AUCKLAND
NEW ZEALAND
29-30 November
2023

Language and Society 2023

Programme and Abstract Book

November 27, 2023

:Linguistic
Society of New Zealand

Contents

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Welcome to the NZ Linguistic Society Language and Society Conference 2023!

On behalf of the organising committee I'd like to welcome you all to Tāmaki Makau-rau/Auckland for the conference. We have had previous conferences here, but this will be the first time that it will take place at the Grafton campus. After more than two years of lockdowns we are really looking forward to seeing as many of you as possible here in person.

We have a great programme with presentations from a broad range of topics in linguistics. Please browse through the abstracts and note the high level of student participation. It is fantastic to see the interest from students research wise, but also from our students helping us in the running of the conference (thank you all!).

Elaine Ballard
Chair of the Organising Committee

	Wednesday 29th November Day 1 of LangSoc2023			Thursday 30th November Day 2 of LangSoc2023	
9 - 9.05	Welcome (507-G100)				
9.05 - 10.05	Keynote (507-G100) https://auckland.zoom.us/j/97496697093?pwd=cW9rd0s3ZllkS1g0dTVJRVZmZWREQT09 **Julia de Bres**		9 - 10	Keynote (507-G100) https://auckland.zoom.us/j/97496697093?pwd=cW9rd0s3ZllkS1g0dTVJRVZmZWREQT09 **Melenaite Taumoefolau**	
10.05 - 10.25	Morning tea		10 - 10.25	Morning tea	
zoom links	https://auckland.zoom.us/j/97496697093?pwd=cW9rd0s3ZllkS1g0dTVJRVZmZWREQT09	https://auckland.zoom.us/j/96626252567?pwd=ZWxQUXlTZUhyTEJlRm8xVmVlZW1OZz09	zoom links	https://auckland.zoom.us/j/97496697093?pwd=cW9rd0s3ZllkS1g0dTVJRVZmZWREQT09	https://auckland.zoom.us/j/96626252567?pwd=ZWxQUXlTZUhyTEJlRm8xVmVlZW1OZz09
	Phonetics I (507-G125) Chair: Paul Warren	Discourse I (507-G145) Chair: Meredith Mara		Phonetics and speech technologies (507-G125) Chair: Andreea Calude	Morpho-syntactic structure (507-G145) Chair: TBD
10.25 - 10.50	Exploring the relationship between the production and perception of vocalic covariation in New Zealand English **Elena Sheard, Robert Fromont, Josh Wilson Black, Jen Hey, Lynn Clark, Gia Hurring**	Indexing Māori-Deaf identity in New Zealand Sign Language **Melissa Simchowitz, Rachel McKee**	10.25 - 10.50	Developing a game app for phonetic transcription skills **Paul Warren**	Syntactic distribution of demonstratives in Yongning Na **Guojin Lu**
10.50 - 11.15	Early acquisition of the New Zealand English short front vowel shift in a longitudinal corpus of Christchurch pre-schoolers **Joshua Wilson Black and Lynn Clark**	"Two hands are powerful": Features and perceptions of an emerging online, informative genre in New Zealand Sign Language **Rachel McKee, George Major**	10.50 - 11.15	The Development of a Japanese Vowel Pronunciation Aid Using Speech Acoustics **Jenice Sunny Kuzhikombil, Anahera Roestenburg, Justine Hui, Catherine Watson**	Adjectives marked with -de and their distribution in Mandarin: evidence for topic and focus inside a nominal **Luyi Zhu**
11.15 -11.40	Phonetic Variation as a Function of Sexual Orientation in Rainbow Women **Aimee Herubin**	"It's my body, you'll be fine": Making Invisible Pain Visible **Alex Mitchell**	11.15 -11.40	Efficacy of Automatic Hate Speech Detection on Social Media in Aotearoa New Zealand **Sidney G.-J. Wong**	A cline of Indonesian-type voice: Insights from Javanese, Balinese, Acehnese and Indonesian **Hero Patrianto, Victoria Chen**
11.40 - 12.05	Acoustic Glottal Analysis for 5 Simulated Primary Emotion in New Zealand English **Itay Ben-Dom, Catherine I. Watson, Clare M. McCann**	"Do it right": Exploring Social Media Journalism Practices on Instagram **Angelicia Anthony Thane**	11.40 - 12.05	Identifying the Common Social Emotions of te reo Māori **Himashi Rathnayake, Jesin James, Gianna Leoni, Ake Nicholas, Catherine Watson, Peter Keegan**	Adjective Ordering Preferences in Mandarin: Furthering the Subjectivity Hypothesis **Yinqiu Bai**
12.05 - 12.30	Introducing a new source of historical New Zealand English data **Brooke Ross, Elaine Ballard, Catherine Watson**	Online Verbal Irony: The Type of Irony the Internet Loves **Megan Dykes**	12.05 - 12.30	Improving the visualisation of the training of TTS systems **Henry An, Jesin James, Catherine Watson, Binu Abeysinghe**	Clause chaining and subordination in Aguaruna (Chicham) **Simon Overall**
12.30 - 1.35	Lunch		12.30 - 1	Lunch	
	Phonetics II (507-G125) Chair: Justine Hui	Discourse II (507-G145) Chair: Simon Overall	1 - 2	New Zealand Linguistics Society AGM https://auckland.zoom.us/j/91279495370?pwd=L3ZsUklpOXV0MVVtV0VtTkxVSG5YQT09	
1.35 - 2	Glottalisation, glides and r-sandhi: Resolving vowel hiatus in London English **Andy Gibson, Devyani Sharma, Paul Kerswill**	Everything, everywhere, all the time: The complex case of relational talk at work **Meredith Marra, Mekennah Paterson**		Natural Language Processing I (507-G125) Chair: Peter Keegan	Bilingualism (507-G145) Chair: Jeanette King
2 -2.25	Exploring Phonetic Variation of VOT in a Bilingual Community: The Production of Stops by Hui-Mandarin Bilinguals. **Tao Qian**	Food, Football, and "Friendly Banter": Investigating Language, Gender, and Sexuality in a Sports Organisation **Stephanie Foxton**	2 -2.25	Childhood exposure is not needed to build a Māori proto-lexicon **Wakayo Mattingley, Forrest Panther, Jennifer Hay, Jeanette King, Simon Todd, Peter Keegan**	Conceptual Transfer in Mandarin-English Bilinguals' Usage of IN, ON LI and SHANG **Jiahan Xu**
2.25 - 2.50	Using Historic Borrowings in Te Reo Māori to indentify missing People. **Catherine Watson, Peter Keegan, Andrew Mason**	'An Attractive Woman': A Critical Multi-Modal Analysis of AI-Generated Images **Carla Moriarty**	2.25 - 2.50	Auditory and Orthographic Knowledge in non-Māori Speakers' Protolexicons **Allie Osborne**	Kenne mer nit, bruche mer nit, fott domet – Attitudes towards the Cologne Dialect within Cologne **Niklas Alexander Pohl**
2.50 - 3.15	Exploring Multilevel Covariation in New Zealand English. **Gia Hurring**	Our whakataukī for today: leadership and biculturalism in hybrid meetings **Reuben Sanderson**	2.50 - 3.15	The relationship between sonority dispersion principle and within-language probabilistic phonotactic distribution **Peiman Pishyar-Dehkordi**	Dwy Iaith, Reo Rua: An Exploration of Dual Language Picturebooks in Aotearoa New Zealand and Wales **Nicola Daly, Siwan Rosser, Ilid Haf**
3.15 - 3.35	Afternoon tea		3.15 - 3.35	Afternoon tea	
	Corpus linguistics and technology (507-G125) Chair: Jesin James	Descriptive & Educational Linguistics (507-G145) Chair: Mary Boyce		Natural Language Processing II (507-G125) Chair: Catherine Watson	Language issues beyond structure (507-145) Chair: Brooke Ross
3.35 - 4	Intensifying expletive constructions in English tweets: the case of #wokeAF **Andreea Calude, Amber Anderson, David Trye**	Comparative Analysis of Demonstrative Systems: A Case Study of Mandarin and the Xihe Dialect in Southern Anhui **Jingfei Ma**	3.35 - 4	Syllabification, sonority theory, and Blackfoot **Donald Derrick, Peiman Pishyar-Dehkordi**	Te Kōhanga Reo Inspired Indigenous Language Revitalization in Taiwan: Challenges and Prospects **Karen Huang**
4 - 4.25	Breasts are not just battlefields: Breast cancer and metaphors **Sara Malik, Andreea Calude, Joe Ulatowski**	A description of interrogatives in Idi, a Papuan language **Fernando Miguez, Dineke Schokkin, Jonathan Dunn**	4 - 4.25	Exploring sound symbolic associations of pitch: Effort Code associations **Sasha Calhoun, Paul Warren, Elena Heffernan, Joy Mills, Jemima Agnew**	Relationships between language and pragmatics across the early development of typically developing children and those with complex developmental disorders. **Susan Foster-Cohen, Jayne Newbury, Toby Macrae**
4.25 - 4.50	Evaluating Whisper ASR for Assisted Transcription of New Zealand English Sociolinguistic Interviews **Robert Fromont, Lynn Clark**	An advantage for L1 vs ESL literacy shown in a comparison of the Early Grade Reading Assessment (EGRA) surveys in PNG **Robert G. Petterson**	4.25 - 4.50	L1 and L2 processing of plausible and implausible English passives **Stephen Skalicky, Victoria Chen**	The sociolinguistics of articulation: Finding the line between disorder and difference in Aotearoa/New Zealand. **Bianca Vowell**
4.50 - 5.10	On the Effect of L2 Learners' Use of ChatGPT on Their Multi-Word Expressions Learning: Does Proficiency Matter? **Kamal Heidari**	A Study of the Conceptual and Associative Structures in Maori English Pedagogical Implications for Culturally Responsive Education **Ahmadreza Mohebbi**	4.50 - 5.10		Global relationships between speech and music **Patrick Savage**
6 ~	Conference dinner				

Useful Information

Conference rooms

All conference sessions will be held at University of Auckland's Grafton campus in building 507. Building 507 has three entrances marked with yellow rectangles. Keynote sessions will be held in Room 507-G100, and presentations will be held in Rooms 507-G125 and 507-G145. Entrances to the rooms are shown in green.
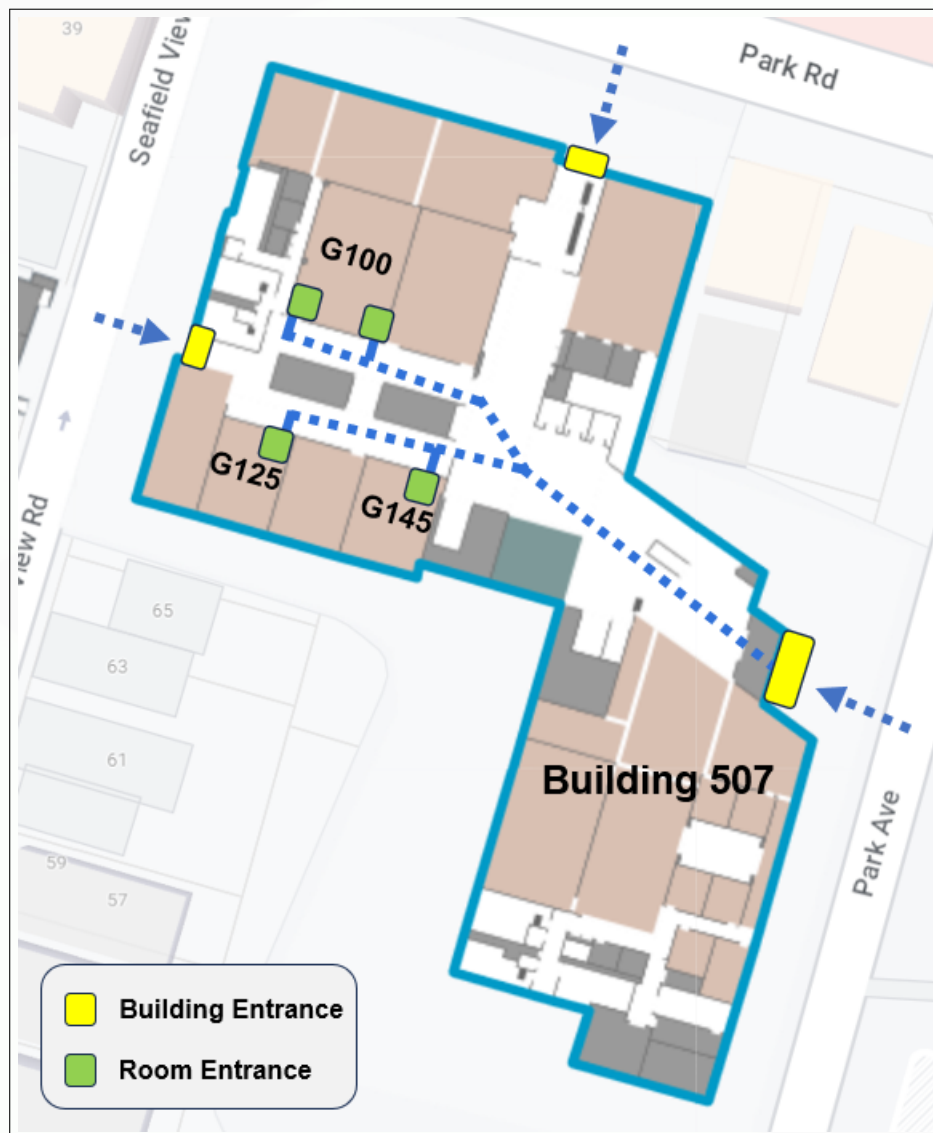
Accessing Building 507

Building 507 can be accessed from Park Ave (see above map).

The route from 85 Park Road is shown below:
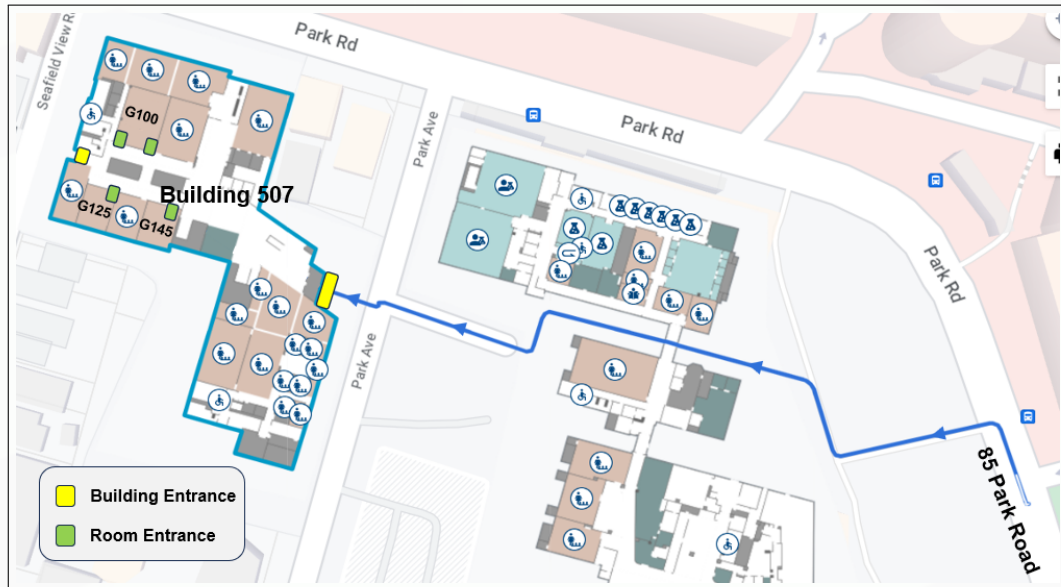
If you are driving to the conference, you may wish to park at the Wilson Parking complex at 117 Grafton Road. See the map below for directions from here to the conference venue.

Language and Society 2023
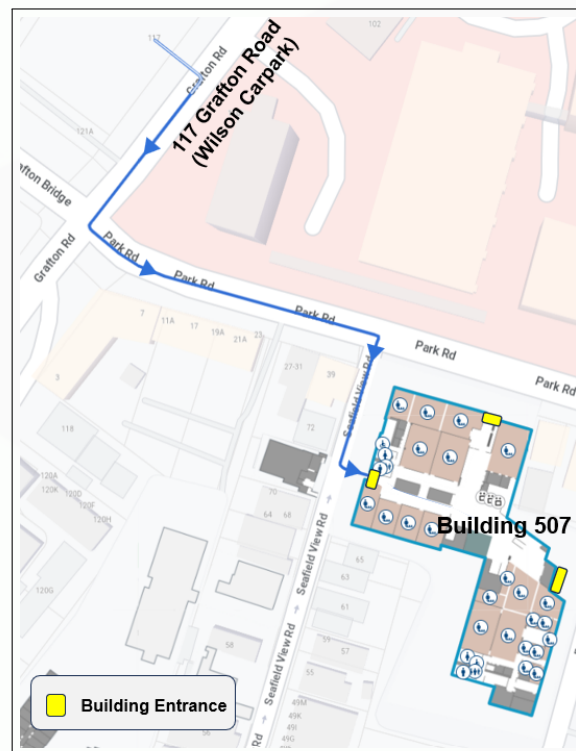
The conference venue is close to the Grafton train station. Please see the map below if you are travelling to the conference by train.
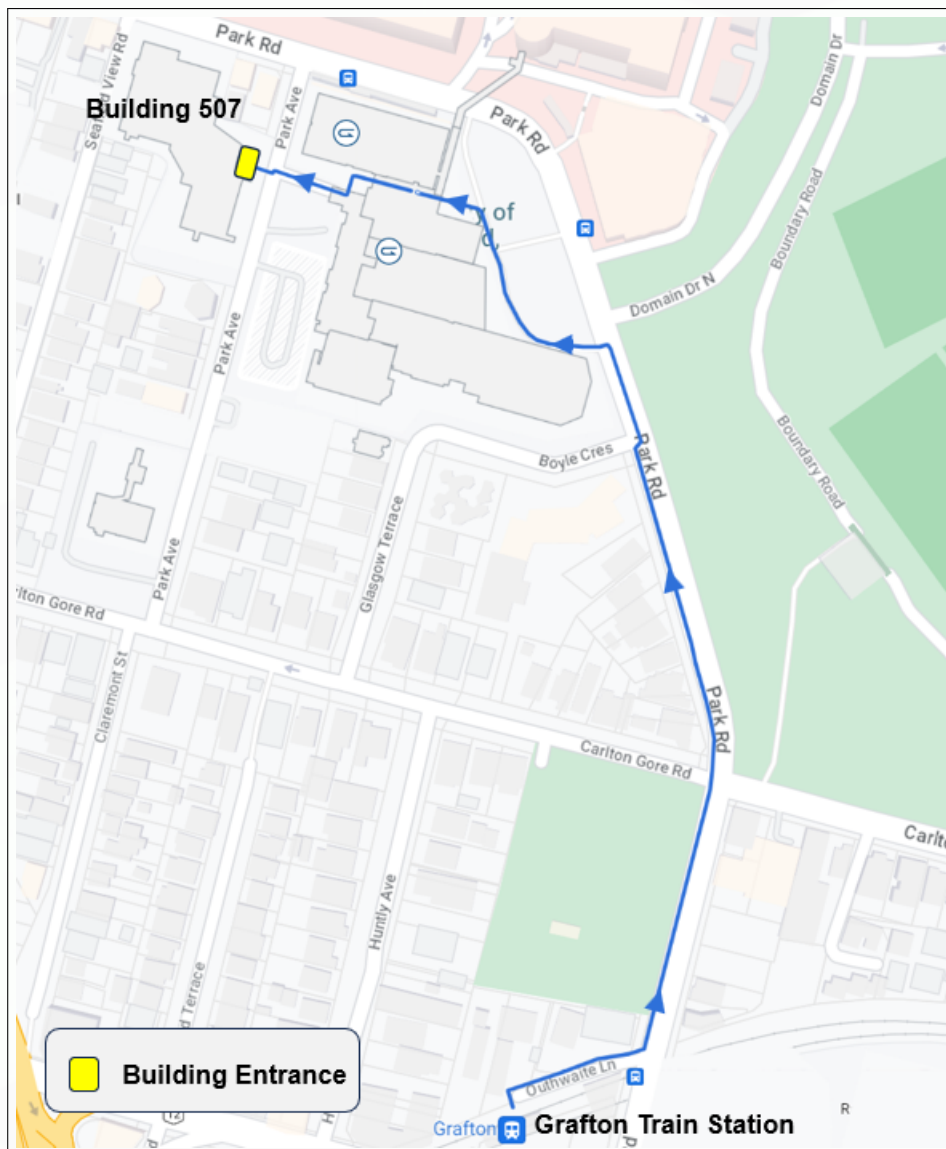
Local eateries and cafés

There are a range of places to eat in short walking distance from the University of Auckland's Grafton Campus. We include estimated (walking time) and *[opening hours]*.

Located in Grafton

- Billy Cafe Newmarket (5 mins) *[7.00am–2.30pm]*
- Subway (1 min) *[8.00am–8.00pm]*
- Masako Japanese Restaurant (11 mins) *[11.30am–5.30pm]*
- Wintergarden Cafe - New Zealand (8 mins) *[8.00am–4.00pm]*
- Candela (13 mins) *[5.00pm-11.00pm]*
- 108 tastes (9 mins) *[11.30am-2.00pm; 5.00pm-9.00pm]*

Located in Newmarket

- Gilli Café (11 mins) *[6.30am–4.00pm; 6.00pm–9.00pm]*
- Archie's Restaurant & Pizzeria (14 mins) *[11.00am–9.00pm]*
- Ajisen Ramen (Newmarket) Restaurant (13 mins) *[11.30am–3.00pm; 5.00pm-9.30pm]*
- Eden Noodles Newmarket (13 mins) *[11.00am–8.30pm]*
- Sunrise Hong Kong Café (14 mins) *[11.00am-8.30pm]*
- The Candy Shop (15 mins) *[7.00am-3.00pm]*

Keynote Presentations

Julia de Bres
Senior Lecturer in Linguistics, Massey University
Wednesday 29 November, 9.05am-10.00am

Melenaite Taumoefolau
Senior Lecturer in Pacific Studies, University of Auckland
Thursday 30 November, 9.00am-10.00am

Back to the drawing board: rediscovering linguistics through art

Julia de Bres
Senior Lecturer in Linguistics, Massey University

A few years ago, I was in an academic slump. I'd spent several years researching my passion area of multilingualism, living in the multilingual wonderland of Luxembourg, and suddenly everything felt flat. Having thought I'd spend my entire career marvelling at multilingual communication, there was no longer much I wanted to learn. Dispirited, I reflected on what I truly loved to do. What lit up my life and brought me joy? I realised it was drawing. I had drawn on and off since I was a kid, and I had recently begun drawing voraciously again. I turned to google, trying to find links between drawing and linguistics. Could I combine my passions and discover something new?

Fast forward a few years and, short answer, yes - I've been doing it ever since. In this talk, I'll trace my own path of bringing my artistic self into conversation with my linguistic self. From my tentative first steps at asking research participants to draw, to my growing delight in analysing their drawings, and on to using my own drawings to illustrate the results of my research. I'll talk about the potential of drawing to illuminate areas of linguistics and discourse that might otherwise be missed, and I'll talk more broadly about the power of any artistic mode – poetry, photography, creative writing – to ramp up the intellectual, social and emotional impact of our research.

In sharing my experience of rediscovering joy in linguistics via an alternative route, I hope to encourage whoever is listening to bring a bit more of themselves – their personal passions, their creativity, the ways they have fun – into their academic life. I believe that it is in pushing the boundaries of what is considered acceptable to the academy that we all can find ways to be our fullest, most authentic and playful selves at work.
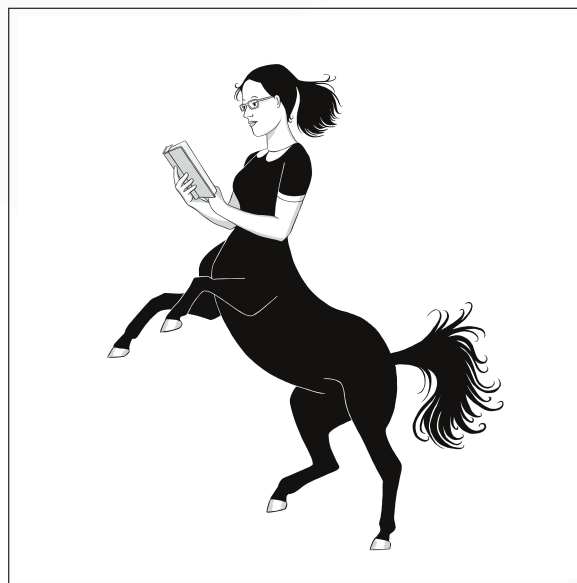
What language *really* is – from my perspective

Melenaite Taumoefolau
Senior Lecturer in Pacific Studies, University of Auckland

Thu
30 Nov
9.00am
507-G100

Pacific languages including te reo Māori are declining in New Zealand and even in the region and their home countries. As linguists what are we doing to help? They say a science is only as good as the questions it asks. As the science of language, what is our discipline's answer to the plight of te reo Māori and other Pacific languages in NZ?

In this talk I will give my perspectives on what language really is and how this understanding of language may throw light on issues of Pacific language decline and Pacific language maintenance in New Zealand and in the region.

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Session 1A: Phonetics I

Wednesday 29 November, 10.25am-12.30pm
Room 507-G125
Chair: Paul Warren

Exploring the relationship between the production and perception of vocalic covariation in New Zealand English

Elena Sheard, Robert Fromont, Joshua W. Black, Jennifer Hay, Lynn Clark, Gia Hurring

University of Canterbury

Wed
29 Nov
10.25am
507-G125

Previous research on covariation using data from the Origins of New Zealand English (ONZE) corpus has established, by means of Principal Component Analysis (PCA), that vowels in New Zealand English are not independent of each, and that speakers' production of constellations of vowels varies predictably (Brand et al. 2021; Wilson Black et al. 2023). These findings have been replicated using data from the QuakeBox corpus (Hurring et al. Under review).

This project asks whether the covariation underpinning the clusters of speakers whose vowels covary in similar ways in their speech is accessible to listeners. We investigate this question through a methodology with limited implementation in sociolinguistic research: free classification (cf. Clopper 2008). Using a modified version of the browser-based Audio-Tokens toolbox (Donhauser and Klein 2023), speakers of New Zealand English are presented with multiple audio stimuli from 38 QuakeBox participants (all Pakeha women between the age of 46 and 55) who consented to have their story shared publicly (Walsh et al. 2013). Participants then drag and drop speakers into groups that they perceive to sound similar, with the 38 stimuli randomly distributed among three instances of the task (12 stimuli in the first, 13 in the second and third).

In this paper we will present preliminary findings from this experiment in relation to our underlying hypothesis that the clusters of speakers based on listener perception will align with the previously established clusters of speakers based on speaker vowel production. If these two clusters of speakers do not align, that would indicate that listeners are assessing speaker similarity based on different social or phonetic cues, and that vowel covariation is not as perceptually salient as these cues.

References

Brand, James, Jennifer 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.

Clopper, Cynthia G. 2008. 'Auditory free classification: Methods and analysis', Behavior research methods, 40: 575-81.

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, Joshua W. Black, Jennifer Hay, and Lynn Clark. Under review. 'How stable are patterns of covariation across time?'.

Walsh, Liam, Jennifer 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.

Black, Joshua W., James Brand, Jennifer Hay, and Lynn Clark. 2023. 'Using principal component analysis to explore co-variation of vowels', Language and Linguistics Compass, 17.

Early acquisition of the New Zealand English short front vowel shift in a longitudinal corpus of Christchurch pre-schoolers

Joshua W. Black and Lynn Clark

University of Canterbury

Wed
29 Nov
10.50am
507-G125

There is a widespread assumption that children go through two stages in their acquisition of sociolinguistic variation and a stable adult vernacular. First, they acquire variation that mirrors their adult female caregiver's speech (transmission). Then, at around age four or five, they depart from this model and accelerate ongoing sound changes by incrementally using more innovative variants as they age (incrementation). These changes are collectively known as 'vernacular reorganisation' (Labov 2001). The tipping point that is thought to trigger the switch from transmission to incrementation is the shift a child makes from "the caregiver-dominated norms of the home to the peer-dominated norms of the wider world" when they enter the school system (Smith & Holmes-Elliott 2022: 98).

In this paper, we investigate the contemporary accuracy of the vernacular reorganisation model. We explore a longitudinal corpus of early child speech (3;11 years to 5;5 years; 131 children) consisting of a story retell task carried out in Christchurch early childhood education centres. The vocalic production of these children is interpreted with respect to changes in progress in the community, measured using the QuakeBox corpus (18-85 years; 251 talkers). Using linear mixed-effects regression models, fit within a Bayesian framework, we find that children appear to start from a more conservative position in the New Zealand English short front vowel shift than would be expected from caregiver transmission. That is, the children 'lab' behind the youngest female speakers in the QuakeBox corpus. We explore these results in light of our understanding of the changing social world of children since Labov's initial proposal of the vernacular reorganisation model.

Phonetic Variation as a Function of Sexual Orientation in Rainbow Women

Aimee Herubin

Te Herenga Waka | Victoria University of Wellington

This study explores the phonetic production of Rainbow Women (RW), defined in this study as self-identified LGBTQIA+ cis women, trans women, and femme-aligned folks. It aims to address the relationship between sexual orientation identities and phonetic variables in NZE. Previous research (e.g. [1], [2]) on the speech of RW has categorized speakers by sexual orientation, comparing across groups. This often limits study to cisgender lesbian and heterosexual women, excluding large portions of the Rainbow community and suggesting sexual orientation as the sole source of variation. More recent research practices in sociolinguistics (e.g. [3]) assert that identity is constructed in social interactions ([4]), making use of linguistic variation. This shifts the focus to individual speakers and how they use phonetic variables to construct Rainbow identities across different interactions. The initial stage of my research has involved interviews with members of Rainbow communities in Wellington to ensure the research practices are community-informed. Participants' self-described sexual orientation, along with measures of LGBTQIA+ identity and psychological sense of Rainbow community were used to assess identity centrality and support within Rainbow communities. Subsequent data collection has explored style shifting through a series of case studies in which RW record themselves in several day-to-day contexts, together with more controlled laboratory recordings. The phonetic variables investigated include the use of pitch variation, including uptalk and creak, and vowel dispersion. These have been found to be significant in other populations of RW but are tailored here to NZE. This research contributes to 3rd wave sociolinguistic methods in the study of sexual orientation and identity.

References

[1] Pierrehumbert, J. B., Bent, T., Munson, B., Bradlow, A. R., & Bailey, J. M. (2004). The influence of sexual orientation on vowel production (L). Journal of the Acoustical Society of America, 116(4), Art. 4. https://doi.org/10.1121/1.178872

[2] van Borsel, J., Vandaele, J., & Corthals, P. (2013). Pitch and pitch variation in lesbian women. Journal of Voice, 27(5), Art. 5. https://doi.org/10.1016/j.jvoice.2013.04.008

[3] Eckert, P. (2012). Three Waves of Variation Study: The Emergence of Meaning in the Study of Sociolinguistic Variation. Annual Review of Anthropology, 41(1), Art. 1. https://doi.org/10.1146/annurev-anthro-092611-145828

[4] Bucholtz, M., & Hall, K. (2005). Identity and interaction: A sociocultural linguistic approach. Discourse Studies, 7(4/5), Art. 4/5. https://doi.org/10.1177/1461445605054407

Acoustic Glottal Analysis for 5 Simulated Primary Emotion in New Zealand English

Itay Ben-Dom, Catherine I. Watson, Clare M. McCann

University of Auckland

Wed
29 Nov
11.40am
507-G125

The human voice serves a principal carrier of emotion. Expressive speech exhibits discernible deviations in voice production relative to modal phonation. Concurrently, emotions contribute to increased fluctuations in airflow, influencing the oscillatory pattern of the vocal folds. These physiological variations to vocal folds behaviour are reflected and quantified in acoustic features of the glottal source. Research into speech emotion has indicated that emotional states are conveyed through a combination of salient acoustic features that are not exclusive to a singular emotion. This present study aims to examine pertinent acoustic parameters in New Zealand English speech for differentiating between five primary emotions: happy, sad, angry, excited, and neutral. The speech material was recorded from four professional voice actors who are native New Zealand English speakers. Each participant was asked to read aloud 15 neutral sentences. Linear mixed-effect models were employed to compare the acoustic parameters across the different emotions. Notably, several acoustic features displayed capacity for acoustic separability between high-arousal and low-arousal emotions. Pitch and open quotient emerged as particularly suitable acoustic markers for emotion analysis. Additionally, long-term average spectrum analysis was found to compliment the findings of the pitch analysis, providing a supplementary visual representation. The findings from this study underscore the discriminatory power of features derived from the glottal source to be used in speech emotion classification.

Introducing a new source of historical New Zealand English data

Brooke Ross, Elaine Ballard, Catherine Watson

University of Auckland

Wed
29 Nov
12.05pm
507-G125

The earliest academic commentaries on New Zealand English (NZE) come from sources such as McBurney's description in Alexander Ellis's 'On Early English Pronunciation' (1889) and Arnold Wall's 1938 commentary. While undertaking a literature review of NZE we recently rediscovered the existence of an early work, which has not previously been reported on in our modern New Zealand English literature. The doctoral thesis of George Edward Thompson, at the University of New Zealand, Otago, titled "The Question of a New Zealand Dialect of English with a Phonetic Examination of New Zealand Vowels", published in 1921, provides a full phonetic analysis of the New Zealand English vowel space, alongside significant sociolinguistic commentary from the time. The significance of this work is multifaceted. It is a primary source from a trained phonetician at a seminal point in the development of New Zealand English, with phonetic transcriptions of New Zealand vowels. It is significantly more extensive (131 pages) than other early academic sources. In addition, it is unique amongst our known primary sources on New Zealand English as it is not written in the "complaint tradition". The content of Thompson's work has potential implications for our understanding of the development of the New Zealand English vowel space and ongoing sound changes, for example the earliest known evidence of KIT centralization and FLEECE and GOOSE diphthongization. In this presentation we introduce this work, discuss its significance, and how it fits within our current body of work on historical New Zealand English.

Session 1B: Discourse I

Wednesday 29 November, 10.25am-12.30pm
Room 507-G145
Chair: Meredith Mara

Indexing Māori-Deaf identity in New Zealand Sign Language

Melissa Simchowitz, Rachel McKee
Victoria University of Wellington

How do Māori Deaf people use variable features of New Zealand Sign Language (NZSL) to invoke a differentiated identity in Aotearoa New Zealand? Previous research has documented NZSL neologisms for Māori concepts and indicated a desire among some Māori Deaf people to mark their identity linguistically as they gain more access to te ao Māori activities and knowledge (McKee et al., 2007; Smiler, 2004; Smiler & McKee, 2007). As yet, there is little investigation of how this development manifests in language practices. A recent study (Simchowitz, 2023) combined descriptive analysis of contact between NZSL and spoken te reo Māori to identify innovative features in Māori Deaf discourse, with qualitative exploration of how these features are perceived to index Māori identity. This presentation will discuss how Māori Deaf individuals use variable pointing handshapes (open-hand vs index-finger) and sign neologisms with Māori reference to fill lexical gaps and to frame a piece of NZSL discourse as Māori. With regard to pointing handshapes, metapragmatic discussion revealed that some signers intentionally select an open-hand variant – already used in NZSL and as a co-speech gesture in Māori discourse – to construct a Māori style. Individuals who actively align with a Māori Deaf network are also creating neologisms and contact language strategies to express Māori concepts, to invoke a Māori discourse context and to construct Māori NZSL identity. Findings exemplify Eckert's (2012, p. 98) claim that local ideologies which imbue linguistic variants with social meaning "are part of the active—stylistic—production of social differentiation".

"Two hands are powerful": Features and perceptions of an emerging online, informative genre in New Zealand Sign Language

Rachel McKee, George Major

Victoria University of Wellington

Wed
29 Nov
10.50am
507-G145

Minority and revitalising languages must change to meet new communicative purposes of speakers. New Zealand Sign Language (NZSL) was traditionally used only for face-to-face social interaction within the Deaf community, however status change has now widened domains of use and digital technology has facilitated new modes of communication among NZSL users. Videorecorded informational texts (such as community and public service announcements) are now shared online with unknown audiences, prompting a new genre analogous to broadcast style.

Our Marsden-funded project examines this emerging genre by interrogating a corpus of conversational, narrative, and online informative texts in NZSL. Variable features of interest include doubling of one-handed signs, open-handed vs index-finger pronominal pointing, and brow-raising for focus marking. Although the target features are not exclusive to any one genre, metalinguistic data indicates that in online texts they are seen to amplify impact of a 'presentation' style and to create a sense of imagined audience involvement in the absence of an embodied audience. The presentation will report on the distribution of features across different text types, before exploring Deaf participants' reflexive awareness of their pragmatic impact (Haugh 2018) in a modern broadcast-like style of NZSL. This study expands a limited literature on genre in signed languages and extends metapragmatic analysis of how discourse features in a signed language are evaluated by users.

References

Haugh, M. (2018). Corpus-based metapragmatics. In A. H. Jucker, K. P. Schneider, & W. Bublitz (Eds.), Methods in Pragmatics (pp. 619–644). De Gruyter, Inc.

"It's my body, you'll be fine": Making Invisible Pain Visible

Alex Mitchell

Te Herenga Waka | Victoria University of Wellington

Wed
29 Nov
11.15am
507-G145

Endometriosis (endo) is a gynaecological disease associated with severe and chronic pelvic pain, a symptom socially constructed as 'illegitimate'. It therefore typically takes many years and multiple doctors for those with endo to be diagnosed and have their symptoms both taken seriously and treated. This delay speaks to the historical and systemic delegitimisation of women's pain and voices, and the consequently limited understanding of their diseases. Mediated almost entirely through language, pain from endo is subject to a raft of historically formed sociocultural Discourses which give rise to harmful, often gendered, (mis)interpretations. My research makes use of these linguistic affordances to explore the Discourses underpinning and perpetuating these (mis)interpretations. Specifically, in this presentation, I draw on focus group data of women recounting their experiences with endo, exposing the power differentials and discrimination inherent in these experiences. Using the tools of Interactional Sociolinguistics, I connect micro-linguistic features with the wider societal narratives that I have identified around il/legitimacy, including those of epistemology and responsibility. Preliminary findings suggest that the current sociocultural and medical understandings of what pain is, and what it means to be in pain, falter when it comes to 'invisible' pain. This systemic inadequacy is failing not just people with endo but the increasingly large number of people with other chronic pain disorders. Revealing how these Discourses work to delegitimise invisible pain both offers a deeper and more nuanced understanding of women's experiences with endometriosis, and problematises our current treatment and understanding of pain as something that must be seen to be believed.

"Do it right": Exploring Social Media Journalism Practices on Instagram

Angelicia A. Thane
Victoria University of Wellington

Wed
29 Nov
11.40am
507-G145

For sociolinguists interested in digital discourse, social networking sites (SNS) offer a rich opportunity to understand the ways in which social media discourse constitutes and is constituted by society (see KhosraviNik, 2023). For journalism, as a form of professional discourse, the print-to-digital media evolution involving SNS has triggered a shift in practices for news reporting. This shift has given rise to new ways of 'doing' the profession, thereby reshaping journalistic discourses (see Humayun & Ferrucci, 2022; Xia et al., 2020). The increasing popularity of Instagram as a news source (Newman et al., 2020) represents an evolving genre involving journalistic practices and discourses that are complex, distinctive, and worthy of research attention.

Employing a discourse analysis perspective, I explore how and why social media journalists (SMJs) communicate professionally and enact their expert status on Instagram. Drawing on interviews with social media editors from BBC News UK, The New Zealand Herald, and The Star Malaysia, I seek to unpack the professional practices of social media journalists. My findings suggest that SMJs adhere to explicit and implicit guidelines that function to bolster their audience engagement efforts, reflecting a combined influence of digital news conventions and social media affordances. At a more covert level, these audience-focused strategies reveal the constant tension between commercial intent and journalistic ideologies. I argue that the professional goals of SMJs are manifested through the discourses of their profession.

Online Verbal Irony: The Type of Irony the Internet Loves

Megan Dykes

Te Herenga Waka | Victoria University of Wellington

Wed
29 Nov
12.05pm
507-G145

The study of verbal irony online has thus far been largely concerned with the use of markers to denote irony or sarcasm. It is understood that because online contexts are devoid of paralinguistic or nonverbal cues, users rely on emoji, emoticon, or tags like /s and /sarcasm to mark that they aren't being genuine. While some users do employ this strategy, little research has been done into other strategies online jokesters may use. This study investigates the use of set phrases to convey sarcastic or ironic intent, such as 'thanks, I hate it!' or 'no ❤️'. Despite lacking some elements of conventional irony, the study seeks to show that these phrases are still understood as ironic - though this understanding can be dependant on membership in, or familiarity with, certain online communities. An important aspect of this study is locating the use of these phrases within the wider context of how people use language creatively, humorously, and collaboratively on the internet. It will provide further insight into factors that influence such language use, including memetics, virality, reusability, and community. Ultimately this paper aims to contribute to the fields of creative language, humour, and verbal irony, and encourage further research into online verbal irony beyond irony markers. Novel data will be presented at the conference.

**Language and
Society 2023**

Session 2A: Phonetics II

Wednesday 29 November, 1.35pm-3.15pm
Room 507-G125
Chair: Justine Hui

Glottalisation, glides and r-sandhi: Resolving vowel hiatus in London English

Andy Gibson, Devyani Sharma, Paul Kerswill
Queen Mary University of London

Wed
29 Nov
1.35pm
507-G125

Multicultural London English (Cheshire et al. 2011) arose in working class areas of London around thirty years ago through intensive, multiethnic social contact (Kerswill & Torgersen 2021). The loss of allomorphy in the articles is one of its features, with traditional variants <an> and [ðiː] losing ground to the use of glottalization at these word boundaries (Britain & Fox 2009; Fox 2015; cf. Meyerhoff et al. 2020; Cox et al. 2022). These changes in the pre-vocalic articles may relate to wider changes in the resolution of vowel hiatus (that is, strategies for avoiding vowel-vowel sequences across boundaries), including at sites of potential linking- and intrusive-/r/. In Australian English, glottalisation is used more at sites of potential linking-r by speakers from ethnolinguistically diverse areas (Gibson et al. 2022). Glottalisation is also favoured before stressed vowels (Yuen et al. 2018) suggesting a boundary marking function (Uffmann 2007). Using preliminary data from a new project, Generations of London English, we explore changes in this system. Using trend data from young speakers recorded at two timepoints, twenty years apart, we present an analysis of a range of sites of potential vowel hiatus: pre-vocalic determiners, sites of potential linking- and intrusive-/r/, and cases of pre-vocalic /l/, where /l/-vocalisation leads to the insertion of [w] to resolve vowel hiatus. We consider the extent to which glottalisation appears as an alternative to traditional hiatus-breakers. We emphasise the importance of prosodic context, while exploring the role of social factors including ethnicity, gender and social class.

Exploring Phonetic Variation of VOT in a Bilingual Community: The Production of Stops by Hui-Mandarin Bilinguals.

Tao Qian

University of Canterbury

Wed
29 Nov
2.00pm
507-G125

This bilingual phonetic study investigates the VOT variation of word-initial Mandarin and Hui stops produced by Hui-Mandarin bilinguals. Its primary objectives are to explore in-depth VOT variation regarding social linguistic factors (age and gender), to investigate the bilingual differences in VOT production, and to assess the influences of language dominance on VOT. Participants in this current study were 28 Hui-Mandarin bilinguals, including 8 children, 10 adults, and 10 elderly individuals. Each participant was required to self-record 16 monosyllable words containing six stops in both Hui dialect and Mandarin. Mixed Effects Modelling, a robust statistical approach, was utilized in this study to examine the significance of differences in VOT. The findings are as follows.

1. Females consistently produced shorter VOT than males in both languages.

2. In comparison to children and the elderly, adults displayed longer VOT for unaspirated stops and shorter VOT for aspirated stops, though not significantly in all stops.

3. Significant differences in VOT were found between Hui dialect and Mandarin produced by the bilinguals.

4. Unbalanced bilinguals showing significant VOT differences between the two languages, while balanced bilinguals not.

The results confirm that the social factors were pivotal predictors for VOT variation. Moreover, findings from this study suggest that Hui-Mandarin bilinguals could separate the distinct phonetic systems in a manner different from monolinguals. Additionally, language dominance had discernible effects on bilinguals' VOT production, and unbalanced language use could boost the cross- linguistic differences in VOT.

Using Historic Borrowings in Te Reo Māori to indentify missing People.

Catherine Watson, Peter Keegan, and Andrew Mason
University of Auckland

Wed
29 Nov
2.25pm
507-G125

The Taranaki-based Parininihi ki Waitotara (PkW) corporation has millions of dollars in dividends owed to shareholders whose contact details are now incorrect. Finding these missing people, or their descendants, is complicated by inconsistent records which often vary between multiple Māori names, European names, and their diminutives. Biggs (1991: 67-68) states there are three ways in which people innovate names: creating a new word, assigning a new meaning to an old word, or borrowing For example, the Parihaka ploughman, Charles Wallace, is also known as Tare Wakaarere, Tare Warahi and Tare Wakawe (Buchanan 2018).

In this paper we outline the te reo Māori informed phonetic algorithms we have developed to match names and associated identifying data from multiple data sources. We have modelled the historic practice of 'borrowing' English words to create new te reo Māori words. While lists of borrowed words have been published (e.g. see Moorfield and Ka'ai (2011), Duval (1995)), our analysis of PkW historic records show that a range of different spelling variants can occur in the Māori form of a borrowed name (e.g. 'Teoti' and 'Hōri' for George). .Additionally there is the Taranaki/Whanganui variations in pronunciation: /h/ as a glottal stop, and /f/ as a glottalized [?w] (Harlow,2007) (e.g. the impact on 'Wherete', the borrowing for 'Fred'). To help us with the modelling of borrowing process for names, we are creating a borrowings corpus, which currently has 3522 unique listed borrowings.

Several studies have sought to provide rules for the historic borrowing process in te reo Māori. including Harlow (2005), Moorfield and Ka'ai (2011) and Degani (2012). However Degani (2012) noted these rules cannot provide a unique one-to-one mapping; since the Māori sound system is smaller than the English one there are homonymous borrowings (e.g. 'Peni' is a borrowing for 'Penny' and 'Benny'). Our research extends the 'rules' governing the creation of te reo Māori borrowings by taking a data-driven approach that quantifies the probabilities of these and other rules being followed based on the borrowed vocabulary. It utilises two pronunciation dictionaries we have developed for te reo Māori and New Zealand English. Excel and Python were used to create a flexible analysis toolkit for this analysis. Inconsistencies of name recording is not limited to PkW, thus the findings from this project have wider benefits to Māori community.

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**Language and
Society 2023**

Wed
29 Nov
2.50pm
507-G125

Exploring Multilevel Covariation in New Zealand English.
Gia Hurring
University of Canterbury

Recent work in sociolinguistics has started to explore variation beyond single variables and towards how multiple variables work together, known as covariation (Beaman & Guy, 2022). Covariation may be a source of social meaning in the forms of macrosocial identities (Guy, 2013), persona packages (Podesva, 2011; Tamminga, 2019), and sound change clusters (Brand et al., 2021). However, there appears to be inconsistent covariation results in the literature with much of the data coming from phonological and/or morphosyntactic variables, leaving other variables under-researched (Beaman & Guy, 2022; Nagy & Gadanidis, 2022). Only recently has more sophisticated methods been employed for dealing with multivariate data. In particular, Brand et al. (2021) find socially meaningful vowel covariation in NZE using Principal Component Analysis (PCA). However, this method has yet to be tested on non-vocalic variables. Thus, this research addresses the gaps in the literature by exploring covariation in thirteen segmental and four suprasegmental variables (i.e., two 'levels') using PCA on speakers of NZE. The results find that only the vowel variables cluster together consistently with no other clusters across or within the different levels. This suggests that most variables are working independently of each other. Reasons for this finding will be explored in the paper.

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Session 2B: Discourse II

Wednesday 29 November, 1.35pm-3.15pm
Room 507-G145
Chair: Simon Overall

Everything, everywhere, all the time: The complex case of relational talk at work

Meredith Marra, Mekennah Paterson
Victoria University of Wellington

Wed
29 Nov
1.35pm
507-G145

In the mid 1990s, members of the Language in the Workplace team investigated the gendered associations of relational practice at work (small talk, story telling, expressing approval, humour). We argued that stereotypical forms (pejoratively associated with women) were just some of the ways in which people-oriented functions were enacted, while many of the other forms avoided negative evaluation (Holmes and Marra 2004). Although there is now more widespread recognition of the important contribution of relational practice to effective workplace interaction, certain instantiations still appear to be understood as peripheral and othered. Recently there has been a noticeable increase in questions from the general public and media about small talk (a recognisable discourse activity for non-specialists). This interest has sent us back to the data to find evidence in practices. Our current focus is leadership where the significance of people-focused behaviours is well established by research. Moving beyond dominant, majority group contexts where their relevance has historically been questioned, we find plenty of evidence of relational practice as core to effective business practice. As a specific example, in the Māori contexts in which we have collected data over many years, relationally-focused strategies are more likely to be characterised in positive terms. In this paper we draw on recent data collected in a self-labelled 'bicultural' organisation in which relational practice regularly features as a way of enacting leadership, ethnicity and collegiality. Our aim is to trouble persisting gendered stereotypes in favour of the interactional achievements of these discursive choices.

Food, Football, and "Friendly Banter": Investigating Language, Gender, and Sexuality in a Sports Organisation

Stephanie Foxton

Victoria University of Wellington

Wed
29 Nov
2.00pm
507-G145

Sport, like any social institution, plays a key role in shaping society. One of the ways we see this is through the language used in and around sporting contexts. Using approaches from Linguistic Ethnography, in particular those developed by the Wellington Language in the Workplace Project, this research examines how wider social discourses related to gender and sexuality are reproduced in a sports organisation. Sports organisations are increasingly expected to play a wider role in society: governing bodies task them with fostering social inclusion and strengthening social cohesion both in local communities and in their own practices. By analysing institutional talk in these organisations (with a specific focus on gender and sexuality), we gain deeper understanding of how, and potentially why, discourses of transphobia, homophobia, and sexism are still prevalent within sporting contexts. Collaborating with a regional sports organisation in New Zealand over a period of 3 months, my 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 and debriefing interviews with participants. Initial findings suggest that despite policies and guidelines that emphasise inclusion, there are recurring discourses of othering in their workplace talk based on gender, age, and status. Moreover, observed institutional practices, particularly those centred around food (e.g., morning tea and group lunches) and social sport (e.g., local business league football), create in-/out-groups within the organisation, thus demonstrating further exclusionary conduct.

'An Attractive Woman': A Critical Multi-Modal Analysis of AI-Generated Images

Carla Moriarty
Victoria University of Wellington

Images 'communicate ideas about things' (Ledin & Machin, 2020:61), and I argue that AI-generated images, fuelled by AI's meteoric rise, exponentially increases our exposure to existing gender ideologies that maintain harmful stereotypes. Building on my previous work on the representation of gender in banking advertisements, my project aims to critically analyse the discursive prompts used to generate AI images with the intent to lay bare 'discourses buried' within them (Machin, Caldas-Coulthard & Milani, 2016:304). Data is sourced from Midjourney, the world's most popular text-to-image AI generator, launched in 2022 (Dawood, 2023). Its 16 million users can create professional-looking images in just a few clicks, with 964 million images produced so far (Valyaeva, 2023). The images, created via user prompts such as 'an attractive woman with long wavy hair [...] glamorous pin-ups, perfect anatomy, perfect posture' (Midjourney, 2023), are then 'reimagined' by Midjourney into a visual representation for users' consumption. My multimodal analysis will demonstrate how these images contribute to narratives that maintain and perpetuate existing 'gender regimes' (Connell, 2021:73) which then reinforce 'social relations of domination and exploitation' (Fairclough, 1995:44). As we stand on the precipice of what Bill Gates has called 'the most transformative innovation [of] our lifetimes' (2023), I argue that critical analysis of both the underlying prompts and resulting AI images should be an area of urgent focus. In doing so, this puts critical sociolinguists at the forefront of understanding and exposing how this revolutionary technology can be used as a discursive tool to sustain and promulgate gender hierarchies.

Our whakataukī for today: leadership and biculturalism in hybrid meetings

Reuben Sanderson

Victoria University of Wellington

During the Covid-19 pandemic, meetings in the hybrid setting became the norm and the use of video-mediated technologies proliferated. As people navigate the complexities of meaning-making when not physically co-present, the role of the leader becomes increasingly important for managing workplace collaboration. This paper explores collaboration amongst the senior leadership team in a bicultural, education-focused organisation, Māori and Pākehā, located in Te-Whanganui-a-Tara. This unique research site affords interesting opportunities to examine how senior leaders of an organisation negotiate how to collaborate.

To investigate this, I examine a series of 6 video-recordings of hybrid meetings at this organisation. I analyse this data through a Multimodal Interaction Analysis lens, which takes the mediated action as its central unit of analysis. Within this framework, I consider how multiple, simultaneously produced mediated actions connect to wider social discourses and practices that are made relevant in each meeting.

My findings suggest that, within this workplace, leaders' actions drew on discourses of pedagogy and education as resources for promoting and validating Māori knowledge. In particular, the use of whakataukī at the start of each meeting were used as a teaching tool, providing a pathway for Pākehā team members to educate themselves on tikanga and reo. Exploring the (co)construction of these discourses through a multimodal lens deprioritises the traditional focus on talk, affording more nuanced examinations of leadership identity to emerge.

Session 3A: Corpus linguistics and technology

Wednesday **29 November, 3.35pm-5.10pm**
Room **507-G125**
Chair: Jesin James

Intensifying expletive constructions in English tweets: the case of #wokeAF

Andreea Calude, Amber Anderson, David Trye

University of Waikato

The hashtag has seen increasing attention in the linguistics literature, in recognition of its prevalence on social media and in other modes of communication. In this talk, we report on a diachronic analysis of the hashtag #wokeAF in English-language tweets posted between 2012 and 2022. First, we trace the use of the word woke from verb to adjective, with novel uses arising in African American Vernacular English and spreading to standard English. We argue that such uses led to a novel construction: the intensifying expletive ([adjective + as + expletive]). Although examples of the intensifying expletive are listed in the Urban Dictionary, to our knowledge, this is the first linguistic analysis of the construction. Second, we analyse semantic interpretations and syntactic characteristics of the intensifying expletive #wokeAF, by documenting its use in tweets spanning eleven years. Analysis of the discourse and the context in which the hashtag appears allows us to uncover its novel use as a collective noun, which in our data, is linked to a strongly pejorative stance. In general, we find innovation in the semantic scope of the hashtag and versatility in its position and integration within tweets. Given the pervasiveness of the word woke in the public consciousness as evidenced by its occurrence in the popular press, we hope to fill a timely gap, while also tackling broader issues around the role of social media in language change.

**Language and
Society 2023**

Breasts are not just battlefields: Breast cancer and metaphors

Sara Malik, Andreea Calude, Joe Ulatowski

University of Waikato

Wed
29 Nov
4.00pm
507-G125

We analyse how breast cancer patients use metaphor to position themselves with respect to their illness. The medical humanities (Whitehead and Woods, 2016) already has a rich tradition of coming to appreciate how cancer is discussed by clinicians, patients, survivors, and others. Our research hopes to extend this ongoing discussion with a particular focus on patients' language by looking within and across two languages: English and Urdu. This research is part of a larger project (a PhD thesis) and in this presentation, we introduce preliminary corpus data and some initial findings from it.

Evaluating Whisper ASR for Assisted Transcription of New Zealand English Sociolinguistic Interviews

Robert Fromont, Lynn Clark

NZILBB, University of Canterbury

Wed
29 Nov
4.25pm
507-G125

The quality of state of the art Automatic Speech Recognition (ASR) systems has increased to the point where they may be used for computer-assisted transcript of sociolinguistic interviews. However, available systems have three drawbacks: 1. they can be costly to use, 2. they are often trained on American English and perform poorly on New Zealand English (NZE), and 3. they are available primarily in the form of cloud-based services, which cannot be used to transcribe recordings of participants who have not given consent to share their speech with third parties. In September 2022, OpenAI released an ASR system called Whisper, which they claim to have accuracy comparable to that of cloud-based systems. Whisper is free, and both the software and models are open-source. It can be run locally, without the need to share recordings with any third party. If it performs well with NZE speech, it addresses the aforementioned drawbacks of other ASR system, and could be used to dramatically speed up transcription of NZE sociolinguistic recordings, removing a barrier to research. We evaluate Whisper's performance with different corpora of NZE recordings, including child and ageing speakers, investigate the practical challenges of replacing fully manual transcription with correction of transcripts produced by Whisper, and measure the difference in speed and quality of the resulting transcripts.

On the Effect of L2 Learners' Use of ChatGPT on Their Multi-Word Expressions Learning: Does Proficiency Matter?

Kamal Heidari

Victoria University of Wellington

Wed
29 Nov
4.50pm
507-G125

Artificial Intelligence (AI) has already commenced to affect various areas of human's life. One area to which AI may make substantial contributions is education, specifically language education (Qu et al., 2022). Pertinent literature has demonstrated that AI has both merits (such as providing individual feedback) and demerits (such as ethics-related concerns) in education (Hwang et al., 2020). Despite the increasing number of studies on the contribution of AI to varying facets of language education, there are still many research avenues needing research one of which is examining the effect of ChatGPT, as a new chatbot of AI, on L2 learners' learning of Multi-Word Expressions (MWEs), as a highly demanding aspect of language for L2 learners, regardless of their proficiency level (Hinkel, 2023). This study, then, aimed to explore whether L2 learners' use of ChatGPT affects their MWEs learning. To this end, 181 L2 learners from three proficiency levels (56 low-level, 59 mid-level, and 66 high-level learners) were selected as the participants. In each proficiency level, the participants were divided into control and experimental groups where the control groups did not work with ChatGPT, but the experimental groups were provided with opportunities to use ChatGPT for MWEs learning, specifically collocations and idioms. After the treatment, form recall and meaning recall posttests were utilized to measure their learning whose results were then analyzed via ANOVA. The findings evinced that while ChatGPT significantly improved the L2 learners' MWEs learning in mid and high-level proficiency groups, it did not cause any significant improvement in MWEs learning of low-level proficiency group.

Session 3B: Descriptive and Educational Linguistics

Wednesday 29 November, 3.35pm-5.10pm
Room 507-G145
Chair: Mary Boyce

Comparative Analysis of Demonstrative Systems: A Case Study of Mandarin and the Xihe Dialect in Southern Anhui

Jingfei Ma

Te Herenga Waka | Victoria University of Wellington

In the southern region of Anhui province, China, two predominant dialects prevail: Wu Dialects and Jianghuai Mandarin. Wu Dialects find usage primarily in suburban and rural locales, while Jianghuai Mandarin dominates urban centers. A distinct feature distinguishing these dialects pertains to their demonstrative systems. Wu Dialects showcase a nuanced three-way system, whereas Mandarin employs a two-way differentiation—one for proximal reference and the other for distant reference. This study undertakes a comparative investigation into the demonstrative systems within Mandarin and the Xuzhen dialect, both spoken in Wuhu, a city situated in southern Anhui. The research meticulously documents the phonetic, syntactic, semantic, and pragmatic intricacies of the three-term demonstrative systems present in the Xuzhen dialect. Moreover, the study entails immersive fieldwork involving participant interaction to discern differentiations between the frequently used two terms and the less common third term. The research findings posit that the distinctive aspect characterizing the third term transcends mere spatial distance, instead being influenced by factors such as visibility and pragmatic considerations.

A description of interrogatives in Idi, a Papuan language

Fernando Miguez, Dineke Schokkin, Jonathan Dunn
University of Canterbury

Wed
29 Nov
4.00pm
507-G145

Idi is a language belonging to the Pahoturi River language group, a collection of five languages totaling approximately 4,000 speakers in southern Papua New Guinea (Evans et al., 2018). Idi is spoken by approximately 1,000 people across three villages in Papua New Guinea (Schokkin, 2021), but is under-documented and sparsely researched. The majority of the extant research on Idi has been carried out by a small group of researchers focusing primarily on its complex phonology and phonetics (Evans et al., 2018, Schokkin, 2021, Schokkin et al., 2021, Lindsey et al., 2022), with some discussion of verbal number (Schokkin, 2023) and complex predicates (Lindsey et al., 2022). Many areas of Idi grammar remain sparsely described, providing opportunity for novel research. This presentation provides a description of the way interrogatives are formed in the Idi language, focusing on question words and content interrogatives. The data was gathered over a series of field trips to Papua New Guinea, and consists of transcribed interviews of native speakers recorded between 2014 and 2019 stored in an online corpus (Schokkin, 2014). A combination of manual and automated analyses of the data on the corpus was carried out to identify and describe the features of Idi interrogatives. The results have uncovered that question words in Idi appear pre-verbally within a clause, taking the in-situ position of the Subject or Object they replace. Additionally the word ydi 'tl. what' also functions as a question marker that can be used for polar interrogatives. This research is the first attempt at codifying interrogatives in Idi, an under-researched area of the language.

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An advantage for L1 vs ESL literacy shown in a comparison of the Early Grade Reading Assessment (EGRA) surveys in PNG

Robert G. Petterson

SIL (PNG)

In the context of falling literacy standards, choosing the appropriate language for teaching a child to read for the first time may be more important than is realised by education policy decision makers. Data on literacy skills and possible factors that may favour or disfavour literacy acquisition was collected in four provinces of Papua New Guinea by the Read-PNG project from 2011-2013. This data was analysed and published in four separate reports by the World Bank (2014). In this paper I present a comparative summary of the data in these four reports, that reveals compelling empirical evidence that teaching a child to read in their own home language will later put them, on average, a year or two ahead of those who are taught to read only in English as a second language (which is the current policy in PNG). For example, in East New Britain Province, the language of literacy in schools was Kuanua up to grade 2, but by grade 4 the children there had an average English reading fluency of 84 correct words per minute (CWPM), whereas in other provinces where English was the only language of education, average reading fluencies were between 44 and 63 CWPM. Factor analysis also revealed that vernacular literacy was still being taught in a few schools in another province, with a huge positive impact for the children concerned. It also showed interesting counter-intuitive associations cropping up in provinces where an English-only education system was in use.

A Study of the Conceptual and Associative Structures in Maori English Pedagogical Implications for Culturally Responsive Education

Ahmadreza Mohebbi

University of Auckland

Wed
29 Nov
4.50pm
507-G145

This study delves into the intricate conceptual and associative frameworks present in Maori English, highlighting their significance for culturally responsive education. Drawing from educational philosophy and sociolinguistic theory, this research examines how Maori cultural conceptualisations shape linguistic structures and meanings in Maori English, the unique variety spoken by New Zealand's indigenous Maori people. By conducting a comprehensive literature review and employing qualitative analysis, the study investigates the interplay between Maori cultural values, worldviews, and language use, shedding light on how Maori English speakers express and negotiate their cultural identity within an English-speaking context. The findings offer valuable insights into the nuanced lexical, semantic, and syntactic features of Maori English. The pedagogical implications of this research are profound, as they inform culturally responsive educational practices. Understanding the distinct conceptual and associative structures in Maori English enables educators to design instructional strategies and materials that validate and empower Maori students, supporting their language use and cultural expressions. Furthermore, this study contributes to the broader field of sociolinguistics and language education by emphasizing the importance of recognizing and honouring diverse linguistic and cultural identities within educational contexts. It underscores the necessity of creating learning environments that celebrate linguistic diversity, promote cultural inclusivity, and foster meaningful engagement with Maori students and communities. By acknowledging and embracing the rich linguistic and cultural heritage of Maori English, educators can cultivate an educational setting that not only supports the academic success of Maori students but also nurtures their cultural well-being. This research encourages educational practitioners to prioritize cultural responsiveness and actively engage with the linguistic and cultural diversity of their students, establishing an inclusive framework for learning and growth.

Session 4A: Phonetics and speech technologies

Thursday 30 November, 10.25am-12.30pm
Room 507-G125
Chair: Andreea Calude

Developing a game app for phonetic transcription skills

Paul Warren
Victoria University of Wellington

Thu
30 Nov
10.25am
507-G125

Students new to transcription frequently struggle with the transition from spelling to transcription, making errors clearly influenced by learned behaviours in writing out spelled words. In order to provide training opportunities that involve elements of fun and competition, I have developed an app based on the Wordle game. In the Wordle game participants have six turns to guess a five-letter word and they get feedback at each turn about whether each chosen letter is in the word and in the correct position. The new app follows the same approach but uses the New Zealand English transcription system, PhoNZE [1], developed at Victoria University of Wellington and adopted in other programmes in New Zealand.

In this presentation I will describe the process of developing the app, known as PhoNZErdle [2], including i) identifying a modifiable app that could serve as a starting point and that is both open-source and allows non-standard characters (IPA symbols), ii) developing a dictionary of five-phoneme words, and iii) providing additional features such as a guide to the transcription system and key tips (a switchable facility that provides information about IPA symbols when the user hovers over them). Three versions of PhoNZErdle have been developed – a daily game (one new word per day), a rolling 'practice' game (new words are available when the previous has been completed), and a version that uses spectrograms both as an additional visual cue to word identity and to allow phonetics students to practise spectrogram-reading skills.

References

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[2] https://www.intro2psycholing.net/PhoNZErdle/

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The Development of a Japanese Vowel Pronunciation Aid Using Speech Acoustics

Jenice Sunny Kuzhikombil, Anahera Roestenburg, Justine Hui, Catherine Watson

University of Auckland

This research project investigates how to use speech acoustics to help second language learners improve their pronunciation, through the use of vowel formants and their relationship with articulation. We hypothesise that incorporating speech acoustics into language learning apps can help improve the learner's pronunciation better than current common-place apps. We have developed an application that allows second-language speakers to practise pronunciation of Japanese vowels. Learners get visual feedback on their production of Japanese vowels through their formants, which are plotted in a visualiser with a reference target derived from native speakers. We assess the effectiveness of the application based on two metrics - whether their pronunciation improves, and also whether they found the application intuitive and usable. We are using a pre/post-test design to assess the effects of the application training on the learner's pronunciation. Learners will be recorded reading out a word list before the training (pre-test) and after the training (post-test). The vowel formants will be drawn from the respective recordings and compared to see if the learner is closer to the target native speaker range.

Efficacy of Automatic Hate Speech Detection on Social Media in Aotearoa New Zealand

Sidney G.-J. Wong

Geospatial Research Institute, University of Canterbury

Thu
30 Nov
11.15am
507-G125

The rate of hate speech and offensive language on social media has increased in volume and tone since early-2023 [1]. The purpose of this study was to determine the efficacy of using transformer-based language modelling to monitor the rate of hate speech and offensive language over time. We retrained XLM-RoBERTa with 50,000 sample of tweets from inner circle varieties of English. We then trained a multi-class classification model using open-source hate speech training data [2]. We took monthly samples of 10,000 tweets originating in Aotearoa New Zealand and the United States of America. Surprisingly, the classification model did not identify any examples of hate speech from the monthly samples from either countries. The rate of offensive language remained stable across both locations. However, the frequency of offensive language was much higher in the US context. This finding stresses the limitations of open-source language training data. Furthermore, the training data was developed to account for the US context. The results highlight the need to develop training data for hate speech and offensive language detection specific to the social, political, and linguistic context of Aotearoa New Zealand.

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[2] Davidson, T., Warmsley, D., Macy, M., & Weber, I. (2017, May). Automated hate speech detection and the problem of offensive language. In Proceedings of the international AAAI conference on web and social media (Vol. 11, No. 1, pp. 512-515).

**Language and
Society 2023**

Identifying the Common Social Emotions of te reo Māori

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

Emotion recognition from speech is becoming increasingly popular these days. Even though several speech emotion recognition systems are built for indigenous languages, all these systems are developed based on emotions identified for other languages, specifically English. However, emotions can differ from language to language due to cultural variations. For the New Zealand indigenous language, te reo Māori, some studies reflect that the delicate nuances of emotions are missed when referenced in English. Hence, we cannot directly use English equivalent emotions for te reo Māori. Hence, a perception test was conducted to identify the common emotions in te reo Māori. First, the speech was collected from Te Hiku media recordings and University of Auckland library resources. Then, a preliminary annotation was performed to determine the emotionally rich durations of those recordings and a set of audio clips was chosen based on it. Then, the perception test was performed with some native te reo Māori speakers and asked them to write down the emotions they experienced in the selected audio clips. The most common social emotions in te reo Māori were identified by refining the responses of the perception test. The results will be discussed in the presentation at the conference.

Improving the visualisation of the training of TTS systems

Henry An, Jesin James, Catherine Watson, Binu Abeysinghe

University of Auckland

Thu
30 Nov
12.05pm
507-G125

Many modern TTS systems rely on training a Neural Network model on a dataset. This includes systems such as Tacotron2 and FastSpeech2 which can generate highly natural sounding speech. This project has investigated improving the visualisation of the training of such Text to Speech (TTS) systems. This project builds on previous work by Binu Abeysinghe and extends the system by adding visualisation of the vowel space over the duration of the vowel. The vowel space is an important characteristic of a language and can be used to determine when to stop training. The existing visualisation system takes the midpoint of each vowel and plots by formant frequency for each model visualised. This visualisation can be accurate for monophthongs but in the case of diphthongs it does not provide sufficient information. By extending the visualisation to include measurements along the entire duration of the vowel diphthongs can be accurately visualised as well. This allows the tool to give an understanding of the states of all of the vowels of the system and better determine when to stop training. This tool was created primarily using python and an evaluation of the tool has been performed. This project can help further the development of TTS systems especially in cases where the shape of the vowel space is more important, such as fine tuning from one accent of a language to another.

Session 4B: Morpho-syntactic structure

Thursday 30 November, 10.25am-12.30pm
Room 507-G145
Chair: Nicola Daly

Syntactic distribution of demonstratives in Yongning Na

Guojin Li
University of Auckland

Thu
30 Nov
10.25am
507-G145

This paper attempts to provide a syntactic analysis to account for the distribution of demonstratives in Yongning Na (YN). Demonstratives in YN can be prenominal (DEM N), postnominal (N DEM) and circumnominal (DEM N DEM) (Lidz, 2010). What is intriguing is the circumnominal pattern, where the head noun occurs between two identical demonstratives with the classifier following the postnominal demonstrative: [Dem N Dem Cl]. Paul&Potsdam (2023, henceforth P&P) provides a syntactic account for a somewhat similar pattern in Malagasy: [Dem N Num Dem]. They propose that NP moves to Spec,NumP due to EPP and the demonstrative, which originates in a projection immediately dominating NP, is probed by two heads, Num and D. The demonstrative is pronounced in two landing sites as Parallel Chains are present. This paper will explore the merits of extending P&P's (2023) analysis to YN. I show that, it can be argued that the DEM N, N DEM, and the DEM N DEM patterns in YN are derived through movement of NPs and demonstratives, and that the circumnominal pattern involves Parallel Chains. However, the presence of classifiers in YN makes it different from Malagasy, and presents a challenge as the Head Movement Constraint (HMC) will be violated if we follow P&P (2023) and assume that postnominal demonstratives in the YN patterns is pronounced in a position adjoined to Num. This paper will propose an analysis which keeps the essence of P&P's (2023), but modifies the mechanics based on the YN patterns to account for the distribution of demonstratives in YN without violating HMC.

Adjectives marked with -de and their distribution in Mandarin: evidence for topic and focus inside a nominal

Luyi Zhu

University of Auckland

Thu
30 Nov
10.50am
507-G145

This paper focuses on the three different positions of an adjective marked with de (A-de) inside a nominal (DP) in Mandarin: (i) [Dem Q Cl A-de N] (ii) [Dem A-de Q Cl N] and (iii) [A-de Dem Q Cl N]. The canonical order is (i), which is also associated with a neutral interpretation.

The Research Questions (RQ) for this paper are: (RQa) are the non-canonical orders in (ii) and (iii) semantically different from (i)? (RQb) Given that (i) is analyzed as [DP Dem [QP Q [ClP Cl [AdjP A-de [NP N]]]]] (Li 1998, Zhang 2015), how can we derive (ii) and (iii)?

This paper demonstrates that for (RQa), there are semantic differences between (i), (ii) and (iii). While (i) is a neutral interpretation, (ii) gives a contrastive reading of the adjective (e.g. beautiful vs non-beautiful), often associated with focus-interpretations. The order in (iii) can yield a contrastive focus reading like (ii), but can also have another interpretation where 'beautiful' is part of the background information, which is often linked with a topic. Taking such semantic differences into account, it is proposed for (RQb) that inside the nominal, there is phrasal movement of the A-de to Focus and Topic Phrases (akin to adjective movement in Bangla, Syed 2014). More specifically, this paper proposes that in (ii), the A-de moves to a Focus position below the Demonstrative; in (iii) the A-de raises higher than the Demonstrative, to a position linked with Topic as well as Focus features, and thus can be interpreted as a Topic or a Focus.

A cline of Indonesian-type voice: Insights from Javanese, Balinese, Acehnese and Indonesian

Hero Patrianto, Victoria Chen
Victoria University of Wellington

Thu
30 Nov
11.15am
507-G145

Indonesian-type languages such as Javanese, Balinese, Acehnese and Indonesian are conventionally considered to demonstrate voice-based split ergativity, where two Austronesian-type voices contrast in case alignment and co-occur with a third voice akin to Indo-European-type passives. New data show that much syntactic variation exists among languages with the so-called "Indonesian- type voice". Some fit well with the traditional A-approach to pivothood (e.g., Indonesian and Acehnese), whereas others are best analyzed as possessing a pivot position linked to topicalization (e.g., Javanese and Balinese). Support for this claim comes from four pieces of evidence: (1) Javanese and Balinese, but not Acehnese and Indonesian, impose a definiteness constraint on pivots, in which a pivot phrase must be definite-marked regardless of its linear order or thematic role; (2) Javanese and Balinese, but not Indonesian and Acehnese, allow a theme pivot to surface as reflexives, bound by by-phrase agents; (3) among the four languages, only in Javanese can PPs constitute a pivot; (4) In Indonesian and Acehnese, pre-auxiliary quantifier stranding is banned across all three voices, contra the observation from Javanese. In conclusion, the so-called "Indonesian-type" voice systems do not form a homogeneous group and are best viewed as a cline of voice systems in transition from Ā- to A-syntax. Via an in-depth investigation of Javanese and parallel comparative data with Indonesian, Acehnese, and Balinese, Javanese voice is distinct from that of Indonesian and Acehnese and is best analyzed as linked to topicalization, akin to Philippine-type voices, whereas Balinese exhibits an in-between voice system in which voice alternation shows both A-and Ā- properties.

Adjective Ordering Preferences in Mandarin: Furthering the Subjectivity Hypothesis

Yinqiu Bai

University of Auckland

Thu
30 Nov
11.40am
507-G145

The linguistic universality of adjective ordering preferences (AOPs) among languages has attracted substantial academic attention. The AOPs of English have been researched extensively (Scott, 2002, among others) for its conspicuous rigorous ordering rules for adjectives while that of Chinese has not been researched as comprehensively because of no such preferences regarding order (Aoun & Li, 2003). However, Shi and Scontras (2020) discovered that Mandarin Chinese did have a strict preference for adjective order due to the 'subjectivity' hypothesis by using the 'Adj-de Adj-de N' schema. This study drew inspiration from their research and investigated another commonly utilised pattern: 'Adj-de Adj N' to investigate whether subjectivity was a reliable predictor of AOP and to ascertain whether conjunctions and contextual factors prevented AOP. Researcher's introspection represented in four self-experiments: two naturalness tests, one production test and one context test, which sought to (1) investigate which two-adjective nominal pattern was more frequently used by a native speaker of the Mandarin language: 'Adj-de Adj-de N' (Shi & Scontras, 2020) or 'Adj-de Adj N'; (2) verify the impact of subjectivity on the AOP in the 'Adj-de Adj N' pattern; (3) examine the impact of the conjunction 'you... you... (and)' on a Mandarin speaker's AOP and (4) examine the AOP in dramatic real-life scenarios in the form of dialogues. The results showcased the existence of AOP in Mandarin that were predicted by subjectivity within the 'Adj-de Adj N' pattern. However, AOPs influenced by conjunctions and contextual forces led to non-rigid ordering.

Clause chaining and subordination in Aguaruna (Chicham)

Simon Overall
University of Otago

Thu
30 Nov
12.05pm
507-G145

Aguaruna, a Chicham language of north Peru, makes heavy use of clause chains, especially in traditional narrative texts. Clause chaining is defined as the use of strings of one or more clauses that are unspecified for some verbal grammatical categories (generally at least tense and mood), followed (or sometimes preceded) by a single fully specified clause. The underspecified clauses, called medial clauses, are dependent in the sense that they must have an associated fully specified clause, known as a final clause. This dependent status of medial clauses makes them similar to subordinate clauses, but semantically they are more like coordinate clauses, and consequently they have been treated as a third clause type labelled cosubordinate. The classic descriptions of clause chaining relate to Papuan languages, with typical properties including: temporally iconic ordering of the clauses with respect to the events they describe; switch-reference marking on the medial clauses; and lack of any separate coordination construction. Aguaruna has no means to coordinate fully specified clauses beyond simple juxtaposition, but also lacks any distinct adverbial subordination construction. The same clause types are used for adverbial modification and for clause chaining. This talk describes the dependent clause types of Aguaruna and situtates them in typological perspective, with reference to the clause chaining constructions of other languages and to the literature on subordination and cosubordination.

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Session 5A: Natural Language Processing I

Thursday 30 November, 2.00pm-3.15pm
Room 507-G125
Chair: Peter Keegan

Childhood exposure is not needed to build a Māori proto-lexicon

Wakayo Mattingley, Forrest Panther, Jennifer Hay, Jeanette King, Simon Todd, Peter Keegan

University of Canterbury

Thu
30 Nov
2.00pm
507-G125

This study focuses on the Māori proto-lexicon of adult migrants to New Zealand. A 'proto-lexicon' is a set of implicitly stored word forms without semantic knowledge. Previous research shows that non-Māori speakers in New Zealand, both adults (Oh et al., 2020; Panther et al., 2023) and school-aged children (Mattingley et al., in preparation) have well-developed phonotactic intuitions and proto-lexical knowledge. While we know that the ambient exposure to the language facilitates building up such implicit knowledge, we still do not know whether childhood exposure in early childhood is completely necessary.

We therefore conducted a web-based experiment with 273 immigrants who moved to NZ after they were seven. In the first task, participants judged how "good-sounding" 60 Māori non-words are, in order to assess their phonotactic knowledge of Māori. In the second task, we tested whether they could distinguish Māori words from phototactically matched non-words using 60 word/non-word pairs to assess their proto-lexicon size. Each stimulus word was presented orthographically to participants in the experiment.

The results reveal that (1) they have well-developed proto-lexical knowledge and phonotactics of Māori. (2) Their knowledge is greater than that of school-aged NZ children, indicating that early childhood exposure to the language is not necessary. We will discuss the effects of time in NZ and age of arrival in NZ on forming a Māori proto-lexicon. Overall, the results show that a proto-lexicon can be acquired in adulthood, and continues to grow with increased exposure to the language.

Auditory and Orthographic Knowledge in non-Māori Speakers' Protolexicons

Allie Osborne

University of Canterbury

Recent research has shown that non-Māori-speaking New Zealanders have a Māori protolexicon (Oh et al., 2020; Panther et al., 2023) which is the implicit knowledge of te reo Māori wordforms due to ambient language exposure. They also have phonotactic knowledge arising from statistical generalisations over this protolexicon. This is demonstrated with non-word wellformedness rating tasks wherein participant ratings of wellformedness correlate with underlying phonological and morphological probabilities.

The work on implicit knowledge of te reo Māori has so far relied on orthographic stimuli. Indeed, this is true of work on wellformedness judgements in general. I analyse the results of an experiment that attempted to replicate the wellformedness rating results reported in Oh et al. (2020), using auditory instead of orthographic stimuli. The phonotactic scores used by Oh et al correlate significantly with the auditory ratings, showing that New Zealanders can access protolexical knowledge to rate auditory stimuli in addition to orthographic stimuli. However, ratings differ between auditory and orthographic stimuli. Therefore, I examine a variety of different potential predictors to try and disentangle the different information used by raters for orthographic and auditory stimuli. For example, one idea tested is that listeners do not robustly hear vowel distinctions in auditory modalities.

Preliminary testing suggests that multiple different types of statistics contribute independently to participants ratings, and that the balance of these differs across orthographic and auditory modalities. This analysis contributes to the work on the non-Māori-speaking population's knowledge of te reo Māori, by providing some insight into the degree to which it is modality-specific.

The relationship between sonority dispersion principle and within-language probabilistic phonotactic distribution

Peiman Pishyardehkordi

University of Canterbury

Thu
30 Nov
2.50pm
507-G125

The worlds' languages contain a variety of cross-linguistic phonotactic patterns, in which certain sound sequences are more likely to occur in a language than others. Are these patterns also reflected as probability distributions within individual languages? We investigate this question in the context of sonority constraints on syllable formation.

Cross-linguistic patterns in syllable structure have been argued to be governed by sonority hierarchies. Sonority dispersion principle argues that "the simplest syllable is one with the maximal and most evenly-distributed rise in sonority at the beginning, and the minimal drop in sonority at the end. Syllables are increasingly complex to the extent that they depart from this preferred profile.". Simpler syllables are more cross-linguistically common than complex syllables. For example, plosive + vowel syllables are more cross-linguistically common than glide + vowel syllables.

We also know that in addition to categorical constraints on their phonology, languages also contain probabilistic phonotactic patterns within the sequences that they allow. Amongst their legal phonological sequences, some sequences tend to be over-represented, and some sequences under-represented.

If cross-linguistic patterns are also reflected as within-language probabilistic constraints, we can hypothesize that in languages that allow both simple and complex syllables, the simplest syllables will be the most frequent.

Preliminary results show that a significant correlation exists between the sonority complexity and bigram type frequency (less complex is correlated with more frequent) for the 8 languages studied. These findings suggest that sonority dispersion principle as a cross-linguistic universal can also manifest within-language probabilistic distributions of segment sequences within syllables.

Session 5B: Bilingualism

Thursday 30 November, 2.00pm-3.15pm
Room 507-G145
Chair: Jeanette King

Conceptual Transfer in Mandarin-English Bilinguals' Usage of IN, ON LI and SHANG

Jiahan Xu

Victoria University of Wellington

Using a second language (L2) involves more than word-to-word translation, which often fails to capture intended meaning in the target language. Contrasting meanings in spatial usages of English IN and ON and Mandarin Chinese LI and SHANG demonstrate this process well, making them ideal candidates for probing cognitive factors at play in L2 use. Studies exploring L2 conceptual transfer have gathered empirical data by having English or Mandarin speaking individuals use these prepositions to describe two-dimensional line drawings depicting different spatial relationships. The results show that Mandarin L1 English L2 speakers make choices in their L2 which suggest L1 influence. However, this research was unable to distinguish whether this was an effect of translation or of cognitive transfer because their stimuli did not distinguish among various spatial relations captured by these prepositions, such as physical containment or relative size.

To address this limitation, a survey was designed featuring 140 sets of photos illustrating various spatial scenarios evoking diverse spatial attributes. Two tasks were created. A sentence completion task asks for a preposition to complete a sentence describing each picture. This allows for an examination of general factors such as the nature and the relative position of the objects involved. The second task includes appropriateness ratings of different prepositions and pictures, delving into spatial attributes such as animacy, shape, and relative position, external force. Examining responses from L1/L2 English or Mandarin Chinese speakers will reveal whether spatial attributes affect preposition choices among these language users. More details of this survey and preliminary results will be presented.

Kenne mer nit, bruche mer nit, fott domet – Attitudes towards the Cologne Dialect within Cologne

Niklas Alexander Pohl

University of Waikato

The dialect of Cologne is a deeply ingrained aspect of the city's cultural landscape, especially during the annual Carnival festivities. Previous studies focused on the cultural usage of the Cologne dialect, but its status among the citizens of Cologne had not yet been the focus of any such research. This study investigated that status with a matched-guise approach with four recordings. The participants were asked to rate the four recordings on 6-point Likert-scales on ten different characteristics. These characteristics were deemed to reflect an assessment of the speakers on a personal basis as well as in relation to the speakers' societal status. Further, the participants were asked to fill in a demographic questionnaire about themselves and the places they have lived in. There were 61 participants in total. A comparison between the Cologne dialect and a more standardised dialect from the same region revealed that the Cologne dialect was rated significantly lower despite its role in the cultural landscape. However, positive correlations were found for the rating of the Cologne dialect in relation to participants' age and their time lived in Cologne. These results indicate differences in the importance of the dialect among the different age groups. Specifically, younger people seem to have a weaker connection to the Cologne dialect than older citizens, but this connection may deepen over time in accordance with the years they have lived in the city. This might demonstrate how the Cologne dialect and the culture surrounding it become more accessible over time.

Dwy Iaith, Reo Rua: An Exploration of Dual Language Picturebooks in Aotearoa New Zealand and Wales

Nicola Daly, Siwan Rosser, Ilid Haf

University of Waikato

Research has begun to unpack the complexity and potential impact of picture-books featuring multiple languages with regard to reflecting, supporting and growing linguistic diversity in families and educational contexts (e.g., Domke, 2019; Daly, Kleker and Short, 2022; Haf, 2019; Naqvvi et al, 2013; Zaidi, 2020). Furthermore, studies (Daly, 2016; Daly, 2017; Daly, 2019; Vanderschantz, Daly & San, 2022) reveal how the design of dual language texts can uphold or subvert dominant language ideologies. In order to explore approaches to the function of dual language picturebooks in bilingual settings, we offer a comparative analysis of the range and variety of dual language picturebooks in two contexts of linguistic marginalization and recent revitalisation, Aotearoa New Zealand and Wales. Our findings indicate the different positioning of Cymraeg (Welsh) and te reo Māori in relation to English and suggest the need for further research on how children and adults respond to dual language picturebook formats in relation to their attitudes to language and language learning.

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Session 6A: Natural Language Processing II

Thursday 30 November, 3.35pm-5.10pm
Room 507-G125
Chair: Catherine Watson

Syllabification, sonority theory, and Blackfoot

Donald Derrick, Peiman Pishyar-Dehkordi

University of Canterbury

Thu
30 Nov
3.35pm
507-G125

Here we show that syllabification in Blackfoot, an Algonquian language spoken in northern Montana and Southern Alberta, can be explained entirely using phonetically grounded principles. This is not possible with traditional sonority theory because even the supposedly universal division of sonorant vs non-sonorant does not allow for the identification of Blackfoot syllable structure (see for example [i .kʼm. s .pi.ka .ps.si] iikómsspika'pssi 'he is hard to take care of'). Instead, we present evidence that four partially independent signals are needed to understand Blackfoot syllabic structure. 1) Acoustic amplitude identifies vocalic nuclei. However, 2) airflow is needed to identify vocalic vs. nasal nuclei as nasals have the same duration and amplitude as vowels in Blackfoot. In addition, 3) duration identifies fricative (particularly /s/) syllable nuclei, and finally 4) some word-final syllables are produced only visually. These four speech signals interact to phonetically ground the syllabification system of Blackfoot, and may point us towards a revitalization of sonority theory along a multi-signal and multi-modal framework.

**Language and
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Exploring sound symbolic associations of pitch: Effort Code associations

Sasha Calhoun, Paul Warren, Elena Heffernan, Joy Mills, Jemima Agnew

Te Herenga Waka | Victoria University of Wellington

Thu
30 Nov
4.00pm
507-G125

Pitch has long been claimed to have sound symbolic associations, which influence pitch meanings (Ohala, 1983). While the Frequency Code is well known (association of pitch level with body size), there has been less attention to other associations, such as the Effort Code, i.e., association of greater articulatory effort with greater arousal and meanings such as surprise or importance (Gussenhoven, 2004). Some previous research has shown pitch meanings consistent with the Effort Code. Chen et al. (2001) showed emphasis was reliably indicated by pitch span (i.e., the size of a pitch excursion) rather than pitch register (the overall pitch height), which they attributed to the Effort Code. Novák-Tót et al. (2017) showed dramatic pitch movements associated with greater charisma, although female speakers made larger movements than male for equivalent charisma ratings. To our knowledge, however, no work has looked at the pitch-effort association itself. We use the Implicit Association Task (IAT) to test implicit associations of pitch with effort, using stimuli differing in either pitch span or register. Participants categorised low and high pitch stimuli and stick figures portraying low and high effort activities. They used either the same buttons for low pitch/effort and for high pitch/effort (consistent condition), or opposite buttons (inconsistent condition). Response times showed a significant consistency effect, both overall and for pitch span, but not for register. This is consistent with the previous findings for emphasis, and supports that this is sourced in the Effort Code. We also explore potential gender and age related differences in Effort Code associations.

L1 and L2 processing of plausible and implausible English passives

Stephen Skalicky, Victoria Chen
Victoria University of Wellington

Thu
30 Nov
4.25pm
507-G125

We investigated misinterpretation effects during the reading of implausible English passive sentences among English L1 and L2 speakers. We collected data from monolingual English speakers, Mandarin Chinese speakers of English, and Japanese speakers of English. We measured processing and comprehension of plausible and implausible English passives containing a by-phrase using a self-paced reading method. Processing measures included word reading times in two regions of the stories read by participants: the passive sentence containing the by-phrase and a spillover sentence. Comprehension was assessed by asking participants to choose the agent of the passive sentence (i.e., who questions). We expected monolingual English speakers to be strongly influenced by the agentive use of by, leading to misinterpretation effects for the implausible uses which placed the bystander event participant as the agent. We further anticipated misinterpretation effects among the L2 speakers, but alongside an expectation that such effects would be moderated by L1 structures and L2 English proficiency. Specifically,

Our results supported some but not all of our predictions. Results of Bayesian multilevel regression models indicated misinterpretation effects for all participants when reading the implausible stories. These effects were strongest for English monolinguals, followed by Japanese L1, then Mandarin L1. However, there were no clear differences between the L2 groups, initially suggesting L1 structures did not play a role. At the same time, processing was linked to comprehension, but only for English monolinguals and Mandarin Chinese participants of average or higher L2 English proficiency. We discuss the implications of these results for several theories of L1 and L2 sentence processing.

**Language and
Society 2023**

Session 6B: Language issues beyond structure

Thursday 30 November, 3.35pm-5.10pm
Room 507-G145
Chair: Brooke Ross

Te Kōhanga Reo Inspired Indigenous Language Revitalization in Taiwan: Challenges and Prospects

Karen Huang

University of Auckland

Thu
30 Nov
3.35pm
507-G145

Indigenous languages in Taiwan are in danger due to decades of Mandarin-only policies. As Taiwan underwent democratization and liberalization in the 90s, efforts have been made to revitalize these minority languages. A shining example comes from Aotearoa, where the success of Te Kōhanga Reo has been praised as a way to save endangered languages. This study delves into three Taiwanese initiatives aimed at transplanting the Kōhanga Reo model: the 'Taipei language tests', 'immersive Indigenous language preschools', and 'tribal cooperative educare service centres'. Employing critical discourse analysis, this study explores language policies, literature, and public discourse about these efforts, evaluating the impact of these revitalization efforts within Taiwan's sociocultural landscape.

The outcomes reveal a stark contrast with the Māori experience. Firstly, the Taiwanese initiatives follow a top-down language planning approach, consequently hampered by limited family engagement and reduced effectiveness. Secondly, governmental funding relies on an output-based framework, which has led to a lot of bureaucracy, deterring community workers due to diminished autonomy. Lastly, the top-down policy fixates on linguistic revival, neglecting holistic cultural and communal enrichment. All these issues point to the fact that these revitalization efforts were led by the government without truly understanding what Indigenous Taiwanese people really needed.

In conclusion, saving Taiwan's endangered languages goes beyond just teaching words – it encompasses cultural vitality and grassroots engagement. The study sheds light on the imperative for policies rooted in genuine community participation and a comprehensive understanding of Indigenous Taiwanese desires.

Relationships between language and pragmatics across the early development of typically developing children and those with complex developmental disorders.

Susan Foster-Cohen, Jayne Newbury, Toby Macrae
New Zealand Institute of Language, Brain and Behaviour, University of Canterbury

While work in language acquisition emphasizes the power of pragmatically effective communication to support the development of linguistic resources of expression, we still know little about the interplay between these two developments in early L1, at either the group or individual levels across time, in either neurotypical children or those who are neurodevelopmentally delayed. This lack of information limits our ability to determine whether children with neurodevelopmental disorders are delayed or disordered in this respect. This presentation addresses this question using longitudinal and cross-sectional parent-report data from the administration of the MacArthur-Bates Communicative Development Inventory and the Language Use Inventory to parents of 87 children with delays and 79 children with typical development. It concludes that stage of development is more powerful than diagnosis at accounting for differences between children, supporting a delay rather than disorder position. While pragmatic development appears to be more advanced than linguistic development at most, but not all, stages of development, the analysis also suggests that there are fluctuating relationships between pragmatic abilities and linguistic resources over time. This fluctuation is found in all the children, suggestive of complex 'push-me-pull-you' relationships between the two developments. The analysis contributes to an understanding of variation in individual trajectories that is required for effective clinical practice.

The sociolinguistics of articulation: Finding the line between disorder and difference in Aotearoa/New Zealand.

Bianca Vowell

Massey University

Thu
30 Nov
4.25pm
507-G145

The field of clinical sociolinguistics brings together the complementary fields of sociolinguistics and speech-language therapy (SLT) and addresses such questions as 'is this speech sound production a difference or a disorder?'

Within the field of SLT research, valuable work is underway to understand cross-linguistic influences on speech and to describe speech development for 80 varieties including New Zealand English, Māori and Samoan (Multilingual Children's Speech, 2023). In Aoteroa/New Zealand, there is also growing recognition of the SLT's role within the Māori worldview on hauora, which challenges the very concept of a 'disorder' (Jones et al., 2023).

However, the application of sociolinguistic paradigms must go deeper. Concepts such as variation, stigma and the construction of identity through speech can account for why difference vs disorder might differ for people with dentalised vs lateralised productions of /s/. Similarly, an SLT who recognises the inequities associated with prestige varieties is more likely to recognise dialectally appropriate productions, for example with /θ/ and /ð/.

In my presentation, I will show that SLTs must have an understanding of these sociolinguistic concepts and of the role of SLTs in different worldviews in order to appropriately identify where the line between disorder and difference is for that individual.

References

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Language and Society 2023

Thu
30 Nov
4.50pm
507-G145

Global relationships between speech and music

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What, if any, similarities and differences between speech and music are consistent across cultures? Both language and music are found in all known human societies and are argued to share evolutionary roots and cognitive resources, yet no studies have compared similarities and differences between speech, song, and instrumental music across languages on a global scale. In this Registered Report, we analyze a novel dataset of 300 high-quality annotated audio recordings representing matched sets of singing, recitation, conversational speech, and instrumental music from 75 collaborators whose 1st/heritage languages span 21 language families, finding strong evidence for cross-culturally consistent differences and similarities between music and language. Of our six pre-registered predictions, five were strongly supported: relative to speech, songs use 1) higher pitch, 2) slower temporal rate, and 3) more stable pitches, while both songs and speech used similar 4) pitch interval size, and 5) timbral brightness. Our 6th prediction that song and speech would show similar pitch declination was inconclusive, with exploratory analysis suggesting that songs tend to follow an arched contour while speech contours tend to decline overall but end with a slight rise. Additional analyses, including of a separate dataset of 418 song/speech recordings from 209 individuals, confirmed that our conclusions are robust to potential biases, identified additional features that also consistently distinguish song from speech, and suggest that such features also vary along a "musi-linguistic" continuum in a cross-culturally consistent manner when including instrumental melodies and recited lyrics. Our study provides strong empirical evidence for the existence of cross-cultural regularities in speech and music.

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