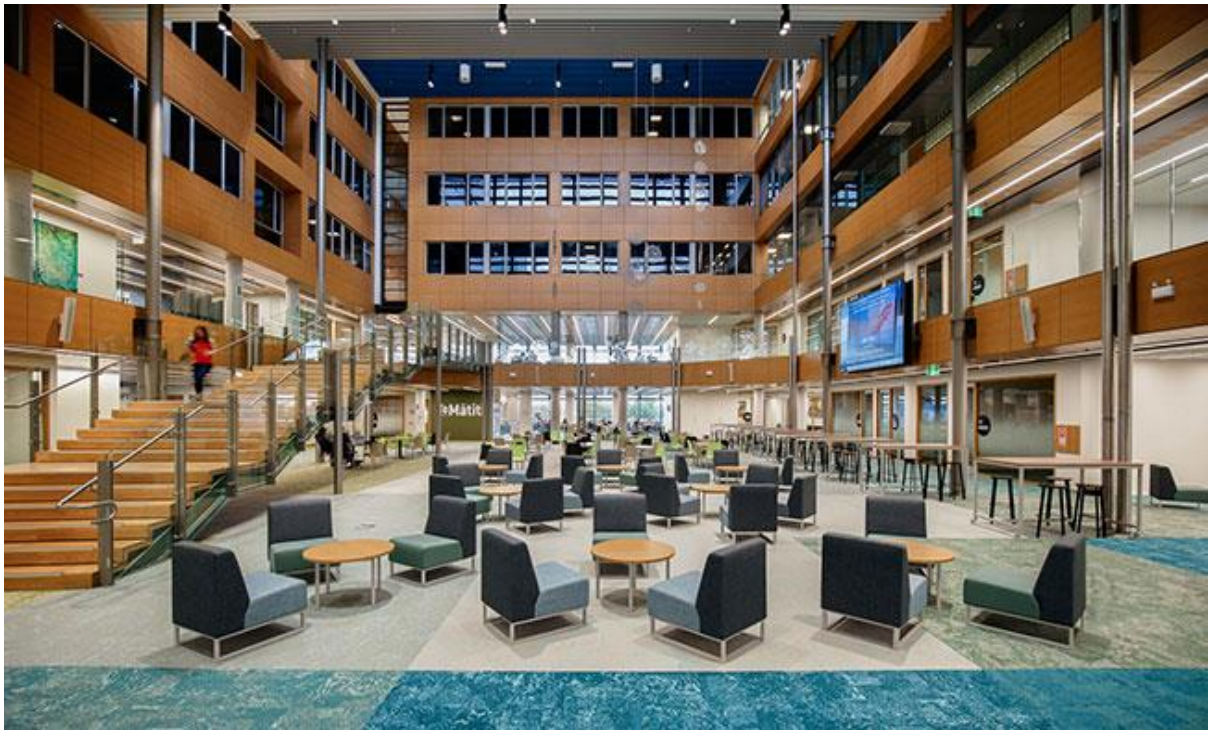


Conference **2022**

NZ Ling Soc

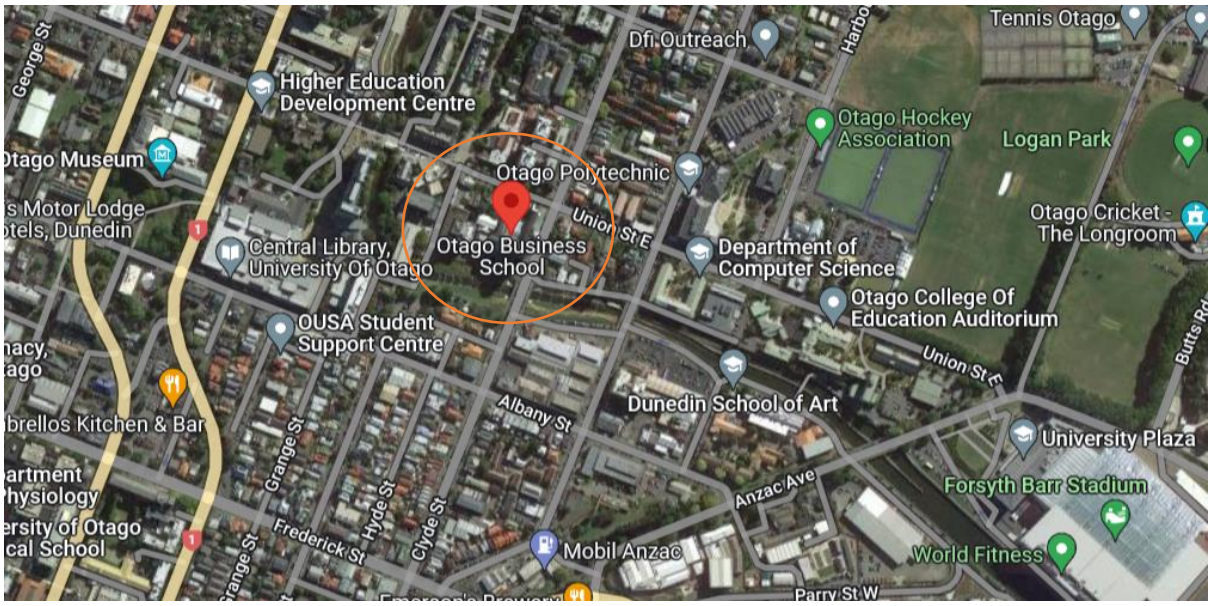
Haere mai

8-9 Dec, 2022

Locations

Other than the plenary lecture, the entire conference will take place in the Otago Business School (OBS), at the corner Union Street East and Clyde St. Enter on the ground floor. Reception and all catering will be on the mezzanine of the first floor. Presentation rooms are LG04 and LG05, Lower Ground of OBS. The plenary talk will be in Archway 1, a 5-minute walk away.

A full set of directions with pictures starts on Page 8.



COVID Guidelines

In general, the NZ Ling Soc follows ministerial recommendations to protect delegates. With COVID being present at academic conferences this season and the community at large, we do

<u>STRONGLY RECOMMEND WEARING MASKS IN THE LECTURE ROOMS UNLESS SPEAKING</u>

We have also chosen lecture rooms where we expect delegates to be able to seat at least one

Schedule at a Glance

Wednesday, 7 December – Narrative Workshop

Zoom Link: https://otago.zoom.us/j/98800102058?pwd=QlhheWZ4ZE5FUGxORC9laEw0ZjFYQT09
Meeting ID: 988 0010 2058 Password: 051078

Speaker	Talk
Introduction	What I mean by narrative, what you mean by narrative – and what we can do with that
Michael Cop	From Repeating Narratives to Rhetorical Tropes: Why is Jericho littered with blind men?
Michael Thames	Story's Gesture
Break	Break
Hunter Hatfield	What is narrative in psycholinguistics?
Simon Overall	Bridging the gap: a technique for narrative cohesion in Aguaruna (Chicham)
Valerie Guérin & Angeliki Alvanoudi	What can discourse markers tell us about narrative structure in Mavea?
Discussion	

Thursday, 8 December

Registration, Welcome, with Tea/Coffee	8:30 – 9:00
Session 1	9:00 – 10:30
Morning tea	10:30 – 11:00
Session 2	11:00 – 12:30
Lunch (on site)	12:30 – 1:30
Session 3	1:30 – 3:00
Afternoon Tea	3:00 – 3:30
Session 4	3:30 – 5:00
AGM	5:15 – 6:15
Conference Dinner (extra)	7:00 – 9:00

Friday, 9 December

Morning coffee and gather	8:30 – 9:00
Plenary Talk	**9:15 – 10:30**
Morning Tea	10:30 – 11:00
Session 5	11:00 – 12:00
Lunch (at participant discretion)	12:00 – 1:30
Session 6	1:30 – 3:00
Afternoon Tea	3:00 – 3:30
Session 7	3:30 – 5:00

Zoom link for Stream 1: Meeting ID: 950 0551 3759. Password: 984655

https://otago.zoom.us/j/95005513759?pwd=Uk5VenEwQVAveENqWjJyOXFqenpBQT09

Zoom link for Stream 2: Meeting ID 937 7120 7261. Password: 044966

https://otago.zoom.us/j/93771207261?pwd=N0NidW9Ydmk1TlZ1dFRlb0RwNmZJUT09

Timetable of Conference Talks

This is a hybrid conference with talks being presented through both Zoom and in-person in a single session. Grey shading on a talk indicates an online Zoom presentation. If all goes well, both online and in-person presenters should not need to adjust for changing format.

Thursday, 08 December

Stream 1	Stream 2
https://otago.zoom.us/j/95005513759?pwd=Uk5VenEwQVAveENqWjJyOXFqenpBQT09	https://otago.zoom.us/j/93771207261?pwd=N0NidW9Ydmk1TlZ1dFRlb0RwNmZJUT09
Meeeting ID: 950 0551 3759	Meeting ID: 937 7120 7261
Password: 984655	Password: 044966

Session 1, 9:00 – 10:30

Stream 1	Stream 2
Tongan and English in the linguistic landscape of downtown Nuku'alofa, the Kingdom of Tonga **Author**: Danielle Tod	Identity Construction in Online Learning Environments **Author**: Mayyer Ling
Recovering Poorly-transcribed Narrative Texts for Endangered Languages: A Computational Approach **Author**: Nathan M. White	The Higher the Learners' Willingness to Communicate, the Deeper Their Vocabulary Knowledge? An Empirical Study **Author**: Kamal Heidari
Where is everybody?: variation, change and the personal compound determinative doublets - *body* and *-one* in spoken and written New Zealand English. **Authors**: David Britain, Andrin Büchler	Task complexity and task type: L1 use and functions **Authors**: Mahnaz Entezari, Mojtaba Tadayonifar

Session 2; 11:00 – 12:30

Stream 1	Stream 2
Te reo Māori pseudowords: generating Māori pseudowords using the Character-gram Chaining Algorithm **Authors**: Jemma L König, Te Taka Keegan, Tirama Te Marino Bramley	Intersectional discourses of parents of transgender children in Aotearoa **Author**: Julia de Bres
Stories of the mind: investigating mental lexicon though a large-scale crowdsourcing study of word associations. The Japanese Small World of Words. **Authors**: Maria Telegina, Simon De Deyne	More than the sum of her parts: Presenting high femme nonbinary identity across multiple phonetic features **Author**: Jacq Jones
Lexical homoplasy as pattern: Computational confirmation of contact correspondence in the Philippines **Author**: Isaac Stead	Using lingcomm to design meaningful stories about linguistics **Authors**: Gretchen McCulloch, Lauren Gawne

Session 3; 1:30 – 3:00

Stream 1	Stream 2
Critiquing the Frequency Code: Sound symbolic pitch associations vary by gender and gender attitudes **Authors**: Sasha Calhoun, Paul Warren, Joy Mills, Jemima Agnew	The linguistics of Twitter hashtags: internal structure, discourse position and syntactic integration of hashtags in #Covid19NZ tweets **Authors**: Andreea Calude, Maebh Long, Jessie Burnette
Topical structure, amplitude variation, and F1 in single-speaker narrative recordings **Authors**: Joshua Wilson Black, Jen Hay, Lynn Clark, James Brand	Hungry for power, thirsty for clout: A Corpus-Based Approach to the DESIRE IS HUNGER Metaphor on Twitter **Author**: Julia McGrath
Rhythm and Rhyme in Japanese Rap Music: An Analysis of Techniques and Recent Developments **Author**: Lucy Pollock	Navigating Aotearoa New Zealand's Multilingual Social Media Landscape **Author**: Sidney GJ Wong

Session 4; 3:30 – 5:00

Stream 1	Stream 2
Imperatives and Variation in Brazilian Portuguese **Author**: Jasmim Drigo	The role of a proto-lexicon in intentionally learning a language **Authors**: Wakayo Mattingley, Forrest Panther, Jeanette King, Jennifer Hay, Simon Todd, Peter Keegan
Diminutives and suprafixes in Yuè and Pínghuà Chinese **Author**: Hilário de Sousa	Early literacy in children with and without language delays **Author**: Susan Foster-Cohen
Rethinking Indonesian-type passives: A view from Javanese **Author**: Hero Patrianto	Making sense of language contact in dual language picturebooks: Developing a method of analysis **Authors**: Julie Barbour, Nicola Daly, Kanauhea Wessels

AGM Meeting 5:15 – 6:15

LG104

Zoom link for Stream 1: Meeting ID: 950 0551 3759. Password: 984655

https://otago.zoom.us/j/95005513759?pwd=Uk5VenEwQVAveENqWjJyOXFqenpBQT09

(same as Stream 1)

Conference Dinner 7:00

Alley Cantina, 140 George Street , https://www.alleycantina.co.nz/

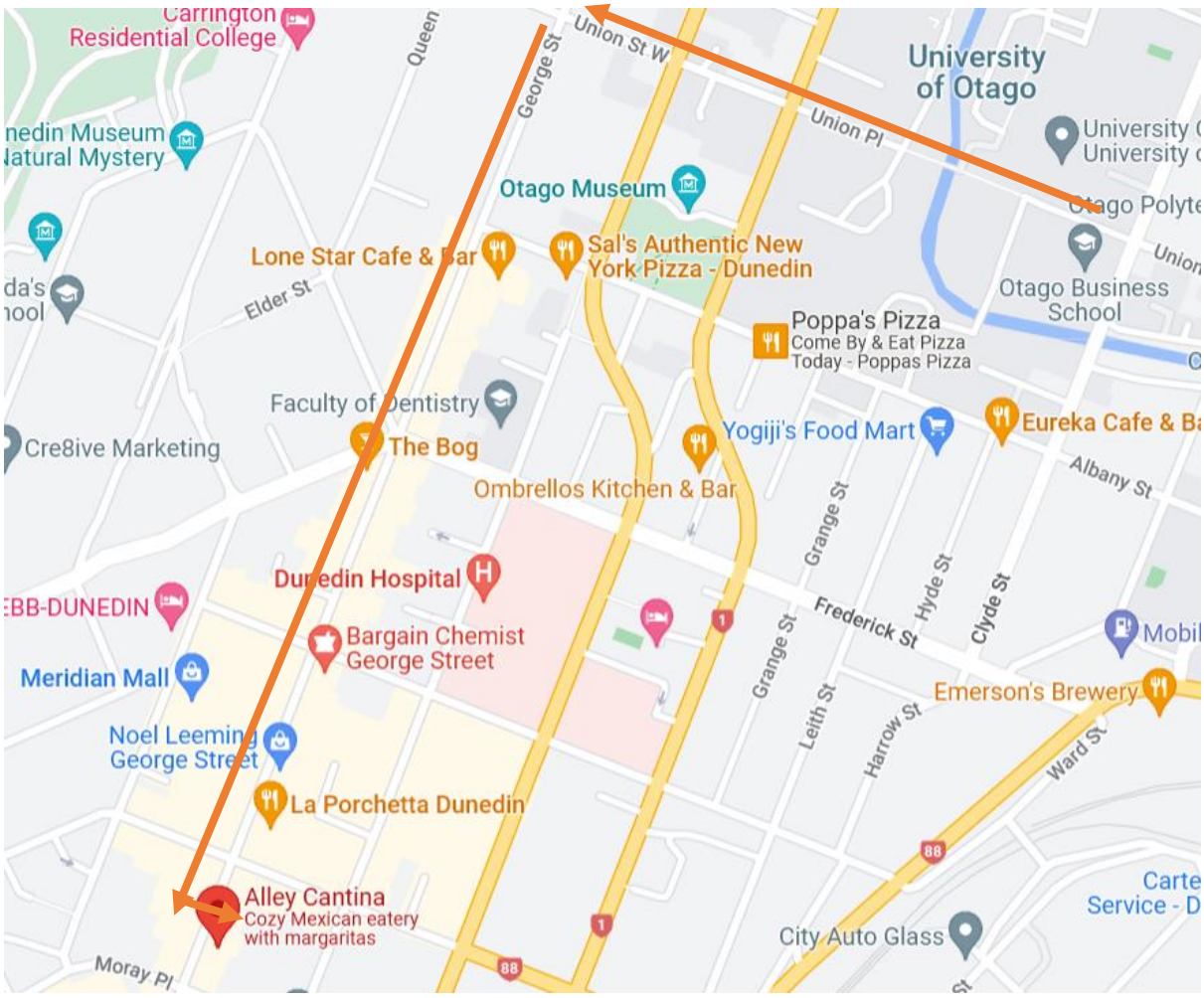
Conference Dinner Location

Alley Cantina is at 140 George Street in the town centre, a 15-20 minute walk from campus. As the name suggests, it is slightly back from George St in an alley.

The dinner covers food costs, but we are unable to purchase drinks. Therefore, margaritas must be at your own order.

The menu can be found here:

https://www.alleycantina.co.nz/menu



Friday, 09 December

Plenary Talk **9:15-10:30**

Professor Felicity Meakins, University of Queensland

Detecting direction: How Gurindji people draw on the earth's magnetic field

Like many First Nations languages, Gurindji expresses spatial relations according to cardinal directions, for example "put the flour north of the vegemite" or "there's a fly on your west shoulder". This attention to geocentric cues has cognitive effects that show that Gurindji people have an extraordinary mental map of the world anchored in the trajectory of the sun, but which is constantly in operation regardless of the time of day. One question is whether this unique attention to geocentric cues is reflected neurologically, i.e. whether Gurindji people have a hard-wired magneto-reception ability. Human neurophysiology has been shown to contain a geomagnetic sensory system. Small rotations in the magnetic field triggered drops in the brain's EEG alpha-wave power. However, no participants were consciously aware of these magnetic field shifts. All participants tested spoke English, which uses a left/right system, with cardinal terms marginal in everyday speech. In this talk I report on results from recent collaborative work with Caltech and Karungkarni Art showing that some members of the Gurindji community are consciously aware of the geomagnetic field, a first in human behavioural and sensory research.

Bio:

Felicity Meakins (ASSA) is Professor of Linguistics at the University of Queensland and a CI in the ARC Centre of Excellence for the Dynamics of Language. She is a field linguist who specialises in the documentation of First Nations languages in northern Australia and the effect of English on these languages. She has worked as a community linguist as well as an academic over the past 20 years, facilitating language revitalisation programs, consulting on Native Title claims and conducting research into First Nations languages. She has compiled a number of dictionaries and grammars, and has written numerous papers on language change in Australia.

Zoom Link: https://otago.zoom.us/j/92879343996?pwd=Z2dVZUdmNFgxYnhZUkpJRkVuUTc5UT09
Meeting Id: 928 7934 3996 Password: 365415

Session 5; 11:00 – 12:00

Stream 1	Stream 2
Interactive Techniques for Visualising Categorical Data in Linguistics **Author**: David Trye	Comparing Covid-19 Discourse between Japan and Aotearoa New Zealand in English-language News **Author**: Meimuna Zahido
Building a tool for text corpus analysis **Authors**: Hunter Hatfield, Emelia Hogg	Morphology vs etymology in understanding vocabulary **Author**: Laurie Bauer

Session 6; 1:30 – 3:00

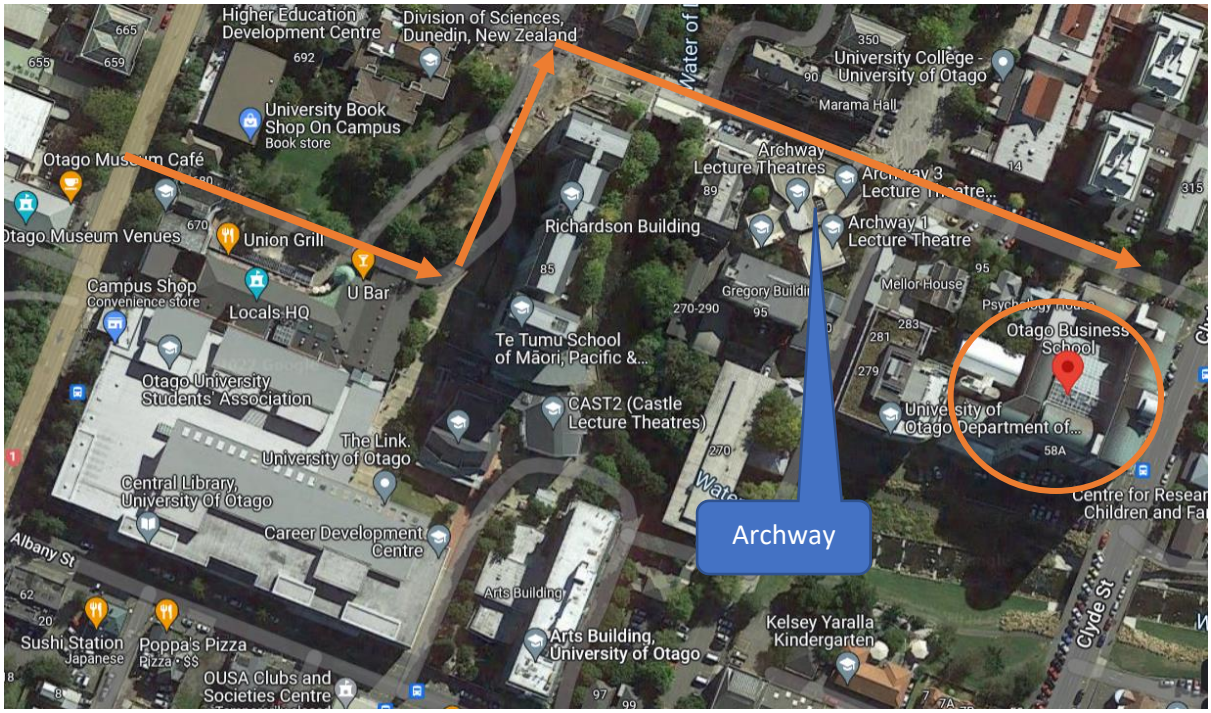
Stream 1	Stream 2
Is it a *kete* or a *basket*? Findings from a picture-naming task involving Māori loanwords used in NZ English **Authors**: Andreea Calude, Eline Zenner, Laura Rosseel, Hēmi Whaanga, Maryanne Garry	Playing by the Rules: Interruption and identity Construction in the 2020 US Presidential Debates. **Author**: Tony Fisher
Possession in Cook Islands Māori **Author**: Sally Akevai Nicholas	From Fractured Reflections to Narrative Coherence **Author**: Anne Feryok
A synchronic analysis of the use of passive voice in Māori narrative texts **Author**: Ngaru Wehi	50 Shades of Consent? A multimodal investigation of consent negotiation in the BDSM community **Author**: Deb King

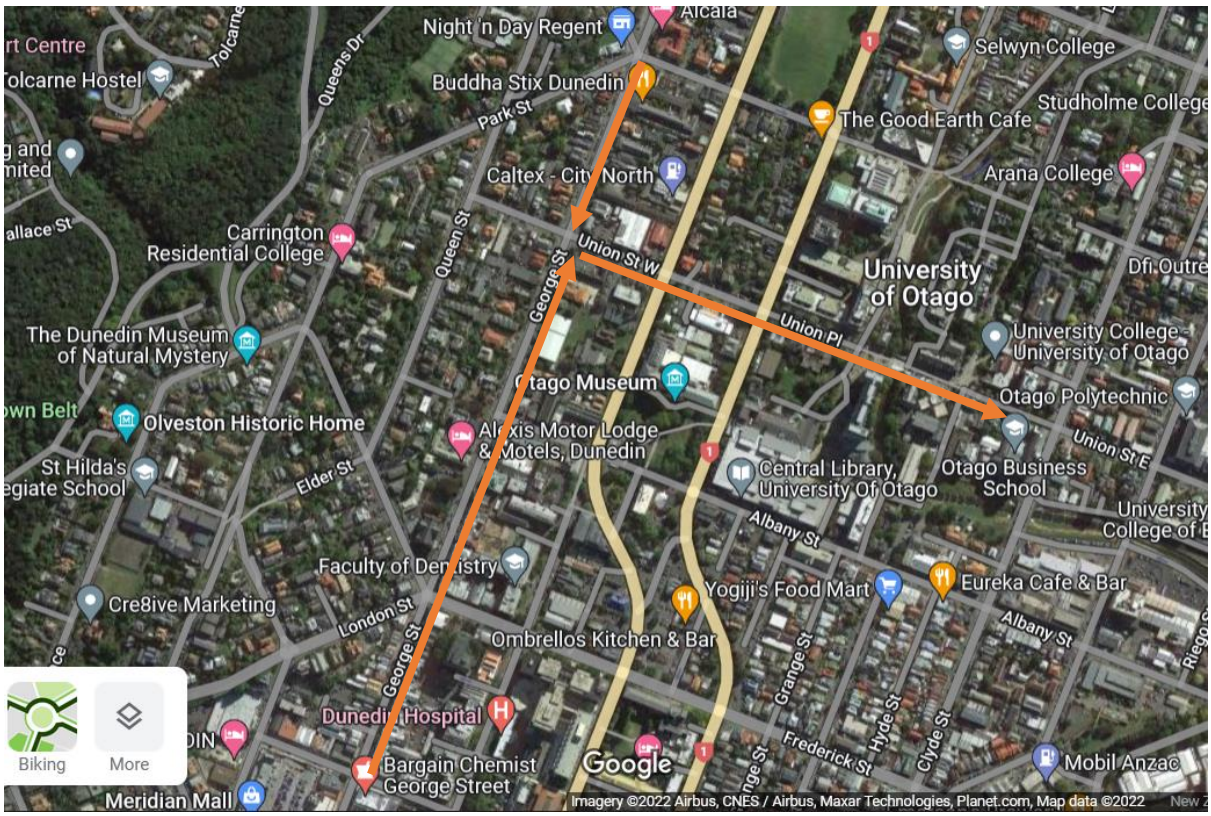
Session 7; 3:30 – 5:00

Stream 1	Stream 2
The Fall of Agent-Patient Alignment in Chhé'ee Fókaa (Northeastern Pomo) **Author**: Neil Alexander Walker	Towards a positive psychology turn in ethnic minority learner: The Role of Foreign Language Learning Enjoyment and Boredom on English achievement **Author**: Xian Zhao
What is and what isn't a frustrative? Defining and applying a comparative concept **Author**: Simon Overall	Conversation repair by basic level Japanese learners: case markers and second language acquisition. **Author**: Kaori Doi
Analysing Narrative Structure in Aguaruna (Chicham) **Author**: Eleanor Scoon	

Directions

There are many ways onto campus. If you are coming from George Street (with many hotels and shops), you might follow the directions along the arrows below.





A Journey to Otago Business School (OBS) and Archway (the Plenary)

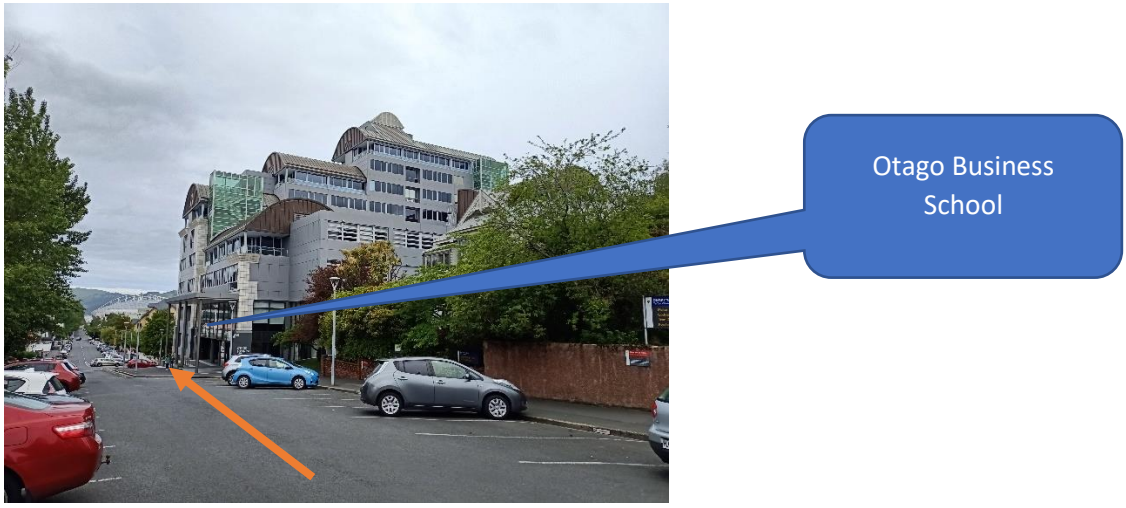
Once you are campus, coming down Union Street, you will get to this point with a sculpture (currently surrounded by construction) leading towards Archway and OBS.

Further down. The Archway lecture theatres are on the right with the big 3. Archway 1 is inside.

Plenary here, but in Archway 1 (it's one building, so all doors work)

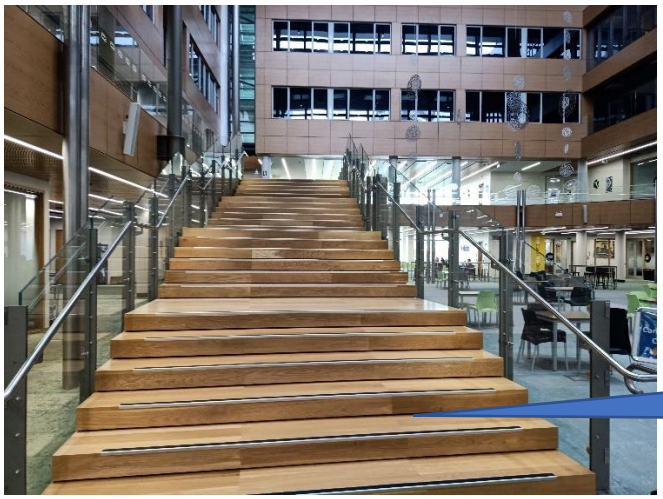
Continue over the walkway (straight down Union) towards OBS.

Cross a road

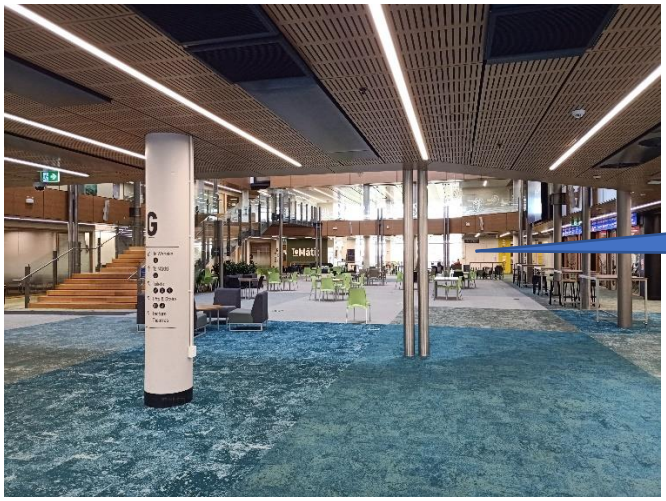

Otago Business School


Enter the main door, you will be on the ground floor.

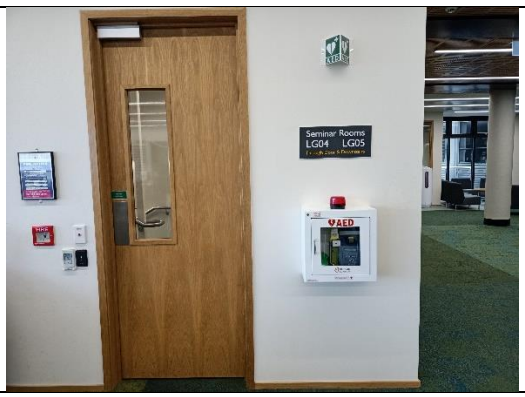
Within the ground floor lobby, stairs will be on the left (lift also available). These will take you to reception. If you continue past the stairs, on the right you will see signed for LG04 and LG05 rooms. The streams are down there.



Up these stairs for reception, teas, and lunch on Thursday.



LG04 and LG05 stairwell. Lift also available.



After going downstairs, there are a few turns to take in the corridors, but LG04 and LG05 are well marked.

Full Abstracts

Making sense of language contact in dual language picturebooks: Developing a method of analysis

Julie Barbour (University of Waikato), Nicola Daly (University of Waikato), Kanauhea Wessels (Victoria University of Wellington)

The lexicon of New Zealand English [NZE] is most clearly distinguished from other varieties of English in its inclusion of vocabulary from Aotearoa's indigenous language, te reo Māori (Deverson 1984: 4; Macalister 2005: viii). Such vocabulary can be observed in dual language picturebooks, which, in the context of Aotearoa take the form of texts written in New Zealand English, with te reo Māori woven into the narrative (Daly, 2016). Such picturebooks provide evidence of language contact phenomena (Daly & Barbour 2022). They provide a wealth of content to explore the language that picturebook readers are being exposed to, and how they are supported to make sense of potentially novel Māori words and phrases that are written into dual language narratives.

While picturebook research of the last decade has focussed on aesthetic properties, picturebooks as material entities, sociocultural representations within picturebooks, and their educational potential, particularly as regards diversity and inclusion (Arizpe 2021), a close linguistic analysis of how creators of dual language picturebooks present words and phrases from more than one language, and how these might make 'sense' to their readers has not been undertaken. In this paper, we present a method of analysis that we are developing to better understand dual language texts. Our method is framed as Critical Content Analysis (Short 2017), with the critical component being our interpretation of dual language picturebooks in Aotearoa New Zealand as indexing changing language attitudes towards te reo Māori (Daly 2021).

We draw on the study of linguistic 'borrowing' (e.g. Haspelmath & Tadmor 2009) to analyse the morpho-syntactic integration of te reo Māori into NZE. We also consider features of orthographic representation (cf. Daly, 2007; Levendis & Calude, 2019), and semantic domain analysis (e.g. Grant 2012; Hay et al. 2008). This allows us to identify the type of elements sourced from te reo Māori and how they are being woven into NZE both typographically and grammatically. We examine how comprehension is supported, considering in particular the first mentions of words/phrases, their sentential and discoursal contexts, and preceding, co-occurring and following illustrations.

We anticipate that our analysis will reveal a wide range of words/phrases from te reo Māori being woven into NZE picturebooks, and an inventory of techniques employed by writers and illustrators to support readers to make sense of te reo Māori in narrative texts. While we are drawing exclusively on NZE-Māori picturebooks for analysis, the method we are developing could be employed to analyse books and texts from other linguistic contexts.

References

Arizpe, Evelyn. 2021. The state of the art in picturebook research from 2010 to 2020. *Language Arts*, *98*(5), 260-272.

Daly, Nicola. 2007. Kūkupa, Koro and kai: The use of Māori vocabulary items in New Zealand English picture books. *New Zealand English Journal*, 21, 20-33.

Daly, Nicola. 2016. Dual Language PictureBooks in Māori and English. *Bookbird, 54(3)*, 10-17.

Daly, Nicola. 2021. "Picturebooks as a Source for the Study of Language Beliefs and Attitudes in Aotearoa/New Zealand." Paper presented at the the 8th International Conference of European Network of Picturebook Research, October 3-4, University of Te Aviv, Israel.

Daly, Nicola & Julie Barbour. 2022. Using dual language picturebooks to teach language contact phenomena in a tertiary context. *International Journal of Bilingual Education and Bilingualism*, 1-15. https://doi.org/10.1080/13670050.2022.2128637.

Deverson, Tony (1984) 'Home loans': Maori input into current New Zealand English. *English in New Zealand 33*, 4–10.

Grant, Lynn E. 2012. Culturally motivated lexis in New Zealand English. *World Englishes 31*(2), 162-176.

Hay, Jennifer, Margaret Maclagan, and Elizabeth Gordon. 2008. Dialects of English. *New Zealand English*, 65-83. Edinburgh University Press.

Haspelmath, Martin, & Uri Tadmor (Eds.). 2009. Loanwords in the world's languages: A comparative handbook. De Gruyter.

Levendis, Katherine & Andreea Calude. 2019. Perception and flagging of loanwords – A diachronic case-study of Māori loanwords in New Zealand English. *Ampersand 6.* https://doi.org/10.1016/j.amper.2019.100056.

Macalister, John. (Ed.). 2005. Introduction. *A dictionary of Maori words in New Zealand English*, viii-xxvi. Oxford University Press.

Short, Kathy G. 2017. Critical content analysis as a research methodology. In Johnson, Holly, Janelle Mathis & Kathy G. Short (Eds), *Critical content analysis of children's and young adult literature*, 1-15. Routledge.

Julie Barbour is a Senior Lecturer in Linguistics at the University of Waikato, specialising in the analysis of indigenous languages of Malekula Island, Vanuatu. Julie also undertakes sociolinguistic and educational research, with an emerging focus on the weaving together of te reo Māori and NZE in children's literature.

Nicola Daly is a sociolinguist and Associate Professor in the Division of Education, University of Waikato, where she teaches children's literature. Her research focus is multilingual picturebooks and their role in perpetuating and challenging language attitudes. She was a Fulbright New Zealand Scholar at the University of Arizona, USA in 2019/2020.

Kanauhea Wessels (Waikato) is a Lecturer in Te Kawa a Māui, the School of Māori Studies, at Victoria University, where she teaches te reo Māori. She is currently completing her PhD in Linguistics at the University of Waikato on the grammar of an indigenous language of Malekula Island, in Vanuatu.

Morphology vs etymology in understanding vocabulary

Laurie Bauer

In this paper, it is made clear that while etymology often uses morphological markers as indicators of an earlier meaning, there is a distinction to be made between the two from a synchronic point of view. While the distinction can be maintained, there are borderline cases, which are particularly important when it comes to using morphological information in language teaching (both for L1 and for L2 learners). The borderline examples are analysable but not productive. Although there are good reasons for using morphological information but not etymological information in teaching, the latter may nevertheless be useful when it comes to teaching technical vocabulary.

Laurie Bauer FRSNZ is emeritus professor of linguistics at Victoria University of Wellington. The *Oxford Reference Guide to English Morphology* (2013), written with Rochelle Lieber and Ingo Plag, won the Linguistic Society of America's Leonard Bloomfield prize. In 2017, he was awarded the Royal Society's medal for the Humanities.

Where is everybody?: variation, change and the personal compound determinative doublets -*body* and -*one* in spoken and written New Zealand English.

David Britain and Andrin Büchler, Universität Bern

For centuries, English has demonstrated variability in its pronominal quantifier system: both -*one* and -*body,* prefixed by *any-/no-/some-* and *every-*, are common in the contemporary written and spoken language and this variability appears, today at least, unsalient.

The existing literature on pronominal quantifier variability points to the following. Firstly, -*one* is more common in the written language than the spoken, suggesting that -*one* is deemed more formal (D'Arcy et al 2013). Secondly, there is a recent diachronic trend across Englishes towards -*one*, away from -*body* in the spoken language (D'Arcy et al 2013, Britain & Büchler 2023). Thirdly, while variability *in the written language* was once shaped very strongly by the choice of prefix, this prefix-based differentiation has diminished over time (D'Arcy et al 2013). In the spoken language, however, prefix-choice appears to remain an important constraint on variability, patterning differently in different countries. Finally D'Arcy at al (2013) found that New Zealand English used -*one* in the spoken language considerably more than the Englishes of the UK, USA and Canada, showing that the preference for -*one* there began in the 1930s and 1940s.

Gaps remain, however, in our understanding of the distribution of -*one* and -*body* in New Zealand English:

- To what extent is the spoken-written difference maintained in NZE, given that NZE has progressed so far towards -*one*?
- To what extent is there variability within written NZE, based for example on genre?
- To what extent is variability in spoken NZE shaped by social and linguistic factors?

We explore these in the *Wellington Corpora of Spoken and Written New Zealand English* (Holmes, Vine and Johnson 1998, Bauer 1993), each comprising one million words of NZE. We extracted 2132 tokens from the corpora, and coded them for a range of textual, linguistic and social constraints.

We found a preference for -*one* in both corpora, but it was significantly more dominant, as expected, in the written corpus. Genre was also significant, with the most formal scientific and official texts having significantly more -*one*, than, e.g. fiction. In the spoken corpus, monologue contained more -*one* than dialogue, and age and education were also significant predictors of variability. The results overall support and provide additional refinement to earlier research on the use of this variable in NZE: -*one* is found in more formal contexts (written over spoken, monologue over dialogue), is used by more educated speakers, and, over time, is becoming more frequently used in general. Linguistic factors, such as prefix, did not overall demonstrate significant effects, suggesting the emergence of an atypical paradigmatic cohesion.

References

Bauer, L. (1993). *Guide to the Wellington Corpus of Written New Zealand English*. Wellington: Department of Linguistics, VUW.

Britain, D. & Büchler, A. (2023). Is there anybody there?: a century of human pronominal quantifier variation in Norwich. Manuscript accepted for Festschrift publication.

D'Arcy, A., Haddican, B., Richards, H., Tagliamonte, S. & Taylor, A. (2013). Assymetrical trajectories: The past and present of –body/-one. *Language Variation and Change* 25: 287–310.

Holmes, J., Vine, B. & Johnson, G. (1998). *Guide to the Wellington Corpus of Spoken New Zealand English*. Wellington: School of Linguistics and Applied Language Studies, VUW.

David Britain is Professor of Modern English Linguistics at the University of Bern. His interests embrace language variation and change, varieties of English, dialect contact and attrition, new dialect formation, the sociolinguistics-human geography interface and the use of new technologies, such as smartphone applications, in collecting dialect data.

Andrin Büchler completed his MA in German and English Linguistics as well as Sociolinguistics at the University of Bern. In his PhD thesis, he focuses on processes of long-term accommodation in an L2 variety of Swiss German. His research interests are social dialectology, contact linguistics and phonetics.

Critiquing the Frequency Code: Sound symbolic pitch associations vary by gender and gender attitudes

Sasha Calhoun, Paul Warren, Joy Mills and Jemima Agnew, Te Herenga Waka – Victoria University of Wellington

High- versus low- voice pitch have long been claimed to have sound symbolic associations. For example, via the Frequency Code, a sound symbolic link between pitch and each of body size and sex is claimed to lead to affective associations of high pitch with submissiveness and low pitch with dominance (Ohala 1983, Gussenhoven 2004). While such associations appear widespread, the code assumes culture- and individual-specific ideological links, e.g. between submissiveness and femininity (e.g. see D'Onofrio & Eckert 2021, Winter 2021). We present an experiment using Implicit Association Tests (IATs, Greenwald et al. 1998) to explore implicit associations between voice pitch and the physical concepts said to underlie the Frequency Code: body size and binary gender; and crucially, how these vary according to the participants' gender and gender attitudes.

The IAT experiments were run online with 115 female and 120 male participants from the UK, Australia and New Zealand. Each participant completed two IATs assessing implicit associations between voice pitch (synthesised high vs. low pitch nonsense words) and two of gender (names associated with female vs. male gender, e.g. *Anna* v *Andrew*), size (small vs. large animals, e.g. *mouse* v *elephant*) and effort (not reported here). In an IAT, participants categorise stimuli from paired concepts (e.g. voice pitch and gender) on the same response keys. An implicit association is shown when participants are faster to categorise 'expected' pairings (e.g. high and female, low and male) than 'unexpected' (e.g. high and male, low and female).

Results showed that there were indeed implicit associations between each of gender and body size (i.e. high pitch with female and small body size, and low with male and large). However, these were stronger for gender than body size, and for male voices than female. Further, associations were stronger for male than female participants, and this interacted with concept, so that female participants did not show a significant association for size. We also measured participants' gender attitudes, using established surveys such as the Ambivalent Sexism Inventory (Glick & Fiske 1986). In general, participants with less egalitarian attitudes toward gender were slower, although this interacted in complex ways with pairing (expected/unexpected), concept and the participant's gender. We argue that each of these findings are consistent with pitch symbolism providing a common 'extra-linguistic' basis for linguistic meaning, but the strength and availability of such associations varying according to the listener's experiences, beliefs and the context.

References

Glick, P., & Fiske, S. T. (1996). The ambivalent sexism inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70(3), 491–512.

Greenwald, A.G., McGhee, D.E. & Schwartz, J.L.K. (1998). Measuring individual differences in implicit cognition: The Implicit Association Test. *Journal of Personality and Social Psychology*, 74: 1464–1480.

Gussenhoven, C. (2004). Paralinguistics: Three biological codes. In *The Phonology of Tone and Intonation* (pp. 71–96). Cambridge University Press.

Ohala, J. J. (1983). Cross-language use of pitch: An ethological view. *Phonetica*, *40*, 1–18.

D'Onofrio, A. & P. Eckert (2021). Affect and iconicity in phonological variation, *Language in Society*, 50(1), 29–51.

Winter, B. G. E. Oh, I. Hübscher, K. Idemaru, L. Brown, P. Prieto, & S. Grawunder (2021). Rethinking the frequency code: a meta-analytic review of the role of acoustic body size in

communicative phenomena, *Philosophical Transactions of the Royal Society B: Biological Sciences*, 376(1840), 20200400.

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The linguistics of Twitter hashtags: internal structure, discourse position and syntactic integration of hashtags in #Covid19NZ tweets

Andreea Calude, Maebh Long and Jessie Burnette, University of Waikato

As social media use continues to increase its presence in our lives, so does the language used on such platforms. One of the most salient features of social media discourse is the hashtag. Starting its life on Twitter nearly 15 years ago, the hashtag has seeped from online to offline communication and its use presents interesting challenges to linguistics theory. It is not clear whether hashtags are words, tags or something else altogether. It is also not clear what morphological process gives rise to hashtags.

This presentation provides an exhaustive analysis of 3,392 hashtags from 1,245 English-language tweets related to Covid-19 vaccines, each manually coded for various linguistics features (position in the tweet, grammatical function, syntactic integration and internal structure). The data come from the Twitter NZ Vaccine 2021 corpus which we put together by harvesting 4,701 English language tweets containing the hashtag ***#Covid19NZ*** and its variations (e.g. *#covid19nz*), and also the lemmas **VACCINE** and/or **VAX**. These tweets were extracted using Python code and the Twitter API, during August 2021 and November 2021. The large dataset was analysed using AntConc and a smaller subset of 1,245 tweets was manually coded for stance and various linguistics features. Tweets were selected from the larger corpus from each month with reference to key events, for example changes in vaccination policy. After choosing a range of dates, tweets were randomly and blindly selected from within this range using Excel.

Our findings suggest that hashtags are incredibly varied in their characteristics. However, while many possibilities are attested, statistical trends can be gleaned to show that most hashtags are likely to involve two component words, they function as nouns, imperative phrases or adjectives and they occur either at the end of the tweet or within the body of it (often in both positions). When hashtags occur within the body of the tweet, they are overwhelmingly syntactically integrated as either heads or modifiers. Regardless of the position occupied, hashtags have a dual role to play in the discourse: 1) adding semantic content (and sometimes, but not always, participating syntactically in the tweet) and 2) affiliating the tweet within topics of discourse or communities of online users. Regarding their linguistic status, we propose that hashtags fit the traditional classification of 'words', albeit with some minor modifications, but that the morphological process which gives rise to them is best kept separate from lexical compounding (we favour the notion of hashtagging, e.g. Caleffi, 2015).

References

Anthony, L. (2022). AntConc (Version 4.0.7) [Computer Software]. Tokyo, Japan: Waseda University. Available from https://www.laurenceanthony.net/software

Caleffi, P. M. (2015). The 'hashtag': A new word or a new rule? *SKASE Journal of Theoretical Linguistics*, *12*(2), 46–69.

Is it a *kete* or a *basket*? Findings from a picture-naming task involving Māori loanwords used in NZ English

Andreea Calude, Eline Zenner, Laura Rosseel, Hēmi Whaanga and Maryanne Garry

Word meaning is layered and multifaceted, imbued not just with semantic content (features and referential characteristics), but also with social meaning and cultural orientation. The present study is part of a three-year sociolinguistics research program, comprising four experiments (this being the first), whose broad aim is to study the acquisition of sociolinguistic meanings in language contact situations.

In this talk, we report findings from a picture-naming task, using a combination of pictures: 197 pictures from a normed dataset, Multipic Dataset (Duñabeitia et al., 2018) (obtained with permission) and 47 pictures (the New Zealand Picture Dataset), which we commissioned in order to represent concepts which NZ English (NZE) frequently borrows words from te reo Māori (e.g, *kete, hongi, kura*). The NZ Picture Dataset includes loanwords from various semantic categories: flora and fauna, kinship terms, physical objects.

Using online survey software, we conducted a picture naming task in which 50 participants (undergraduate psychology students) were shown a set of pictures and asked to name the word they would use to describe each picture. Each participant also filled in a background questionnaire, which was used to construct a Māori orientation index (for each participant). The results from this experiment were used to answer the following three research questions:

1. To what extent are NZE speaking respondents with a higher Māori orientation index more likely to select Māori loanwords when naming pictures depicting concepts that can be lexicalized by a listed Māori word in NZE and how does this compare with differences in naming agreement between the respondents for concepts that cannot be lexicalized by a Māori word in NZE?
2. To what extent is naming agreement lower for Māori concepts rather than for a control group of concepts that do not have a listed Māori loanword alternative?
3. To what extent do we find variation in the answers to RQ1 and RQ2 depending on the semantic field to which the concept belongs (fauna and flora, kinship words etc.)?

In addition to answering the questions above, the findings arising in this work will be used in two ways. First, the NZ Picture Dataset will be made freely available for NZ schools and language researchers (see Haitana et al., 2010 for discussion of need for such materials). Secondly, the findings will inform our next set of experiments, in which we plan to test the passive knowledge of common Māori loanwords of kiwi mainstream, primary-aged children and probe their general associations with these.

References

Duñabeitia, J.A., Crepaldi, D., Meyer, S.A., New, B., Pliatsika, C., Smolka, E., & Brysbaert, M. (2018). MultiPic: A standard set of 750 drawings with norms for six European languages. *Quarterly Journal for Experimental Psychology*, 71(4), 808–816. https://doi.org/10.1080/17470218.2017.1310261

Haitana, T., Pitama, S., & Rucklidge, J. J. (2010). Cultural biases in the Peabody picture vocabulary test-III: testing tamariki in a New Zealand sample. *New Zealand Journal of Psychology*, 39(3), 24–34.

Intersectional discourses of parents of transgender children in Aotearoa

Julia de Bres, Massey University

This talk presents the results of a research project exploring the intersectional discourses adopted by parents of transgender children in Aotearoa to support their children and resist gender-based oppression. Family support is protective for transgender youth, improving their wellbeing and fostering their resilience outside the home (Aramburu Alegria 2018). There is a growing body of research on parent experiences in this area, but it has overwhelming focused on trauma rather than resistance (de Bres 2022). Although there has been an intersectional turn in transgender studies in recent years (de Vries and Sojka 2020, Paz Galupo and Orphanidys 2022), this has not yet reached research on parents, with most participants to date being white North American middle-class mothers. This means we are not getting a representative picture of the diversity of parent experiences.

Existing research has pointed to a range of social discourses about childhood gender diversity that parents encounter, but our project is the first to analyse how parents respond to these from a discourse analysis perspective. Our research uses the method of reflective drawing (de Bres and Lovrits 2021, Lovrits and de Bres 2020), asking 20 parents of different cultural backgrounds, genders and sexual orientations in Aotearoa to draw their experience of parenting a transgender child and to discuss this in interview. Using critical multimodal discourse analysis (Rose 2016, Ledin and Machin 2020), we explore how the participants discursively construct their experience from their uniquely situated perspectives, as Māori, Pacific, Asian, Pākehā, female, male, non-binary, straight and queer parents. We argue that these perspectives reveal both challenges and benefits, reflecting the burdens of intersectional oppression, while fostering the parents' capacity for engaging in discursive resistance to advance their children's interests.

References

Aramburu Alegria, C. (2018). Supporting families of transgender children/youth: Parents speak on their experiences, identity and views. *International Journal of Transgenderism* 19(2): 132-143.

de Bres, J. (2022). Research on Parents of Gender-Diverse Children: From Pathologization to Affirmation. *LGBTQ+ Family: An Interdisciplinary Journal*, DOI: 10.1080/27703371.2022.2058669

de Bres, J. and V. Lovrits (2021). Monolingual cringe and ideologies of English: Anglophone migrants to Luxembourg draw their experiences in a multilingual society. *Journal of Multilingual and Multicultural Development*, DOI: 10.1080/01434632.2021.1920965

de Vries, K. M. and C. J. Sojka (2020). Transitioning gender, transitioning race: Transgender people and multiracial positionality. *International Journal of Transgender Health* 23:1-2: 97-107.

Ledin, P. and D. Machin (2020). *Introduction to Multimodal Analysis* (2ed). London and New York: Bloomsbury.

Lovrits, V. and J. de Bres (2020). Prestigious language, pigeonholed speakers: Stances towards the 'native English speaker' in a multilingual European institution. *Journal of Sociolinguistics* 25,3: 398-417.

Paz Galupo, M. and J. C. Orphanidys (2022). Transgender Black, Indigenous, and People of Color: Intersections of oppression. *International Journal of Transgender Health* 23(1-2):1–4.

Rose, G. (2016). Visual Methodologies: An Introduction to Researching with Visual Materials. (4th ed). London: SAGE Publications.

Julia de Bres is a Senior Lecturer in Linguistics at Massey University, specialising in how language is used to reproduce and challenge social inequalities. She analyses drawings, interviews and media texts, examining how people advance their personal interests through discourse and how minority groups discursively resist imbalances of power.

Diminutives and suprafixes in Yuè and Pínghuà Chinese

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While most varieties of Yuè 粵 and Pínghuà 平話 are poor in tone sandhi, they have suprafixes: the use of suprasegmental affixes – tones in this case – for derivational purposes. For instance, Standard Cantonese (i.e. Standard Yuè) has two suprafixes: high rising tone [3^{5}] and high level tone [^{55}]. As an example, there is the root *mui22* 妹 'younger sister' (e.g. *mui22-fu^{55}* 妹夫 'younger sister's husband') in its citation tone. Derived from the root *mui22* 妹 is the word *mui3^{5}* 妹 'younger sister' (as an independent word, *mui3^{5}* 妹 always carries a [3^{5}] suprafix), and the suffix *-mui^{55}* 妹 'girl' (e.g. *ma13lai^{55}-mui^{55}* 馬拉妹 'Malay girl'). From studies of this phenomenon in Cantonese and other Yuè dialects (e.g. Zhōu 周 (2002: 146–171); Shào 邵 (1997, 2005); Bauer & Cheung (2005); Chén 陈 (2006, 2007: 263–275); Kao 高高 (2007); Kwok 郭 (2016)), we know that the high tone suprafixes came from a diminutive suffix, probably 兒 (Middle Chinese *nyeA*) 'child' and/or 子孑 (Middle Chinese *tsiB*) 'son', which has subsequently lost its segmental contents, leaving only a high tone. The suprafix has lost the smallness meaning, leaving it a word-building device without specific semantics. This talk paints a fuller picture of this morphological development by contributing data from Pínghuà, which in a sense is a westward continuation of the Yuè dialect continuum. Lacking from (the descriptions of) Yuè dialects is a *-nyeA* 兒 diminutive suffix in Lower tone A, which the expected reflex would have (due to the voiced onset). On the other hand, amongst Pínghuà varieties, a *-nyeA* 兒 diminutive suffix in Lower tone A can be easily found. For instance, Nánníng Pínghuà has a diminutive *-ȵi21* 兒 in its expected Lower tone A, a diminutive *-ȵi^{55}* 兒 with a high tone suprafix, and also a newer diminutive *-tʃai33* 仔, which is loaned from Cantonese.

Also discussed in this talk is the variation of the high tone suprafixes more narrowly amongst Cantonese varieties. The time depth of the high tone suprafixes in Cantonese is probably rather shallow, given the markedly less prolific use of the high tone suprafixes in e.g. Nánníng Cantonese, Macau Cantonese, which developed less than two hundred years ago.

References

Bauer, Robert S. 包睿舜 & Kwan-hin Cheung 張群顯. 2005. Database of Cantonese words derived through diminutive bianyin 粵語小稱變音詞語派生的詞彙. In Keng Pan Tang 鄧景濱 & Choi Lan Tong 湯翠蘭 (eds.), Dìjiǔjiè Guójì Yuèfāngyán Yántǎohuì lùnwénjí 第九屆國際粵方方言研討會論文文集 [Proceedings of the 9th International Conference on Yue Dialects], 174–179. Macau: Associação de Literatura Chinesa de Macau 澳門中國語文文學會.

Chén, Xiǎoyàn 陈小燕. 2006. Guǎngxī Hèzhōu Běndìhuà de "-ér" wěi: Jiānlùn Yuèyǔ xiǎochēng xíngshì de fāzhǎn hé yǎnbiàn 广广西贺州本地话的"-儿儿"尾 – 兼论粤语小称形式的发展和演变 On "er" of Hezhou dialect in Guangxi Province. *Journal of Guangxi Normal University: Philosophy and Social Science Edition* 广广西师范大大学学报: 哲学社会科学版 42 (1). 72–76.

Chén, Xiǎoyàn 陈小燕. 2007. Duō zúqún yǔyán de jiēchù yǔ jiāoróng: Hèzhōu Běndìhuà yánjiū 多族群语言言的接触与交融: 贺州本地话研究 [Contact and interactions between multiple

ethnolinguistic groups: Studies of Hezhou Bendihua]. Beijing: The Ethnic Publishing House 民族出版社.

Kao, Wan-yu 高高婉瑜. 2007. Lùn Yuèyǔ xiǎochēngcí jí qí yǔfǎhuà 論粵語小稱詞及其語法化 On the diminutives in Yue dialect and their grammaticalization. *Bulletin of the Department of Chinese Literature*, National Taiwan University 臺大大中文文學報 27. 229–262.

Kwok, Bit-Chee 郭必之. 2016. Yuèyǔ fāngyán xiǎochēng biànyīn de lèixíng jí qí lìshǐ láiyuán 粵語方方言言小稱變音的類型及其歷史來源 Diminutive sound changes in the Yue dialects: Typology and historical origins. *Chinese Studies* 漢學研究 34 (2). 281–314.

Shào, Huìjūn 邵慧君. 1997. Yuèyǔ xiǎochēng biànyīn yǔ “ér” wěi zōngshù 粤语小称变音与“儿儿”尾综述 [Summary of the Yue diminutive sandhi and the “er” suffix]. In Bóhuì Zhān 詹伯慧, Yí Shào 邵宜 & Bō Jiāng 姜波 (eds.), Dìwǔjiè Guójì Yuèfāngyán Yántǎohuì lùnwénjí 第五届国际粤方方言言研讨会论文文集 A collection of thesis from The Fifth International Conference on Cantonese & Other Yue Dialects, 32–40. Guangzhou: Jinan University Press 暨南大大学出版社.

Shào, Huìjūn 邵慧君. 2005. Guǎngdōng Màomíng Yuèyǔ xiǎochēng zōnglùn 广广东茂名粤语小称综论 A study on the diminutives of Maoming dialect in western Guangdong Province. *Fāngyán (Dialect)* 方方言言 2005 (4). 337–341.

Zhōu, Liètíng 周烈婷. 2002. *Yùlínhuà yánjiū* 玉玉林话研究 A study of Yulin Yue dialect. Singapore: National University of Singapore PhD thesis.

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Conversation repair by basic level Japanese learners: case markers and second language acquisition.

Kaori Doi

This study investigates repairs in Japanese learners' conversations from the perspective of correlation of syntactic elements of repair and second language acquisition. Most of previous studies about "repair" have analyzed the types of repair, the organization of it and its position in interaction. Relationships between repair and syntax have received relatively little attention except for the study by Fox, Hayashi and Jasperson (1996) that focuses on the relationships between syntax and repair and demonstrates the difference of repair between languages that can be attributed by syntax of both languages. However, most of previous research on repair have not studied the relationships between repair and language acquisition. This study focuses on the syntactic features of repairs, including "case markers" in conversation repairs and investigates how basic level learners of Japanese use the case markers as conversation repair. The study also analyze how basic level Japanese learners acquire "how to use case markers" in Japanese (their second language) from the perspective of second language acquisition.

The data in this study consists of conversational interactions videotaped and transcribed in detail in which pairs talk about given daily topics freely. Japanese conversation data in which English native speakers have to communicate only in Japanese are analyzed. This study divides learners' levels of Japanese proficiency by experience of studying Japanese and the period of living in Japan and into 'advanced' and 'basic' level. The study analyzes conversational interactions by mainly "basic level" learners of Japanese comparing advanced speakers in how speakers acquire case markers in conversation. This study also uses conversation data of Japanese native speakers in order to compare with data of learners of Japanese.

This study investigates the case markers in conversation repairs and the place of them in conversational interactions at two levels (advanced and basic level) and indicates the difference of them by comparing with conversations by native speakers of Japanese.

Furthermore, the study analyzes the correlation of syntactic elements of repairs and their places that occur in interactions and language proficiency by comparing strategies how learners of Japanese use them in Japanese conversation. The study also shows the difficulty by basic level learners of Japanese in acquiring grammatical elements in conversation by comparing these two levels speakers. This study focuses on how the pragmatic acquisition of second language occurs by analyzing not only syntactic elements of repairs but also how to use them in second language.

Kaori Doi studied English linguistics, Sociolinguistics and language acquisition. The main field is conversation analysis in both English and Japanese. The author has investigated the features in conversation such as turn-taking and conversation repair comparing English and Japanese and has recently analyzed second language acquisition.

Imperatives and Variation in Brazilian Portuguese

Jasmim Drigo

Some languages (e.g. Spanish) do not allow negation of true imperatives and only use other type of structure to negate orders (cf. Zanuttini 1997, Han 2000, Isac 2015, Despić 2016), i. e. surrogate imperatives (usually morphological subjunctives or infinitives). However, in Brazilian Portuguese negation of true imperatives is allowed, and it is extremely common, especially in some dialects of the north of Brazil:

(1) ***Fecha*** *essa porta!* 'Close this door!'

(2) ***Não fecha*** *essa porta!* 'Don't close this door!'

Scholars have assumed that Brazilian Portuguese followed the same pattern as European Portuguese and Spanish, but only because the standard prescriptive Brazilian dialect has been fully analyzed (e.g. Sherre 2007).

Since example (2) shows that true imperatives can be negated exactly like surrogate imperatives, it is not necessary to argue for two different syntactic structures; the best solution would be to have one single structure for both types of imperatives.

I argue that imperatives do not move to C in BP, and that is the reason why true and surrogate imperatives have a very similar behavior. Since imperatives do not move to a really high position in the tree, they get licensed by long-distance Agree.

References

DESPIĆ, Miloje (2016). "Negative Imperatives, Aspect and Agree: From Locality to Argument Structure". Lecture given in *LinG Colloquium, Linguistics in Göttingen*, October 25, 2016.

HAN, Chung-hye (2000). The structure and interpretation of imperatives: mood and force in *universal grammar*. New York: Garland Pub.

ISAC, Daniela (2015). *The Morphosyntax of Imperatives*. Oxford: Oxford University Press.

SCHERRE, Maria M. P. (2007) "Aspectos Sincrônicos e Diacrônicos do Imperativo Gramatical no Português Brasileiro". In: *Alfa* 51, 1, pp.189-222.

ZANUTTINI, Raffaella (1997). Negation and Clausal Structure : A Comparative Study of *Romance Languages*. Oxford: Oxford University Press.

Jasmim Drigo is a PhD candidate at Cornell University in the USA. She works with Historical Linguistics of Indo-European languages, especially with ancient languages like Latin and Old Irish, but also with Brazilian Portuguese.

Task complexity and task type: L1 use and functions

Mahnaz Entezari and Mojtaba Tadayonifar

A matter of concern in Task-Based Language Teaching (TBLT) is that learners might overuse their first language (L1) while performing the tasks. Many factors might have an influence on L1 use. The present study investigated the effects of manipulating task complexity along resource-directing variables (+/-reasoning demands) of Cognition Hypothesis and task type on L1 use and the functions it served by analyzing the interaction of 24 intermediate EFL learners while they were completing two different task types (focused and unfocused) with two levels of task complexity (simple and complex). The analysis of L1 words and turns indicated that both task complexity and task type affected L1 use significantly. The results further indicated that L1 was employed for a variety of purposes which were mainly affected by task complexity than task type.

Mahnaz Entezari has a M.A. in TEFL from Tehran Payame Noor University. Her research interests include vocabulary learning, CALL, and Task Based Language Teaching. She is particularly interested in the Cognition Hypothesis to test its speculation that pedagogic tasks be sequenced based on their cognitive complexity.

Mojtaba Tadayonifar is a PhD student at Victoria University of Wellington. His primary area of expertise is Language Education. He is exploring the factors that influence the learning of multi-word expressions through combining methods from applied linguistics, cognitive psychology and education. His additional research interests include CALL and TBLT.

From Fractured Reflections to Narrative Coherence

Anne Feryok, University of Otago

This interactional sociolinguistic study uses Goffman's interaction order to show how a participant's unelicited narrative transformed my understanding of the interview data a decade after its collection. In 2010 I interviewed volunteers from a study on New Zealand language learning experiences and attitudes. I focus on one participant; he appeared to be Pākehā but presented his Māori heritage in the interview. His aim for self-presentation contrasted with my aim for research data; my linear style of developing interview topics contrasted with his organic style of developing personal topics.

The analysis draws on Rawls'(1987) interpretation of Goffman's (1983) interaction order. Rawls argues that Goffman's resolution of the agency-social structure dichotomy is based on interaction being both constitutive of the self and a social structure replete with expectations. The latter relationship is highly relevant to research interviews, where interviewers typically have explicit normative expectations about the data to be collected and the interview as the means of colleting it. Participants also have normative expectations about interactions that may be largely implicit, but can become explicit. Because the seemingly explicit expectations of interviewers may obscure their implicit assumptions, my analysis also uses Holmes (2018) account of the New Zealand culture order (Holmes, 2018), that is, that majority Pākehā group assume their norms are in force rather than considering minority Māori group norms. In particular, Paringatai (2014) argues that Pākehā may make assumptions about the cultural and linguistic knowledge of New Zealanders with Māori heritage that causse embarrassment and self-doubt. This culture order underlies the assumptions I made that fractured (Rawls & Duck, 2017) my reflection of the participant's identity, leading to a misunderstanding that resulted in the participant feeling embarrassed.

What is interesting is not how we repaired that misunderstanding, but the two inter-related functions performed by the later narrative. In it, the participant implied he was recognized as Māori by Māori by integrating the topics he had introduced into interview. The narrative therefore helped me both recognize who he was and how he created interactional coherence. Rawls (1989) is right about the dialectical relationship between self-presentation and social structures (like the cultural order) being resolved in interaction, but resolution may depend on ignorance (rather than malice) being the cause of the fracture, since ignorance can be repaired by sharing knowledge.

References

Holmes, J. (2018). Negotiating the culture order in New Zealand workplaces. *Language in Society*, *47*, 3 3-56.

Paringatai, K. (2014). Māori identity development outside of tribal environments. *Aotearoa New Zealand Social Work*, *26*(1), 47-54. Rawls, A. W. (1987). The interaction order sui generis: Goffman's contribution to social theory. *Sociological Theory*, *5*, 136-149.

Rawls, A. W. (1989). Language, self, and social order: A reformulation of Goffman and Sacks. *Human Studies*, *12*, 147-189.

Rawls, A. W. & Duck, W. (2017). Fractured Reflections" of High-Status Black Male Presentations of Self: Nonrecognition of Identity as a "Tacit" Form of Institutional Racism. *Sociological Focus*, *50*, 36-51.

Anne Feryok joined the University of Otago in 2007 and is a senior lecturer in Linguistics. She teaches discourse analysis and child and adult language acquisition and supervises postgraduate

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Playing by the Rules: Interruption and identity Construction in the 2020 US Presidential Debates.

Tony Fisher

The first US presidential debate of 2020 between Donald Trump and Joe Biden was marked by clash (Carlin at al. 1991; Jacobsen, 2019) or 'communicative fight' (Tymbay, 2021), characterized largely by extended episodes of simultaneous talk and floor competition. Following the overwhelmingly negative response to the first debate in the global media, the format was altered for the second and final debate, such that each candidate would have their microphone muted during their opponent's initial two-minute response to each of the agenda-setting questions. The result was a debate which was 'calmer' and 'more civil' (Hudak, 2020), and in which the persistent interruption which characterized the first debate was largely absent. The second debate was, in other words, a speech event in which the behaviour of both candidates was more closely aligned with the rules of debate as a long-established speech genre.

Tymbay (2021: 288) notes that while political debates are rule-governed speech events, they also allow for a degree of spontaneity and unpredictability, and he argues that it is in their deviations from debate rules that participants are often able to construct political identities. When viewed as a deviation from the distinctive turn-taking system of political debate (Heritage, 1998), the potential for interruption to serve as a discursive space for the construction of political identity is readily apparent. The particular significance of interruption for Trump's debating style is noted by Sclafani who, in her analysis of the 2016 primary debates, argues that Trump's repeated interruptions of the moderator serve as a key vehicle for the construction of his identity as an outsider to the political establishment. The present study examines interruption in both debates from the 2020 US election, both as turn-violative behaviour and a potential resource for identity construction. It considers how the change of rules in the second 2020 debate impacted on the opportunities for identity construction afforded to candidates, while also exploring other resources exploited by Trump in the construction of a coherent and relatively stable identity as a political outsider.

References

Carlin, D.P., Howard, C., Stanfield, S. 7 Reynolds, L. (1991) The effects of Presidential debate formats on clash: A comparative Analysis. *Argumentation and Advocacy* 27: 126-136.

Heritage, J. (1998) Conversation Analysis and Institutional talk: Analyzing Distinctive Turn-Taking Systems. in S. Cmejrkova, J. Hoffmannova, O. Mullerova & J. Svetla (eds.) *Proceedings of the 6th International Congress of the International Association for Dialog Analysis*, Tubingen: Niemeyer, pp. 3-17.

Hudak, J. (2022) Donald Trump should be furious the RNC nixed presidential debates. Brooking Institute: https://www.brookings.edu/blog/fixgov/2022/04/15/donald-trump-should-be-furious-the-rnc-nixed-presidential-debates/

Jacobsen, R. (2019) Interruptions and co-construction in the First 2016 Trump-Clinton US presidential debate. *Journal of Pragmatics* 148: 71-87

Sclafani, J, (2018) Talking Donald Trump: A Sociolinguistic Study of Style, Metadiscourse, and Political Identity. London: Routledge.

Tymbay, A. (2021) Interruption as a reflection of speaker's identify on the 220 US presidential debates. In Suvremena Linvistika (2022): 283-306.

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Early literacy in children with and without language delays

Susan Foster-Cohen

The development of literacy skills in early childhood is argued to be influenced by a number of factors, including oral language development, book-sharing, metalinguistic awareness, responses to print, letter recognition, early drawing and writing, and video/TV watching. Understanding literacy development in children with developmental delay requires an understanding of the relationships between preliteracy skills as compared with typically developing children. It is also necessary to understand the role of parents to determine whether children with delays experience the same literacy supports as other children at similar stages of language and functional development.

This study used the Developmental Literacy Questionnaire (DLQ) (Boudreau, 2005; van Bysterveldt, Gillon & Foster-Cohen, 2010), a qualitative parent report. Questions on the DLQ address behaviours around reading books, language awareness, responses to print, interest in letters, writing and TV/computer watching with a combination of Likert and free text questions. Of the 27 Likert scale questions, 20 address behaviours of the children and 7 address parent behaviours. The DLQ was completed by the parents of 31 children with Down syndrome (DS) (Mean age = 52.5 months) and 80 typically developing children (TD) (Mean age = 29.22). DS group scores were compared with TD group scores matched separately on (a) vocabulary size measured by the NZCDI (Reese & Read, 2000) and (b) functional development measured by the Adaptive Behaviour Assessment System II (Harrison & Oakland, 2008).

Analyses address the patterns of interaction among the components of literacy development, and their relationship to language and general functional development. While the children with DS present a largely similar pattern to TD children, there are greater levels of visually based skills, including print awareness. Children with DS also watch more TV, but this may be seen as a positive support for narrative exposure. At the same time parent support for preliteracy development is shown to be to a degree dependent on the children's behaviours leading to a potential limiting effect on children's experiences.

References

Boudreau D. (2005) Use of a parent questionnaire in emergent and early literacy assessment of pre-school children. *Language, Speech and Hearing Services in Schools*. 36(1):33-47

Harrison, P. L., & Oakland, T. (2008). ABAS-II assessment methods. In *Adaptive behavior assessment system-II* (pp. 37-49): Elsevier.

Reese, E., & Read, S. (2000). Predictive validity of the New Zealand MacArthur communicative development inventory: Words and sentences. *Journal of child language*, *27*(2), 255-266.

van Bysterveldt, A., Gillon, G., & Foster-Cohen, S. (2010). Literacy environments for children with Down syndrome: What's happening at home?. *Down Syndrome Research and Practice*, *12*(2), 98-102.

Susan Foster-Cohen is Adjunct Associate Professor, University of Canterbury. Her research focuses on clinical linguistics, particularly the early acquisition of lexis and pragmatics. From 2004-2020 Susan was Director of The Champion Centre, a multidisciplinary centre for early intervention.

Building a tool for text corpus analysis without programming

Hunter Hatfield

Emelia Hogg

People with a diverse set of academic backgrounds – linguists, language teachers, literary analysts, data scientists and more - can benefit from computational text analysis. However, not all of these possible researchers have the programming background in language processing to create corpora and analyse them. While it may be reasonable for a computational linguist to take the time to develop these skills, this is not reasonable for all parties. They simply don't engage with computational questions regularly enough to do so. If programming in a tool like R or Python is required, there will always be people who could ask interesting questions of text who will be excluded from asking them. A tool that performs text analysis without requiring programming knowledge is therefore of benefit.

There are existing tools that perform text analysis tasks well. However, they are often fragmented. One tool may perform web-scraping, a second tool generates word counts and bigrams, and a third tool performs statistical analysis. Many of these tools are also closed, requiring a license to operate. We are therefore building a tool that will allow someone to build a corpus, calculate token statistics, run comparative analyses, visualise data, perform hypothesis testing, and generate a report, all in one place without programming knowledge. The tool is built within the R ecosystem using R Shiny, Quarto, and related tools.

In this talk, we will present the goals of the project and demonstrate the app as it exists. We hope the audience will provide feedback on the flow of actions and indicate what tools might be of most use as the project develops. The tool will always be too restricted for state-of-the-art computational analysis, but we think will be of use to those learning corpus analysis, digital humanities, and performing common tasks in text analysis.

Hunter Hatfield is senior lecturer in linguistics at the University of Otago with a diverse range of interest in psycholinguistics, pragmatics, narrative, and digital humanities.

Emelia Hogg is a data scientist at the University of Otago, completing degrees in data science, statistics, and ecology.

The Higher the Learners' Willingness to Communicate, the Deeper Their Vocabulary Knowledge? An Empirical Study

Kamal Heidari

It is axiomatic that vocabulary is among the most pivotal facets of language (Laufer, 2017). Accordingly, researchers have extensively examined it and consequently, numerous findings have been obtained which, in turn, have clarified many points on lexical aspect of language. However, despite all the previously conducted studies and their worthy findings, there are still many question marks as to vocabulary that require further investigation. One of the areas that requires further attention is the role of individual factors predicting the learning of learners' depth vocabulary knowledge (Li et al., 2022). Furthermore, it is apparent that there are various factors that might influence the process of language learning, specifically vocabulary knowledge (Laufer, 2017). Among these differences are individual differences referring to the specific characteristics of learners likely to affect their performance. Individual differences as an umbrella term embrace a set of sub-components one of which is willingness to communicate (WTC). The interplay of WTC and vocabulary knowledge, especially depth of vocabulary knowledge is still far from clear. There is little understanding if having high WTC can play a role in promoting the quality of vocabulary knowledge or not. This research gap is to be addressed in the present study. The present study, then, looks into the impact of Willingness to Communicate (WTC) on deepening learners' vocabulary knowledge. The hypothesis underlying the study is that WTC might be taken as an indicator of the degree of learners' depth of lexical knowledge in the sense that learners who are more willing to communicate have deeper lexical knowledge compared to those with lower WTC. To test this hypothesis, 88 ESL learners is given three different instruments (one as a placement test, one to identify their WTC degree, and one to measure their depth of lexical knowledge).

References

Laufer, B. (2017). From word parts to full texts: Searching for effective methods of vocabulary learning. *Language Teaching Research*, *21*(1), 5-11.

Li, SH., Hiver, PH., & Papi, M. (2022). The Routledge handbook of second language acquisition and individual differences. New York and London: Routledge.

Kamal Heidari is currently a Ph.D. candidate of Applied Linguistics at Victoria University of Wellington. His research areas include psycholinguistics, vocabulary, individual differences, reading skill, and mixed-methods research. He has published articles in journals, including *Journal of applied linguistics*, *Journal of mixed-methods research*, *Thinking skills & creativity*, *Discourse & society*.

More than the sum of her parts: Presenting high femme nonbinary identity across multiple phonetic features

Jacq Jones

Sex/gender is often taken to be a binary and static macrosocial category, with speakers falling perpetually and exclusively into one of two categories: either male or female. Even studies of transgender listeners often assume a "transition" narrative between a starting point based on assigned sex at birth, and an ending point in the "other" sex/gender category.[1] For both listeners and speakers, while a number of stereotypes exist about the voices of men and women,[2] there are virtually no established templates for the nonbinary voice. This talk defines "nonbinary" speakers as those whose sex/gender identity exists outside of, or somewhere between, the two demarcated binaries.

The flexibility of acoustic signals to reference multiple indexical features is well-studied, as is the concept of *bricolage*, in which existing linguistic cues are recombined to create new indexical links.[3] This talk will explore some of the ways acoustic cues can be utilized by nonbinary speakers to do identity work that relies not on the multiplicative nature of cues with similar signals, but in creating *incongruence* between signals, a particular form of bricolage that uses gendered signals in speech in unexpected ways to signal a "new" sex/gender identity outside of listeners' binary expectations. I examine the use of bricolage across a number of speech features (and one non-speech feature) using vignettes from Istus (she/her), a nonbinary speaker who identifies as nonbinary, genderless, and high femme. I present some examples of Istus' ability to manipulate her pitch from moment to moment to adopt different affects (such as a "California femme"), and how she interprets her own relationship to femininity through these ways of speaking. I also examine her monophthong production, which exhibits a systemic shift in F2 across the entire vowel space, resulting in productions unlike either binary men or binary women. Her use of medial /t/ frication also varies: During the sociolinguistic interview, she exhibits more masculine-coded flaps[4] when positioning herself as outside of femininity. In her non-interview recordings with friends, she uses more masculine-coded flaps when wearing more overt makeup, such as red lipstick. Across domains, Istus is constantly asserting her nonbinary identity, including its strong relationship to femininity, via the reinterpretation of perceptually-gendered speech features.

1 Davies, Shelagh and Joshua M Goldberg (2006). Clinical aspects of transgender speech feminization and masculinization. *International Journal of Transgenderism* 9.3-4, pp. 167–196.; Kim, Hyung-Tae (2017). A new conceptual approach for voice feminization: 12 years of experience. *The Laryngoscope* 127.5, pp. 1102–1108;

2 Strand, E. A. (1999). Uncovering the role of gender stereotypes in speech perception. *Journal of language and social psychology*. 18(1), 86-100

3 Eckert, P. (2003). The meaning of style. Texas Linguistic Forum. 47. 41-53., paraphrasing Hebdige, D. (1984). *Subculture: The meaning of style.* New York: Methuen

4 Fiasson, R. (2016). Frication, pre-aspiration and tapping of medial/t/in New Zealand English. *Te Reo*, 59, 47; Hay, J., & Foulkes, P. (2016). The evolution of medial/t/over real and remembered time. *Language*, 92(2), 298-330; Holmes, J. (1994). New Zealand flappers: an analysis of T voicing in New Zealand English. *English World-Wide*, 15(2), 195-224

Jacq Jones is a newly minted PhD in Linguistics from the University of Canterbury. They are interested in sociophonetics, with a focus on liminal spaces, nonbinary gender identity, and the intersection between qualitative and quantitative methodologies.

50 Shades of Consent? A multimodal investigation of consent negotiation in the BDSM community

Deb King

The taboo nature of sex and sexuality makes consent negotiation a fraught discourse activity.

However, in the BDSM community (Bondage, Discipline/Dominance, Submission/Sadism, Masochism), consent negotiation is foregrounded, explicit, and considered essential to practices. To date, scholars investigating the BDSM context (Martin 2020, McCormick 2018) have focused on static written data (e.g. personal ads, books) rather than practical consent conversations. In my research I investigate the language of consent, recognising that consent is an ongoing process (.ie. it can always be revoked) and that interactional data can offer greater access to consent strategies employed by BDSM practitioners.

Consent has been a regular research focus in the field of language, gender, and sexuality (Ehrlich 2014). A strong concern in mainstream consent practices is that explicit lexical forms of negation (eg. saying “no”) do not serve a pragmatic consent-negating function for many reasons (Kulick 2003; Ehrlich 1998, 2001; Giles-Mitson 2020; Candelas 2016). Researchers generally agree that this arises from an underlying power imbalance: literature currently discusses women as “ready-made victims” due to the “cultural scaffolding” of rape culture within heterosexual societal narratives around sex (Gavey 2018), or unpacks how misunderstandings around consent ultimately hinge upon an andro-centric perspective on what a “normal person” would do under pressure (Ehrlich 1992, 2001). While this power imbalance is something which places constraints upon agency in mainstream society, the BDSM focus on exchanging power (ie. “powerplay” - enacting power differences in a consensual, regulated manner) means that these issues of agency and imbalance are also directly negotiated and discussed between practitioners (Easton & Hardy 2001, 2003). Therefore, in this research I focus on: relational dynamics between those who self-identify as non-normative; real-time conversations of consent that occur around erotic activities; discourses of explicitly negotiated consent; and models and insights into ‘best practice’ consent processes.

My data for analysis comprises two focus groups held with members of the BDSM community, as well as self recordings of negotiation conversations by volunteers. Consent negotiation is an intricate discourse activity that involves multiple levels of information and is thus a prime site for multimodal analysis beyond the lexus and prosody of conversational partners. A multimodal approach is essential for building understandings of how consent is co-constructed and enacted. Demonstrating that consent discourses are sensitive, I argue that modes such as body posture and gesture, environment, and even physical arrangement are all relevant factors that need to be taken into account if we are to further understand the negotiation of consent.

Deb King is completing their Master of Linguistics in the department of Linguistics and Applied Language Studies at Victoria University of Wellington. Within the field of language, gender and sexuality, they have a particular interest in consent issues and queer spaces.

Te reo Māori pseudowords: generating Māori pseudowords using the Character-gram Chaining Algorithm

Jemma L König, Te Taka Keegan, and Tirama Te Marino Bramley

A pseudoword is a sequence of characters that adheres to the orthographic and phonological rules of a language but holds no meaning. In English, this can be pseudowords such as *hydraft*, *ouncing*, and *injusting*. For Te reo Māori, this can be pseudowords such as *kūtauri*, *horau*, and *āhiwi*. Linguists and language researchers use pseudowords to evaluate linguistic features such as morphology, pronunciation, and vocabulary acquisition. Szakay et al. (2012), for example, use Māori pseudowords, alongside English pseudowords and Māori and English words to investigate translation priming.

This research investigates the automatic generation of Māori pseudowords and evaluates the suitability of the pseudowords that are generated. The Character-gram Chaining Algorithm, developed by König et al. (2019), generates pseudowords using a wordlist from the given language. While this algorithm has yet to be evaluated with pseudowords in languages other than English, we propose that the implementation of the algorithm means that it can be applied to other languages, specifically Te reo Māori. In this project, we present 100 Māori pseudowords, which have been generated using the Character-gram Chaining Algorithm and the Rārangi Kupu wordlist. Rārangi Kupu, which contains 14K Te reo Māori words, is a comprehensive wordlist that was developed for NZQA as part of a spellchecking functionality project (Mato et al., 2021).

The pseudowords have been evaluated, both in terms of their legal form and through a subjective suitability score. First, each pseudoword has been evaluated based on its orthographic and phonological form as follows. (i) The pseudoword must contain characters from the Māori alphabet only. (ii) The pseudoword must not contain any consonant clusters (excluding the digraphs wh and ng). (iii) Te reo is an open syllable language. As such, all syllables within the pseudoword must end in a vowel. Second, each of the pseudowords has been given a subjective suitability score between 1 and 5 by two fluent Te reo researchers. These researchers were asked to give each pseudoword a score of 1 if the word was unsuitable, up to 5 if it was most suitable.

While analysis is still underway, preliminary results are encouraging. All pseudowords have been found to adhere to the legal orthographic and phonological form of the language. Of the 100 pseudowords, two were determined to be real Te reo words. The remaining pseudowords received an average suitability score of 4.13 (out of 5). The lowest score was 3, which was given to pseudowords such as *rētā* which was considered too close to a real word (*reta*). The highest suitability score was 5, which was given to pseudowords such as *pīenga* and *raiki*.

References

König, J. L., Calude, A. S., & Coxhead, A. (2019). Using character-grams to automatically generate pseudowords and how to evaluate them. *Applied linguistics*, *41*(6), 878-900. https://academic.oup.com/applij/article/41/6/878/5580557

Mato, P., Keegan, T. T., & Perkins-Gordon, D. (2021). Te Reo Māori Spellcheck Technologies and NCEA examinations.

Szakay, A., Babel, M., & King, J. (2012). Sociophonetic markers facilitate translation priming: Maori English GOAT–A different kind of animal. *University of Pennsylvania Working Papers in Linguistics*, *18*(2), 16.

Jemma L König (Te Āti Haunui a Pāpārangi) is a Postdoctoral Fellow in the School of Computing and Mathematical Sciences at the University of Waikato. Jemma's research centres on Computer Assisted Language Learning and pseudoword generation algorithms for both English as a second language (L2 English) and Te reo Māori.

Te Taka Keegan (Waikato-Maniapoto, Ngāti Porou, Ngāti Whakaaue) is an Associate Professor of Computer Science, and an Associate Dean Māori at the University of Waikato. Te Taka has worked on a number of projects involving the Māori language and technology. These include the Māori Niupepa Collection, Te Kete Ipurangi, the Microsoft keyboard, Microsoft Windows and Microsoft Office in Māori, Moodle in Māori, Google Web Search in Māori, the Māori macroniser and SwiftKey for Māori.

Tirama Te Marino Bramley (Waikato-Maniapoto) is an Undergraduate Student at the University of Waikato studying a Bachelor of Design, majoring in Communication Design and Te Reo Māori. Tirama assists with research regarding Te Reo Māori, and Te Reo Māori learning resources.

Identity Construction in Online Learning Environments

Mayyer Ling, Victoria University of Wellington

Writers employ a range of strategies to negotiate knowledge, persuade their readers to empathise and agree with the ideas put forward and construct their intended self-identity. These strategies, referred to as metadiscourse, facilitate 'social communicative engagement' (Hyland and Tse, 2004, p. 156) between a text writer and reader. This presentation reports on an investigation of students' written interaction on discussion boards on the learning platform, Canvas. Earlier studies have shown that when students collaborate with their peers, it promotes 'intersubjective understanding' (Yukawa, 2006, p.207), which results in a deeper understanding of knowledge compared to non-collaborative processes of meaning-making. While collaborating with peers, learners actively decide how they wish to portray themselves (Bax, 2013), constructing an academic self-identity. This talk reports on how learners develop their academic self-image in online discussions in a digital learning environment. Online interaction in discussion forums from four English Studies modules involving university students at the Universiti Brunei Darussalam was collected. In total, 294 discussion posts and 390 comment posts were collected over seven weeks. The resultant corpus size is 157886 words. Ädel's Reflexive Model of Metadiscourse (Ädel, 2006) was used to identify and analyse personal metadiscourse in this data. Semi-structured interviews of 20 undergraduates and post-graduate students were used to investigate interviewees' explanations for the use of metadiscourse. Keeping in mind that metadiscourse focuses on what is explicitly displayed in the discussion forum, the findings revealed that (1) learners prefer to use partial agreements and project false uncertainties in their interactions. (2) They were divided in their identity as 'authority' for subjects discussed in the forum. (3) The learners vary in how they display 'professionalism' in their posts. The study reveals the dynamics of the process of constructing an academic self-identity and the intended outcome aimed for by the learners when they interact online. These dynamics may be complex, but they must be understood to ensure that the online forums are encouraging and productive for collaborative academic discussions.

Mayyer Ling is an assistant lecturer at Universiti Brunei Darussalam. Her research interest is language use in the digital media, including learning and teaching in virtual learning environments (VLEs) and information consumption in social media. She is currently pursuing her PhD in Applied Linguistics at Victoria University of Wellington, working on Reflexive Metadiscourse in VLE.

The role of a proto-lexicon in intentionally learning a language

Wakayo Mattingley (NZILBB, University of Canterbury), Forrest Panther (NZILBB, University of Canterbury), Jeanette King (University of Canterbury), Jennifer Hay (University of Canterbury), Simon Todd (University of California, Santa Barbara), Peter Keegan (University of Auckland)

Recent studies show that the regular exposure to an ambient language has a huge impact on increasing adults' phonotactic sensitivity to the language (Oh et al., 2020; Panther et al., 2021). These studies provide evidence that people who do not understand or speak a language are able to access sophisticated phonotactic knowledge of the language through exposure to the language in their daily life. Panther et al. (2021) find that exposure to the Māori language on a regular basis allows New Zealand adults who cannot speak Māori to build *a 'proto-lexicon'* of Māori - implicitly stored word forms without knowing the meaning of them. Moreover, non-Māori-speaking New Zealanders with a larger proto-lexicon have more sophisticated phonotactic knowledge.

The current study pushes this understanding considerably forward by investigating whether the implicit linguistic knowledge represented in a proto-lexicon gives any advantages in intentionally learning a language in a tertiary educational environment. This study investigates whether adult New Zealanders can activate their proto-lexicon of Māori when they learn te reo, by examining whether they can add meanings to these word forms more accurately than learners who don't have a Māori proto-lexicon.

We conducted a three-task experiment with 40 Canterbury University students who enrolled in a basic beginners' course in te reo Māori. We tested them at three time points: before the course starts, at the end of the course and two months after completion of the course. At each time point they conducted three tasks. 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 nonwords using 30 word/non-word pairs to assess their proto-lexicon size. Lastly, participants provided definitions of 87 Māori words that were selected from the course materials. Each stimulus word was presented orthographically to participants in the experiment.

The results show that a proto-lexicon gives significant learning advantages for intentionally learning a language. Students with larger proto-lexicons of Māori (i.e., who were better at task two) showed significantly more improvement over time at defining words (i.e., in task 3). The proto-lexicon provides an advantage for learning word meanings in a classroom setting. This real-world example shows how exposure to a language before explicit language learning commences can provide significant advantages for language learning.

References

Oh, Y., Todd, S., Beckner, C., Hay, J., King, J., & Needle, J. (2020). Non-Māori-speaking New Zealanders have a Māori proto-lexicon. *Scientific Reports*, *10*(1), 1–9. https://doi.org/10.1038/s41598-020-78810-4

Panther, F., Mattingley, W., Todd, S., Hay, J., & King, J. (2021). Proto-lexicon size and phonotactic knowledge are linked in non-Māori speaking New Zealand adults [Manuscript submitted for publication].

Wakayo Mattingley is a post-doctoral fellow at the New Zealand Institute of Language, Brain and Behaviour (NZILBB) since 2021. She has a background in phonological research, second-language

acquisition, and quantitative methodology. She is a native speaker of Japanese and an intermediate learner of te reo Māori.

Forrest Panther (Te Rarawa) is a post-doctoral fellow at the New Zealand Institute of Language, Brain and Behaviour (NZILBB) since 2021. He has a background in phonological and morphological research, quantitative methodology, and corpus linguistics. He completed his PhD in Linguistics on an indigenous Australian language called Kaytetye.

Professor Jeanette King has published widely in areas relating to the Māori language and languages spoken by Māori - from aspects of linguistic change through to language revitalization. She is a member of the MAONZE (Māori and New Zealand English) project examining change over time in the pronunciation of Māori.

Professor Jen Hay is Director of the New Zealand Institute of Language, Brain and Behaviour, and is involved in collaborative interdisciplinary projects with a number faculty in the institute. She has primary research interests in New Zealand English, sociophonetics, laboratory phonology and morphology.

Simon Todd (Ngāi Tahu) is an Assistant Professor in the Department of Linguistics at the University of California, Santa Barbara, where he directs the Computational Psycholinguistics of Listening and Speaking (CPLS) Lab. He is a computational psycholinguist with a focus on speech perception.

Peter Keegan (Waikato-Maniapoto, Ngāti Porou) teaches in the School of Māori and Indigenous Education, Faculty of Education and Social Work, University of Auckland. He has a background in linguistics and assessment/measurement. Peter undertakes research on Māori language and Māori and indigenous education.

Using lingcomm to design meaningful stories about linguistics

Gretchen McCulloch and Lauren Gawne

Myths about language in the popular imagination are pervasive, and linguists are well-placed to reimagine this collective understanding of language if we take an evidence-informed approach. In this paper we present a case study of how we have challenged the myth that emoji are language-like using the methods outlined in The Debunking Handbook (Lewandowsky et al. 2020). The Debunking Handbook 2020 summarises the current state of the science of misinformation and debunking. It was written by a team of 22 prominent scholars of misinformation and debunking, and it represents the current consensus on the science of debunking for engaged citizens, policymakers, journalists, and other practitioners. Debunking involves a critical approach to narrative analysis.

One of the central observations of The Debunking Handbook is that it is not enough to point out why a myth is incorrect, you need to provide a compelling alternative to the existing narrative. In our reframing of the nature of emoji, we draw on the literature from Gesture Studies that notes that gesture has different structural properties to signed and spoken languages, draws on context and has cross-cultural variation in use (McNeill 1992; Kendon 2004 inter alia). This gives people a clear and meaningful alternative to replace the old myth.

Having reframed the myth, we also discuss how we make use of different media and different platforms to tailor the narrative for different audiences. We used a research article for an academic audience as an initial step to stress-test our metaphor (Gawne & McCulloch 2019). A subsequent chapter of a popular linguistics book about internet language (McCulloch 2019) and an article for international online news site The Conversation (2019) provided the same narrative for different public audiences without the use of academic jargon. We also used the medium of podcasting to discuss this topic on an episode of Lingthusiasm, allowing us to use the advantages of the medium to construct a conversation on the ways emoji are like gesture that allowed people to feel personally connected (Spinelli & Dann 2019) and democratise knowledge usually only accessible in academic domains (Quintana & Heathers 2020).

Finally we discuss how our approach to linguist myth-busting on this topic has influenced public communication, education, and even the technical implementation of emoji.

References

Kendon, A. (2004). *Gesture: Visible action as utterance*. Cambridge University Press.

Lewandowsky, S., J. Cook, U. Ecker, D. Albarracin, M. Amazeen, P. Kendou, D. Lombardi, E. Newman, G. Pennycook, E. Porter, D. Rand, D. Rapp, J. Reifler, J. Roozenbeek, P. Schmid, C. Seifert, G. Sinatra, B. Swire-Thompson, S. van der Linden, E. Vraga, T. Wood, M. Zaragoza. (2020) *The Debunking Handbook 2020*. https://doi.org/10.17910/b7.1182

McCulloch, G. (2019). *Because internet: Understanding the new rules of language*. Riverhead Books.

McNeill, D. (1992). *Hand and mind: What gestures reveal about thought*. The University of Chicago Press.

Gawne, L., & G. McCulloch. (2019). Emoji as digital gestures. *Language@ Internet*, *17*(2).

Gawne, L. (2019). Emoji aren't ruining language: They're a natural substitute for gesture 💧💧💧. *The Conversation.* http://theconversation.com/emoji-arent-ruining-language-theyre-a-natural-substitute-for-gesture-118689

Quintana, D.S. & J.A. Heathers, (2020). How podcasts can benefit scientific communities. *Trends in cognitive sciences.* https://doi.org/10.1016/j.tics.2020.10.003

Spinelli, M. & G. Dann. (2019). *Podcasting: The audio media revolution.* Bloomsbury Publishing USA.

Gretchen McCulloch communicates linguistics to public audiences as a full time profession. She is the author of Because Internet, a New York Times bestselling book about internet language. She is co-creator and producer of Lingthusiasm, a podcast that is enthusiastic about linguistics.

Dr. Lauren Gawne is a Senior Lecturer at La Trobe University Australia. Her research interests include the use of co-speech gesture across cultures, the grammar of Tibetic languages, and lingcomm. She is co-creator and producer of Lingthusiasm, a podcast that is enthusiastic about linguistics.

Hungry for power, thirsty for clout: A Corpus-Based Approach to the DESIRE IS HUNGER Metaphor on Twitter

Julia McGrath

Expressions such as *She's hungry for power* and *He's thirsty for attention* are grounded in the DESIRE IS HUNGER conceptual metaphor. However, hunger and thirst have traditionally been considered synonymous in such expressions, with no attention given to how they may diverge in use. This study explores how the expression of DESIRE differs across the HUNGER and THIRST domains, with a particular focus on the THIRST domain and how its use has changed since appropriation of the AAVE slang term *thirsty*.

While previous work on the DESIRE IS HUNGER metaphor has relied on intuitive or elicited data (Gibbs et al., 2004; Kövecses, 2000), this study employs a corpus-based approach using naturally occurring data from Twitter. A 2007 Corpus and 2022 Corpus were compiled to identify changes in use over time. Based on common constructions involving the DESIRE metaphor, frequent nouns were identified and categorised into frequent themes. Overall, the HUNGER domain was more frequently used in a literal sense than THIRST. Nouns of metaphorical HUNGER constructions had more positive sentiment scores, and most frequently related to the theme CONTROL. Constructions involving THIRST often involved slurs and derogatory terms and had less positive sentiment scores, and the domain was most frequently used to specifically express sexual desire based on combined use of the SEXUAL and PEOPLE themes. The THIRST domain was also frequently involved in and with medium-related slang and in constructions unique to its metaphorical sense. These unique constructions revealed the existence of another metaphor – ADMIRATION IS THIRST – in constructions previously believed to be based upon DESIRE.

References

Gibbs Jr, R. W., Lima, P. L. C., & Francozo, E. (2004). Metaphor is grounded in embodied experience. *Journal of pragmatics*, *36*(7), 1189-1210.

Kövecses, Z. (2000). Metaphor and Emotion: Language, Culture, and Body in Human Feeling. Cambridge University Press.

Possession in Cook Islands Māori

Sally Akevai Nicholas

The possessive systems of Austronesian languages have long caused much excitement for linguists and learners alike, and the famously complex "possessive grammars" of Polynesian languages are no exception. A common paradigm in Oceanic languages involve some distinction between alienable/un-alienable possessive constructions sometimes with further sub-categorisation as found in Fijian (Lichtenberk, 1985:83).

Polynesian languages have developed a system that is semantically and syntactically more innovative. In this talk I will describe how possession works in Cook Islands Māori (an East Polynesian language) with reference to the range of scholarly attempts to describe Polynesian systems (cf. Hohepa, 1967; Clark, 1976; Wilson, 1982, Taumoefolau, 1996, Biggs, 1998). Then I will address the discourse around possession in Polynesian languages and ask could it be calmed by a more linguistically accurate description of the system. Or not…

References

Biggs, B. (1998). Let's learn Māori a guide to the study of the Māori language. Auckland University Press., Auckland [N.Z.].

Clark, R. (1976). Aspects of Proto-Polynesian syntax. Linguistic Society of New Zealand, Auckland.

Hohepa, P. W. (1967). A profile generative grammar of Maori, volume 20. Published at the Waverly Press by Indiana University, Bloomington.

Lichtenberk, F. (1985). Possessive constructions in Oceanic languages and in Proto-Oceanic. In Pawley, A. and Carrington, L., editors, Austronesian linguistics at the 15th Pacific Science congress, pages 93–140. Australian National University-Research School of Pacific & Asian Studies-Pacific Linguistics.

Taumoefolau, M. (1996). Nominal possessive classification in Tongan. In Oceanic studies: proceedings of the first International Conference on Oceanic Linguistics, pages 293–304. Department of Linguistics, Research School of Pacific and Asian Studies, Australian National University.

Wilson, W. H. (1982). Proto-Polynesian possessive marking. Pacific Linguistics, Canberra.

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What is and what isn't a frustrative? Defining and applying a comparative concept

Simon E. Overall (University of Otago)

This talk takes as its starting point Overall's (2017) suggestion that a grammaticalized frustrative construction is an areal feature of Amazonia, and goes on to address the question of how to define a comparative concept of "frustrative" in order to test this hypothesis.

While the data set for Overall (2017) was compiled mainly on the basis of the label having been used in the descriptive literature, the same author notes that some phenomena that have been labelled frustrative in the literature do not fit this definition. The challenge remains, then, to identify frustratives in languages that have not been described as having such a marker.

This challenge goes hand in hand with the task of refining the definition such that it delimits a coherent category. Following Haspelmath (2010) and Kuteva et al. (2019), we assume that descriptive categories for individual languages are not useful in crosslinguistic comparison, which instead should be carried out using explicitly defined comparative concepts constructed with a specific typological goal in mind.

Frustrative is defined by Overall (2017: 479) as: "a grammatical marker that expresses the non-realization of some expected outcome implied by the proposition expressed in the marked clause". This somewhat convoluted wording is intended to cover both the more aspectual functions, in which frustrative marking implies incompleteness of the marked verb (ex. 1), and the more epistemic function, where frustrative marking does not negate the marked verb but relates to another implied proposition (ex. 2).

While evidence for frustratives that do fulfil Overall's (2017) definition comes from some languages beyond the Amazonian area: Manambu (Aikhenvald 2009); Tohono O'odham (Copley 2005); Kimaragang (Kroeger 2017); it is not clear that all authors have worked from comparable definitions of frustrative.

As an example of this, Adaskina (2005), Müller (2013), Aikhenvald (2012) all consider an emotive/evaluative component to be criterial to frustrative. Some but not all of the Amazonian languages in Overall (2017) include an evaluative component to frustrative, but Overall (2017) considers this to be epiphenomenal and irrelevant to his core definition, which prioritizes the epistemic/aspectual element. Would a comparative concept be more useful if it included the evaluative component?

This talk outlines the frustratives that have been identified outside of Amazonia, and discusses the criteria involved in formulating a comparative concept that would be sufficient to answer the question of whether or not this category can be considered an areal feature of Amazonia (or of some other area, such as Australia, cf. Caudal, in press).

(1) KWAZA

hy'ja-ça-le-ki

fall-2-frust-decl

'you nearly fell' (Van der Voort 2000: 311)

(2) TUPINAMBÁ

a-só-biã

1sg-go-frust

'I went, but didn't accomplish anything.' (Jensen 1998:539)

References

Adaskina, Yulia V. 2005. Tipologicheskii analiz konstruktsii s frustrativnym znacheniem. [Typological analysis of constructions with frustrative value]. Masters thesis, Faculty of Philology, Moscow State University.

Aikhenvald, Alexandra Y. 2009. The Manambu Language of East Sepik, Papua New Guinea. Oxford University Press.

Aikhenvald, Alexandra Y. 2012. *The languages of the Amazon*. Oxford: Oxford University Press.

Caudal, Patrick. In press. Avertive/frustrative markers in Australian languages: blurring the boundaries between aspectuo-temporal and modal meanings. In Kasia M. Jaszczolt (ed.), *Understanding Human Time*. Oxford: Oxford University Press.

Copley, Bridget. 2005. When the actual world isn't inertial: Tohono O'odham *cem*. In Becker, M. and A. McKenzie (eds.). *Proceedings of SULA 3*. pp. 1–18.

Haspelmath, Martin. 2010. Comparative Concepts and Descriptive Categories in Crosslinguistic Studies. *Language*, 86(3):663–687.

Jensen, Cheryl. 1998. Comparative Tupí-Guaraní Morphosyntax. In D. C. Derbyshire and G. K. Pullum (eds.), *Handbook of Amazonian Languages*, vol. 4, 489–618. Mouton de Gruyter.

Kuteva, Tania, Bas Aarts, Gergana Popova & Anvita Abbi. 2019. The grammar of 'nonrealization.' *Studies in Language*. John Benjamins 43(4). 850–895.

Kroeger, Paul. 2017. Frustration, culmination, and inertia in Kimaragang grammar. *Glossa: A journal of general linguistics* 2(1), p.56. doi: https://doi.org/10.5334/gjgl.146

Müller, Neele. 2013. Tense, Aspect, Modality, and Evidentiality Marking in South American Indigenous Languages. LOT.

Overall, S. E. (2017). A Typology of Frustrative Marking in Amazonian Languages. In A. Y. Aikhenvald & R. M. W. Dixon (Eds.), The Cambridge Handbook of Linguistic Typology (pp. 477–512). Cambridge: Cambridge University Press.

Van der Voort, Hein. 2000. *A grammar of Kwaza*. Amsterdam.

Rethinking Indonesian-type passives: A view from Javanese

Hero Patrianto

Does Javanese possess a true passive? Facts and fictions revisited. The 3rd person prefix ḍi- in East Javanese has long been analyzed as a passive marker that indicates the demotion of the agent (Suhandano 1994; Nurhayani 2014; Krauße 2017). In a di-marked construction like (1), the theme appears pre-verbally, as agents do in Actor Voice. The agent must either be absent or present as an adjunct with an optional preposition ambe'.

(1) Surat-é ḍi-kirim ((ambè') Siti). (Putative passive construction)

letter-DEF 3RD/PASS-send by Siti

'The letter was sent (by Siti).'

This construction is typologically unusual under the traditional passive analysis. First, the agent can never be in 1st or 2nd person — a surprising person restriction if the agent is a genuine adjunct. Furthermore, this restriction is in complementary distribution with that in Object Voice (OV), where only 1st or 2nd person agents are allowed, (2). As seen below, in OV, the 1st or 2nd person agents also surface as a proclitic, as does the 3rd person prefix di- in the putative passive.

(2) Surat-é ta'/mbo'-(*ḍi)-kirim (*(ambè') Siti). (Object Voice)

letter-DEF 1st/2nd-(3rd)-send by Siti

'I/you/*Siti sent the letter.'

I present novel evidence that (1) is best analyzed as an OV construction with a third-person agent. Support for this claim comes from five pieces of evidence that the fronted theme in (1) is an undergoer topic, and not a subject (as must be assumed under a passive analysis). Three of the five arguments are summarized below. First, similar to OV constructions, the theme in (1) can be a reflexive pronoun. Second, it must receive definite/specific reading. Third, in a 3-place construction, the preverbal undergoer can be a PP as long as it is definite/specific. All three observations lend support to a topic analysis for the theme and argues against a subject analysis.

Hero Patrianto I am a native Javanese from East Java, Indonesia. In my home country, I work as a linguist at the Language Office of East Java (Indonesian Ministry of Education and Culture). I received my master degree in linguistics from the University of Iowa (US) fully funded by the Fulbright Scholarship. Currently a Wellington Doctoral Scholarship awardee, I am now a PhD student at Linguistics and Applied Language Study in Victoria University of Wellington. My research interest includes formal syntax, language documentation, indigenous language and culture studies.

Rhythm and Rhyme in Japanese Rap Music: An Analysis of Techniques and Recent Developments

Lucy Pollock

Rap is still a relatively new genre in Japan. Until Japanese rap songs achieved commercial success for the first time in the mid-90s, many people believed that rap would simply not take off in Japan due to differences in language and culture (Condry, 2006). Some of the main linguistic obstacles Japanese rappers faced were ones related to rhyme and rhythm (Manabe 2006). Rhyming is rendered simplistic due to the language's head-final nature and highly inflected morphology, as well as its relatively small phoneme inventory. Rhythm on the other hand is complicated by a lack of stress accents, polysyllabic vocabulary (Manabe 2006) and emphasis on the mora rather than the syllable. Manabe (2006), Tsujimura & Davis (2008), Condry (2006), and Kawahara (2002, 2005) have all discussed techniques developed by rappers to overcome these difficulties, and how these changed over time. However, all of these papers analyse rap songs from the early-90s to mid-2000s (around the time rap was becoming established in Japan) meaning it is likely that the techniques discussed have developed further since.

This presentation will build on past work on Japanese rap techniques, and use original data to show how these have developed in the past 10 years.

The main finding is that the rhyming technique dubbed “moraic assonance” by Tsujimura & Davis (2008), seems to no longer be as prevalent within Japanese rap. Moraic assonance requires all vowels in rhyming moras to be identical, however, in recent songs there is evidence of rappers rhyming words/phrases that only share the same mora (or even syllable) count, ignoring the vowel quality. Another finding was the creation of rhythmic patterns around the bimoraic foot (Poser, 1990), potentially imitating English poetic stress patterns. These changes may possibly represent an increasing influence of English on Japanese rap, and perhaps on the language itself.

References

Condry, I. (2006). Hip-hop Japan: rap and the paths of cultural globalization. Duke University Press.

Kawahara, S. (2002). Aspects of Japanese hip-hop rhymes: What they reveal about the structure of Japanese. In *5th ICU Language Study Workshop, International Christian University, Tokyo, Japan, June* (pp. 21-23).

Kawahara, S. (2005). *Linguist’s delight: Similarity, half-rhyme, and hip hop*. Paper presented at the 5th ICU Language Study Workshop, International Christian University, Tokyo, Japan, June 21–23.

Manabe, N. (2006). Globalization and Japanese Creativity: Adaptations of Japanese Language to Rap. *Ethnomusicology*, *50*(1), 1–36. http://www.jstor.org/stable/20174422

Poser, W. J. (1990). Evidence for Foot Structure in Japanese. *Language (Baltimore)*, *66*(1), 78-105. doi:10.1353/lan.1990.0031

Tsujimura, N., & Davis, S. (2008). Dragon Ash and the Reinterpretation of Hip Hop. In Alim, H. S., Ibrahim, A., & Pennycook, A. (Eds.), *Global linguistic flows : Hip hop cultures, youth identities, and the politics of language*. (pp. 179-193).Taylor & Francis Group.

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Analysing Narrative Structure in Aguaruna (Chicham)

Eleanor Scoon

This paper describes ongoing work on the grammatical marking of narrative structure in Aguaruna, a Chicham language of Peru. It focuses on the enclitic topic marker *=ka*, which is typically hosted by noun phrases but may also appear on other types of constituents (Overall 2017). The data comes from a corpus of traditional Aguaruna stories recorded in 2004–2006.

Qualitative research has shown that the appearance of the topic marker *=ka* in a clause is associated with backgrounded information, defined as supporting, amplifying, or commenting on the narrative; this is in contrast to foregrounded information that advances the narrative events along a chronological timeline.

Three types of backgrounded information are marked with *=ka*:

1. Information that strengthens the shared knowledge between speaker and addressee in relation to the immediate context of the narrative, especially abstracts, where the speaker begins the narrative by providing context to the audience about the story they are about to tell.
2. Parenthetical asides, where the speaker steps outside the narrative universe to explain or provide a metacommentary.
3. The third category of background information does not necessarily fit into either of the categories mentioned above, and can be described as associated with pivotal moments in the narrative.

The paper then outlines planned further work on corpus building and data processing using the GRAID framework (Haig & Schnell 2014) that will allow a broader quantitative approach to complement the qualitative approach taken thus far. This expanded dataset should provide a clearer picture of the motivations that underlie the use of the topic marker *=ka*, assuming that these motivations are best represented as statistical tendencies rather than categorical grammatical rules.

References

Haig, G. & Schnell. S. (2014). Annotations using GRAID (Grammatical Relations and Animacy in Discourse). Manual Version 7.0.

Overall, S. (2017). *A Grammar of Aguaruna (Iinia Chicham)*. Mouton Grammar Library (MGL), 68. De Gruyter Mouton. Berlin.

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Lexical homoplasy as pattern: Computational confirmation of contact correspondence in the Philippines

Isaac Stead

Loanword detection and identification of contact areas among closely related languages can be difficult, especially if these languages are similar in phonology. It is also challenging to demonstrate such phenomena empirically. While there has been some recent progress in this area (Zhang et al. 2021; Miller et al. 2020), none of these methods have focussed on the problem of contact-induced lexical change among closely related languages.

In this paper I present a multivariate analysis of lexical data from 101 Philippine languages (Blust & Trussel 2022) which represents a solution to these problems. 1,511 cognate sets are arranged as binary features per language in a Euclidean ordination space such that the distances between them define subgroups or regions in this space. These regions can be recovered in a manner which can be intuitively understood by the ”linguist in the street”. This is accomplished by reducing the dimensionality of the space such that the distances between the languages are preserved, using Multidimensional Scaling (Borg 1997; Faith et al. 1987; Kruskal 1964a, b). This method is adapted from computational biology, where it has been used to demonstrate patterns of ecologically driven morphological convergence in ducks (Faith 1989).

These regions can be considered to reflect the results of contact-induced lexical change among more distantly related but geographically and culturally proximate Philippine languages. The explanatory power of the pattern recovered by the analysis is confirmed by means of null hypothesis testing using Monte Carlo simulations. Importantly, the results also empirically confirm the existence of the axial relationships in the Philippines which have been recently proposed by Zorc (2021) using a different data set. The power and non-black-boxiness of this method make it a promising tool for similar analyses in other language families and geographical areas.

References

Blust, R., & Trussel, S. (2013). The Austronesian Comparative Dictionary: A Work in Progress. Oceanic Linguistics, 52, 493–523. http://www.jstor.org/stable/43286361

Borg, I., & Groenen, P. (1997). A Majorization Algorithm for Solving MDS. In Modern Multidimensional Scaling (pp. 135-157). Springer, New York, NY.

Faith, D. P., Minchin, P. R., & Belbin, L. (1987-04). Compositional dissimilarity as a robust measure of ecological distance. Vegetatio, 69, 57–68. https://doi.org/10.1007/bf00038687

Faith, D. P. (1989-09). HOMOPLASY AS PATTERN: MULTIVARIATE ANALYSIS OF MORPHOLOGICAL CONVERGENCE IN ANSERIFORMES. Cladistics, 5, 235–258. https://doi.org/10.1111/j.1096-0031.1989.tb00488.x

Kruskal, J. B. (1964). Multidimensional scaling by optimizing goodness of fit to a nonmetric hypothesis. Psychometrika, 29(1), 1-27.

Kruskal, J. B. (1964). Nonmetric multidimensional scaling: a numerical method. Psychometrika, 29(2), 115-129.

Miller, J. E., Tresoldi, T., Zariquiey, R., Castañón, C. A. B., Morozova, N., & List, J.-M. (2020-12). Using lexical language models to detect borrowings in monolingual wordlists. PLOS ONE, 15, e0242709. https://doi.org/10.1371/journal.pone.0242709

Zorc, D. (2021). Axis relationships in the Philippines: Where traditional subgrouping falls short. Paper Presented at the 14th Philippine Linguistics Congress, University of the Philippines Diliman.

Stories of the mind: investigating mental lexicon though a large-scale crowdsourcing study of word associations. The Japanese Small World of Words.

Maria Telegina (University of Tokyo), Simon De Deyne (University of Melbourne)

In this paper, we present a project dedicated to creation of a large-scale Japanese associative database as part of the multilingual Small World of Words project (SWOWJP). The simultaneous collection of other languages provides a unique resource for comparative analyses of mental lexicon across languages to address theoretical questions about conceptual universality, demographic-aware representations, gender symbolic asymmetry and biases, psycholinguistic experimentation, and several applications, such as bilingual vocabulary learning.

In psychology and linguistics, mental lexicon is defined as information on the meaning, syntactic features, pronunciation, and sociolinguistic knowledge stored in our minds. Previous research (De Deyne, Verheyen, and Storms 2016) suggests that word associations are a more effective tool to access mental lexicon, than resources based on natural language production. Based on such conclusions and due to development of computational means of data collection and organization, word association data have been rediscovered as a source of information for research on language and the mind. Such topics as demographic dependent differences in language use (Garimella et al., 2017), gender symbolic asymmetry (Wyrobkova, Gygax, and Macek 2015), lexical centrality and semantic similarity (De Deyne et al. 2019) language development, and agedependent changes in concept connectivity (Wulff et al. 2019; Zortea et al. 2014; Zortea and Salles 2012) are investigated with word associations as the main material for the studies.

A total of 17 languages are currently included as part of the international collaborative Small World of Words project, and datasets in several major world languages are now available (Dutch, +18,000 cues, English, +14,000 cues) or prepared for publication (Spanish +12,000 cues, Mandarin, +10,000 cues). The English and Dutch databases have already been already downloaded by more than 3000 researchers. Here we situate the opportunities and challenges to create a new dataset for Japanese comparable in scale with the English and Dutch ones. Beyond providing a source of data for linguists and psychologists, Japanese is a language spoken by over 120 million speakers and taught in over 136 countries, which opens several exciting avenues for multilingual comparative research, foreign language education, and other disciplines investigating the interaction between language thought and culture.

References

De Deyne, Simon, Danielle J Navarro, Amy Perfors, Marc Brysbaert, and Gert Storms. 2019. 'The "Small World of Words" English Word Association Norms for over 12,000 Cue Words'. *Behavior Research Methods* 51 (3): 987–1006. https://doi.org/10.3758/s13428-018-1115-7.

De Deyne, Simon, Steven Verheyen, and Gert Storms. 2016. 'Structure and Organization of the Mental Lexicon: A Network Approach Derived from Syntactic Dependency Relations and Word Associations'. In *Towards a Theoretical Framework for Analyzing Complex Linguistic Networks*, edited by Alexander Mehler, Andy Lücking, Sven Banisch, Philippe Blanchard, and Barbara Frank-Job, 47–74. Berlin: Springer Berlin Heidelberg.

Wulff, Dirk U., Simon De Deyne, Michael N. Jones, and Rui Mata. 2019. 'New Perspectives on the Aging Lexicon'. *Trends in Cognitive Sciences* 23 (8): 686–98. https://doi.org/10.1016/J.TICS.2019.05.003.

Wyrobkova, Adriana, Pascal Gygax, and Petr Macek. 2015. 'Human and Man Side by Side, Woman Trapped in a Different Reality: Word Associations in Czech'.Ceskoslovenska Psychologie 59 (1). https://www.researchgate.net/profile/Pascal-Gygax/publication/296332362_Human_and_man_side_by_side_woman_trapped_in_a_different

_reality_Word_associations_in_Czech/links/56d47b0a08aed6a7b275c4dc/Human-and-man-side-by-side-woman-trapped-in-a-differentreality-Word-associations-in-Czech.pdf.

Zortea, Maxciel, Bruno Menegola, Aline Villavicencio, and Jerusa Fumagalli de Salles. 2014. 'Graph Analysis of Semantic Word Association among Children, Adults, and the Elderly'. *Psicologia: Reflexão e Crítica* 27 (1): 90–99. https://doi.org/10.1590/S0102-79722014000100011.

Zortea, Maxciel, and Jerusa Fumagalli de Salles. 2012. 'Semantic word association: comparative data for Brazilian children and adults'. *Psychology & Neuroscience* 5 (1): 77–81. https://doi.org/10.3922/j.psns.2012.1.10.

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Tongan and English in the linguistic landscape of downtown Nuku'alofa, the Kingdom of Tonga

Danielle Tod

The linguistic landscapes of urban spaces today are increasingly multilingual, often characterised by the strong textual presence of English, even where English is not the L1 of the majority (Gorter 2006; Bolton 2012). The current study examines code choice in the linguistic landscape of downtown Nuku'alofa, the urban capital of the Kingdom of Tonga, a nation in the South Pacific that occupies a blurred space between the Outer and Expanding Circles. I unpack the motivations behind these code choices and examine the ways in which locally held language ideologies are entextualised in the linguistic landscape.

A mixed methodology is employed in examining a corpus of over 300 signs, gathered in 2019 on a fieldwork trip to Tongatapu, the main island of the Tongan archipelago. A quantitative analysis informed by the principles of variationism is employed to examine the distribution of codes in the LL, outlined by Soukup (2016) and termed a 'variationist linguistic landscape study' (VALLS). A qualitative analysis is also employed, supported by ethnographically informed observations of language use in the community, allowing for a contextualised appreciation of code choice in Tonga.

Findings indicate a strong prevalence of English in the linguistic landscape, present in 93% of signage. Nonofficial emitters are more likely to use English, particularly in the commercial arena, reinforcing the value of English as a language of globallness and access to western practices of consumption. Tongan appears on 19% of signage, either in a monolingual or bilingual constellation, and is more prevalent on signage emitted by the government, who adhere most closely to a locally held ideology of bilingualism as ideal for the community (Taufe'ulungaki 1992). Bilingual signs follow different patterns depending on emitter, with the government often using translations, while nonofficial emitters more commonly code switch, where English is the matrix language, inserting Tongan words or phrases. This suggests that the primary motivation for bilingual signage differs, with the government driven by a desire to ensure understanding, while nonofficial emitters employ Tongan as an index of localness. In addition, code switching may be read as modern (Besnier 2011). Code choice in the linguistic landscape of downtown Nuku'alofa provides a concrete example of glocalisation and cultural mix that characterise modern Tongan society.

References

Besnier, Niko (2011). *On the Edge of the Global: Modern Anxieties in a Pacific Island Nation*. Stanford University Press.

Bolton, Kingsley (2012). World Englishes and linguistic landscapes. *World Englishes*, 31(1): 30-33.

Gorter, Dirk (2006). *Linguistic Landscape: A New Approach to Multilingualism*. Multilingual Matters Ltd.

Soukup, Barbara (2016). English in the linguistic landscape of Vienna, Austria (ELLViA): Outline, rationale, and methodology of a large-scale empirical project on language choice on public signs from the perspective of sign-readers. *Vienna English Working Papers*, 25: 1-24.

Taufe'ulungaki, 'Ana Maui (1992). *Implications of language attitudes for language planning in Tonga* (Doctoral dissertation). University of Birmingham.

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Interactive Techniques for Visualising Categorical Data in Linguistics

David Trye, University of Waikato

So much of linguistic analysis involves categorical variables (Levshina, 2015; Stefanowitsch, 2020), from phonological, to lexical and grammatical features (see, for instance, Dryer & Haspelmath, 2013), and even language contact phenomena (Trye et al., 2020). Crucially, though, information visualisation is needed to make sense of large quantities of data. Yet, few visualisation techniques support the analysis of more than a handful of categorical variables at the same time. As the size and complexity of datasets continues to increase, more powerful visualisation tools are needed to facilitate their effective exploration. In this talk, I introduce two interactive techniques for visualising multivariate categorical data, which are being developed into free online tools. These techniques can also be applied to datasets of mixed types, provided the continuous variables are appropriately 'binned'. The functionality of both tools is demonstrated using a COVID-19 Twitter dataset coded for the use of directives and users' stance towards government measures in New Zealand (Burnette & Calude, 2022).

The first technique I will introduce is the *Staircase Plot*, which employs a space-efficient, matrix-based layout to display multiple bivariate summaries. The main visualisation is a heatmap depicting all possible two-way contingency tables for the given collection of variables. This allows the user to quickly identify associations between variables, and to detect any cells with zero frequencies or exceedingly low/high counts. The display can also be changed to show proportions or Pearson residuals instead of raw frequencies. Moreover, there is built-in support for the Chi-squared test of independence: all variable pairs that satisfy the criteria are coloured according to the effect size, as measured by Cramer's V. This removes the burden of manual computation, visually reinforces correct interpretations and enables all results to be conveniently displayed in one place.

The second technique, *MultiCat* (Trye, 2022), is designed for examining higher-order categorical relationships: that is, multivariate rather than pairwise associations. The display enables the comparison of category frequencies, foregrounding precise combinations of categories that are commonly observed across individual data items. This can provide insights that are distinct from but complementary to those revealed by Staircase Plots.

The proposed techniques have practical value for linguists who frequently deal with categorical data and wish to enhance their workflows for data exploration, anomaly detection, knowledge discovery and hypothesis testing. The interactive nature of these tools encourages the user to uncover patterns that may otherwise go unnoticed, by examining the data from multiple perspectives.

References

Burnette, J., & Calude, A. S. (2022). Wake up New Zealand! Directives, politeness and stance in Twitter #Covid19NZ posts. *Journal of Pragmatics*, *196*, 6-23.

Dryer, M. S., & Haspelmath, M. (2013). The World Atlas of Language Structures Online. Leipzig: Max Planck Institute for Evolutionary Anthropology. (Available online at http://wals.info, Accessed on 2022-10-10.)

Levshina, N. (2015). *How to do linguistics with R: Data exploration and statistical analysis*. John Benjamins Publishing Company.

Stefanowitsch, A. (2020). *Corpus linguistics: A guide to the methodology*. Language Science Press.

Trye, D. (2022, April 11-14). Visualising multivariate categorical data. In *Proceedings of the IEEE Pacific Visualization Symposium (PacificVis)*, Tsukuba, Japan.

Trye, D., Calude, A. S., Bravo-Marquez, F., & Keegan, T. T. (2020). Hybrid hashtags: #YouKnowYoureAKiwiWhen your tweet contains Māori and English. *Frontiers in artificial intelligence*, *3*, 15.

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The Fall of Agent-Patient Alignment in Chhé'ee Fókaa (Northeastern Pomo)

Neil Alexander Walker

Alignment systems were once proposed as time-stable features of language families (Nichols 1992: 181), though subsequent research showed that even typologically rare systems, such as agent-patient (or agentive) alignment, may be borrowed by unrelated languages, as in Yuki, which borrowed its agent-patient alignment system from Pomoan (Mithun 2008). This paper investigates the origins of the alignment system of the Chhé'ee Fókaa language and confirms the ability of unrelated languages to borrow entire alignment systems.

Chhé'ee Fókaa is one of seven Pomoan languages of California. Mithun (2008: 308) states that the agent-patient alignment system of Pomoan is "fully developed in all seven members of the family." Subsequent research has shown that this statement is incorrect: Chhé'ee Fókaa has grammaticized a nominative-accusative alignment system (Walker 2016: 87-88). There remains fossilized evidence within Chhé'ee Fókaa grammar that confirms a previous agent-patient alignment system was later reanalyzed as a nominative-accusative one. Pomoan languages typically lack person-marking affixes on verbs. However, Chhé'ee Fókaa has grammaticized a first-person singular suffix, *-tọ* , which may be used in conjunction with the first-person singular nominative pronoun *ʔa:* (e.g. *ʔa: tą́ -n-tọ* 1sg.NOM see-DVS-1sg 'I see'). This suffix is clearly cognate with the Chhé'ee Fókaa first-person singular accusative pronoun *ʔahtọ* , which is cognate with the various reflexes of Proto Pomo *ʔawito: (McLendon 1973:57, McLendon 1976:30), which represent the first-person singular patient pronoun in the other six Pomoan languages.

In addition to the phonological similarities between the first-person singular suffix of Chhé'ee Fókaa and the reflexes of Proto Pomo *ʔawito:, there are semantic clues that point to a non-nominative-accusative origin. Most extant examples have *-tọ* attached to intransitive clauses, especially verbs of feeling or predicate adjectives. Examples in transitive clauses are largely confined to verbs of perception or emotion. Southern Pomo, a sister language to Chhé'ee Fókaa, allows patient-marked pronouns in the same environments (where a nominative form would be expected in a nominative-accusative language) (Walker 2020: 292-295, 2022: 108-110).

The shift from agent-patient to nominative-accusative alignment can be explained by contact with Wintuan languages, which also have nominative-accusative alignment (Walker 2016: 81). The language-internal data supporting a shift from agent-patient to a nominative-accusative alignment in Chhé'ee Fókaa combined with clear evidence of language contact with an unrelated language with a nominative-accusative alignment system, provides clear evidence for the malleability of alignment systems and their unsuitability as the primary support for proposals of deep-time relationships among language families.

References

McLendon, Sally. 1973. *Proto Pomo*. University of California Publications in Linguistics 71.

McLendon, Sally. 1976. "The Proto-Pomo pronominal system." In *Hokan studies, papers from the first conference on Hokan languages*, San Diego, California, April 23-25, 1970, ed. Margaret Langdon and Shirley Silver, 13-28. Janua Linguarum, Series Practica 181. The Hague: Mouton.

Mithun, Marianne. 2008. "The emergence of agentive systems in core argument marking." In *The Typology of Semantic Alignment*, edited by Mark Donohue and Søren Wichmann, 297-333. Oxford University Press: New York.

Nichols, Johanna. 1992. *Linguistic Diversity in Space and Time.* University of Chicago Press: Chicago.

Walker, Neil Alexander. 2016. “Assessing the effects of language contact on Northeastern Pomo.” In Language Contact and Change in the Americas: Studies in Honor of Marianne Mithun, ed. Andrea Berez-Kroeker, Diane M. Hintz, and Carmen Jany, 67-90. Amsterdam: John Benjamins.

Walker, Neil Alexander. 2020. *A grammar of Southern Pomo.* University of Nebraska Press: Lincoln.

Walker, Neil Alexander. 2022. “Southern Pomo switch-reference and its origins within Pomoan.” International Journal of Linguistics, 88, no. 1, 95-127.

A synchronic analysis of the use of passive voice in Māori narrative texts

Te Ngaru Wehi

The passive voice has been described as unusually frequent in Māori from a typological perspective (Pucilowski 2006, Hōhepa 1969). This is especially the case in past tense narratives compared to natural conversational speech, however the motivations for the high use of passive voice are still unclear. Therefore, this paper attempts to demystify the motivation for some verbs to be used in passive voice rather than active voice, taking into account speech genre; aspect; and transitivity in the sense of Hopper & Thompson (1980).

The data for this study comes from interviews (via Zoom) with 10 speakers of Te Reo Māori, in Māori. Speakers participated in 3 different genres of storytelling including natural storytelling or an anecdote, a retelling of the Ranginui and Papatūānuku creation myth, and the Frog Story which is a wordless children's picture book by Mercer Mayer.

The research shows that certain verb forms do indeed show high transitivity compared to other verb forms, and are more likely to appear in the passive voice form. However, passivation was more frequently used in natural conversational speech compared to narrative speech, particularly in the Frog Story genre of storytelling, which contrasts with Pucilowski's (2006) and Hōhepa's (1969) assertions.

Future research should include more recordings, with a wider sample size, and different genres of storytelling. This would allow speakers to use a wider range of verbs rather than being confined to a small range of verbs that apply to the Frog Story genre of storytelling.

References

Hohepa, P. W. (1969). The accusative-to-ergative drift in Polynesian languages. *The Journal of the Polynesian Society*, 78(3), 295-329.

Hopper, P. J., & Thompson, S. A. (1980). Transitivity in Grammar and Discourse. *Language*, *56*(2), 251–299. https://doi.org/10.2307/413757

Pucilowski, A. (2006). Split-ergativity in Māori. MA thesis, Canterbury University.

Kia ora. My name is **Te Ngaru Wehi**. I am a student at Otago University double majoring in Linguistics and Māori Studies. I am a native speaker in Te Reo Māori and hugely passionate about upskilling myself to contribute to its revitalization in New Zealand, which is why I am interested in partaking in your event in December.

Ngaa manaakitanga.

Recovering Poorly-transcribed Narrative Texts for Endangered Languages: A Computational Approach

Nathan M. White

For some marginalized and endangered languages, there exists a large body of material in archives and social media that could make a significant impact on knowledge of the language and language revitalization efforts. However, in many cases, this data is poorly transcribed or written without orthographic standardization, and often lack any available translation. Yowlumne (Yokuts; California, USA; ISO 639-3: yok) suffers from exactly this situation: a large number of traditional narratives are available, but these cannot be readily accessed or used in research or language revitalization due to the problems mentioned above.

The current study seeks to show that through a combination of computational methods, including text normalization and lemmatization, the Yowlumne narrative texts can be successfully standardized and glossed, enabling access and their restored use. The texts in question are found in messy, handwritten archival documents in the papers of John Peabody Harrington (Mills and Brickfield 1985) dating from between 1910 and 1935, the period immediately before new government policies led to the decline and eventual near dormancy of the language.

More specifically, the recovery approach takes the form of first transcribing a number of available handwritten texts in digital form, then running a preliminary text normalization process using an algorithm involving Levenshtein distance (Levenshtein 1965) applied to sound-classes containing commonly confused sounds on the part of the original transcriber. This first pass at normalization is then hand-checked for accuracy, and used to train a Transformer model (Vaswani et al. 2017) that can then be used to normalize additional data. The data normalized by the Transformer model can then be searched by lexeme.

The study also considers preliminary observations that can be made regarding grammatical phenomena found in Yowlumne traditional narratives as a result of applying the above methods.

This approach is designed to be language-general, and as such, can be adapted to enable access to other marginalized languages for which messy text data exists. The study will be of interest to those interested in computational approaches to language as well as those who seek to access problematic but vital texts for language revitalization and other applications for marginalized languages.

References

Levenshtein, Vladimir. 1965. Binary codes capable of correcting spurious insertions and deletions of ones. *Problems of Information Transmission*, 1:8–17.

Mills, Elaine L. & A.J. Brickfield (eds.) 1985. *The papers of John Peabody Harrington in the Smithsonian Institution, 1907-1957*. Volume 2. White Plains, NY, USA: Kraus International Publications.

Vaswani, Ashish et al. 2017. Attention is All You Need. In Proceedings of the 31st Conference on Neural Information Processing Systems.

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Topical structure, amplitude variation, and F1 in single-speaker narrative recordings

Joshua Wilson Black, Jen Hay, Lynn Clark, and James Brand

Research on speaker style and stance encourages the move from single linguistic variables towards systems of covarying variables and their within-speaker variation (e.g. Podesva 2008; Eckert 2012; Eckert & Labov 2017). We here report a surprising finding made while exploring within-speaker stylistic covariation of vowel formants. Namely, that vowel formants strongly covary in response to fluctuations in speaker amplitude. We argue that this effect is of concern to any sociolinguist extracting vowel formants from speaker recordings. We also find potentially agentive use of amplitude variation to signal the beginning and end of topics within single-speaker narrative recordings.

Our data comes from the QuakeBox corpus (Clark et al. 2016), a collection of transcribed and force-aligned single-speaker recordings of stories about the 2010-2011 Christchurch earthquakes stored in a LaBB-CAT instance (Fromont & Hay 2008). QuakeBox recordings occurred in a quiet mobile recording studio environment. We divide speaker recordings into 60 and 240 second intervals within which we take the mean F1 and F2 values for ten New Zealand English monophthongs. Application of PCA then reveals strong covariation of F1 values for all monophthongs (cf. Brand et al. 2021). We connect this effect with amplitude by including it within the PCA analysis and by means of GAMM modelling.

While previous research has connected amplitude and vowel formants, especially in the context of speech in noisy environments and of vocal effort (e.g. Van Summers et al. 1988, Liénard & Benedetto 1999, Koenig & Fuchs 2019), we are unaware of studies concerning normal variation in amplitude in a quiet recording environment.

We argue that the magnitude of the amplitude effect should be taken seriously by sociolinguists on two grounds. First, the extraction of vowel formants is a core tool in sociolinguistic research. However, relative changes in amplitude have a significant effect on the nature of the vowel space as a whole. We demonstrate this by means of an R Shiny interactive, allowing investigation of high and low amplitude vowel spaces in the QuakeBox corpus, and by comparing the effect of amplitude with the often-controlled-for effect of speech rate on formants. Second, we argue that amplitude variation may be being used agentively by speakers to signal the beginning and end of topical subsections of their narratives. Amplitude variation may thus be an important part of the emerging literature on the role of phonetics in discourse structure and turn taking (e.g. Local 2007, Zellers & Post 2012).

References

Brand, James, Jen Hay, Lynn Clark, Kevin Watson & Márton Sóskuthy. (2021). Systematic co-variation of monophthongs across speakers of New Zealand English. *Journal of Phonetics*. 88.

Clark, Lynn, Helen MacGougan, Jennifer Hay & Liam Walsh. (2016). "Kia ora. This is my earthquake story." Multiple applications of a sociolinguistic corpus. *Ampersand.* 3, 13-20.

Eckert, Penelope. Three waves of variation study: The emergence of meaning in the study of sociolinguistic variation. *Annual Review of Anthropology*. 41, 87-100.

Eckert, Penelope & William Labov. (2017). Phonetics, phonology, and social meaning. *Journal of Sociolinguistics*, 21(4), 467-496.

Fromont, Robert & Jennifer Hay. (2008). ONZE Miner: the development of a browser-based research tool. *Corpora.* 3(2), 173-193.

Koenig, Laura L. & Susanne Fuchs. (2019). Vowel formants in normal and loud speech. *Journal of Speech, Language, and Hearing Research.* 62(5), 1278-1295.

Liénard, Jean-Sylvain & Maria-Gabriella Di Benedetto. (1999). Effect of vocal effort on spectral properties of vowels. *The Journal of the Acoustical Society of America.* 106(1), 411-422.

Local, John & Gareth Walker. (2007). Methodological imperatives for investigating the phonetic organization and phonological structures of spontaneous speech. *Phonetica.* 62(2-4), 120-130.

Podesva, Robert J. (2008). Three sources of stylistic meaning. *Texas Linguistic Forum.* 51, 1--10.

Van Summers, W., David Pisoni, Robert H. Bernacki, Robert I. Pedlow & Michael A. Stokes. (1988). Effects of noise on speech production: Acoustic and perceptual analyses. *Journal of the Acoustical Society of America.* 83(3), 917-928.

Zellers, Margaret and Brechtje Post. (2012). Combining formal and functional approaches to topic structure. *Language and Speech.* 55(1), 119-139.

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Navigating Aotearoa New Zealand's Multilingual Social Media Landscape

Sidney GJ Wong

The purpose of the current study is to take a demographic approach to understand Aotearoa New Zealand. The advent of social media and the influx of language data using computational linguistic methods provide linguists with a new avenue of research. One benefit of analysing geo-referenced social media language data is that we are able to show variation and change in the distribution of languages used in Aotearoa New Zealand to low geographic areas. The geo-referenced tweets come from a subset of the Corpus of Global Language Use (Dunn, 2020). The tweets were collected from 98 locations across Aotearoa New Zealand between 2017 to present. We used a language identification model to classify tweets based on the content of the words. Over 403 distinct languages were identified from the tweets using the language identification model. However, comparing the distributions of languages alone does not provide a clear picture of Aotearoa New Zealand's changing multilingual social media landscape. In order to do this, we calculated the concentration ratio (CR) for each data collection point as a proxy measure for linguistic diversity (Hirschman, 1945). A CR is often used to determine market competitiveness. A low CR between 0% to 40% suggests low concentration (i.e., high linguistic diversity) while a CR between 70% to 100% suggests high concentration (i.e., low linguistic diversity). The results of the current study suggest that locations across Aotearoa New Zealand are largely linguistically homogeneous; however, linguistic diversity does fluctuate over time. The linguistic landscape of Twitter is consistently more diverse in locations such as those in Tāmaki Makaurau Auckland than Ōtautahi Christchurch. Furthermore, there are clear impacts of the linguistic landscape from the Covid-19 pandemic as a result of restrictions on travel and migration. By observing the variation in the distribution of languages on Twitter, we are able to identify changes in the linguistic behaviour for a given location. Social media platforms like Twitter provide a rich source of language data for us to observe real-time societal and attitudinal changes which would not be possible using traditional survey and sampling methods.

References

Dunn, J. (2020). Mapping languages: the Corpus of Global Language Use. *Lang Resources & Evaluation* 54, 999–1018.

Hirschman, A. O. (1945). *National power and the structure of foreign trade*. University of California Press.

Sidney GJ Wong (he/him, any pronouns with respect) is a Cantonese-tauiwi PhD student based at the Geospatial Research Institute Toi Hangarau, University of Canterbury. The focus of Sidney's work modelling language variation and change using geo-referenced social media language data in local populations.

Comparing Covid-19 Discourse between Japan and Aotearoa New Zealand in English language News

Meimuna Zahido

Covid-19 provided researchers an opportunity to analyse language used by the media to communicate complex information to the wider public. Mass media has a significant impact on our expectations of family, parents, and children, creating standards for our way of life, love, worship, and society (Srivastava et al., 2018). This study reports on differences and similarities in the media approach to this topic of discourse, between Japan and New Zealand. Thus, this research provides an analysis of two major national news media outlets, namely NHK in Japan and RNZ in Aotearoa New Zealand. As both countries began implanting Covid-19 measures, such as lockdowns and the national states of emergency, at different times, the research is focused on the lockdown or the national state of emergency which happened from March 2020 to May 2020 for Aotearoa New Zealand and from April 2020 to May 2020 for Japan. Corpus data was collected in order to conduct quantitative analyses which looked to identify word frequencies and usage of sentiment words (positive, negative and neutral words) in the articles published. Preliminary results show interesting similarities in the word patterns of both countries. For instance, the word 'people' appeared as a highly ranked word in both Aotearoa New Zealand and Japanese data. In contrast, a divergence was used in regard to country names: ‘New Zealand’ appeared in the top 10 ranked words in the Aotearoa New Zealand data, while the word ' Japan' did not appear in Japanese data. The data also shows a higher percentage of neutral words than positive or negative words.

Reference

Srivastava, K., Chaudhury, S., Bhat, P. S., & Mujawar, S. (2018). Media and mental health. *Industrial Psychiatry Journal*, *27*(1), 1–5. https://doi.org/10.4103/ipj.ipj_73_18

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Towards a positive psychology turn in ethnic minority learner: The Role of Foreign Language Learning Enjoyment and Boredom on English achievement

Xian Zhao

A recent decade has witnessed a surging interest in emotional elements across English language learning and positive psychology as the prevalence of emotions in class could lead to profound effects on academic achievement, which is the most concerned issue of students (Dewaele & Li, 2020; Khajavy & Aghaee, 2022). Despite the emotional research could date back to five decades ago, the primary focus has been on anxiety as it was underpinned by the affective filter hypothesis and thus widely considered the culprit of grades fallen (Dulay & Burt,1977; Krashen, 1985), other emotions have been in the shadow of discussion in language-related research (Horwitz et al., 1986; Li, 2022; MacIntyre, 2017; Spielberger, 1972).

Against this backdrop, there has been a burgeoning body of literature on foreign language enjoyment in conjunction with anxiety (FLE/FLA), which has been reflected as the 'left and right feet' on learner's passage to success (Dewaele & MacIntyre, 2016; MacIntyre & Gregersen, 2012). However, the paucity of foreign language learning boredom (FLLB), and the combination of FLE and FLLB in educational contexts may impede the adequate understanding of learners' emotional well-being and jeopardize their progress in language achievement (Li, 2021; 2022; Li & Han, 2022).

To present, few studies have been able to unveil the relationship between foreign language learning boredom (FLLB), foreign language enjoyment (FLE), and language achievement, especially among the under-explored Chinese ethnic group students, a population that accounts for approximately 9% of the total Chinese group (Nation Bureau of Statistics, 2021), encountered most learning obstacles but received less attention. Therefore, this research is one of the first attempts to gain a granular understanding of those students' emotional well-being, the relationship between FLE and FLLB, and the predictive effect of emotions on students' English achievement.

To address these questions, a sample of 860 responses from Chinese high school students participated in this questionnaire survey, and 787 responses were adopted and examined in this quantitative study. The results indicate the following: i). FLE and FLLB co-existed in the process of language learning as twins with an adverse nature, with a high level of FLE and a low level of FLLB; ii). There was a strong negative correlation between FLE and FLLB; iii). FLE and FLLB positively or negatively predicted students' English learning achievement, but FLE obtains a strong predictive power than FLLB. This study theoretically overthrows the metaphor 'left and right feet' of FLE and anxiety and stretched the affective filter hypothesis from positive psychological perspectives.

References

Dewaele, J.-M., & MacIntyre, P. D. (2016). Foreign language enjoyment and foreign language classroom anxiety: The right and left feet of the language learner. In P. D. MacIntyre, T. Gregersen, & S. Mercer (Eds.), *Positive Psychology in SLA* (pp. 215–236). Multilingual Matters. https://doi.org/10.21832/9781783095360-010

Dewaele, J.-M., & Li, C. (2020). Emotions in second language acquisition: A critical review and research agenda. *Foreign Language World*（《外语界》）, 196 (1), 34–49.

MacIntyre, P. D., & Gregersen, T. (2012). Emotions that facilitate language learning: The positive-broadening power of the imagination. *Studies in Second Language Learning and Teaching*, 2(2), 193–213.

Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125–132. https://doi.org/10.1111/j.1540-4781.1986.tb05256.x

Krashen, S. (1985). The input hypothesis: Issues and implications. New York: Longman.

Khajavy, G. H., & Aghaee, E. (2022). The contribution of grit, emotions and personal bests to foreign language learning. *Journal of Multilingual and Multicultural Development*, 1–15. https://doi.org/10.1080/01434632.2022.2047192

Dulay, H., & Burt, M. (1977). Remarks on creativity in language *acquisition*. Viewpoints on English as a second language, 2, 95-126.

Li, C. (2021). A control–value theory approach to boredom in English classes among university students in China. *The Modern Language Journal*, 105(1), 317–334. https://doi.org/10.1111/modl.12693

Li, C. (2022). Foreign language learning boredom and enjoyment: The effects of learner variables and teacher variables. *Language Teaching Research*, 13621688221090324. https://doi.org/10.1177/1362168822109032

Li, C., Han, Y. (2022). 外语愉悦、焦虑及无聊情绪对网课学习成效的预测作用 [The predictive effects of foreign language enjoyment, anxiety, and boredom learning outcomes in online English classrooms]. *Modern Foreign Languages (Bimonthly)*, 45 (2), 207-219

MacIntyre, P. D. (2017). An overview of language anxiety research and trends in its development. In C. Gkonou, M. Daubney, & J.-M. Dewaele (Eds.), *New insights* into language anxiety: Theory, research and educational implications (pp. 11–30). Multilingual Matters.

Spielberger, C. D. (1972). Anxiety as an emotional state. In C. D. Spielberger (Ed.). Anxiety: Current trends in theory and research (pp. 23–49). New York: Academic Press.

Nation Bureau of Statistics, 2021.
http://www.stats.gov.cn/tjsj/zxfb/202105/t20210510_1817176.html

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