Zealand's social and linguistic history.

North Arts A3 ● 10:35am – 11:05am

Investigating lexical deployment and structural dynamics in AI and human-generated texts

Matthew Durward, University of Canterbury

We are experiencing a transformative era characterized by integrating AI technologies into many facets of daily life, particularly in language learning, where Large Language Models (LLMs) have become instrumental. LLMs are applied across various sectors, including education, healthcare, and research, demonstrating their versatility and impact (Hosseini et al., 2023). The role of LLMs in language acquisition and written composition is particularly noteworthy; they offer significant benefits to learners through personalized learning experiences, interactive prompts, and feedback on writing (Dao, 2023). These advantages underline the potential of LLMs to enhance language learning strategies greatly. Nonetheless, it is crucial to consider whether texts produced by LLMs, especially examples generated in educational settings, accurately reflect what learners might encounter in real-world scenarios. Motivated by anecdotal descriptions of LLM-generated text as 'generic' or 'bland' in tone, we aim to explore how such differences relate to lexical diversity and the rate or sequencing of new vocabulary introduction. Specifically, we seek to determine if LLMs generate text concerning different registers similar to humans, including the impact of English variety or dialect.

Previous studies (AlAfnan & MohdZuki, 2023; Gómez-Rodríguez & Williams, 2023) provide insights into the perceived 'style' and characteristics of LLM output. Our study examines vocabulary usage in both AI and human-generated texts, defining it in two ways: structural differences and keyword differences. Structural differences are assessed by converting text into Vocabulary Management Profiles (VMPs), a method initially used for discourse analysis. VMPs offer a linear representation of the introduction rate of new vocabulary throughout a text. To achieve this, we analyze texts authored by humans and those generated by machines, treating the text data as a time series. We evaluate these data series via distance measures and the derivation of similarity scores to ascertain if the structural dynamics in AI texts mirror those in human texts. We focus on attributes related to discourse and vocabulary, two closely linked concepts expected to differ by register. While VMPs provide insights into vocabulary usage rates, our investigation extends to internal variations and the rate of vocabulary change across different English varieties. We employ a measure emphasizing frequency and dispersion for keyword analysis to identify 'key' keywords. A qualitative approach is then used to identify thematic differences between human and AI writing.

References

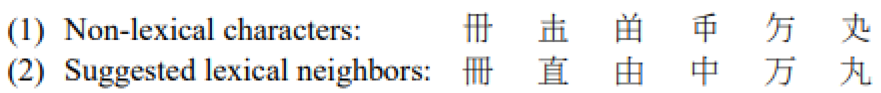
- AlAfnan, M. A., & MohdZuki, S. F. (2023). Do Artificial Intelligence Chatbots Have a Writing Style? An Investigation into the Stylistic Features of ChatGPT-4. *Journal of Artificial Intelligence and Technology.* https://doi.org/10.37965/jait.2023.0267
- Dao, X.-Q. (2023). *Performance Comparison of Large Language Models on VNHSGE English Dataset: OpenAI ChatGPT, Microsoft Bing Chat, and Google Bard* (arXiv:2307.02288). arXiv. https://doi.org/10.48550/arXiv.2307.02288
- Gómez-Rodríguez, C., & Williams, P. (2023). *A Confederacy of Models: A Comprehensive Evaluation of LLMs on Creative Writing* (arXiv:2310.08433). arXiv. http://arxiv.org/abs/2310.08433
- Hosseini, M., Gao, C. A., Liebovitz, D., Carvalho, A., Ahmad, F. S., Luo, Y., MacDonald, N., Holmes, K., & Kho, A. (2023). *An exploratory survey about using ChatGPT in education, healthcare, and research* (p. 2023.03.31.23287979). medRxiv. https://doi.org/10.1101/2023.03.31.23287979

Productive knowledge of Chinese grapheme form: beyond perception and lexical similarity

James Myers, National Chung Cheng University

Despite the vast experimental literature on reading and writing, very little is known about productive knowledge of grapheme form. To address this gap, we took inspiration from the study of phonotactics (Kawahara, 2011), asking traditional Chinese readers/writers in Taiwan to perform a variety of tasks on 136 non-Chinese characters (from the extinct Chinese influenced Kitan script; Kane, 2009, https://www.babelstone.co.uk/).

Since the processing of non-lexical spoken words is affected by their similarity with lexical neighbors (e.g., Bailey & Hahn, 2001), Experiment 1 presented 20 participants with non-lexical characters, as in (1), and asked them to suggest the closest Chinese lexical neighbor, as in (2), and to rate their similarity. These similarity judgments reflected far more than just the number of shared strokes, as a linear mixed-effects model predicting the former from the latter captured less than 6% of the variance.



In Experiment 2, 36 new participants were asked to judge each test item as being unlike or like Chinese (i.e., well-formed). A mixed-effects logistic regression model predicted these binary judgments from lexical similarity scores derived from Experiment 1, plus three perceptual variables: stroke number, mean stroke complexity, and the proportion of strokes with horizontal or vertical axes (Morin, 2018). Unsurprisingly, lexical similarity had a significant positive influence on Chinese-likeness (Figure 1), even with perceptual influences factored out.

In Experiment 3, 36 new participants performed a matching task in which they judged whether item pairs were identical or not. In a mixed-effects linear regression model using the same predictors as Experiment 2, plus that experiment's by-item Chinese-likeness rates, latencies for correct responses to matching characters were again influenced by perceptual factors. Crucially, however, they were also sped by Chinese-likeness (Figure 2), while lexical similarity had no effect.

Finally, in Experiment 4, 43 new participants were asked to copy each test item on a tablet. A mixed-effects linear regression predicting response latency (time to start writing) for accurately written items yielded results like Experiment 3 (Figure 2), with perceptual and Chinese-likeness effects but no effect of lexical similarity.

Together these findings suggest that grapheme knowledge is truly analogous to phonotactics (see also Myers, 2019): both depend on a mentally active sense of well-formedness that cannot be reduced to perceptual factors or lexical similarity.

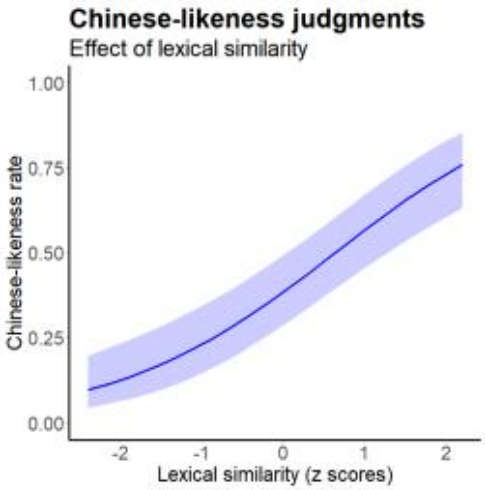


Figure 1.

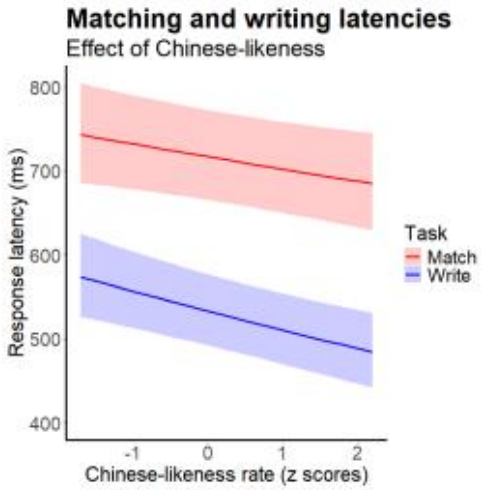


Figure 2.

References

- Bailey, T. M., & Hahn, U. (2001). Determinants of wordlikeness: Phonotactics or lexical neighborhoods? *Journal of Memory and Language*, 44(4), 568-591.
- Kane, D. (2009). *The Kitan language and script*. Leiden: Brill.
- Kawahara, S. (2011). Experimental approaches in theoretical phonology. In M. van Oostendorp (Ed.) *The Blackwell companion to phonology, volume IV: Phonological interfaces* (pp. 2283-2303). John Wiley & Sons.
- Morin, O. (2018). Spontaneous emergence of legibility in writing systems: The case of orientation anisotropy. *Cognitive Science*, 42(2), 664-677.
- Myers, J. (2019). *The grammar of Chinese characters: Productive knowledge of formal patterns in an orthographic system.* Routledge

North Arts A3 ● 11:35am – 12:05pm

Portuguese Baila verses and anti-colonial subaltern ideology in Ceylon Coast: A case study on Hugh Nevil manuscripts

Achinthya Bandara, University of Colombo

The Portuguese were the first known European Nation to colonize Ceylon during the early 16th century. When the Portuguese set sail in the late 15th century towards the East and West, they first landed in Pondicherry (Pondicherry), an eastern coastal location of early India and established their trade in the Indian Oceanic regions (Jaysuriya, 2008, 1). Sri Lanka (Ceylon until 1972) made its first contact with the Portuguese just a few years after they anchored in India, the Luso-Sri Lankan contact was initiated and became prominent across the time, even during the later colonial rules, i.e., Dutch and British. Such connections created a Luso-Asian hybrid culture in Ceylon, that shared both Sri Lankan and European identities. Portuguese Creole communities were prominent among them as an ethnic group with Portuguese descent interwoven with local traditions and customs, yet outcast by the mainstream Portuguese colonials. Hugh Nevil, a British Civil Servant who served Ceylon in the early 1800s, had collected a considerable amount of such Luso-Asian Literature belonging to Sri Lankan Portuguese creole communities, including 180 Portuguese creole verses sung by the creole communities in Eastern Sri Lanka. Though the collection was studied to uncover literature traits, few or no known studies focused on the anti-colonial subaltern discourse appearing in the shades of this work. It is evident that these verses contain local anti-colonial ideologies that create a platform to place them as elements of Luso-Asian subaltern literature. This research explores how the language and content of these verses contradict the mainstream colonial ideologies we intend to position within a regional anti-colonial subaltern context. As this is a part of a long-term research project that translates the whole collection into Sinhalese and Tamil, this study will show evidence from early 1800's verses to suggest how Luso-Asian communities create a unique subaltern linguistic and literary discourse.

Tuesday 10th December

Session Four ● North Arts A1

1:30pm – 3:00pm

Session Chair • Gia Hurring

Talks presented by:

- Sara Malik, Andreea Calude and Joseph Ulatowski
- Carla Moriarty
- Pakkawan Udomphol

North Arts A1 ● 1:30pm – 2:00pm

Pronoun Shifting in YouTube breast cancer narratives: An inclusive perspective

Sara Malik, University of Waikato
Andreea S. Calude, University of Waikato
Joseph Ulatowski, University of Waikato

This paper explores the linguistic phenomenon of pronoun shifting from first person pronoun 'I' to the generic pronoun 'you' (and vice versa) in New Zealand English narratives of breast cancer patients posted on YouTube. In particular, we want to investigate the function of pronoun shifting in discourse. With a theoretical foundation in cognitive linguistic theory, particularly Ronald Langacker's (2007) concept of personal pronouns- an aspect in grounding, this study investigates how pronoun shifts influence the relatability and engagement of the audience.

We collected a corpus of forty-six personal narratives, posted between 2011 and 2023 on YouTube by breast cancer organisations, such as 'NZ Breast Cancer Foundation' and 'nzbreastcancer'. The data was transcribed using the Whisper AI tool and then curated to include only patients' discourse, further organised into seven narrative topics: testing phase, treatment phase, remission phase, family support, charity and awareness efforts, government support and funding, and general information. The data was analysed both qualitatively and quantitatively. AntConc software was used to identify key word in context (KWIC) related to the use of pronouns. For the qualitative analysis, pronouns were manually coded to determine their referents. This data is part of a larger project which seeks to understand how individuals discuss their experiences with breast cancer. In this talk, we report on two aspects: 1) the proportion of pronoun shifts from first person to second person and 2) the communicative function this shift serves.

The findings suggest that the proportion of pronoun shift varies across narrative topics, with the highest proportion in the treatment phase. Moreover, the shifts from 'I' to 'you' are used to generalize personal experiences, making them relatable to a broader audience as also argued in other discourse topics by Schoofs & Van de Mieroop (2019) and Van de Mieroop (2014). This linguistic strategy fosters a sense of shared experience (e.g., "you thought you were hit by the truck")

By integrating theoretical insights with empirical data, this study contributes to general understanding of pronoun usage in personal stories and cancer discourse and highlights the role of language in shaping interpersonal communication in health-related contexts.

North Arts A1 ● 2:00pm – 2:30pm

Imagining a perfect woman: A linguistic analysis of gender stereotypes within image generative AI

Carla Moriarty, Victoria University of Wellington

Image generative artificial intelligence (AI) platform Midjourney (2024) promotes itself as "exploring new mediums of thought". However, user text prompts such as *a perfect woman, perfect slim figure, a beautiful female supermodel, 20 years old […] wearing a low cut white vest* (Midjourney, 2023) reveal a troubling tool for the ongoing social (mis)construction of gender, creating 34 million images per day for users' consumption (Attie, 2023). This, alongside the echo chamber effect whereby the technology accesses its own previously biased and stereotyped images to create new ones (Garon, 2023; Gross, 2023), indicates that image generative AI is poised to play a dominant role in the global transmission of gender stereotypes. The paucity of investigation into the consequences associated with proliferative text-to-image generative AI from a linguistic perspective has prompted urgent calls to action (West et al., 2019; Wilde, 2023).

This study provides an initial response to these calls. Employing a critical stance, I utilise corpus linguistics to analyse 4.27 million Midjourney user text prompts, focusing on personal pronouns, gendered, gender-neutral, and gender-connotative noun forms alongside adjectival collocates. A reference corpus is used to benchmark the results while a social semiotically informed multimodal analysis on selected images is presented to exemplify and highlight the corpus results.

Today I present key findings which reveal that Midjourney users' text prompts construct feminised identities for women on a vast scale, with the most requested attributes being *beautiful and young.* Pictorial representations follow a similar vein, casting women as young, white, and epitomising normative beauty standards. Men, with notably fewer text prompts, are similarly cast into hegemonic roles with action and strength-based attributes prioritised by users, while those beyond the binary or not adhering to 'normative' representations of appearance are all but erased.

I argue that generative AI has precipitated a transformative shift in our communication landscape and that, alongside the echo effect, this means that vulnerable groups are facing an avalanche of deleterious discourse, including narratives around gender. The need for critical analysis is urgent, placing linguists at the forefront of discussions aimed at identifying and mitigating the propagation of gender hegemonies via image generative AI.

References

- Attie, Ivana 2023. 19 Visual AI Stats: AI-Generated Images in Impressive Numbers (Latest Data). AI Secrets. https://aisecrets.com/applications/visual-ai-stats/
- Garon, Jon 2023. A practical introduction to generative AI, synthetic media, and the messages found in the latest medium. *Synthetic Media, and the Messages Found in the Latest Medium* (March 14, 2023).
- Gross, Nicole 2023. What chatGPT tells us about gender: a cautionary tale about performativity and gender biases in AI. *Social Sciences*, 12(8), 435.
- Midjourney 2023. Midjourney (V5) [Text-to-image model]. https://www.midjourney.com/
- Midjourney 2024. Midjourney (V6) [Text-to-image model]. https://www.midjourney.com/
- West, Sarah, Meredith Whittaker & Kate Crawford 2019. Discriminating systems. *AI Now*, 1-33.
- Wilde, Lukas 2023. Generative Imagery as Media Form and Research Field: Introduction to a New Paradigm. *IMAGE*, 37(1), 6.

North Arts A1 ● 2:30pm – 3:00pm

Critically investigating metadiscourse in New Zealand environmental sustainability reports using corpus linguistics

Pakkawan Udomphol, Massey University

New Zealand's emissions profile stands out among developed nations, with a legislative commitment to achieve carbon neutrality by 2050, a milestone highlighted by the Ministry for the Environment (2022). Despite efforts to promote environmental practices, concerns about the integrity of environmental reporting have emerged. Some organizations face accusations of 'greenwashing,' using non-financial reports to potentially mislead stakeholders about their sustainability efforts (De Freitas Netto et al., 2020). The present study applies a critical lens to such practices by investigating the metalinguistic strategies evident in sustainability reports produced by New Zealand businesses, specifically focusing on the CEO letters that typically preface such reports.

My study expands upon research which has viewed metadiscourse as a key indicator of discourse competence (Hyland 2005), focusing instead on metadiscourse as a strategically and potentially ideologically significant discursive resource in the context of sustainability reporting. The study utilises a bespoke corpus of 96 CEO letters across companies representing varied greenhouse gas emissions trends in agriculture, transportation, energy, and building and construction sectors. Adapting Hyland's (2005) metadiscourse framework while drawing upon the analytical techniques of corpus linguistics, the study analyses the prevalence and function of metadiscourse markers in these reports.

Preliminary findings suggest that interactional markers of metadiscourse are more dominant than interactive markers in CEO letters, strategically enhancing credibility and articulating confidence in sustainability strategies. Moreover, a preliminary investigation of metadiscourse markers identifies self-mentions as the most frequent linguistic feature employed, often employing first-person plural pronouns to underscore collective responsibility and depict actions as collaborative endeavours rather than solely attributable to the CEO. This communicative approach perhaps not only fosters a conversational tone within CEO communications but also aims to engage readers, cultivate relationships, and bolster participation in sustainability efforts, thereby promoting transparency and accessibility.

By examining the linguistic strategies utilized in CEO letters within New Zealand's corporate sustainability discourse, this study contributes to a nuanced understanding of how language shapes perceptions of environmental commitment and accountability. It emphasizes the role of metadiscourse in providing additional information about the discourse, thereby influencing how the primary message is comprehended and interpreted by readers in the context of sustainability. This research underscores its implications for organizational transparency and stakeholder engagement in environmental stewardship.

References

- De Freitas Netto, S. V., Sobral, M. F., Ribeiro, A. R., & Soares, G. R. (2020). Concepts and forms of greenwashing: A systematic review. *Environmental Sciences Europe*, 32(19), 1-12.
- Hyland, K. (1998). Exploring corporate rhetoric: Metadiscourse in the CEO's letter. *The Journal of Business Communication* (1973), 35(2), 224-244.
- Hyland, K. (2005). Metadiscourse: *Exploring Interaction in Writing*. Continuum
- Ministry for the Environment. (2022). *Te hau mārohi ki anamata Towards a productive, sustainable and inclusive economy: Aotearoa New Zealand's first emission reduction plans* (Report No. ME1639). Ministry for the Environment.

Table 1
Examples of metadiscourse markers in my study

Code	Functions	Examples
Transitions	Express semantic relation between the main clause	*as, and, furthermore, but, likewise, however, therefore, because, in conclusion*
Frame markers	Direct to text boundaries	*aims, outlines, want to, reports that*
Endophoric markers	Refer to other parts of the text in order to make additional information available, provide supporting arguments, and thus steer the reader toward a preferred interpretation	*see page X, mention here, the next chapter*
Evidentials	Represent of an information from another source and help to establish authorial command of the subject	
Code glosses	Supply additional information by rephrasing, illustrating or explaining	*such as, namely*
Hedges	Indicate the writer's decision to recognize other voices, viewpoints or possibilities and be (ostensibly) open to negotiation with the reader	*could, may, like, maybe, possible, might*
Boosters	Allow the writer to anticipate and preclude alternative, conflicting arguments by expressing certainty instead of doubt	*It's clear, believe, will, obviously, undoubtedly*
Attitude markers	Indicate the writer's opinion or assessment of a proposition	*Importantly, hopefully, interestingly, sadly, pleasingly, proud of, unfortunately*
Self-mentions	Explicit authorial presence in the text and give information about his/her character	*I, us, me, our group, our team,* exclusive *we, the company, Airlines*
Engagement markers	Explicitly address readers to draw them into the discourse	*you,* inclusive *we, our shareholders, our customers, our people, Kiwis*

Tuesday 10th December

Session Five ● North Arts A2

1:30pm – 3:30pm

Session Chair • Heeju Hwang

Talks presented by:

- Zi-chun Lin and Jen Ting
- Ning Zhang
- India Frith
- Yutai Watanabe

North Arts A2 ● 1:30pm – 2:00pm

A VP-manner adjunct analysis for bei-pai-jingcha type of sentences: Implications for Chinese short passives

Zi-chun Lin, National Taiwan Normal University
Jen Ting, National Taiwan Normal University

In this presentation, we address the issue whether non-local passivization in *bei* sentences without the presence of overt logical subjects in Chinese, as exemplified by (1), is possible. Such sentences are claimed to be ungrammatical by Ting (1998) and Huang et al. (2009), but are judged acceptable by Her (2009). The acceptability of these sentences undermines the nonuniform proposal by Ting (1998) and Huang et al. (2009), but aligns with the uniform approach of Her (2009). Interestingly, a notable number of speakers also accept these sentences, as shown by our survey of 38 consultants, 14 of whom approve of them. We argue that if the sentences are acceptable, they have a configuration in which the VP preceding the passivized verb is not a main predicate in (2), but an adjunct modifying the passivized verb in (3). We will show that speakers favoring sentences like (1) can make sense of them with a structure parallel to those like (4) that involves a VP adjunct. This way, the non-uniform analysis is maintained.

Theoretically, we have three pieces of support. The first comes from the V-*de* construction with a *ba* NP sequence. In (5), the embedded Pro can refer to either *wo* 'I' or *tamen* 'they'. The reading of wo 'I' being the controller follows from the analysis that the ba NP sequence is an adjunct (Huang et al. 2009). Similarly, we argue that in one possible structure *pai jingcha* 'send the police' in (1) is an adjunct. We observe that people accepting (1) show the index contrast of Pro ($_{i, *j, *k}$). Crucially, this acceptability contrast indicates the V-NP sequence in (6) right after *bei* indeed behaves like the *ba* NP adjunct. Second, following Chen & Li (2021), we paraphrase the manner adjuncts in Mandarin using *yi…de fanshi* 'in a … way' contributing to the fine result (7). Finally, as shown in (8), the *pai henduo jingcha* 'send lots of police' sequence can serve as a fragment answer to the question *ruhe* 'how' asking about the manner of the action.

Summarizing, our proposal explains how the non-uniform approach to Chinese passives (Ting 1998, Huang et al. 2009, Liu & Huang 2016) can account for cases like (1). Therefore, such sentences do not provide decisive support for a unified approach (Her 2009, cf. Collins 2005, 2024).

Examples

(1) Zhangsan bei pai jingcha zhua-zou le.
Zhangsan BEI send police arrest-away LE
'Zhangsan was arrested by someone sending the police to do so.'

(2) Zhangsan$_i$ bei [$_{VP}$ pai jingcha [zhua-zou e_i le]]
Zhangsan BEI send police arrest-away LE
'Zhangsan was affected by someone's sending the police to catch him.'

(3) Zhangsan$_i$ bei [$_{VP}$ [$_{VP}$ pai jingcha] zhua-zou e_i le]
Zhangsan BEI send police arrest-away LE
'Zhangsan was arrested by someone sending the police to catch him.'

(4) a. Zhangsan bei [$_{VP}$ yong guiji] pian le.
Zhangsan BEI use scheme scam LE
'Zhangsan was scammed by someone using schemes.'

b. Ni laolao bei [$_{VP}$ fang gou] yao.huai le.
you grandma BEI let.go dog bite.bad LE
'Your grandma was bitten hurt by someone letting dogs do so.'
(adapted from Shi 1997:64, ex 40)

(5) wo$_i$ ba tamen$_j$ da de Pro$_{i/j}$ shou dou zhong-le.
I BA them hit DE hand all swollen-LE
i. 'I hit them such that my hands got swollen.'
ii. 'I hit them such that their hands got swollen.'

(6) Zhangsan$_i$ bei jiao ren$_j$ / pai jingcha$_k$ ma-de [Pro$_{i/*j/*k}$ mianzi gua.bu.zhu]
Zhangsan BEI ask person send police scold-DE face hang.not.ZHU
'Zhangsan was scolded (by someone asking a person to do so / sending the police to do so) and lost his face.'

(7) Yi pai jingcha de fangshi, Zhangsan bei zhua-zou le.
by send police DE manner Zhangsan BEI arrest-away LE
'In the way of sending the police, Zhangsan was arrested.'

(8) Q: Zhangsan bei ruhe zhua-zou le?
Zhangsan BEI how arrest-away LE
'How was Zhangsan arrested?'
A: Pai-le henduo jingcha.
send-LE many police
'By sending lots of police.'

References

- Chen, Zhe, and Yafei Li. 2021. Bipartite Agentivity Expression in Chinese Passives. *Syntax,* 24: 123-141.
- Collins, Chris. 2005. A smuggling approach to the passive in English. *Syntax*, 8(2): 81-120.
- Collins, Chris. 2024. *Principles of argument structure: A Merge-based approach*. MIT Press.
- Huang, Cheng-Teh James, Yen-Hui Audrey Li, and Yafei Li. 2009. *The Syntax of Chinese.* Cambridge: Cambridge University Press.
- Her, One-Soon. 2009. Unifying the Long Passive and the Short Passive: On the Bei Construction in Taiwan Mandarin. *Language and Linguistics* 10(3): 421-470.
- Liu, Na, and Cheng-Teh James Huang. 2016. Control and raising passives, and why Mandarin does not smuggle. *Journal of East Asian Linguistics*, 25, 385-404.
- Shi, Dingxu. 1997. Issues on Chinese Passive. *Journal of Chinese Linguistics* 25, 41-70.
- Ting, Jen. 1998. Deriving the Bei-construction in Mandarin Chinese. *Journal of East Asian Linguistics*. 7(4): 319-354.

North Arts A2 ● 2:00pm – 2:30pm

Nominal appositives as reduced copular clauses

Ning Zhang, National Chung Cheng University

A nominal appositive (NAP) is definite (1a) or indefinite (1b).

(1) a. She met *an old friend*, Trisha, yesterday.
b. She met *Trisha*, an old friend, yesterday.

We make two claims.
▲ A NAP is separated from the anchor-hosting clause.
First, a NAP is invisible in the gender (2) and number (3) agreement in the clause. Second, an adverb may occur with a NAP (4). Since no adverb occurs between two nominals that form a nominal constituent, this fact shows that a NAP and its anchor do not form a constituent (contra de Vries 2012). Third, a NAP can be non-adjacent to its anchor (5). Fourth, the prosodic break between a NAP and its anchor indicates they do not form a nominal constituent.

▲ NAPs come from copular clauses. A predicative copular clause (6a) predicates a property of the subject, but a specificational one (6b) specifies who (or what) someone (or something) is (Mikkelsen 2011). The post-copula nominal in the former is not referential, nor is an indefinite NAP; the post-copula nominal in the latter is referential, and so is a definite NAP. Therefore, a definite and an indefinite NAP are reduced specificational and predicational copular clauses, respectively.

Onea & Ott (2022, O&O hence) claim that a definite NAP comes from a near copy of the anchor-hosting clause before ellipsis (7b). Their claim has problems:

First, if a NAP answers a potential question raised by the anchor-hosting clause (O&O), the Question Under Discussion is about the property or identification of the individual denoted by the anchor. The potential question raised by the anchor clause in (7a) can be *Who is the brother?* One may answer '*He is Emre*', not '*Emre has a girlfriend*'.

Second, if a NAP contains an adverb, the adverb does not scope over the non-anchor part of the clause. (8a) entails (8b), not (8c). But in O&O, the adverb may scope over the verbal expression.

Third, in our unified copular clause analysis of NAPs, such clauses contain a pre-copula null pronominal, such as HE in (7c), which takes the anchor as its antecedent. O&O's (7b) has no pronominal. It cannot explain the intended coreference between two referential nominals in the two clauses.

Fourth, VP ellipsis should be licensed by an auxiliary, but there is no auxiliary for the assumed VP ellipsis in (7b).

Fifth, in some languages, if a NAP follows an adverb, an overt copula occurs in both types of NAPs (9). This supports our copular clause analysis.

This research improves our understanding of the properties of NAPs.

Examples

(2) a. *Die* *Lise*, **das** **arme** **Weib**, hat ihren Mann verlohren.
the.F Lise the.N poor wife has POSS.F husband lost
'Lise, that poor woman, lost her husband.'

b. *Das* *arme* *Weib*, **die** **Lise**, hat seinen Mann verlohren.
the.N poor wife, the.F Lise has POSS.N husband lost
'That poor woman, Lise, lost her husband.' [German, Heringa 2012]

(3) *The loot*, **fourteen pure diamonds**, {was/*were} worth millions. (O&O: 362)

(4) a. He met *an old friend*, **probably Skylar García**, at the pub today.
b. I met *Skylar García*, **frankly a rather dull character**, at the pub today.

(5) *Two saints* are buried here, **St Andrew and St Matthew**. (Burton-Roberts 1994)

(6) a. E. M. Forster was a novelist. [predicational]
b. The author of *A Room with a View* was E. M. Forster. [specificational]

(7) a. *One of Mary's brothers*, **Emre**, has a girlfriend.
b. *One of Mary's brothers* [**Emre** ~~has a girlfriend~~] has a girlfriend. (O&O: 361 for (7a))
c. *One of Mary's brothers* [HE IS **Emre**] has a girlfriend. (our claim for (7a))

(8) a. *A student*, **probably Sam**, lost his wallet.
b. Probably that was Sam (rather than another person).
c. Probably Sam lost his wallet (rather than he forgot his wallet; or, rather than he lost his phone).

(9) a. *You* *yi-wei* *nanfang-ren*, **dagai** ***(shi)** **Li Yu,** zhengzai yanjiang.
have one-CL south-person probably be Li Yu now speak
'A southerner, probably Li Yu, is making a speech now.'

b. *Li Yu*, **dagai** ***(shi)** **yi-wei** **nanfang-ren**, zhengzai yanjiang.
Li Yu probably be one-CL south-person now speak
'Li Yu, probably a southerner, is making a speech now.' [Mandarin Chinese]

References

- Burton-Roberts, Noel. 1994. Apposition. In: R. E. Asher & J. M. Y. Simpson (eds.), *The Encyclopedia of Language and Linguistics*. Oxford: Pergamon Press, 184–187.
- Heringa, Herman. 2012. *Appositional constructions*. Utrecht: LOT.
- Mikkelsen, Line. 2011. Copular clauses. In von Heusinger, Maienborn and Portner (eds.), *Semantics* (HSK 33.2): 1805–1829. Berlin: Mouton de Gruyter.
- Onea, Edgar, and Dennis Ott. 2022. Nominal appositives in grammar and discourse. *Language* 98.2: 359–391.
- Vries, M. de. 2012. Unconventional Mergers. In: M. Uribe-Extebarria & V. Valmala (eds.), *Ways of Structure Building*, Oxford: Oxford University Press. 143–416.

North Arts A2 ● 2:30pm – 3:00pm

Wh-questions in Niuean: The paradigm of locative PPs

India Frith, The University of Auckland

This paper explores the formation of Wh-questions in Niuean (Tongic Polynesian), a VSO/VOS language with predicate-initial word order in verbless clauses. Massam (2020) proposes that Niuean's verb-initial word order is due to an EPP-parameter: predicates must raise to specFinP because Finº has an EPP feature [+PRED]. Subjects remain below FinP, and PP and CP arguments remain below subjects. That is, while nominals (NPs/DPs) undergo EPP-movement in many languages (e.g. English, French, Bangla, etc.), in languages like Niuean it is the predicate (vP) that undergoes EPP-movement. Under this analysis, it is unexpected that in Niuean, Wh-elements in questions can occur either (i) in the left-edge of the clause, before the verb, or (ii) in-situ, in which case they obligatorily follow the verb. The distribution in (ii) suggests that Wh-elements need not undergo movement to form questions. However, the distribution in (i) begs the question: how does the Wh-element end up on the left-edge? If this is movement of just a Wh-element, then it is not a predicate movement, which goes against the EPP[+PRED] movement analysis of Niuean. As such, the argument in existing works is that these structures do not involve Wh-movement, but are underlyingly pseudo-clefts, where the Wh-element constitutes a non-verbal predicate, and the clausal remainder is a headless relative clause (Seiter 1980, Massam 2003, 2020). Wh-elements, thus, appear at the left edge via regular predicate-raising, and incur no EPP violations.

However, there is another position that Wh-elements can occupy in Niuean. Certain PPs can appear between the verb and the subject in Niuean if they are Wh-questioned. This position cannot usually be occupied by PPs if they are not Wh-questioned, and it cannot be occupied by case-marked objects, even if they are Wh-questioned. The Wh-questioned PPs which appear in this position superficially appear to have undergone movement. This is problematic for the hypothesis that Niuean has no Wh-movement. I propose that postverbal Wh-PPs are in fact in-situ, merged in the specifiers of secondary predicates. It is argued that these Wh-PPs are licit inside the predicate, unlike their non-Wh counterparts, because they are non-referential elements. This follows from Massam's (2020) analysis of VSO/VOS alternations in Niuean: VSO results when a referential object merges outside the predicate, while VOS results when a non-referential object merged inside the predicate. This analysis is shown to be compatible with a pseudo-cleft analysis of regular Niuean Wh-initial interrogatives formed on arguments, and capable of deriving the correct surface order for these constructions relative to postverbal particles. Furthermore, it is argued to account for quirks of the pseudocleft construction which are otherwise unexplained.

References

- Massam, Diane. 2003. "Questions and the Left Periphery in Niuean". In Anastasia Riehl and Thess Savella (eds.), *Cornell Working Papers in Linguistics* (19)1, 94–106. Ithaca, NY: Cornell University.
- Massam, Diane. 2020. *Niuean: Predicates and arguments in an isolating language.* Oxford: Oxford University Press.
- Seiter, William John. 1980. *Studies in Niuean Syntax*. Doctoral Dissertation, University of California.

North Arts A2 ● 3:00pm – 3:30pm

Foreign-accented English in NZ films

Yutai Watanabe, Hosei University

The producers of a feature film may cast internationally renowned actors in key roles, aiming to ensure its success, whether artistically or commercially. Those actors are expected to portray the speech of their assigned character, which can often be fairly distinctive from their native one. Regional and social accents in film have been comprehensively discussed in the settings of the UK (Hodson, 2014), North America (Boberg, 2021), and Disney animated cartoons (e.g. Barrett et al., 2023). This paper focuses on how non-Kiwi actors' speech is addressed when depicting characters who are supposed to be NZ citizens or residents, because NZ English, known as 'the dark horse of World English regional dialectology' (Crystal, 2019, p. 374), is markedly different in phonetic features from other Inner Circle varieties of English.

An analysis of the ten films listed in Table 1 identifies four strategies (A to D) for overcoming potential issues with accent authenticity.

> (A) Seeking an actor whose native accent is close to a character's in terms of stereotypical phonetic features: e.g., George Baines played by an American actor in *The Piano* speaks with non-rhoticity and pronounces the BATH vowel as [a:] rather than its General American variant [æ].
>
> (B) Preparing a script where a character is a temporary visitor from another English-speaking country; e.g., in *Heavenly Creatures*, Juliet Hulme continues to speak with a British accent.
>
> (C) Inserting dialogue within scenes to clarify a character's unique linguistic background; e.g., it is repeatedly commented on by supporting actors how Paul Prior *in In My Father's Den* lost his NZ accent during his prolonged overseas stay.
>
> (D) Exploiting an unusual accent for a dramatic effect; e.g., Maude Garrett speaks purposefully with a fake British accent to the NZ and American crew in *Shadow in the Cloud*.
>
> Adopting strategy (A) alone seems to be less common and multiple strategies are combined in some works, as both filmmakers and audiences have become increasingly sensitive to the historical and linguistic accuracy of story settings since the turn of the century. Strategy (D) has been emerging as a manipulation of a nonlocal accent for an integral part of a storyline

Table 1: Films in which NZ citizens/residents are portrayed by actors with non-NZ accents

#	Film (release year)	Actor (native accent)	Character (expected accent)
1	*Mesmerized* (1995)	Jodie Foster (US)	Victoria Thompson (NZ)
2	*The Piano* (1993)	Harvey Keitel (US)	George Baines (NZ)
3	*Heavenly Creatures* (1994)	Kate Winslet (UK)	Juliet Hulme (UK)
4	*Snakeskin* (2001)	Boyd Kestner (US)	Seth (US)
5	*In My Father's Den* (2004)	Matthew Macfadyen (UK)	Paul Prior (NZ)
6	*The World's Fastest Indian* (2005)	Anthony Hopkins (UK)	Burt Munro (NZ)
7	*Love Birds* (2011)	Sally Hawkins (UK)	Holly (NZ-UK)
8	*Shadow in the Cloud* (2020)	Cholë Grace Moretz (US)	Maude Garrett (UK-US)
9	*The Justice of Bunny King* (2021)	Essie Davis (Australia)	Bunny King (NZ?)
10	*Juniper* (2021)	Charlotte Rampling (UK)	Ruth (UK)

References

- Barrett, R., Cramer, J., & McGowan, K. B. (2023). *English with an accent: Language, ideology, and discrimination in the United States* (3rd ed.). Routledge.
- Boberg, C. (2021). *Accent in North American film and television: A sociophonetic analysis*. Cambridge University Press.
- Crystal, D. (2019). *The Cambridge encyclopedia of the English language* (3rd ed.). Cambridge University Press.
- Hodson, J. (2014). *Dialect in film and literature*. Red Globe Press.

Tuesday 10th December

Session Six ● North Arts A3

1:30pm – 3:30pm

Session Chair • Forrest Panther

Talks presented by:

- ia Morrison–Young
- Penny Harris
- Himashi Rathnayake, Jesin James, Gianna Leoni, Ake Nicholas, Catherine Watson and Peter Keegan
- Niklas Alexander Pohl, Andreea Calude, Hēmi Whaanga, Eline Zenner and Laura Rossell

North Arts A3 ● 1:30pm – 2:00pm

'My takatāpui whānau weave worlds together': An exploration of the Indigenous gender and sexuality term takatāpui for rangatahi Māori

ia Morrison-Young, Massey University

As we embark on research with Pacific and Māori transgender young people in Aotearoa about their family support experiences, we are met with complex linguistic questions from the outset. For instance, the word 'transgender' may be irrelevant to Pacific and Māori young people, considering the resurgence and reclamation of mātauranga Māori and Pacific knowledges.

In Aotearoa, experiences of trans people are largely discussed via Western terms that do not adequately articulate Indigenous gender identities or experiences. The term Takatāpui, popularized by Māori scholars Ngahuia Te Awekotuku and Elizabeth Kerekere, has appealed to some Māori who (re)claim this identity. 'Takatāpui' refers to any Māori with non-heterosexual and/or non-cisgender identities, but Māori terms for gender identities have also emerged with more specificity: some in long-standing use and others adapted from Western terms. Further, the low prominence of gendered language in te reo Māori contrasts with the use of binary or non-binary gendered pronouns in English. Māori uses the non-gendered pronoun ia for 'he/she/they', but gendered English pronouns appear around Māori gender terms when used in English. Thus, speakers operate in a colonized linguistic context, which has the potential to uphold the heteropatriarchal system by organizing our people into binary categories.

Similar issues arise among Pacific people, who experience colonization in the Islands and racism in Aotearoa. Pacific societies also have histories and terminologies for gender and sexual fluidity that were suppressed through colonization. Pacific advocate Phylesha Brown-Acton developed a Pacific version of 'LGBTQ+'- 'MVPFAFF+'- to refer to a collection of identities. These include: *Mahu* (Hawai'i and Tahiti), *Vaka sa lewa lewa* (Fiji), *Palopa* (Papua New Guinea), *Fa'afafine* (Samoa), *Akava'ine* (Rarotonga), *Fakaleiti* (Tonga), and *Fakafifine* (Niue). While some of these are derogatory terms that are being reclaimed, others have positive connotations. Additionally, Pacific cultures remain highly influenced by Christianity, producing ever-complexifying layers of colonisation regarding gender, sexuality and language

Thus, the terms we choose to affirm our identities in the modern context are dynamic. While the negotiation of identity terms is not unique to settler-colonial societies, it encounters extra layers of complexity in Aotearoa. Aside from conceptual and ideological issues, the vastness of terminologies also raises practical and ethical concerns for researching with our communities. Our presentation invites discussion of te reo Māori and Pacific-language gender terms, recognising both the constraints and opportunities they bring to affirm and uplift Māori and Pacific trans youth.

North Arts A3 ● 2:00pm – 2:30pm

Passive formation in te reo Māori: An experimental study

Penny Harris, University of Canterbury

In te reo Māori, verbs are commonly passivised by adding one of 17 morphological suffixes. Several studies (e.g., de Lacy 2004, Sanders 1990) have explored systematicity in root/suffix pairing, proposing root shape and historically-driven lexicalisation as predictors. However, these theories were based on dictionary sources, and they lose their predictive power when applied to everyday speech. Indeed, novel loanwords often surface with historical 'lexicalised' suffixes. To date, no experimental work has investigated reo Māori passive formation in everyday contexts. This study fills that gap, presenting the results of an exploratory experiment where contemporary reo Māori speakers formed passives from novel (loan and nonsense word) stimuli. I test the predictive power of the leading phonological and prosodic theories of passive formation, and explore the progress of possible suffix regularisation by use of a 'default' suffix. I also investigate whether the selection of a passive suffix is analogically-driven by frequent Māori words of similar shapes.

North Arts A3 ● 2:30pm – 3:00pm

Common social emotions in te reo Māori speech: Insights from te reo Māori speaker feedback

Himashi Rathnayake, The University of Auckland
Jesin James, The University of Auckland
Gianna Leoni, Te Hiku Media
Ake Nicholas, The University of Auckland
Catherine Watson, The University of Auckland
Peter Keegan, The University of Auckland

Emotions play a significant role in human communication. Identifying how emotions are semantically expressed in different languages, including how they are categorised, is important. However, Indigenous languages like New Zealand's te reo Māori have limited emotion-based studies. The emotion categories for such languages are not well-defined, and current technology often relies on categories identified in English or their translations (e.g. [1], [2]). Some emotion categories significant to Māori receive little attention in Western emotion research [3]. Additionally, te reo Māori has a large vocabulary for emotions that lack direct translations into English, leading to a loss of nuances during translation [4, 5]. Therefore, assuming that emotions in Māori are categorised in the same way as in English is inadequate. Identifying emotion categories for Māori is essential for gaining deep insights into unique worldviews and hence informing technology development.

This study focuses on identifying common social emotions in te reo Māori speech. To achieve this, a questionnaire was designed using media recordings from Te Hiku Media community radio and various te reo Māori TV shows. First, the emotion-rich durations of these recordings were identified, and randomly selected audio clips were provided to te reo Māori speakers, who were asked to give free responses about the emotions expressed in the given clips. Forty-two participants completed the questionnaire. Since te reo Māori is a revitalised language, some participants reported difficulties in identifying emotions due to their lack of emotion vocabulary.

We manually marked all potential emotion terms in the participant responses, then removed duplicate terms, intensity words, and non-emotional terms describing actions or qualities of the speakers rather than internal emotions. This process resulted in 218 emotion terms, with 105 in te reo Māori and 113 in English. Some te reo Māori terms appeared to refer to the same English emotion, and some emotion terms seemed to represent varying intensities of a particular emotion. To verify the similarity of terms, feedback from te reo Māori experts is required. Consequently, a focus group was proposed to categorise the emotion terms into a few categories based on their similarity. During the pilot test for the focus group, 23 emotion categories were identified. The results of the focus group will be discussed in the conference presentation.

All phases of the study were designed and conducted in close collaboration with the community to ensure the study was culturally appropriate and not biased against Indigenous people.

References

- R. Paccotacya-Yanque et al, "A speech corpus of Quechua Collao for automatic dimensional emotion recognition," *Scientific Data*, vol. 9, *(1),* pp. 778, 2022. https://doi.org/10.1038/s41597-022-01855-9
- J. Manamela, M. J. Manamela, T. I. Modipa, T. J. Sefara and T. B. Mokgonyane, "The Automatic Recognition of Sepedi Speech Emotions Based on Machine Learning Algorithms," 2018 International Conference on Advances in Big Data, Computing and Data Communication Systems (icABCD), Durban, South Africa, 2018, pp. 1-7, https://doi.org/10.1109/ICABCD.2018.8465403
- W. G. Parrott and R. Harre, *The emotions: Social, cultural and biological dimensions*. Sage, 1996.
- H. Elder, *Aroha: Maori wisdom for a contented life lived in harmony with our planet*. Random House, 2020.
- J. Ritchie, “Staying with the Troubles of Colonised Emotional Well-Being of Young Children in Aotearoa (New Zealand)”. Open Access Te Herenga Waka-Victoria University of Wellington, 30-Oct-2021, https://doi.org/10.25455/wgtn.24923526

North Arts A3 ● 3:00pm – 3:30pm

When your maunga is a mountain but your moana is not a sea; Insights from the perception of synonymy of te reo Māori loanwords and New Zealand English lexical equivalents

Niklas Alexander Pohl, University of Waikato
Andreea Calude, University of Waikato
Hēmi Whaanga, University of Waikato
Eline Zenner, KU Leven
Laura Rosseel, Vrije Universiteit Brussel

Languages and their speakers are in ongoing contact with one another, which inevitably leads to a flow of words being borrowed from one language into another (Haspelmath 2009; Winford 2010). One perspective that has comparatively seen less attention in language contact research concerns how loanword relate to existing lexical alternatives. In recent years, language contact research has thus seen a paradigm shift towards an onomasiological perspective (see Anderson et al. 2017; Crombez et al. 2022; Zenner et al. 2023). Within this shift, most studies looking at lexical variation between loanwords and their near-synonyms equivalents employ corpus linguistics methods (e.g. Onysko & WinterFroemel 2011; Soares da Silva 2013).

This project presents a large-scale experimental approach from a case-study involving Māori loanwords borrowed into New Zealand English (NZE). Māori loanwords are ubiquitous, salient and probably still increasing within the NZE lexicon (Macalister 2007; Trye et al. 2019). Regarding onomasiology, Māori loanwords have been glossed and explained in different ways, and to date, there has been to our knowledge almost no research focused specifically on the relationship between loanwords and their near-synonyms.

Here, we report on a Qualtrics experiment devised to probe the perceived relationship between 60 Māori loanwords (spanning established semantic categories: flora and fauna, material culture, and social culture)) and their NZE equivalents, as ascertained from published sources. The synonymy judgments were elicited for pairs (e.g. whānau – family), using an analogue slider (ranging from 0 = non-synonymous to 100 = fully synonymous; see Figure 1). Because synonymy judgements are subjective, we also included ten fillers, to help us calibrate and interpret participant judgements. The 60 words were divided into two-word lists in order avoid fatigue, resulting in a within participant design. The target demographic for our population of interest consisted of young adults (18-24 years).

Following cleaning and exclusions (e.g. participants who ignored filler items), the final dataset contained 260 participants. Inspecting the dataset showed a skew towards female participants, and for this reason, we focus our statistical analysis on this core sample, while keeping an eye on the full dataset containing all participants. Preliminary findings suggest that young adults think Māori loanwords are (highly) synonymous with NZE lexical alternatives. These findings will be further scrutinised with regression techniques and qualitative analyses of the comments provided in an open answer section of the questionnaire.

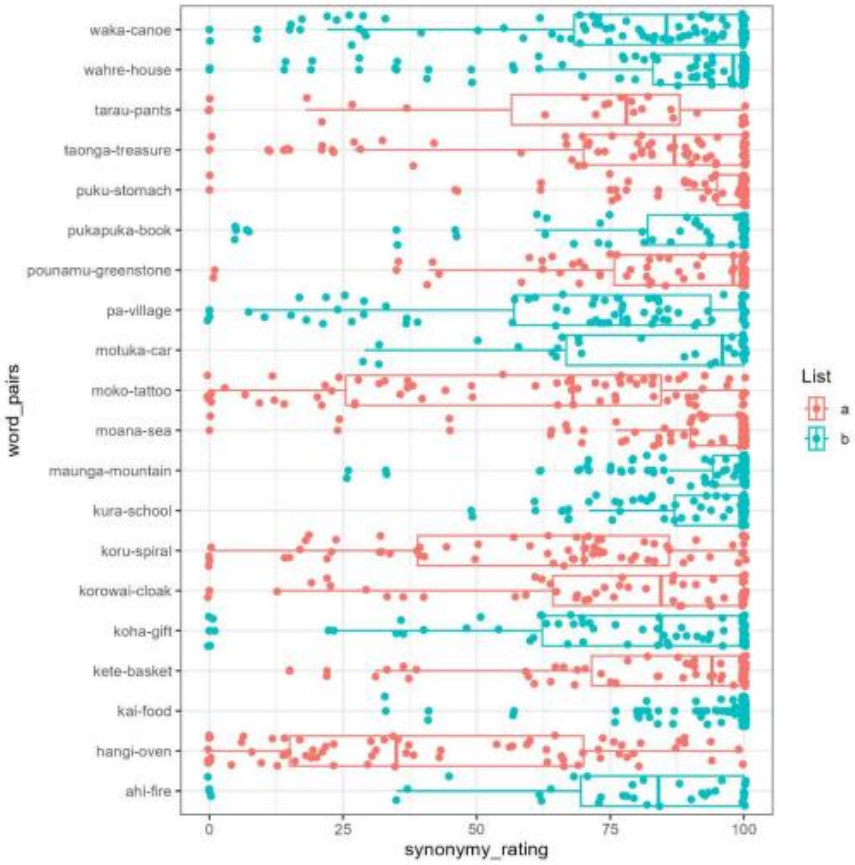


Figure 1.: Preliminary boxplot example of synonymy ratings of material culture words for both word lists.

References

- Anderson, G., Furiassi, C. & Mišić-Ilić, B. (2017). The pragmatic turn in studies of linguistic borrowing. *Journal of Pragmatics*, 113, 71-76.
- Crombez, Y., Ghyselen, A., Winter-Froemel, E. & Zenner, E. (2022). The sociopragmatic parameters steering the reported selection of Anglicisms or their Dutch alternatives. *Linguistics, 60*(4), 973-1010.
- Haspelmath, M. (2009). Lexical borrowing: concepts and issues. In M. Haspelmath, & U. Tadmor (Eds.), *Loanwords in the World's Languages: A Comparative Handbook* (pp. 35-54). De Gruyter Mouton.
- Macalister, J. (2007). Weka or woodhen? Nativization through lexical choice in New Zealand English. *World Englishes,* 26(4), 492-5-6.
- Onysko, A. & Winter-Froemel, E. (2011), Necessary loans – luxury loans? Exploring the pragmatic dimension of borrowing. *Journal of Pragmatics*, 43(6), 1550-1567.
- Soares da Silva, A. (2013). Measuring and comparing the use and success of loanwords in Portugal and Brazil: A corpus-based and concept-based sociolectrometrical approach. In E. Zenner, & G. Kristiansen (Eds.), *New perspectives on lexical borrowing: Onomasiological and phraseological innovations* (pp. 101-142). De Gruyter.
- Trye, D., Calude, A., Keegan, T. T. & Falconer, J. (2019). When loanwords are not loanwords: Using networks and hypergraphs to explore Māori loanwords in New Zealand English. *International Journal of Corpus Linguistics*, 28(4), 461-499.
- Winford, D. (2010). Contact and borrowing. In R. Hickey (Ed.*), The handbook of language contact* (pp. 170- 187). Wiley-Blackwell.
- Zenner, E., Hilte, L., Backus, A. & Vandekerckhove, R. (2023). On sisters and zussen: integrating semasiological and onomasiological perspectives on the use of English person reference nouns in Belgian-Dutch teenage chat messages*. Folia Linguistica*, 57(2), 449-480.

Tuesday 10th December

Session Seven • North Arts A1

3:50pm – 4:50pm

Session Chair • Sarah van Eyndhoven

Talks presented by:

- Gia Hurring
- Donald Derrick and Matthias Heyne

North Arts A1 ● 3:50pm – 4:20pm

Exploring the perception of phonological covariation in New Zealand English

Gia Hurring, University of Canterbury

Recent research on covariation in New Zealand English (NZE) has found that clusters of monophthongs covary with each other to some degree, meaning that if we know how a speaker produces one vowel, we can reliably predict how that speaker would produce multiple other vowels (Brand et al., 2021; Hurring et al., under review; Wilson Black et al., 2023). These patterns may be structurally motivated (e.g., vowel reorganisation), and/or sound change driven (e.g., speakers as entirely innovative or conservative in a vowel change cluster regardless of their age or gender), and/or socially meaningful (Sheard et al., 2024).

My previous research builds on the literature above and explored whether covariation is present in other phonological variables in 122 NZE speakers. This included segmental (vowels, intervocalic /t/, /s/-fronting) and suprasegmental (speech rate, rhythm, pitch, creak) variables. The results suggested that variables cluster together to find macrosocial groups, meaning that variables cluster to identify groups of ages and genders. However, only the vowels clustered together when finding nuances *within* these macrosocial groups (i.e., within groups of ages and genders) while all other variables are working independently of each other.

This raises questions about how much phonological features actually need to covary to be perceived to index meaning beyond macrosocial variation. Refining this further, how are salient NZE vowels and intervocalic /t/ interpreted together in the perception of macrosocial vs microsocial identities?

This talk details a perception experiment that aims to answer the question above by exploring how much listeners rely on segmental covariation to make speaker judgements. Based on the production results above, we would expect stronger rating effects when listeners are presented with stimuli that include covariation between two vowels (KIT and TRAP). On the other hand, we would expect stronger rating effects when listeners are presented with either a vowel (TRAP) or intervocalic /t/ alone, given that the two variables do not appear to be working together. Data collection is underway and preliminary results will be presented at the conference.

References

- Brand, J., Hay, J., Clark, L., Watson, K., & Sóskuthy, M. (2021). Systematic co-variation of monophthongs across speakers of New Zealand English. *Journal of Phonetics*, 88, 101096.
- Sheard, E., Hay, J., Fromont, R., Wilson Black, J., & Clark, L. (2024). Covarying New Zealand vowels interact with speech rate to create social meaning for NZ listeners. In T. Cho, S. Kim, J. Holliday and S. Lee-Kim (Eds), *Proceedings of the 19th Conference on Laboratory Phonology* (pp. 323-324). HIPCS.
- Hurring, G., Wilson Black, J., Hay, J., and Clark, L. Under review. 'How stable are patterns of covariation across time?', *Language Variation and Change*.
- Wilson Black, J., Brand, J., Hay, J., & Clark, L. (2023). Using principal component analysis to explore co-variation of vowels. *Language and Linguistics Compass, 17*(1), e12479.

North Arts A1 ● 4:20pm – 4:50pm

R-Sandhi in New Zealand English

Donald Derrick, University of Canterbury
Matthias Heyne, State University of New York at New Paltz

R-sandhi in NZE has been studied acoustically [1-3] and perceptually [4], though not yet articulatorily. NZE is generally non-rhotic, thus word- and syllable-initial /ɹ/ is usually produced as an approximant (cf. [5]). Like other non-rhotic dialects of English, NZE has various types of *r*-sandhi: linking-*r* (present in the orthography) connects non-high vowels across word boundaries, while intrusive-*r* can occur word-internally and across word boundaries. The Intermediate Archive of the Origins of New Zealand English (ONZE) corpus [6, cf. 3] contains 260 examples of word-linking intrusive-r but only one instance of it occurring word-internally.

Hypotheses

We hypothesize that medial /ɹ/s are the most robust /ɹ/s, are almost always produced, and have the most complex tongue shapes. Linking-*r* will be less commonly realized and less complex articulatorily, followed word-linking intrusive-*r*, with word-internal intrusive-*r* realized least commonly and having the least complex tongue shapes.

Methods

Participants: 66 participants, aged 3-48, mean = 16.8, SD = 13.5, 31 female. Of these 47 are native speakers, and 62 are native or arrived in NZ as very young children.
Materials: Participants read the following stimuli from a printed list: 1) medial /ɹ/: Bo**r**at, La**r**a, fai**r**y, a**rr**est, sta**rr**ing, bo**r**ing, whispe**r**ing, clea**r**ing. 2) intrusive-*r* (word-internal): He likes to go birding, particularly kea_ing.; He's really into dancing, both salsa_ing and samba_ing.; I can't imagine sawing such a hard piece of wood.; The children were ooh_ing and aah_ing. 3) intrusive-*r* across words: The fauna_and plants of New Zealand are amazing.; The lions tried to claw_and bite their pray.; Utah_and Nevada are American states.; I had a sofa_accident at work today. 4) Linking /ɹ/: Mum likes to store_and keep everything.; The nurse carried a chair_and a book.; Australia is quite far_away.; Kids like to whisper_and shout; It happens year_in and year_out.
Procedure: After providing consent, we had participants hold an ultrasound probe under their chin, and recorded ultrasound images and audio similarly to the process documented in [5] (GE Logiq E V11 ultrasound, 8CRS ultrasound probe, Epiphan VGA2USB pro USB frame grabber; Sound Devices LLC USB Pre 2 preamp; Sennheiser MKH 416 microphone. Recordings took 2-3 minutes.
Analysis: Ultrasound and audio were aligned by landmark using Blender [7] and speech was segmented using LaBB-CAT [8] or Montreal Forced Aligner [9]. Ultrasound tongue contours were automatically traced with DeepEdge [10]. R-markdown will be used to inspect tongue contours and fix incorrect traces. Generalized Linear Mixed-effects models will be used to compare Modified Curvature Index measure of tongue curvature [11] by participant age and /ɹ/ type.

Results and Discussion

The results of our hypotheses will be provided upon completion of data analysis, along with a discussion of theoretical implications.

References

[1] Hay, J., & Sudbury, A. (2005). How rhoticity became /r/-sandhi. *Language*, *81*(4), 799–823. https://www.jstor.org/stable/4490019
[2] Hay, J., & Maclagan, M. (2010). Chapter 2: Social and Phonetic Conditioners on the Frequency and Degree of "intrusive/r/" in New Zealand English. *A Reader in Sociophonetics*, edited by Dennis R. by Dennis R. Preston and Nancy Niedzielski, Berlin, New York: De Gruyter Mouton, pp. 41-70. https://doi.org/10.1515/9781934078068.1.41
[3] Hay, J., & Maclagan, M. (2012). /R/-sandhi in early 20th century New Zealand English. *Linguistics*, *50*(4), 745–763. https://doi.org/10.1515/ling-2012-0023

[4] Hay, J., Drager, K., & Gibson, A. (2018). Hearing r-sandhi: The role of past experience. *Language*, *94*(2), 360–404. https://www.jstor.org/stable/26630389
[5] Heyne, M., Wang, X., Derrick, D., Dorreen, K., & Watson, K. (2020). The articulation of /ɹ/ in New Zealand English. *Journal of the International Phonetic Association*, *50*(3). https://doi.org/10.1017/S0025100318000324
[6] Gordon, Elizabeth, Margaret A. Maclagan & Jennifer Hay. 2007. The ONZE corpus. In Joan C. Beal, Karen P. Corrigan & Herman Moisl (eds.), *Models and methods in the handling of unconventional digital corpora,* vol. 2: *Diachronic corpora,* 82–104. Basingstoke, Hampshire: Pal- grave Macmillan.
[7] Blender Online community. 2024. Blender- a 3D modelling and rendering package. Blender Foundation. Blender Institute, Amsterdam. http://www.blender.org
[8] Fromont, R., & Hay, J. (2012). *LaBB-CAT: An annotation store* (P. Cook & S. Nowson, Eds.; pp. 113–117).
[9] McAuliffe, M., Socolof, M., Mihuc, S., Wagner, M., & Sonderegger, M. (2017). *Montreal Forced Aligner: Trainable Text-Speech Alignment Using Kaldi. 2017*, 498–502.
[10] Chen, W.-R., Tiede, M., & Whalen, D. (2020). DeepEdge: Automatic ultrasound tongue contouring combining a deep neural network and an edge detection algorithm. 12th International Seminar on Speech Production (ISSP).
[11] Dawson, K. M., Tiede, M. K., & Whalen, D. (2016). Methods for quantifying tongue shape and complexity using ultrasound imaging. *Clinical Linguistics & Phonetics*, *30*(3–5), 328–344.

Tuesday 10th December

Session Eight ● North Arts A2

3:50pm – 4:50pm

Session Chair • Jen Hay

Talks presented by:

- Charlie Shirreffs
- Peiman Pishyardehkordi

North Arts A3 ● 3:50pm – 4:20pm

Towards a syntactic typology of grammatical politeness

Charlie Shirreffs, Victoria University of Wellington

Building on frameworks such as face theory (Brown and Levinson 1987) or CCSARP (Blum-Kulka and Olshtain 1984), much previous work on politeness has conceptualised politeness at the level of pragmalinguistic goals or speech act subtypes. However, politeness can and should also be understood as achievable at another linguistic level: that of syntax.

Recent work that investigates structural politeness (e.g., Dolinina 2003; Matešić and Marot Kiš' 2015; Wang 2023; Shirreffs 2023) has demonstrated that smaller linguistic elements meaningfully contribute to the overall politeness meaning of an utterance. However, these studies restrict their focus to a particular speech act, specific language(s) or grammatical feature. The present study takes a crosslinguistic look at the use of such features in order to better understand grammatical politeness from a typological perspective.

Through a systematic survey of grammatical politeness reported in reference grammars and journal articles, I code and analyse reported cases of grammatical politeness from 55 languages under 10 distinct language families, targeting grammatical features reported to denote some form of politeness—including honorifics, rapport management and face-threat mitigation, among others—at any level of morphology or syntax. The features are classified into three broad categories: grammatical politeness achieved by (A) argument marking or form, (B) predicate marking or form, and (C) sentence structure. I then report a list of common grammatical features used for expressing politeness: (i) changes in person, number, or definiteness, (ii) use of specific TAM features, (iii) structural changes including the use of non-active voice, infinitives, and light-verb periphrasis.

This study has three broader implications: first, the study of politeness can and should take place at the level of a unit smaller than the speech act; second, the study of grammar can and should incorporate considerations of social and pragmatic context; third, that some kind of syntactic and semantic logic underlies the findings enabled by such practices.

References

- Blum-Kulka, Shoshana and Elite Olshtain 1984. Requests and apologies: A cross-cultural study of speech act realization patterns (CCSARP). *Applied Linguistics* 5(3): 196-213.
- Brown, Penelope and Stephen C. Levinson 1987. *Politeness: some universals in language use.* Cambridge University Press.
- Dolinina, Inga B. 2003. Politeness in imperatives: Grammatical encoding and meaning from a cross-linguistic perspective. *LACUS Forum* 29: 205-216.
- Matešić, Mihaela and Danijela Marot Kiš 2015. Pragmatics of grammatical forms: Morphological and syntactic means in the service of expressing politeness. *Fluminensia* 27(2): 103-116.
- Shirreffs, Charlie 2023. Across the modalverse: Counterfactuality and structural politeness in English. Unpublished master's term project.
- Wang, Ruoan 2023. Honorifics without [HON]. *Natural Language & Linguistic Theory* 41: 1287–1347.

North Arts A3 ● 4:20pm – 4:50pm

Does acoustic modulation within bigrams predict probabilistic distribution of bigrams in English?

Peiman Pishyardehkordi, University of Canterbury

Listeners use acoustic cues to phonological contrasts to identify phonemes in the speech stream [1,2,3,4]. In a sequence of segments, the more robust the acoustic cues are, there is more potential for the listeners to identify the segments after coarticulation [5,6,7,8]. One factor which might increase robustness of cues to contrasts is modulation [9,10] in the portion of the signal that acts as a cue in a sequence of two segments. This study investigates whether acoustic modulation within bigrams will predict the probabilistic distribution of bigrams in English.

Modulation [9,10] of a perceptual property is referred to as the change in this property in the transition of a segment to the next in a sequence of two segments. When there is a bigger change, the perceptual cues will be less confusable, and the phonological distinction is subsequently more robust. It is known that segment sequences which are perceptually weak will be altered towards more perceptible strings through synchronic and diachronic changes [3,6,7,11,12]. This will potentially result in more perceptible strings to be language-internally over-represented.

Languages contain probabilistic phonotactic patterns within the sequences that they allow [13,14]. Amongst their legal phonological sequences, some sequences tend to be overrepresented, and some sequences under-represented. Native speakers of languages can rate the well-formedness of non-words, closely tracking the probabilities of the sequences they contain [15,16]. These within-language gradient phonotactic patterns are thus an important part of the linguistic knowledge. But where do these patterns originate from? A significant portion of the probabilistic distribution of sequences, I hypothesize, can be related to perceptual modulation within those sequences which makes those sequences more perceptible.

To test the above hypothesis, the TIMIT corpus [17] will be used to measure modulation of the first formant, the second formant and overall intensity within each bigram within syllables in English. Then, the CELEX database [18] will be used to obtain the type-frequency of bigrams within syllables of English. Then, linear regression models will be performed to test any correlation between measures of modulation and frequencies of bigrams within syllables.

If findings will show support for my hypothesis, I can suggest that higher modulation in the portion of the signal that acts as a cue to phonological contrasts increases the robustness of phonological distinctions in sequences of segments, which in turn will make these sequences more perceptible, which will then lead to over-representation of these sequences within languages.

References

[1] Flemming, E. (2004). Contrast and perceptual distinctiveness. *Phonetically based phonology*, 232, 276. [2] Silverman, D. D. (1997). *Phasing and recoverability*. Taylor & Francis.
[3] Steriade, D. (2001). The phonology of perceptibility effects: The P-map and its consequences for constraint organization. *Ms., UCLA*.
[4] Wright, R. (2001). Perceptual cues in contrast maintenance. *The role of speech perception in phonology*, 251-277.
[5] Benkí, J. R. (2003). Analysis of English nonsense syllable recognition in noise. *Phonetica*, 60(2), 129-157. [6] Henke, E., Kaisse, E. M., & Wright, R. (2012). Is the sonority sequencing principle an epiphenomenon. In S. Parker (Ed.), *The Sonority Controversy* (Vol. 18, pp. 65-100). Walter de Gruyter.
[7] Seo, M. (2003). *A segment contact account of the patterning of sonorants in consonant clusters*. The Ohio State University.
[8] Wright, R. (2004). A review of perceptual cues and cue robustness. In B. Hayes, R. Kirchner, & D. Steriade (Eds.), *Phonetically based phonology* (Vol. 34, p. 57).
[9] Kawasaki-Fukumori, H. (1992). An acoustical basis for universal phonotactic constraints. *Language and Speech*, 35(1-2), 73-86.
[10] Kawasaki-Fukumori, H., Ohala, J., Eliasson, S., & Jahr, E. (1997). Alternatives to the sonority hierarchy for explaining segmental sequential constraints. *Language and its ecology: Essays in memory of Einar Haugen*, 100, 343.

[11] Blevins, J. (2004). *Evolutionary phonology: The emergence of sound patterns*. Cambridge University Press.
[12] Steriade, D. (2001). The phonology of perceptibility effects: The P-map and its consequences for constraint organization. *Ms., UCLA*.
[13] Frisch, S. A., Pierrehumbert, J. B., & Broe, M. B. (2004). Similarity avoidance and the OCP. Natural language & linguistic theory, 22(1), 179-228.
[14] Pierrehumbert, J. (2001). Stochastic phonology. Glot international, 5(6), 195-207.
[15] Bailey, T. M., & Hahn, U. (2001). Determinants of wordlikeness: Phonotactics or lexical neighborhoods? Journal of Memory and Language, 44(4), 568-591.
[16] Frisch, S. A., Large, N. R., & Pisoni, D. B. (2000). Perception of wordlikeness: Effects of segment probability and length on the processing of nonwords. Journal of memory and language, 42(4), 481-496.
[17] Garofolo, J. S. (1993). Timit acoustic phonetic continuous speech corpus. *Linguistic Data Consortium,* 1993.
[18] Baayen, R. H., Piepenbrock, R., & Gulikers, L. (1996). The CELEX lexical database (cd-rom)

Thank you for joining us in Christchurch, we hope you have enjoyed the conference and that you have a safe journey back home ❤