



# LINGUISTIC SOCIETY OF NEW ZEALAND CONFERENCE 2025

# ABSTRACT BOOKLET



## Contents

#### **PLENARY SPEAKERS**

CAN SOMETHING AS SMALL AS A PICTUREBOOK CONTRIBUTE TO SOMETHING AS BIG AS LANGUAGE REVITALISATION? (Associate Professor Nicola Daly)	1
NOA ATU 'E NGARUNGARU TE TAI – TŪKĒTŪKĒ TE AU RIMA I TŌ TERE'ANGA   EVEN THOUGH THE SEA IS CHOPPY YOU HAVE MANY DIFFERENT HANDS ON YOUR JOURNEY (Dr Ake Nicholas)	3
TE HURINGA O TE TAI: WHERE THE TIDE TURNS – REAWAKENING DOMAINS BEYOND REVITALISATION <i>(Associate Professor Hona Black)</i>	4
PRESENTATIONS	
"CAN'T GET YOU OUT OF MY HEAD": LEARNING L2 VOCABULARY FROM LISTENING TO SONGS <i>(Mahnaz Aliyar)</i>	5
HOW MUCH OF THE FUTURE IS BEHIND IN ARABIC? A VIEW ON ARABIC CULTURE AND EMBODIMENT (Maisarah M. Almirabi)	6
WORD BY WORD: RECLAIMING TE REO MĀORI THROUGH HUIA PUBLISHERS' TRANSLINGUAL CHILDREN'S PICTUREBOOKS (Julie Barbour, Darryn Joseph, Nicola Daly, Te Kani Price, Pania Tahau-Hodges, Kawatea Teepa, Nicholas Vanderschantz, Eboni Waitere & Bryony Walker)	7
EXPRESSING MULTIPLE HUMAN PARTICIPANTS IN THE MALEKULA LANGUAGES (Julie Barbour, Kanauhea Wessels & Gayleen Tarosa)	9
SEX-BASED DIFFERENCES IN THE ACOUSTIC EXPRESSION OF EMOTION IN PARKINSONIAN SPEECH: EVIDENCE FROM THE EMOPARKNZ CORPUS (Itay Ben-Dom, Catherine Watson & Claire McCann)	11
EXPLORING VARIATION IN ARTICULATORY SETTING IN NEW ZEALAND ENGLISH USING FACIAL TRACKING (Joshua Wilson Black)	12
CHILDREN'S ACQUISITION OF THE SOCIAL MEANING OF TE REO MĀORI LOANWORDS IN NEW ZEALAND ENGLISH (Jessie Burnette, Andreea Calude, Hēmi Whaanga & Laura Rosseel)	14
CAN CHANGING LISTENERS' BELIEFS AFFECT THEIR ICONIC PITCH ASSOCIATIONS? (Sasha Calhoun, Paul Warren & Sara Gilbert)	16

SELF-PERCEPTIONS OF ENGLISH SARCASM USE BY LI ENGLISH SPEAKERS AND L2 ENGLISH SPEAKERS OF CANTONESE AND MANDARIN LI BACKGROUNDS (Lydia Chan, Stephen Skalicky & Anna Siyanova-Chanturia)	17
GEOGRAPHICAL TYPOLOGY AS A WINDOW INTO THE EVOLUTION OF A LANGUAGE FAMILY: A WESTERN AUSTRONESIAN CASE STUDY (Victoria Chen)	
COLOUR IN FLUX: EVOLUTION IN THE POLYNESIAN COLOUR LEXICONS THROUGH MIGRATION AND COLONISATION (Victoria Chen, Priska Pramastiwi, Tia Neha & Neil Dodgson)	20
PATTERNS OF POLYSEMY BETWEEN LINEAR AND AFFINAL KINSHIP TERMINOLOGIES IN AUSTRONESIAN LANGUAGES (Jessica Coates)	21
THE PROFESSIONAL EXPERIENCES OF HERITAGE LANGUAGE TEACHERS IN NEW ZEALAND: PRELIMINARY FINDINGS (Margaret Connelly)	22
GRADIENT AND INDIVIDUAL MORPHOLOGICAL EFFECTS ON THE PRODUCTION OF VOWEL SEQUENCES IN TE REO MĀORI (Kirsten Culhane, Jennifer Hay, Jeanette King, Forrest Panther & Simon Todd)	24
SPEECH AIRFLOW OUTSIDE THE MOUTH IN TE REO MĀORI (Donald Derrick, Mark Jermy & Jason Chen)	26
THE ELUSIVE I AND KI (Frédéric Dichtel)	28
CHANGES TO COLOUR TERMS IN TE REO MĀORI - A CROSS-GENERATIONAL STUDY (Neil Dodgson, Victoria Chen & Tia Neha)	29
A LONGITUDINAL STUDY OF LEXICAL DIVERSITY AND MULTI-WORD EXPRESSIONS IN MANDARIN-SPEAKING SCHOOL-AGE CHILDREN'S WRITTEN NARRATIVES (Zixing Fan & Anna Siyanova-Chanturia)	30
MULTIPLE EXPONENCE IN PAICÎ DETERMINERS (lan Flaws)	
A TYPOLOGY OF RAISING TO OBJECT, WITH SPECIAL REFERENCE TO AUSTRONESIAN (Benji Fowler)	34
WRITING WITH MACHINES: HOW AI ASSISTANCE SHAPES LINGUISTIC STRUCTURES (Qiao Gan, Benjamin Adams, Johnathan Dunn & Andrea Nini)	35
HERITAGE LANGUAGE MAINTENANCE AND FAMILY RELATIONS DYNAMICS: A CHILDREN'S PERSPECTIVE (Marianne Gorter)	37
TENTATIVELY TRACING TRANS-NEW GUINEA: A PHYLOGENETIC EVALUATION OF POTENTIAL DEEPER RELATIONSHIPS (Simon Greenhill)	38
UNDERSTANDING THE IMPACT OF ACOUSTIC ENVIRONMENTS ON THE ACOUSTIC CUES OF TE REO MĀORI MONOPHTONGS (Hiraia Haami-Wells)	40

AUTHENTICITY AND AUTHORITY: LANGUAGE IDEOLOGIES OF TRADITIONAL CHINESE SCRIPT AMONG MAINLAND CHINESE NETIZENS (Karen Huang)	41
OFFICIAL LANGUAGE LEGISLATION IN AOTEAROA NEW ZEALAND - TIME FOR CHANGE (Lucy Jessep)	42
INCORPORATING A SCEPTICAL STANCE TOWARDS GENAI ACROSS A LINGUISTICS PROGRAMME (Jacq Jones)	43
MARKING CONTRASTIVE FOCUS IN BAHASA INDONESIA (Uswatun Khasanah & Sasha Calhoun)	44
PROFILING L2 SPOKEN FORMULAIC LANGUAGE: THE RELATIONSHIP BETWEEN FORMULA FLUENCY, RICHNESS AND PROFICIENCY IN JAPANESE EFL LEARNERS (Akihiro Kotoh)	46
THE PRAGMATIC SIGNIFICANCE OF NON-VERBAL (SILENCE) COMMUNICATION IN AN INTERCULTURAL WORKPLACE (Panisa Kurakan)	47
REDUPLICATED ATTRIBUTIVE ADJECTIVES: TOWARDS A TYPOLOGY AND SYNTACTIC THEORY (Catherine Lee, Saurov Syed & Gove Grefnes)	48
DEMONSTRATIVE SYSTEM IN THE YOUYANG DIALECT (Jingfei Ma)	50
DO I MAKE MYSELF CLAIRE? RETHINKING THE DIRECTION OF THE NEAR- SQUARE MERGER IN NEW ZEALAND ENGLISH (Juliette MacIver)	51
BREAST CANCER TALK: A CROSS-LINGUISTIC STUDY OF LEXICAL VERBS OCCURRING WITH GENERIC PRONOUN 'YOU' (Sara Malik, Andreea Calude & Joseph Ulatowski)	52
WHEN WE WERE EQUAL? EXAMINING GENDER EQUITY IN RESPONSES TO THE EQUAL PAY AMENDMENT ACT (Meredith Marra & Janet Holmes)	53
IMPLICIT GRAMMAR LEARNING IN A REAL-WORLD CONTEXT: WHAT NON- MĀORI-SPEAKING ADULTS IN NEW ZEALAND KNOW ABOUT MĀORI SYNTAX (Wakayo Mattingley, Jeanette King, Jennifer Hay & Forrest Panther)	54
ENGAGING WITH AN UNSEEN AUDIENCE: ADDRESS STRATEGIES IN ONLINE ANNOUNCEMENTS IN NEW ZEALAND SIGN LANGUAGE (Rachel McKee & George Major)	56
INDIVIDUAL DIFFERENCES IN SILENT READING (Joy Mills & Sasha Calhoun)	57
AWAJÚN REPORTED SPEECH PRACTICES IN AREAL PERSPECTIVE (Simon Overall)	59
VERBAL SEMANTICS AND THE MĀORI PASSIVE SUFFIX (Forrest Panther)	61
ATTITUDES OF EAST ASIAN PEOPLE TOWARDS COMMUNICATION DISORDERS	67

CONNECTED BY AROHA OR BY LOVE? ELICITING PREFERENCES FOR LEXICAL VARIATION IN AOTEAROA NEW ZEALAND ( <i>Niklas Alexander Pohl, Andreea Calude,</i> Hēmi Whaanga, Laura Rosseel & Eline Zenner)	-
PHRASE VERSUS SUBPART FREQUENCY EFFECTS IN PRODUCTION OF MULTI- WORD EXPRESSIONS (Yi Qi)	
IS VOWEL CO-VARIATION SHARED BETWEEN BILINGUALS' TWO LANGUAGES?	66
LINGUISTICS IN VANUATU 45 YEARS AFTER INDEPENDENCE (Tihomir Rangelov, Eleanor Ridge & Lana Takau)	68
TOWARDS DEVELOPING AN EMOTIONAL SPEECH DATABASE FOR TE REO MĀORI: A COMMUNITY-ORIENTED APPROACH (Himashi Rathnayake, Jesin James Ake Nicholas, Gianna Leoni, Catherine Watson & Peter Keegan)	
TRANS AND/OR ASIAN: DISCURSIVE CONSTRUCTIONS OF IDENTITY BY TRANSGENDER ASIAN YOUNG PEOPLE AND THEIR FAMILIES ( <i>Tara Ravi</i> )	71
"THE VERY FORMULAIC SIMPLE THINGS": STANCETAKING VIS-À-VIS TOKENISTIC LANGUAGE AS IDENTITY CONSTRUCTION AMONG NON-MĀORI LEARNER- SPEAKERS OF TE REO MĀORI <i>(Travis E Richardson)</i>	72
"LEADER-LAGGER" VOWELS AND CORRELATING IDEOLOGIES (Marlee Rosoff)	74
EXPLORING AUCKLAND'S ROLE IN THE DEVELOPMENT OF NEW ZEALAND ENGLISH (Brooke Ross, Catherine Watson & Elaine Ballard)	75
ACTIVELY REDUCING SYMBOLIC VIOLENCE IN RESEARCH INTERACTIONS (Corinne Seals, Sara Kindon, Olesksii Stepura & Maja Krtalic)	76
AGE-GRADING AND CENTRALISATION OF THE NEW ZEALAND ENGLISH VOWEL SPACE (Elena Sheard, Lynn Clark & Megan McAuliffe)	77
EXPLORING VARIATION IN THE NATURE AND DURATION OF MĀORI /R/ (Isabella Shields, Peter Keegan & Catherine Watson)	79
A CORPUS-BASED COMPARATIVE STUDY OF THE CONCEPTUAL METAPHORS RELATED TO "STONE" IN ENGLISH AND CHINESE (Laidong [Anthear] Song)	80
PROTO-AUSTRONISIAN: A RECONSIDERATION OF THE FORMOSAN DATA (Craig Stansfield)	81
ALIGNMENT AMONG COMMUNITY GARDENERS (Ruey Fern Tan)	82
PHRASE-FINAL LENGTHENING AS EVIDENCE FOR THE COGNITIVE REPRESENTATION OF 'PART OF SPEECH' IN TE REO MĀORI (Connor Taylor-Brown, Marlee Rosoff, Ryan Shriver, Sarah Barlow, Sharmaine Esteban, Jennifer Hay	
& Kirsten Culhane)	84

LINGUISTIC LANDSCAPE OF EATERIES: MENU, METHODS AND MORE (Anil Kumar Thakur)	85
PUBLIC HEALTH COMMUNICATION ON INSTAGRAM: LINGUISTIC AND MULTIMODAL STRATEGIES OF SOCIAL MEDIA JOURNALISTS (Angelicia Anthony Thane)	87
ASIAN-PACIFIC INDIGENOUS AND MINORITY LANGUAGE PRESERVATION THROU GENERATIVE AI: A SYSTEMATIC REVIEW (Le Thi Thach Thao & Le Thanh Nhan)	
DESIGNING SEMI-CONTROLLED ELICITATION TASKS FOR PROSODIC PROMINENCE STUDY IN THAI: BALANCING NATURALNESS AND PHONETIC CONTROL (Prapatsorn Tiratanti)	90
CAN VOWEL SPACE VISUALISATION REVEAL HOW TEXT-TO-SPEECH SYSTEMS LEARN? (Pasindu Udawatta, Jesin James, Catherine Watson, Ake Nicholas & B T Balamurali)	91
RHETORICAL MOVES AND LINGUISTIC STRATEGIES IN NEW ZEALAND CEO SUSTAINABILITY LETTERS: A GENRE-BASED APPROACH ( <i>Pakkawan Udomphol</i> ).	92
IDENTITY, LANGUAGE SHIFT AND MAINTENANCE AMONG NEW ZEALAND'S 19TH CENTURY SCOTTISH IMMIGRANTS (Sarah van Eyndhoven)	94
"YOU CAN HAVE A VIRTUAL CHOCOLATE FISH": HYBRID MEETINGS DURING COVID-19 (Bernadette Vine)	96
EXPLORING CHINESE EFL LEARNERS' SELF-REGULATED STRATEGIES IN LEARNING SPOKEN ENGLISH BEYOND THE CLASSROOM (Haixia Wang)	97
INVESTIGATING THE EFFECT OF HIGH-VARIABILITY PHONETIC TRAINING UNDER VARIOUS ACOUSTIC ENVIRONMENTS ON VOWEL LENGTH IDENTIFICATION FOR L2 LISTENERS (Xin Wang)	98
REDDIT AS A SOURCE FOR PERCEPTUAL DIALECTOLOGY IN NEW ZEALAND ENGLISH (Sidney Wong)	99
PHILIPPINE LANGUAGES THAT ARE NOT PHILIPPINE-TYPE: NOMINATIVE-ACCUSATIVITY IN THE BUHIDIC SUBGROUP (Hannah Woodfield)	100
NOT QUITE A VOWEL, NOT QUITE A FRICATIVE: RETHINKING CATEGORISATION OF FRICATIVE VOWELS THROUGH ACOUSTIC AND ULTRASOUND EVIDENCE (Aixin Yuan)	102
LEARNING OF SEMANTIC PROSODY IN THE FIRST AND SECOND LANGUAGE (Zhentong [Francis] Zhan, Irina Elgort & Anna Siyanova-Chanturia)	103
WILL LEARNERS' ATTITUDES TO CHATGPT-GENERATED WRITTEN CORRECTIVE FEEDBACK CHANGE FOLLOWING USE? (Mengxuan Zhang)Zhang	104

## **Plenary Speakers**



ASSOCIATE PROFESSOR NICOLA DALY
TE WHARE WĀNANGA O WAIKATO - UNIVERSITY OF WAIKATO

I am a sociolinguist interested in the language hierarchies present in children's literature. I am also interested in the pedagogical potential of picturebooks for social justice in educational contexts from early childhood settings through to tertiary contexts. I teach courses in children's literature and supervise Masters and PhD students in children's literature and language-related topics.

# CAN SOMETHING AS SMALL AS A PICTUREBOOK CONTRIBUTE TO SOMETHING AS BIG AS LANGUAGE REVITALISATION?

Picturebooks are often associated with young children, and maybe because of this they can be underestimated. However, picturebooks are powerful. The space between words and images seems to create a space where the power of story is magnified (e.g., Arizpe & Styles 2015; Kummerling-Meibauer, 2018; Mourao, 2016; Seals & Olsen-Reeder, 2020). I have spent the last 20 years exploring the power and potential of picturebooks in relationship to representation, both cultural and linguistic (Daly, 2025). In this talk I propose that picturebooks can make a considerable contribution to the revitalisation/ reclamation of te reo Māori in Aotearoa. I explore how Māori and English are used in New Zealand picturebooks, tracing changes over the years and examining how the layout (Vanderschantz & Daly, 2023) of pukapikitia reo rua (dual language picturebooks) can reflect and disrupt language hierarchies (de Bres, 2015). I will share work with colleagues examining how Māori words are woven into the English text of pukapikitia texts (Barbour, Daly & Wessels, 2025) which contributes to our understanding of contact between the two languages (Hay et al., 2008). Preliminary research in ECE settings with whānau, teachers and children will be presented to show the ways in which pukapikita reo rua can be used to support the use of te reo Māori and Pacific languages. Lastly, I share early findings (Daly et al., 2025) from a Marsden funded 3-year research programme exploring how HUIA Publishers, a leading Indigenous publisher in Aotearoa, brings authentic Indigenous voices into the picturebooks they publish.

- Arizpe, E., & Styles, M. (2015). Children reading picturebooks: Interpreting visual texts. Routledge.
- Barbour, J. Daly, N. & Wessells, K. (2025). New Zealand English and Te Reo Maori: a critical perspective on the loanword narrative using data from translingual picturebooks. Journal of Bilingualism.
- Daly, N. (2025). Language, Identity and Diversity in Picturebooks. An Aotearoa New Zealand Perspective. Routledge.
- Daly, N., Barbour, J., Joseph, D., Price, T. K., Tahau-Hodges, P., Teepa, K,
  Vanderschantz, N., Waitere, N, Walker, B. (in press). Nurturing Authentic
  Indigenous Voices in ICYAL: An Aotearoa New Zealand Case Study.
  Bank Street Collective Special Issue: Why Indigenous Children's and
  Young Adult Literatures Matter?
- de Bres, J. (2015). The hierarchy of minority languages in New Zealand. Journal of Multilingual and Multicultural Development, 36(7), 677-693.
- Grant, L. E. (2012). Culturally motivated lexis in New Zealand English. World Englishes 31(2), 162-176.
- Hay, J., Maclagan, M. A. & Gordon, E. (2008). New Zealand English. Edinburgh University Press.
- Huia Publishers. (n.d.). Huia Publishers: About Us. Retrieved on July 22, 2025, from https://huia.co.nz/pages/about-us
- Kümmerling-Meibauer, B. (Ed.). (2018). The Routledge companion to picturebooks (p. 1). London: Routledge.
- Mourão, S. (2016). Picturebooks in the primary EFL classroom: Authentic literature for an authentic response. CLELE journal, 4(1), 25-43.
- Seals, C. A., & Olsen-Reeder, V. (2020). Translanguaging in conjunction with language revitalization. System, 92, 102277.
- Vanderschantz, N., & Daly, N. (2023). The implications of typographic design in bilingual picturebooks for hierarchies. Journal of Visual Literacy, 42(1), 48-66.



### DR AKE NICHOLAS WAIPAPA TAUMATA RAU - UNIVERSITY OF AUCKLAND

I am a member of the Ngāti Te'akatauira people of Ma'uke (Cook Islands/ 'Avaiki Nui). I am a senior lecturer in linguistics at Waipapa Tuamatarau (UoA) New Zealand. My research focuses on the description, documentation, sociolinguistics and revitalisation of Cook Islands Māori and New Zealand Māori, along with matters of linguistic justice, and language revitalisation more broadly. I have a particular interest in how young people can be encouraged to learn and use their ancestral languages.

#### NOA ATU 'E NGARUNGARU TE TAI – TŪKĒTŪKĒ TE AU RIMA I TŌ TERE'ANGA | EVEN THOUGH THE SEA IS CHOPPY YOU HAVE MANY DIFFERENT HANDS ON YOUR JOURNEY

The Māori people of the so-called Cook Islands have been increasingly engaged in language revitalisation activies over the last decade. As with so many Indigenous peoples on language reclamation journeys, we have encountered many challenges along with many successes. A site-specific set of challenges result from our complex constitutional status as part of the Realm of New Zealand. This arrangement means that Cook Islands Māori people (along with the people of Niue and Tokelau) must navigate the complex identities. We are simultaneously, a people occupied, settlers in Aotearoa, and whanaunga to tangata whenua. And all the while invisibilised inside the "Pasifika aggregate". For the majority of Cook Islands Māori living in Aotearoa (or New Zealand Proper), we navigate from a position of severe economic marginalisation. These difficulties notwithstanding we have enormous cultural strengths to draw on in this struggle including the fastest beats in the ocean.

In this talk I will share some of the challenges and successes I have encountered in my capacity as a linguistic researcher, language teacher, activist and beatmaker living in multiple islands of this Realm. We will travel around formal and informal education spaces, orthographic reform, the creation of linguistic meta terminology, technical capacity building, and various flavours of social tension and creative liberation.



ASSOCIATE PROFESSOR HONA BLACK TE KUNENGA KI PÜREHUROA - MASSEY UNIVERSITY

### TE HURINGA O TE TAI: WHERE THE TIDE TURNS – REAWAKENING DOMAINS BEYOND REVITALISATION

As the tides of language shift, so too do the spaces in which te reo Māori lives, breathes, and thrives. Te Huringa o te Tai marks a moment of turning - from revitalisation as a project of recovery, toward a future of reawakening and renewal. This plenary explores what lies beyond revitalisation: the deliberate reoccupation of domains once lost, and the creation of new spaces where te reo Māori can flourish as a living language of whānau, community, and nationhood. Drawing on the metaphor of the tide, this kōrero examines how changing currents of attitude, identity, and social acceptance shape the possibilities for te reo Māori in everyday life. It considers how language gains strength not only through policy and planning, but through the quiet reclamation of homes, workplaces, media, and institutions as Māori-speaking domains. We are challenged to look past survival toward transformation - to ask not only how do we keep the language alive, but where will it live next?

### **Presentations**

"CAN'T GET YOU OUT OF MY HEAD": LEARNING L2 VOCABULARY FROM LISTENING TO SONGS

#### **MAHNAZ ALIYAR**

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

**Keywords:** second language acquisition, incidental vocabulary learning, songs in language learning, listening, Italian as a foreign language

Vocabulary growth in a second/foreign language (L2) can occur incidentally through engaging, meaning-focused input, yet little is known about the potential of songs for vocabulary learning. Prior classroom-based research showed that listening to songs can yield measurable incidental vocabulary uptake, though often at modest rates (Nie at al., 2022; Pavia et al., 2019). However, the effects of listening to songs for pleasure and in an ecologically valid setting on incidental lexical growth, especially among advanced learners, remain to be investigated. The present study aims to fill this gap by exploring whether advanced L2 learners can incidentally acquire vocabulary from pleasure listening to 13 authentic Italian songs (including four fillers), and whether gains differ between single words and multi-word expressions (MWEs). Eighty-eight university students of L2 Italian were randomly assigned to an experimental group (n = 31) or a non-treatment control group (n = 57). Over four weeks, the experimental group listened to Italian songs at their own convenience, listening to each six times, without consulting lyrics or focusing on language forms. Target vocabulary comprised 23 low-frequency lexical items (12 single words, 11 MWEs) occurring one to five times in the songs.

Using a pretest–post test–delayed-post test design, we assessed form recognition, meaning recall, and meaning recognition. Mixed-effects modelling revealed significant gains across all measures for the experimental group, with no significant attrition after three weeks, while the control group showed no progress. Crucially, MWEs were learnt and retained significantly better than single words, suggesting that the prosodic salience, and repetition of songs may enhance MWE uptake.

The findings extend evidence of incidental vocabulary learning to authentic songs in L2 Italian, showing that songs can support robust, durable acquisition at advanced levels. Pedagogically, they highlight the potential of music to enrich learners' lexical repertoires, especially MWEs, through motivating, real-world exposure.

#### REFERENCES

Nie K., Fu J., Rehman, H. & Zaigham, G. H. K. (2022) An empirical study of the effects of incidental vocabulary learning through listening to songs. *Frontiers in Psychology, 13*, 891146. <a href="https://doi.org/10.3389/fpsyg.2022.891146">https://doi.org/10.3389/fpsyg.2022.891146</a>

Pavia, N., Webb, S., & Faez, F. (2019). Incidental vocabulary learning through listening to songs. *Studies in Second Language Acquisition*, 41(4), 745–768. <a href="https://doi.org/10.1017/50272263119000020">https://doi.org/10.1017/50272263119000020</a>

### HOW MUCH OF THE FUTURE IS BEHIND IN ARABIC? A VIEW ON ARABIC CULTURE AND EMBODIMENT

#### MAISARAH M. ALMIRABI

**UMM AL-QURA UNIVERSITY** 

**Keywords:** conceptual metaphors, cognitive linguistics, Hijazi-Saudi Arabic, TIME IS SPACE, FUTURE IS BEHIND, embodiment theory

This study investigates the conceptual metaphors TIME IS SPACE and THE FUTURE IS BEHIND in Hijazi-Saudi Arabic, a variety of Arabic whose metaphorical system remains understudied. Using naturally occurring linguistic data collected from online sources and verified by native speakers, the study explores how Arabic speakers conceptualize time, particularly the placement of the FUTURE relative to the EGO. The analysis reveals that while the FUTURE is predominantly conceptualized as being in front of the EGO, there are instances where it is placed behind, reflecting a bidimensional conceptualization of time.

The study employs Conceptual Metaphor Theory (CMT) and the Metaphor Identification Procedure (MIP) to analyze tokens that embody the LIFE IS A JOURNEY metaphor. Findings indicate that the FUTURE is typically located in front of the EGO, aligning with the metaphor FOCUS IS FRONT, where the FUTURE represents a destination toward which the EGO travels. However, in certain contexts, such as when speakers are distracted or engaged in social interactions, the FUTURE is conceptualized as being behind the EGO, reflecting the metaphor PERIPHERY IS BEHIND. This shift is attributed to the experiential embodiment of turning to face interlocutors, temporarily reorienting the FUTURE to the periphery.

The study also introduces the metaphor RESPONSIBILITY IS BEHIND, which explains how future obligations are conceptualized as being behind the EGO when attention is diverted. This metaphor is culturally specific to Arabic and highlights the interplay between social interactions and temporal conceptualizations. The analysis further reveals that the direction of writing and cultural values influence the placement of the FUTURE, though these factors are not pre-set reasons for metaphor usage but emerge naturally from the data.

This research contributes to the understanding of cognitive linguistics and embodiment theory by providing insights into the metaphorical system of Hijazi-Saudi Arabic. It challenges the universality of the FUTURE IS FRONT metaphor and invites cross-linguistic comparisons to explore how different cultures conceptualize time. By analyzing naturally occurring discourse, the study offers a nuanced perspective on the cultural and cognitive dimensions of temporal metaphors, paving the way for further research on understudied varieties of Arabic and other languages.

### WORD BY WORD: RECLAIMING TE REO MĀORI THROUGH HUIA PUBLISHERS' TRANSLINGUAL CHILDREN'S PICTUREBOOKS

#### JULIE BARBOUR, DARRYN JOSEPH, NICOLA DALY, TE KANI PRICE, PANIA TAHAU-HODGES, KAWATEA TEEPA, NICHOLAS VANDERSCHANTZ, EBONI WAITERE & BRYONY WALKER

TE WHARE WĀNANGA O WAIKATO - UNIVERSITY OF WAIKATO

**Keywords:** te reo Māori, semantic domains, translingual piecturebooks, bilingualism, language education

Te reo Māori, Aotearoa's Indigenous language, is spoken by a growing number of people (Lane 2024), with more than 30% of the total population reporting being able to speak more than a few words or phrases of the language and nearly a quarter of Māori being first language speakers (StatsNZ 2022). The resurgence of the language is taking place in a context of intensive language revitalisation which gained momentum in the 1980s (King 2018). For people who identify as Māori, but who have been denied access to their heritage language, the reclamation of te reo Māori can be traumatic (Hamley 2023). Children's picturebooks created by Māori content creators offer a way to access Māori language (Daly 2025), supporting the reclamation of te reo Māori and and growing understandings of te ao Māori.

HUIA Publishers (n.d.), established in 1991, is a leading Indigenous publisher in Aotearoa. HUIA's English language picturebooks, produced for a non-Māori speaking audience, are commonly translingual, interweaving Māori words and phrases. In this paper, we examine kupu Māori in HUIA's picturebooks. Accessing their catalogue of trade publications from a period of more than 30 years, we extracted kupu Māori and undertook a semantic domain analysis to understand the types of kupu Māori that are included. We identify semantic domains that are variously enduring, transient, and newly emerging, and we explore the types of vocabulary that populate each semantic domain.

Our research departs from the established literature concerning New Zealand English by positioning kupu Māori in translingual picturebooks as tokens of Māori language, not English, reflecting the languages (and cultures) of HUIA's content creators. Further, to analyse Semantic Domains, we step away from English categories and instead draw on cultural categories from te ao Māori to classify kupu.

Our research demonstrates the wealth of Māori language that is shared through HUIA Publisher's trade picturebooks. These picturebooks afford opportunities to a Māori audience to begin the process of reclaiming their heritage language. At the same time, they provide opportunities for Pākehā to engage with te reo Māori and te ao Māori.

#### **REFERENCES**

Daly, N. 2025. Language, Identity and Diversity in Picturebooks: An Aotearoa New Zealand Perspective (1st ed.). Routledge. <a href="https://doi.org/10.4324/9781003411888">https://doi.org/10.4324/9781003411888</a>

Hamley, L. 2023. Intergenerational Affect, Language Trauma, and Pride: Young Māori Men's Emotional Experiences of Te Reo Māori. *Journal of Language, Identity & Education*, 1–14. <a href="https://doi.org/10.1080/15348458.2023.2281955">https://doi.org/10.1080/15348458.2023.2281955</a>

- Huia Publishers. (n.d.). Huia Publishers: *About Us.* Retrieved on July 22, 2025, from <a href="https://huia.co.nz/pages/about-us">https://huia.co.nz/pages/about-us</a>
- King, J. 2018. Māori: Revitalization of an Endangered Language. In K. L. Rehg & L. Campbell (eds), *The Oxford Handbook of Endangered Languages* (online edn), 592-612. Oxford University Press. <a href="https://doi.org/10.1093/oxfordhb/9780190610029.013.28">https://doi.org/10.1093/oxfordhb/9780190610029.013.28</a>
- Lane, C. 2024. First and second language speakers in the revitalisation of te reo Māori: A statistical analysis from Te Kupenga 2018. Te Reo. *Journal of the Linguistic Society of New Zealand 66*(2), 28-56.
- StatsNZ Tatauranga Aotearoa. (2022, July 05). *Te reo Māori proficiency and support continues to grow.*New Zealand Government. <a href="https://www.stats.govt.nz/news/te-reo-maori-proficiency-and-support-continues-to-grow/#:~:text=The%20proportion%20of%20people%20able%20to%20speak%20te%20reo%20M%C4%81ori,been%20observed%20from%20GSS%20data.

### EXPRESSING MULTIPLE HUMAN PARTICIPANTS IN THE MALEKULA LANGUAGES

#### JULIE BARBOUR, KANAUHEA WESSELS & GAYLEEN TAROSA

TE WHARE WĀNANGA O WAIKATO - UNIVERSITY OF WAIKATO

Keywords: Vanuatu, inclusory pronominals, associative plurals, WITH-languages, agreement

In the languages of Malekula Island, Vanuatu (Austronesian/Oceanic), there are several structural possibilities to refer to situations where one human participant holds the same semantic role. In this paper, we document the diversity in these single-role dual/multi-participant constructions. We draw on published grammars of Malekula languages, as well as corpora of data collected in the field for Neverver (Central Western Malekula), Espiegle Bay (Tepërav – Northern Malekula) and Atchin (Eastern Malekula) for our study.

At least five structural types are attested although not all are reported in all grammatical accounts. Type (1) employs a comitative preposition, a strategy found commonly in WITH-languages (cf. Stassen 2000). Type (2) involves a plural inclusory pronoun and a second human NP. Such constructions form a phrasal inclusory pronominal construction (cf. Lichtenberk 2000). Type (3) has a proper noun combined with a plural subject index inclusive of the reference the proper noun. This kind of structure is analysed as a split inclusory pronominal construction (cf. Lichtenberk 2000), or an associative plural (cf. Corbett 2000; Daniel & Moravcsik 2013; Mauri & Sansò 2019). Type (4) involves a sequence of two or more proper nouns with no overt coordination, co-occurring with a plural subject index on the verb. Finally, type (5) involves a verb of accompaniment.

In surveying the Malekula languages for these structures, we examine the morphosyntactic organisation of each structure, seeking to understand the range of structural possibilities available in each language, and the sources of morphology. We consider whether the strategies are available for any participants, or limited to humans, giving consideration to the Animacy Hierarchy. Of particular interest is the shift from prepositional WITH to conjunctive AND in some languages, as well as the relationship between verbal morphology and morphology found in inclusory pronominal constructions.

#### **Examples:**

- Mama blev bbubbu ar-uv father with grandfather 3REAL:DU-go 'Dad and grandfather went ....' (Barbour 2012:127 [66])
- 2. Nam-ix mama nari-vlem

  1EXCL:NSG-APPL father 1EXCL:REAL:DU-come

  'My father and I came ...' (Barbour 2012:130 [73])
- 3. Lesien at-uv lon noxos.
   L. 3REAL.PL-go LOC garden
   'Leisen and them went to the garden. (Barbour 2012:130 [75])

- 4. Ana-Aki. Lenaus. Ela. Letang, Leraxsil. Leraxbel. Lemeldan. E. Α. L. L. L. L. Mary Alice, Lemelue at-xavux nani M. 3REcoconut 'Ana-Aki, Lenaus, Ela, Letang, Lerakhsil, Lerakhbel, Lemeldan, Mary Alice (and) Lemelue planted coconuts (Barbour 2012:276 [48])
- 5. At-uv ati-blev vinang.

  3REAL:PL-go 3REAL:PL-be with woman:ANA

  'They went with the woman.' (Barbour 2012:276 [48])

#### **REFERENCES**

Barbour, J. 2012. A grammar of Neverver. De Gruyter Mouton.

Barbour, J. & Tarosa, G. 2011-2025. Tepërav Corpus. University of Waikato.

Corbett, G. G. 2000. Number. Cambridge University Press.

Daniel, M. & Moravcsik, E. 2013. The Associative Plural. In: Dryer, M. S. & Haspelmath, M. (eds.) *WALS Online* (v2020.4) [Data set]. Zenodo. <a href="https://doi.org/10.5281/zenodo.13950591">https://doi.org/10.5281/zenodo.13950591</a>

Lichtenberk, F. 2000. Inclusory Pronominals. Oceanic Linguistics 39(1), 1-32.

Mauri, C. & Sansò, A. 2019. Nouns & co. Converging evidence in the analysis of associative plurals. STUF 72(4), 603-626.

Stassen, L. 2013. Noun Phrase Conjunction. In Dryer, M. S. & Haspelmath, M.(eds.), *WALS Online* (v2020.4) [Data set]. Zenodo. <a href="https://doi.org/10.5281/zenodo.13950591">https://doi.org/10.5281/zenodo.13950591</a>

Stassen, L. 2000. AND-Languages and WITH-Languages. Linguistic Typology 4, 1-54.

Wessels, K. 2019-2025. Atchin Corpus. University of Waikato.

### SEX-BASED DIFFERENCES IN THE ACOUSTIC EXPRESSION OF EMOTION IN PARKINSONIAN SPEECH: EVIDENCE FROM THE EMOPARKNZ CORPUS

#### ITAY BEN-DOM, CATHERINE WATSON & CLAIRE McCANN

WAIPAPA TAUMATA RAU - UNIVERSITY OF AUCKLAND

**Keywords:** Parkinson's disease, sex differences, emotional speech, acoustic analysis, New Zealand English

The ability to convey emotion through speech is critical for human social interaction. Parkinson's disease (PD) can impair this capacity due to motor and phonatory disruptions, potentially straining relationships and reducing quality of life. This study explores how PD influences the acoustic expression of emotion in speech, with particular attention to sex-based variation, a dimension often underrepresented in clinical and sociolinguistic research. Epidemiological studies consistently report higher PD prevalence in males, with male-to-female ratios ranging from 1.5-2.0 across populations. As a result, research has historically been biased toward male participants, limiting our understanding of how PD manifests in females, particularly in speech and prosody.

EMOPARKNZ is a corpus of simulated emotional speech by New Zealand English speakers with PD. Speech data were collected from 12 participants (6 male, age: 63.7±9.0 years; 6 female, age: 64.3±13.9 years), with self-identified sex at recruitment. No gender diverse people volunteered to participate in the study. Each speaker produced 15 sentences across five emotions (excited, happy, angry, sad, neutral). Nine acoustic features were analysed: fundamental frequency, intensity, speech rate, jitter, shimmer, harmonics-to-noise ratio, open quotient, speed quotient, and normalised amplitude quotient. Mann–Whitney U tests were conducted to assess group differences, with false discovery rate correction.

Findings reveal significant sex-based differences in emotion expression. Female speakers showed consistently higher fundamental frequency and lower jitter, as well as distinct glottal timing (lower open quotient and normalised amplitude quotient) across all emotions. These findings reflect known physiological differences in laryngeal function, but also suggest that sociolinguistic factors, such as gendered norms of emotional expression, intersect with clinical symptoms in shaping speech production. By foregrounding sex as a variable, this study contributes to a more inclusive understanding of disordered speech and underscores the importance of sociolinguistic perspectives in clinical phonetics and voice research.

### EXPLORING VARIATION IN ARTICULATORY SETTING IN NEW ZEALAND ENGLISH USING FACIAL TRACKING

#### **JOSHUA WILSON BLACK**

TE WHARE WĀNANGA O WAITAHA - UNVERSITY OF CANTERBURY

Keywords: New Zealand English, articulatory setting, embodied sociophonetics

Variation in articulatory setting, the underlying posture of the articulators during speech, has been identified both across and within languages. Within languages, variation in articulatory setting is often socially meaningful and can underlie stylistic variation. Holmes-Elliot and Levon (2024) argue that acoustic differences between contemporary versions of RP and Cockney speech in the south east of England are due to the adoption of an articulatory posture ('lax voice') which itself "embodies British ideals of eliteness". Pratt and D'Onofrio (2017) similarly trace acoustic variation in California (the California Vowel Shift) to the adoption of a jaw setting which "indexes Californian personae" and which can be investigated using audio-visual data from parodic performances of Californian stereotypes by actors and comedians.

This paper presents work-in-progress towards a large-scale investigation of across-speaker variation in articulatory setting New Zealand English via the QuakeBox corpus (Clark et al. 2016). Significantly, the QuakeBox corpus contains both audio and video recordings across a large number of participants. We apply the Google MediaPipe Face Landmarker (Lugaresi et al. 2019) to QuakeBox video, extracting 52 "blendshape scores" for each frame of video which occurs within an inter-utterance pause (Figure 1). These scores correspond to positions of facial features (e.g. "jawOpen", "browDownLeft"). By focusing on inter-utterance pauses, we can (defeasibly) infer interspeech posture, which been identified as the "least biased configuration" for determining the underlying articulator setting of a language in across-language studies (Wilson et al. 2014).

We will apply dimensionality reduction techniques, including Principal Component Analysis, to the mean blendshapes for each speaker during inter-utterance pauses, visualise the variation in facial shapes which emerges, explore any social patterning in the variation, and investigate whether it correlates with known large-scale acoustic variation already identified in New Zealand English (Hurring et al. 2025; Brand et al. 2021).

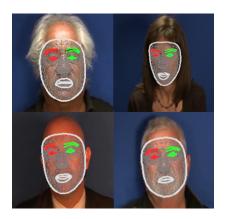


Figure 1: Faces from four inter-utterance pauses from QuakeBox speakers as tracked by MediaPipe. Frames are the closest to the mean blendshape values for each speaker.

- Brand, James, Jen Hay, Lynn Clark, Kevin Watson, and Márton Sóskuthy. 2021. "Systematic Co-Variation of Monophthongs across Speakers of New Zealand English." *Journal of Phonetics 88*: 101096. https://doi.org/10.1016/j.wocn.2021.101096
- Clark, Lynn, Helen MacGougan, Jennifer Hay, and Liam Walsh. 2016. "Kia Ora. This Is My Earthquake Story'. Multiple Applications of a Sociolinguistic Corpus." *Ampersand 3*: 13–20. <a href="https://doi.org/10.1016/j.amper.2016.01.001">https://doi.org/10.1016/j.amper.2016.01.001</a>
- Holmes-Elliott, Sophie, and Erez Levon. 2024. "The Jet Set: Modern RP and the (Re)Creation of Social Distinction." *Language Variation and Change*, May 29, 1–22. <a href="https://doi.org/10.1017/S0954394524000097">https://doi.org/10.1017/S0954394524000097</a>
- Hurring, Gia, Joshua Wilson Black, Jen Hay, and Lynn Clark. 2025. "How Stable Are Patterns of Covariation across Time?" *Language Variation and Change*, May 21, 1–25. <a href="https://doi.org/10.1017/80954394525000043">https://doi.org/10.1017/80954394525000043</a>
- Lugaresi, Camillo, Jiuqiang Tang, Hadon Nash, et al. 2019. "MediaPipe: A Framework for Building Perception Pipelines." arXiv:1906.08172. Preprint, arXiv, June 14. <a href="https://doi.org/10.48550/arXiv.1906.08172">https://doi.org/10.48550/arXiv.1906.08172</a>
- Pratt, Teresa, and Annette D'Onofrio. 2017. "Jaw Setting and the California Vowel Shift in Parodic Performance." *Language in Society* 46(3): 283–312.
- Wilson, Ian, and Bryan Gick. 2014. "Bilinguals Use Language-Specific Articulatory Settings." *Journal of Speech, Language, and Hearing Research* 57(2): 361–73.

#### CHILDREN'S ACQUISITION OF THE SOCIAL MEANING OF TE REO MĀORI LOANWORDS IN NEW ZEALAND ENGLISH

#### JESSIE BURNETTE, ANDREEA CALUDE, HĒMI WHAANGA & LAURA ROSSEEL

TE WHARE WĀNANGA O WAIKATO - UNIVERSITY OF WAIKATO

**Keywords:** New Zealand English, te reo Māori loanwords, developmental sociolingistics, social meaning, lexical production

The integration of loanwords from te reo Māori into English represents one of the most central features of New Zealand English (NZE) (Hay et al., 2008). How exactly these loanwords are used and evaluated by everyday New Zealanders is still largely unknown (Macalister 1999). This study examines interview data collected from a previously unexamined demographic: primary school-aged children, whose production of loanwords and evaluations of their use by others offer unique insights both into the use of te reo Māori loanwords in NZE and the ages at which children acquire the social meaning of language varieties more broadly.

In this paper, we consider our methodological approach to collecting data from children through interviews as well as some preliminary findings. Data were collected from 29 children aged 8-12 at two different English-medium primary schools (see Table 1) and will inform two separate analyses examining: 1) children's production of loanwords; and 2) children's evaluations of speakers who (do not) use these words. We utilize a novel approach to data collection building on previous strategies pairing creative methodologies with semi-structured interviews (e.g., St. Pierre 2024; Schuring 2024).

Research into children's production and evaluation of loanwords, along with their acquisition of social meaning, is new to Aotearoa. However, based on previous international research, we hypothesize that we will see an increase in children's awareness of the social meaning of loanwords the older they are (e.g. Pierre et al. 2024; Kaiser and Kasberger 2021). We further hypothesize that, across all age groups, most children will produce te reo Māori loanwords and positively evaluate those who use them (see Murphy et al., 2019).

- Barbu, S., Nardy, A., Chevrot, J., & Juhel, J. (2013). Language evaluation and use during early childhood: Adhesion to social norms or integration of environmental regularities? *Linguistics*, *51*(2), 381-412. <a href="https://dx.doi.org/10.1515/ling-2013-0015">https://dx.doi.org/10.1515/ling-2013-0015</a>
- De Vogelaer, G., Chevrot, J., Katerbow, M., & Nardy, A. (2017). Bridging the gap between language acquisition and sociolinguistics: Introduction to an interdisciplinary topic. In G. De Vogelaer & M. Katerbow (Eds.), *Acquiring Sociolinguistic Variation* (pp. 1-41). John Benjamins Publishing Company.
- Hay, J., Maclagan, M., and Gordon, E. (2008). New Zealand English. Edinburgh University Press
   Kaiser, I., and Kasberger, G. (2021). Children's sociolinguistic preferences: The acquisition of language attitudes within the Austrian dialect-standard continuum. In A. Ghimenton et al. (Eds.), Sociolinguistic Variation and Language Acquisition Across the Lifespan. Amsterdam: John Benjamins Publishing Company.

- Macalister, J. (1999). Trends in New Zealand English: Some Observations on the Presence of Maori Words in the Lexicon. *New Zealand English Journal*, *13*, 38-49.
- Murphy, H., Reid, D., Patrick, A., Gray, A., & Bradnam, L. (2019). Whakanuia te reo kia ora: Evaluation of te reo Māori in English-medium compulsory education. *Te Taura Whiri i te Reo Māori.* <a href="https://thehub.swa.govt.nz/assets/Uploads/Whakanuia-te-Reo.pdf">https://thehub.swa.govt.nz/assets/Uploads/Whakanuia-te-Reo.pdf</a>
- Pierre, T. S., Jaffan, J., Chambers, C. G., & Johnson, E. K. (2024). The Icing on the Cake. Or Is it Frosting? The Influence of Group Membership on Children's Lexical Choices. *Cognitive Science*, 48, 1-17. <a href="https://doi.org/10.1111/cogs.13410">https://doi.org/10.1111/cogs.13410</a>
- Schuring, M. (2024). Between observation and elicitation. A multi-methods analysis of English in preadolescents' Belgian Dutch.

### CAN CHANGING LISTENERS' BELIEFS AFFECT THEIR ICONIC PITCH ASSOCIATIONS?

#### SASHA CALHOUN, PAUL WARREN & SARA GILBERT

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

Keywords: iconicity, pitch Frequency Code, gender and language

"She squeaked like a mouse, he roared like a lion" - voice pitch has iconic associations: high pitch is physically linked to small size and female sex, and low to large size and male sex (Ohala, 1983; Gussenhoven, 2004). This Frequency Code is claimed to explain pitch associations in language like submissiveness/dominance (Gussenhoven, 2004). As iconic associations with linguistic forms have a physical basis, it is often assumed that they are universal. We contend that, while Frequency Code associations have a basis in common bodily experience, they are also, like all of language, social. That is, we claim such pitch associations are also socially constructed, shaped by culture- and language-specific experiences and beliefs, including gender stereotypes (try swapping 'she' and 'he' above) (D'Onofrio & Eckert, 2021; Winter et al., 2021; Holliday et al., 2023). In our previous studies, using the Implicit Association Task (IAT), we have shown listeners implicitly associate pitch and gender/size; but men, especially older men, do so more strongly (Calhoun et al., 2024). This is consistent with our hypothesis that there is a socially determined element to the association. In the present study, we test the effect of individual beliefs directly using a priming task. Participants will complete a priming task where they meet characters who either conform to iconic pitch-association stereotypes (e.g. small creature-high pitch voice, large creature-low pitch voice) or which are counter-stereotypes (e.g. large creature-high pitch voice, small creature-low pitch voice). They will then complete the same IAT as in our previous experiments. We predict that Frequency Code pitch associations will be weaker for participants in the counter-stereotype than the stereotype-conforming condition. We will present the results from this study and discuss implications for the role of iconicity in language (particularly intonation), and how physical and social influences on iconic associations interact.

#### **REFERENCES**

Calhoun, S., Warren, P., Mills, J. & Agnew, J. (2024). Socialising the Frequency Code: Effects of gender and age on iconic associations of pitch. *Journal of the Acoustical Society of America* 156(5): 3183–3203. https://doi.org/10.1121/10.0034354

Gussenhoven, C. (2004). The Phonology of Tone and Intonation. Cambridge University Press.

Holliday, J., Walker, A., Jung, M., & Cho, E. S. R. (2023). Bringing indexical orders to non-arbitrary meaning: The case of pitch and politeness in English and Korean. *Laboratory Phonology, 14*(1), Article 1.

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

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

Winter, B., Oh, G.E., Hübscher, I., Idemaru, K., Brown, L., Prieto, P. & Grawunder, S. (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* B3762020040020200400.

SELF-PERCEPTIONS OF ENGLISH SARCASM USE BY L1 ENGLISH SPEAKERS AND L2 ENGLISH SPEAKERS OF CANTONESE AND MANDARIN L1 BACKGROUNDS

#### LYDIA CHAN, STEPHEN SKALICKY & ANNA SIYANOVA-CHANTURIA

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

Keywords: L2 sarcasm use, culture, individual differences

Imagine you and your friend planned to meet for dinner at 7pm, and they arrived at 9pm. You might say to them "you're just on time!" sarcastically, or you might not. Intuitively it seems plausible that some people use sarcasm more often than others (Ivanko et al., 2004). To test whether individual differences exist in sarcasm use, Ivanko et al. (2004) devised the Self-reported Sarcasm Scale (SSS). The SSS contains 16 questions covering self-perceived level of sarcasm, as well as the likelihood of sarcasm use in general and specific situations. Not only has the SSS been used in English (e.g., Dress et al., 2008; Ivanko et al., 2004; Johnson & Kreuz, 2023), but also across different L1s (e.g., Blasko et al., 2021; Kuczmierowska et al., 2024; Mendiburo-Seguel & Heintz, 2020; Zajączkowska et al., 2024). However, the SSS has not been used to test L2 sarcasm use. Using the SSS in L2 will help further validate its structure, and shed lights on how individuals perceive sarcasm in their L2.

Accordingly, this study reports on the self-perceptions of both L1 and L2 sarcasm use. Three target groups were recruited: L1 English speakers (n = 84), L2 English L1 Cantonese speakers (n = 102), and L2 English L1 Mandarin speakers (n = 44). The present SSS was slightly modified from Ivanko et al. (2004) to improve the flow and to account for potential cultural differences. However, English was kept as the language of the SSS for all three groups of participants. In other words, the Cantonese and Mandarin participants completed the SSS in their L2. An Exploratory Factor Analysis (FA) was done to check whether the factors in the current SSS were loaded in the same across the three target groups. The results indicated distinct factor structures for each group, providing insight into how sarcasm use is conceptually constructed (and differs) across cultures, and also how individuals perceive their use of sarcasm in their L2.

- Blasko, D. G., Kazmerski, V. A., & Dawood, S. S. (2021). Saying what you don't mean: A cross-cultural study of perceptions of sarcasm. *Canadian Journal of Experimental Psychology/Revue Canadianne de Psychologie Expérimentale*, 75(2), 114–119. https://doi.org/10.1037/cep0000258
- Dress, M. L., Kreuz, R. J., Link, K. E., & Caucci, G. M. (2008). Regional Variation in the Use of Sarcasm. *Journal of Language and Social Psychology, 27*(1), 71–85. <a href="https://doi.org/10.1177/0261927X07309512">https://doi.org/10.1177/0261927X07309512</a>
- Ivanko, S. L., Pexman, P. M., & Olineck, K. M. (2004). How Sarcastic are You?: Individual Differences and Verbal Irony. *Journal of Language and Social Psychology, 23*(3), 244–271. <a href="https://doi.org/10.1177/0261927X04266809">https://doi.org/10.1177/0261927X04266809</a>
- Johnson, A. A., & Kreuz, R. J. (2023). Sarcasm Across Time and Space: Patterns of Usage by Age, Gender, and Region in the United States. *Discourse Processes*, 60(1), 1–17. <a href="https://doi.org/10.1080/0163853X.2022.2085475">https://doi.org/10.1080/0163853X.2022.2085475</a>

- Kuczmierowska, J., Kandemirci-Bayız, D., Akdeniz, B., Abayhan, Y., Zajączkowska, M., Glenwright, M., Pexman, P. M., & Banasik-Jemielniak, N. (2024). Examining the Structure of the Sarcasm Self-Report Scale Cross-Culturally: Evidence from Canada, Poland, and Türkiye. In N. Banasik-Jemielniak, P. Kałowski, & M. Zajączkowska (Eds.), Studying Verbal Irony and Sarcasm (pp. 303–325). Springer Nature Switzerland. <a href="https://doi.org/10.1007/978-3-031-57172-5">https://doi.org/10.1007/978-3-031-57172-5</a> 13
- Mendiburo-Seguel, A., & Heintz, S. (2020). Who shows which kind of humor? Exploring sociodemographic differences in eight comic styles in a large Chilean sample. *Scandinavian Journal of Psychology, 61*(4), 565–573. <a href="https://doi.org/10.1111/sjop.12629">https://doi.org/10.1111/sjop.12629</a>
- Zajączkowska, M., Zimna, O., Kurzawa, M., & Banasik-Jemielniak, N. (2024). Exploring the Polish Adaptation of the Sarcasm Self-report Scale Using the Think-Aloud Protocol: Three Lessons About Studying Irony Through Questionnaires. In N. Banasik-Jemielniak, P. Kałowski, & M. Zajączkowska (Eds.), Studying Verbal Irony and Sarcasm (pp. 241–256). Springer Nature Switzerland. <a href="https://doi.org/10.1007/978-3-031-57172-5">https://doi.org/10.1007/978-3-031-57172-5</a> 10

### GEOGRAPHICAL TYPOLOGY AS A WINDOW INTO THE EVOLUTION OF A LANGUAGE FAMILY: A WESTERN AUSTRONESIAN CASE STUDY

#### VICTORIA CHEN

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

Keywords: typology, language change, Austronesian languages, morphosyntax

We explore the potential of geographical typology as a methodological lens for understanding the evolutionary trajectories of language families, using Western Austronesian languages as a case study. With over 1,200 languages dispersed primarily across islands, the Austronesian language family provides an ideal laboratory for examining patterns of linguistic variation and change. While previous research has focused largely on protolanguage reconstruction and subgrouping, relatively little attention has been paid to the areal distribution of morphosyntactic features across this language family.

We present preliminary findings from systematic coding of existing documentation on over 90 Western Austronesian languages spanning Taiwan, the Philippines, Malaysia, and Indonesia. Two specific morphosyntactic domains are examined: (i) the Austronesian-type voice system, which varies in complexity across Western Austronesian languages; and (ii) person-indexing morphology, which also exhibits considerable variation among these languages. Our findings reveal underexplored patterns of geographical clustering and areal features that are difficult to detect without systematic sampling and spatial mapping.

Three key conclusions are identified: (a) Taiwan and Sulawesi stand out as hotspots of syntactic diversity in both domains, while the Philippines consistently shows lower levels of variation; (b) Western Austronesian languages appear to be undergoing parallel simplification processes, though at different rates; and (c) recurrent patterns of structural change and directionality are attested across multiple island regions. These findings position Western Austronesian languages as a compelling case for geographically informed typological research and highlight the value of extending this approach to other language families. Finally, we present preliminary explanations for these three generalisations.

### COLOUR IN FLUX: EVOLUTION IN THE POLYNESIAN COLOUR LEXICONS THROUGH MIGRATION AND COLONISATION

#### VICTORIA CHEN, PRISKA PRAMASTIWI, TIA NEHA & NEIL DODGSON

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

**Keywords:** Polynesian languages, te reo Māori, colour terms, language variation and change, language contact, historical linguistics

Colour terms offer a productive lens into how linguistic systems categorise perceptual continua and encode culturally significant distinctions. We present preliminary findings from a systematic analysis of the colour lexicon of te reo Māori and 18 closely related Polynesian languages, including two 'Polynesian outlier' languages that migrated from Polynesia back to Melanesia. Building on a pilot study that identified contact-induced changes in te reo's colour terminology, this expanded project investigates how colonisation and language contact may have shaped indigenous conceptualisations of colour across the Pacific.

We focus on the colour systems of these 19 Polynesian languages, which exhibit varying intensities and histories of European contact. Drawing on documentary data, early dictionaries and wordlists, and the reconstructed lexicon of Proto-Polynesian, we track innovations in colour terminology and identify shifts in lexical frequency, as well as the emergence or decline of particular terms. Special attention is given to educational materials as possible vehicles of change, and to the role of revitalisation in shaping modern lexicons.

Our findings underscore the complex ways in which colonisation and revitalisation influence lexical systems: in some communities, colour terms borrowed from colonial languages have supplanted native forms; in others, revitalisation efforts have introduced neologisms or revived archaic terms. By situating colour within the broader politics of language change, this project contributes to mātauranga Māori and Pacific linguistic heritage and calls for more nuanced engagement with indigenous semantic systems in language education and planning. More broadly, it highlights colour as a microcosm for understanding how contact reshapes language and cultural knowledge.

### PATTERNS OF POLYSEMY BETWEEN LINEAR AND AFFINAL KINSHIP TERMINOLOGIES IN AUSTRONESIAN LANGUAGES

#### **JESSICA COATES**

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

Keywords: grammar, polysemy, kinship, Austronesian languages

Reciprocities in the grammar of kinship can provide great insight into the social structure and worldviews of language users in different language communities. Building on Radcliffe-Brown's (1941) observation that the English term 'uncle' obscures distinctions such as relative age and parental lineage, the following study examines patterns of polysemy in kinship terminology across Austronesian languages. The research investigates how polysemy is distributed across lineage, gender, generation, and sibling birth order, with a focus on the consanguineal generations two generations above and below Ego, the generation at the level of Ego, and their affinal counterparts. Results were analysed to identify any areal patterns across the language regions, following the Out of Taiwan theory (Bellwood, 1984; Blust, 1984) and the migration hypothesis posited by Blust (2013). These results were then examined through historical and sociolinguistic lenses to identify possible influences from migration, societal change, and colonial influence, with the intention of understanding the stability and purpose of polysemy in grammar in such a fundamental aspect of society. The study finds that the reciprocal terms between grandparents and grandchildren are a gesture of Proto-Austronesian, still commonly found in the observed Filipino languages, though languages still hold morphological similarities between these extremities further east in the language region. Instances of gender polysemy are most commonly found in generations below Ego, and never among the parent generation. Polysemy is seen less in the eastern regions, existing primarily in the sibling generation in Polynesia.

- Bellwood, P. (1984). A Hypothesis for Austronesian Origins. *Asian Perspectives, 26*(1), 107–117. <a href="http://www.istor.org/stable/42928109">http://www.istor.org/stable/42928109</a>
- Blust, R (1984). *The Austronesian homeland: A linguistic perspective, Asian Perspectives, 26*(1), 45–67.
- Blust, R. (2013). *The Austronesian languages* (Revised ed.). Canberra: Asia-Pacific Linguistics, Research School of Pacific and Asian Studies, Australian National University.
- Radcliffe-Brown, A. R. (1941). The study of kinship systems. *The Journal of the Royal Anthropological Institute of Great Britain and Ireland, 71*(1/2), 1–18. https://www.jstor.org/stable/2844398

### THE PROFESSIONAL EXPERIENCES OF HERITAGE LANGUAGE TEACHERS IN NEW ZEALAND: PRELIMINARY FINDINGS

#### MARGARET CONNELLY

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

**Keywords:** heritage languages, teacher experiences, language teacher education, critical ethnographic sociolinguistics

This presentation explores the experiences of heritage language (HL) teachers in New Zealand, where rapid intergenerational language shift, limited languages provision in schools and minimal recognition of learners' existing language repertoire create unique challenges. Although 40% of two-year-olds are growing up multilingual in New Zealand (Morton et al. (2014)), compulsory education remains a largely monolingual environment – a catalyst for family language shift (Kitchen (2014)). Issues such as a "lack of recognition" of learners' existing language skills, and language teacher "workforce capacity and capability" have been identified as impacting the provision of language programmes in schools (Ministry of Education (2022)). Situated within this broader context, community language education is a vital domain for language maintenance, yet its peripheral positioning impacts the professional recognition of HL teachers, despite their specialist skills (Alsahafi (2019); Nordstrom (2020); Cruikshank et al. (2020)). This research explores how HL teachers experience such issues, employing a critical sociolinguistic ethnographic approach to understand teachers' lived professional experiences in their language teaching contexts.

Preliminary findings from observations, interviews, and document analysis highlight how HL teachers navigate macro-structures and their professional roles, including the impact of professional development. Initial results indicate that HL teachers are skilled specialists and key language policy actors, addressing a gap in educational provision in collaboration with communities. Through a discussion of the challenges faced by these teachers, the presentation explores how systemic changes might better support community-led initiatives for language education.

While still in the preliminary stages of data collection and analysis, this project has implications for teacher education, and may inform comprehensive language policies that address the needs of multilingual learners in linguistically diverse contexts like New Zealand.

- Alsahafi, M. (2019). Language maintenance and heritage language education: The case of a weekend Arabic school in New Zealand. *International Journal of Applied Linguistics and English Literature*, 8(2), 21-29.
- Cruickshank, K., Jung, Y. M., & Li, E. B. (2020). *Parallel Lines: Community Languages Schools and Their Role in Growing Languages and Building Communities.*
- Kitchen, M. (2014). Korean students' stories from an Aotearoa New Zealand high school: perceived affordances of English and Korean language use. *Language and Education*, *28*(6), 552-567

Morton, S.M.B., Atatoa Carr, P.E., Grant, C.C., Berry, S.D., Bandara, D.K., Mohal, J., Tricker, P. J., Ivory, V.C., Kingi, T.R., Liang, R., Perese, L.M., Peterson, E., Pryor, J.E., Reese, E., Waldie, K.E., and Wall, C.R. (2014). *Growing Up in New Zealand: A longitudinal study of New Zealand children and their families. Now we are Two: Describing our first 1000 days.* Auckland: Growing Up in New Zealand.

Nordstrom, J. (2020). Teaching in the periphery: Teacher identity in community language schools. *Teaching and Teacher Education, 96,* 103192.

### GRADIENT AND INDIVIDUAL MORPHOLOGICAL EFFECTS ON THE PRODUCTION OF VOWEL SEQUENCES IN TE REO MĀORI

### KIRSTEN CULHANE, JENNIFER HAY, JEANETTE KING, FORREST PANTHER & SIMON TODD

TE WHARE WĀNANGA O WAITAHA - UNVERSITY OF CANTERBURY

Keywords: te reo Māori, phonetics, morphology

Descriptions of te reo Māori state that when certain vowel sequences straddle morpheme boundaries, they are hiatuses, but otherwise are diphthongs<sup>1,2</sup> <sup>3,4</sup>investigate this claim, showing that there is considerable variation in the production of both closing and opening sequences in Māori, forming a clear continuum between hiatus- and diphthong-like realisations. They find some evidence for a morpheme boundary effect for both opening and closing sequences but treat boundaries as either present or absent. However, there evidence that morphemeboundaries are gradient rather than categorical<sup>5</sup>.

Focussing on /ai ia ea oa ua/, this study examines:

- 1. Do gradient morphological boundaries in Māori lead to gradient phonetic effects?
- 2. Are individual differences in perceived morphology linked to differences in production?

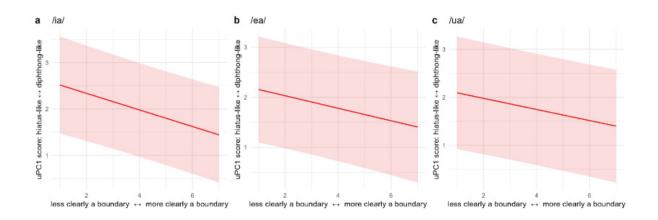
Data comes from an online experiment with eight participants, comprising two tasks. In the first task, participants read words containing vowel sequences (Figure 1). In the second task, participants rated how strongly they felt a given vowel sequence straddled a boundary (Figure 2). The data analysis involved the same bottom-up approach as<sup>3,4</sup>, and identifies a similar continuum of hiatus to diphthong-like productions. Addressing RQ1, we examine if participants' vowel sequence production is better predicted by a binary measure (e.g. boundary = TRUE/FALSE), or their ratings of the degree of morphological complexity. We find significant effects of participants' own ratings for /ia/ /ea/ and /a/ (Figure 3), but no effects of the binary measure. Addressing RQ2, we reran our models on 100 randomly shuffled data frames. We find that the AIC scores are much lower for real models than models run on shuffled data. This entails that participants' own ratings of morphological complexity are the best predictor of how they produce their vowel sequences, i.e. that speakers with different perceived structures show different pronunciations.

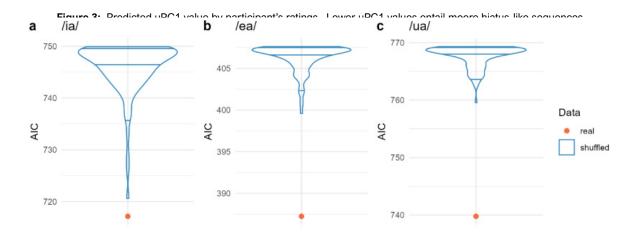


Figure 1: Screenshot from the first task (reading)



Figure 2: Screenshot from the second task (rating)





**Figure 4:** AIC scores of the regression models run on the real data (shown in orange) cf. models run on 100 randomly shuffled data frames.

- <sup>1</sup> W. Bauer, *Māori*. USA and Canada: Routledge, 1993
- <sup>2</sup> R. Harlow, *Māori: A Linguistic Introduction*. Cambridge: Cambridge University Press, 2007.
- The Authors. Variation in the production of te reo Māori opening vowel sequences. Paper submitted to Laboratory phonology.
- <sup>4</sup> The Authors. Variation and change in the production of te reo Māori closing sequences. Paper submitted to Phonetica.
- <sup>5</sup> J. Hay, Causes and Consequences of Word Structure. New York and London: Routledge, 2003.

#### SPEECH AIRFLOW OUTSIDE THE MOUTH IN TE REO MĀORI

#### DONALD DERRICK, MARK JERMY & JASON CHEN

TE WHARE WĀNANGA O WAITAHA - UNVERSITY OF CANTERBURY

**Keywords**: aero-tactile speech production, multi-modal speech production, te reo Māori, speech production

Speech airflow can alter speech perception in English (Gick & Derrick, 2009) and Mandarin (Derrick et al., 2019), but with limitations during continuous speech (Derrick et al., 2019; Hansmann et al., 2023). To understand why, we recorded speech airflow outside the mouth (for English and Māori) during continuous speech. We used optical features of air density (schlieren), filtered out non-speech information (Derrick et al., 2025), and then used optical flow analysis to measure speech airflow velocity (Liu, 2017). Here we present data on Māori, focusing on speech airflow from syllables lexical and phrase stress.

Schlieren speech airflow recordings were completed with a single-mirror system and a high-speed Photron SA5 camera (1024x1024 px, 250 fps), along with audio recordings (Beyerdynamic TG H55c heaset). Six (6) Maori speaking participants (4 female, 2male, age 26-70, non-native) were recorded. Participants heard recordings in 3 blocks of 5 phrases 1: i te taenga mai o te tau hou (When the New Year arrives) 2: i tino) tika (hoki (it's quite right) 3: te prangi o ngā ropū Māori (that Māori groups want) 4: ki te rere ki tetahi wāpu (to rush off to a wharf) 5: i te whanga nei (in this harbour) (underline = lexical stress, red = phrase stress if diderent). They repeated each phrase for recording. The task took 2 hours each.

Airflow from penult and final lexical stress in each phrase reached 30 cm from the lips (see Figure), for both fricatives and plosives. Only one other stressed syllable's airflow (phrase 3, pī in pīrangi) reached that far.

Results show Māori, like English, allows airflow from stressed breathy syllables to reach a distance far enough for close interlocutors to potentially feel that breath, but at the end of phrases, not the beginning as expected.

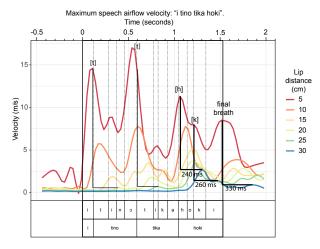


Figure 1: Speech airflow velocity by distance from lips for the Māori phrase "I tino tika hoki".

- Derrick, D., Heyne, M., O'Beirne, G., and Hay, J. (2019). Aero-tactile integration in Mandarin. In Calhoun, S., Escudero, P., Tabain, M., and Warren, P., editors, Proceedings of the *19th International Congress of Phonetic Sciences*, Melbourne, Australia 2019, 3508–3512, Melbourne, Australia. Australian Speech Science and Technology Association Inc
- Derrick, D., Jermy, M., and Chen, J. (2025). Isolating fast and slow flows in schlieren video. In *21st International Symposium on Flow Visualization* (ISFV21), ISFV21–1155, Tokyo, Japan
- Derrick, D., Madappallimattam, J., and Theys, C. (2019). Aero-tactile integration during speech perception: Edect of response and stimulus characteristics on syllable identification. *Journal of the Acoustical Society of America*, 146(3):1605–1614
- Gick, B. and Derrick, D. (2009). Aero-tactile integration in speech perception. Nature, 462:502-504
- Hansmann, D., Derrick, D., and Theys, C. (2023). Hearing, Seeing, and Feeling Speech: The Neurophysiological Correlates of Trimodal Speech Perception. *Frontiers in Human Neuroscience:* Speech and Language, 17:1–11

#### THE ELUSIVE I AND KI

#### FRÉDÉRIC DICHTEL

ŌTĀKOU WHAKAIHU WAKA - UNIVERSITY OF OTAGO

Keywords: spoken English, self-regulation, out-of-class learning

The prepositions *i* and *ki* are among the grammatical features that students of te reo Māori (including the author) find the most challenging. While their non-spatial uses are well documented, their spatial meanings remain less studied and continue to cause confusion. In particular, the commonly cited rule of thumb - that *i* corresponds to the English 'at' and *ki* to the preposition 'to'- often proves unreliable. Harlow (2001) and Bauer (1997) have established that *ki* is frequently used when the location is linked to a notion of prior motion. However, how is a learner to determine whether the speaker's *tirohanga* (perspective) conveys that idea of prior motion?

This piece of research intends to provide learners with reliable guidelines based on clear linguistic cues. It also aims to explore the tirohanga underlying the use of *i/ki*, so that students and teachers also know *why* these prepositions are used thus.

I have therefore compiled a corpus of 300 paragraphs drawn from Māori translations. Preliminary analysis suggests that *ki* co-occurs with verbs of physical position that entail motion (e.g. *tae* 'arrive', *tau* 'land'), while *i* denotes the location of static activities (*tatari* 'wait', *huna* 'hide').

Many verbs, however, are neither clearly kinetic nor static and seem to appear with both *i* and *ki*. So far, I am yet to identify formal linguistic cues that can predict which preposition will co-occur with such verbs, which calls for research into a wider corpus. Also, further research is needed to understand how *tirohanga* Māori can inform the use of *i/ki* with culturally significant verbs, such as *whānau* 'be born' and *hui* 'gather'.

In this presentation, I will describe my interim findings, and the methodology I will be using to expand the corpus and improve understanding of the linguistic principles underlying the spatial uses of *i* and *ki*.

#### REFERENCES

Bauer, W. (1997). The Reed reference grammar of Māori. Reed.

Harlow, R. (2001). A Māori reference grammar. Pearson Education.

# CHANGES TO COLOUR TERMS IN TE REO MĀORI - A CROSS-GENERATIONAL STUDY

### **NEIL DODGSON, VICTORIA CHEN & TIA NEHA**

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

Keywords: colour, Māori

Our previous research showed that te reo Māori terms for colour have been profoundly influenced, first by settlement of New Zealand (e.g., the colour terms kōwhai and kākāriki replaced their Proto-Eastern Polynesian predecessors), then by contact with English (e.g., the terms pāpura, ārani, puru, kerei are all loan words), and more recently by the revitalisation of the language (e.g., the terms poroporo, karaka, kahurangi, kiwikiwi are all repurposing of existing words to refer to colours).

At least two phases of changes occurred within living memory. In the early twentieth century, the suppression of te reo is likely to have led to a shift in the meanings of words. For example, in the nineteenth century, the Māori whero encompassed English red, brown, purple and pink, but a primarily English-language education would have pushed it to mean only the same as the English red. The second phase of change is that the revitalisation of te reo has led to a dramatic change in the colour words that are taught to tamariki but has also led to a homogenisation that the same words are taught across the nation regardless of local dialect.

We are preparing to conduct a cross-generational interview-based study to investigate how the language has changed over time and how it varies across regions in Aotearoa. The interview format is based on that used by Paula Teixeira Moláns to investigate the parallel case of Galician, a language of north-western Spain. Like te reo Māori, Galician was supressed for decades in favour of another language and has recently undergone a revitalisation. We will interview both kaumātua and rangatahi across three regions: Tairāwhiti, Te Tai Tokerau, and Wellington. Our intention is to use colour terminology as a microcosm of how language varies across the country and across generations.

# A LONGITUDINAL STUDY OF LEXICAL DIVERSITY AND MULTI-WORD EXPRESSIONS IN MANDARIN-SPEAKING SCHOOL-AGE CHILDREN'S WRITTEN NARRATIVES

#### **ZIXING FAN & ANNA SIYANOVA-CHANTURIA**

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

Keywords: Mandarin, multi-word expressions, written narrative, longitudinal development

Narrative competence is increasingly recognized as central to children's language and literacy development, with vocabulary growth playing a key role in fluent and proficient language use (Christiansen & Arnon, 2017; De Wilde, 2023; Gillam et al., 2023; Jiang et al., 2020). However, in the field of Mandarin research, little is known about the longitudinal development of single- and multiword lexical units in Mandarin-speaking school-age children's written narratives. Based on the usage-based theory of language acquisition, which views linguistic knowledge as emerging from repeated exposure to and use of language patterns (Ellis & Ogden, 2017; Wulff, 2018), this study focuses on children's development of lexical diversity and multiword expressions (MWEs) through authentic narrative production.

We track 74 children from Grades 2-5 across four time points over two years, analyzing their lexical diversity measures (Type-Token Ratio, vocD, Guiraud index, MTLD), use of adjective-noun and verbnoun phrases in narrative writing produced in standardized language tests. Mixed-effects models are employed to investigate the extent to which lexical diversity, phrase frequency, association strength (mutual information), lexical gravity, Delta P forward, and Delta P backward vary as a function of time, grade, gender, the frequency and length of the first and second words, and the interactions among these predictors. We use Pearson correlation analyses to reveal the relationship (or lack thereof) between lexical diversity and the features of MWEs.

This research addresses a key gap in understanding how children acquire, develop, and employ Mandarin vocabulary over time in narrative production. The findings will provide a foundation for more inclusive, discourse-based approaches to studying their expressive language development. Clinically, the findings will offer first normative benchmarks, informing educators and clinicians about expected growth patterns in children's usage of single words and MWEs, supporting the development of assessment tools and evidence-based interventions.

#### **REFERENCES**

Christiansen, M. H., & Arnon, I. (2017). More than words: The role of multiword sequences in language learning and use. In (*Vol. 9*, pp. 542-551): Wiley Online Library.

De Wilde, V. (2023). Lexical characteristics of young L2 English learners' narrative writing at the start of formal instruction. *Journal of Second Language Writing*, *59*, 100960. <a href="https://doi.org/10.1016/j.jslw.2022.100960">https://doi.org/10.1016/j.jslw.2022.100960</a>

Ellis, N. C., & Ogden, D. C. (2017). Thinking about multiword constructions: Usage-based approaches to acquisition and processing. *Topics in cognitive science*, *9*(3), 604-620. <a href="https://doi.org/https://doi.org/10.1111/tops.12256">https://doi.org/https://doi.org/10.1111/tops.12256</a>

- Gillam, S. L., Vaughn, S., Roberts, G., Capin, P., Fall, A.-M., Israelsen-Augenstein, M., Holbrook, S., Wada, R., Hancock, A., & Fox, C. (2023). Improving oral and written narration and reading comprehension of children at-risk for language and literacy difficulties: Results of a randomized clinical trial. *Journal of Educational Psychology, 115*(1), 99. <a href="https://doi.org/10.1037/edu0000766">https://doi.org/10.1037/edu0000766</a>
- Jiang, S., Jiang, X., & Siyanova-Chanturia, A. (2020). The processing of multiword expressions in children and adults: An eye-tracking study of Chinese. *Applied Psycholinguistics*, *41*(4), 901-931. <a href="https://doi.org/10.1017/S0142716420000296">https://doi.org/10.1017/S0142716420000296</a>
- Wulff, S. (2018). Acquisition of Formulaic Language from a Usage-Based Perspective. In A. Siyanova-Chanturia & A. Pellicer-Sanchez (Eds.), *Understanding formulaic language: A second language acquisition perspective* (pp. 19-37). Routledge.

### MULTIPLE EXPONENCE IN PAICÎ DETERMINERS

#### **IAN FLAWS**

TE WHARE WĀNANGA O WAIKATO - UNIVERSITY OF WAIKATO

Keywords: Paicî Oceanic, New Caledonia, noun phrase, determiners, multiple exponence

Paicî is a New Caledonian language, spoken by about 6,500 speakers (Flaws & Pourouda, 2023). It is one of the few tonal languages of the Oceanic family. While its tone has been well studied (Rivierre, 1974; Lionnet, 2019, 2022), there has been almost no dedicated research into Paicî's morphosyntax. The author's doctoral research aims to fill this gap.

Paicî has rich sets of prenominal determiners. The grammatical category of number is encoded in three of these sets: evaluative, indefinite and human determiners. Determiners from more than one of these sets can co-occur in a single Noun Phrase, generating redundancy in the coding of number. Interestingly, number contrasts are encoded differently in each of the three sets. The human determiners encode singular, dual and plural, whereas the indefinite and evaluative determiners show two different binary distinctions: between singular and plural; and between non-plural and plural respectively. Of interest also is that the singular and plural indefinite determiners occur in a different position relative to other determiners.

The following examples show NPs with combinations of the evaluative determiners ji (non-plural) and nyi (plural); the indefinite determiners jè (singular) and pàra (plural), and the human determiners tô (feminine singular), du (feminine dual) and tèpa (masculine plural):

1.	<i>ji</i> DIM.NPL	tô F.SG	<i>ilàri</i> woman			'the little woman'
2.	tô F.SG	<i>j</i> è INDF.SG	<i>ilàri</i> woman			'a(nother) woman'
3.	<i>j</i> è INDF.SG	<i>ji</i> DIM.NPL	<i>pàara</i> moment			'a small moment'
4.	<i>nyi</i> DIM.PL	<i>pàra</i> INDF.PL	<i>ârawéà</i> fish			'a few fish'
5.	<i>nyi</i> DIM.PL	<i>tèpa</i> M.PL	<i>nari</i> little	<i>èpo</i> child		'the little children'
6.	<i>ji</i> DIM.NPL	du F.DU	<i>ârailu</i> two	<i>nari</i> little	<i>mwani</i> money	'two small coins'
7.	<i>pàra</i> INDF.PL	<i>tèpa</i> M.PL	<i>âboro</i> person			'some people'

In this paper, the Paicî determiner system will be presented, and multiple exponence in the coding of number will be explored.

#### **REFERENCES**

- Flaws, I. & Pourouda, J. (2023). Paicî (Central mainland, New Caledonia): Language Snapshot, Language Documentation and Description 23(1): 1. https://doi.org/10.25894/ldd.319
- Lionnet, F. (2019). The colon as a separate prosodic category: Tonal evidence from Paicî (Oceanic, New Caledonia). In R. Stockwell, M. O'Leary, Z. Xu & Z. L. Zhou (Eds.). *Proceedings of the 36th West Coast Conference on Formal Linguistics*. <a href="http://www.lingref.com/cpp/wccfl/36/paper3469.elc">http://www.lingref.com/cpp/wccfl/36/paper3469.elc</a>
- Lionnet, F. (2022). Tone and downstep in Paicî (Oceania, New Caledonia), *Phonological Data and Analysis*, 4, 1–47.
- Rivierre, J.-C. (1974). Tons et segments du discours en langue paicî (Nouvelle-Calédonie) [Tones and discourse segments in the Paicî language]. *Bulletin de la Société de Linguistique de Paris, 69*(1), 325–340.

# A TYPOLOGY OF RAISING TO OBJECT, WITH SPECIAL REFERENCE TO AUSTRONESIAN

#### **BENJI FOWLER**

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

**Keywords:** raising, phase, prolepsis, hyperraising, Austronesian

This project examines raising to object (RTO) constructions reported in 22 languages. This construction is characterized by allowing a phrase that is thematically linked to an embedded clause in a complex sentence to optionally surface in the matrix clause and behave syntactically as a matrix object. An example of RTO in the Austronesian language Madurese is presented in (1). The phrase Hasan (thematically identified with the embedded subject) precedes the temporal adverb bari 'yesterday', which modifies the matrix clause. Hasan appears therefore to sit within the matrix clause.

(1) Madurese (Austronesian)

Siti	negera	Hasan	bari'	[melle	motor].
S	AV.think	Н	yesterday	[AV.buy	car ]

<sup>&#</sup>x27;Yesterday Siti thought Hasan to have bought a car.' (Davies 2005)

RTO constructions are theoretically interesting as they appear to violate commonly understood restrictions on phrasal movement, such as the Phase Impenetrability Condition (PIC) (Chomsky 2000, 2001):

(2) Phase Impenetrability Condition (Chomsky 2000, 2001) In phase  $\alpha$  with head H, only H and its edge are accessible to operations outside  $\alpha$ .

This project systematically reconsiders existing analysis of RTO in the literature, focusing on the underlying structure of each construction and a holistic comparison of RTO across languages. Each construction is coded in terms of syntactic diagnostics such as sensitivity to islands and case connectivity. This process determines that there are four distinct types of RTO with different underlying structures and behaviours. Some feature a proleptic relationship between the 'raised' argument and the embedded clause, avoiding PIC issues, whereas other Types feature A- or Ā-movement operations, which present other theoretical complications. This study reassesses these complications and considers some solutions to them. It also reclassifies some RTO constructions from the literature based on the new typology. The project also considers the distribution of RTO constructions across languages, noting that both the proleptic and the movement types of RTO appear to be prevalent in different subregions within the Austronesian language family.

#### **REFERENCES**

Chomsky, Noam. 2000. Minimalist inquiries: The framework. In Step by step: Essays on minimalist syntax in honor of Howard Lasnik, 89–155. MIT press.

Chomsky, Noam. 2001. Derivation by phase. In Ken Hale: A Life in Language. MIT press.

Davies, William D. 2005. Madurese prolepsis and its implications for a typology of raising. Language 81(3). 645–665.

# WRITING WITH MACHINES: HOW AI ASSISTANCE SHAPES LINGUISTIC STRUCTURES

#### QIAO GAN, BENJAMIN ADAMS, JONATHAN DUNN & ANDREA NINI

TE WHARE WĀNANGA O WAITAHA - UNVERSITY OF CANTERBURY, UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN, UNIVERSITY OF MANCHESTER

**Keywords:** large language models, Al-assisted writing, linguistic structures, human-Al interaction, text composition

Large language models (LLMs) such as ChatGPT are increasingly integrated into everyday writing. While prior studies have examined their effects on text quality and fluency (e.g., Dhillon et al., 2024), little is known about how machine assistance shapes the underlying linguistic structures of human-authored text. Here, we conducted a writing experiment using a GPT-4o-powered interface, adapted from Lee et al. (2022). We recruited 166 native speakers of American English and randomly assigned them to one of six writing conditions. These conditions were designed to simulate a range of human-Al interactions, from unaided writing to light-touch assistance to near co-authorship (see Table 1).

#### We ask two questions:

- 1. How much influence does machine assistance have on writing?
  To measure this, we tracked the origin of each word in the final text human-generated, Al-generated, or jointly edited. As shown in Table 2, the local suggestion mode, Phrase Continuation, yielded the highest level of human-Al interaction, while Machine Completion led to the greatest presence of synthetic language. These findings indicate that Al assistance strongly shapes the surface composition of human-authored texts (Lee et al., 2022; Padmakumar & He, 2024).
- 2. How much structural difference does machine assistance create? Even if Al contributes a substantial portion of the final text, does this affect the types of linguistic structures used? Analyses of lexical, semantic, syntactic, and stylistic similarity showed that naturally written and Al-assisted texts were structurally alike, suggesting that while machine assistance affects who produces what, it does not radically alter the inventory of linguistic structures in the output.

Together, these findings suggest that LLMs can substantially shape the surface composition of writing without fundamentally altering its structural profile. This points to a distinction between authorship and structure in human-Al co-writing, with implications for debates on linguistic diversity and authorship in Al-mediated communication.

Table 1:	Descriptive	statistics	of data	set
iable i.	Descriptive	Statistics	UI Uate	1 301

Conditions	Tasks	Samples	Total Words	Average Words
Natural production	wrote without any machine assistance	27	14,723	545
Stylistic suggestions	GPT-4o provided sentence-level structural suggestions	26	13,953	537
Phrase continuation	GPT-4o offered 3-5 word phrase suggestions	29	16,265	561

Conditions	Tasks	Samples	Total Words	Average Words
Sentence continuation	I GPT4-0 suggested follow-up sentences. I		15,263	587
Machine completion	Participants wrote the first half of the essay, GPT-4o completed the rest	30	17,809	594
Human completion	Participants received a GPT-4o generated first half and wrote the second half	28	15,230	544

Table 2: Origin of words for each condition

Conditions	By participants	By GPT-4o	By Both	
Stylistic suggestions	57%	30%	13%	
Phrase completion	45%	12%	43%	
Sentence continuation	41%	27%	32%	
Machine completion	48%	41%	10%	
Human completion	49%	34%	17%	

#### **REFERENCES**

Dhillon, P. S., Molaei, S., Li, J., Golub, M., Zheng, S., & Robert, L. P. (2024). Shaping human-Al collaboration: Varied scaffolding levels in co-writing with language models. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems (CHI '24)* (Article 1044, pp. 1–18). Association for Computing Machinery. <a href="https://doi.org/10.1145/3613904.3642134">https://doi.org/10.1145/3613904.3642134</a>

Lee, M., Liang, P., & Yang, Q. (2022). CoAuthor: Designing a human-Al collaborative writing dataset for exploring language model capabilities. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems (CHI '22)* (Article 388, pp. 1–19). Association for Computing Machinery. <a href="https://doi.org/10.1145/3491102.3502030">https://doi.org/10.1145/3491102.3502030</a>

Padmakumar, V., & He, H. (2024). Does writing with language models reduce content diversity? In Proceedings of the Twelfth International Conference on Learning Representations (ICLR). Vienna, Austria. Retrieved from <a href="https://openreview.net/forum?id=Feiz5HtCD0">https://openreview.net/forum?id=Feiz5HtCD0</a>

### HERITAGE LANGUAGE MAINTENANCE AND FAMILY RELATIONS DYNAMICS: A CHILDREN'S PERSPECTIVE

#### MARIANNE GORTER

TE KUNENGA KI PŪREHUROA - MASSEY UNIVERSITY

**Keywords:** heritage language maintenance, family relationships, family cohesion, heritage language transmission, children's perspectives, cultural identity, heritage language agency, New Zealand, Catalan,

This qualitative research investigated the complexities around Heritage Language Maintenance (HLM) efforts and their implications for family relationships. The topic was explored via an in-depth case study drawing on narrative data from a Catalan immigrant mother to New Zealand, and her two New-Zealand born daughters. Data were collected through semi-structured interviews, using a narrative inquiry approach that provided a quasi-longitudinal component in the form of retrospective reflections from the participants within their 'generational unit'. Using a reflexive thematic analysis approach, themed HLM practices involved immersion-method, awareness-raising for the heritage language (HL) and culture, and annual visits to the home country.

The overall outcome of HLM efforts was generally successful, but the process entailed significant, not always positive, impacts on the participants' individual lives and their mutual relationships. Some of these pertained to linguistic power struggles, feelings of isolation, and a sense of non-belonging. Findings also suggest that the strong link with their HL and cultural identity played a role in shaping the daughters' agency to maintain HL, ultimately leading to an improved relationship with their mother and contributing to the family's overall wellbeing.

By focusing on the (adult) children's experiences and perspectives on successful HL transmission, this research deepens our understanding of the family dynamics involved with HLM. It provides fresh insights into the challenges that immigrant families may be facing as a result of their HL-transmission attempts. Developing a full linguistic repertoire including both the HL and societal-dominant language is essential for children to participate in society and life at home, where HL symbolizes the family's shared cultural identity. The implications of this study are therefore significant to language policymakers and language education sector whose efforts are aimed at promoting and supporting successful additive bi/multilingualism in children with an HL background.

# TENTATIVELY TRACING TRANS-NEW GUINEA: A PHYLOGENETIC EVALUATION OF POTENTIAL DEEPER RELATIONSHIPS

#### SIMON GREENHILL

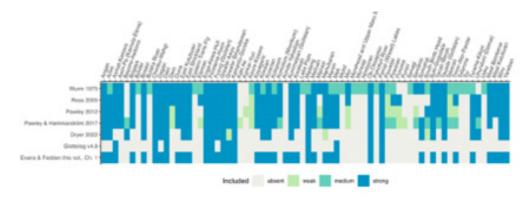
WAIPAPA TAUMATA RAU - UNIVERSITY OF AUCKLAND

**Keywords:** Trans-New Guinea, phylogeny, computational methods

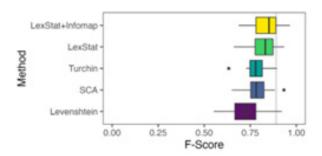
The Trans-New Guinea language family is one of the world's largest language families. Strikingly it is also one of the world's least studied. There is ongoing debate about which of many languages should be included in Trans-New Guinea and how these relate to each other (fig 1). Resolving this debate is hard due to the complexities of studying New Guinea languages, and a lack of adequate data suitable for detailed historical linguistic work. These difficulties have led to suggestions that the only way forward is to wait for low-level descriptive field-work and detailed bottom-up historical linguistic reconstructions. However, the wait has been long, and while some promising inroads have been made, there is still a long path to travel before we can track the relationships between these languages.

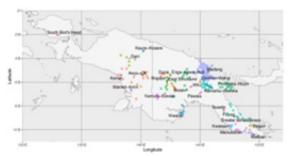
In this talk I will propose a potential way forward that aims to tackle the mid-ground between detailed low-level work within subsets of languages, and high level top-down reconstructions, while avoiding the ongoing debates about the adequacy of the proto-forms. I take a fully automated computational approach to identify cognates, construct family trees, and quantify the evidence for potential higher-level subgroupings. I first evaluate the performance of the automated cognate identification on well-established groups of New Guinea languages, and find that the accuracy is relatively high (~85%), suggesting that automated cognate detection approach works well at detecting known cognate sets identified by linguistic experts (fig. 2). I then scale up this approach to a dataset of 294 languages documented by 205 concepts across a total of 54,956 lexemes (fig 3). Applying Bayesian phylogenetic methods to these languages reveals some potential deeper groupings that I hope can be treated as a set of future hypotheses to be evaluated using the traditional comparative method (fig 4).

Overall, the combination of traditional linguistic scholarship and cutting-edge phylogenetic methods is the best way towards a better understanding of the great linguistic puzzle that is New Guinea. It is my hope that this approach can help shape useful avenues for future work by tentatively tracing – and quantifying – the strength of evidence for particular language groupings.



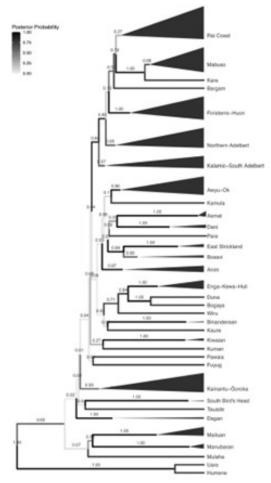
**Figure 1:** Figure showing the language subfamilies included (or not included) in TNG by the seven major classifications. Weak, Medium, Strong represents how convinced the relevant authors are that the subfamily is part of TNG.





**Figure 2:** Boxplot showing the accuracy for automated cognate identification methods by method. The gray line indicates the average accuracy identified by List et al. (2017).

**Figure 3:** Map of New Guinea showing the languages sampled. Each language is indicated by a hexagon and coloured according to subfamily membership.



**Figure 4:** Backbone Phylogeny of all the Trans-New Guinea language subfamilies showing the deeper relationships between language groups. Numbers of branches and the colouring, indicates the relative strength of each branch in the data as reflected by the posterior probability. The black triangles indicate the collapsed subfamilies and are proportional to their size.

# UNDERSTANDING THE IMPACT OF ACOUSTIC ENVIRONMENTS ON THE ACOUSTIC CUES OF TE REO MĀORI MONOPHTONGS

#### HIRAIA HAAMI-WELLS

WAIPAPA TAUMATA RAU - UNIVERSITY OF AUCKLAND

**Keywords:** te reo Māori, speech production, acoustic environments

This study investigates the spectral and temporal acoustic features of te reo Māori speech and examines how different acoustic environments influence these features. Acoustic environments can impact the fidelity of acoustic cues, therefore hindering accurate speech processing and comprehension. While extensive research has identified key acoustic cues in English, little is known about how these cues function in te reo Māori.

Using spoken data recorded in 2025, from ten fluent speakers of te reo Māori, we analyse vowel duration and their first and second formants, for all 5 monophthongs, i.e. / i e a o u/. Stimuli include varied sequences of short-short, short-long, and long-long vowel pairs, as well as constant contrasts (e.g./kVkV/, /pVpV/, /tVtV/). All words are placed in a carrier phrase "Ko CVCV te kupu", 5 versions of each word are recorded, in random order, yielding 125 words per speaker. Room impulse responses were recorded to simulate realistic acoustic environments for Waipapa and Tūtahi Tonu Marae, which are culturally significant spaces where te reo Māori is actively spoken at Waipapa Taumata Rau, University of Auckland. Combined, we use this data to simulate how the clean speech of the 10 speakers is affected by the introduction of the acoustic environments.

Our findings aim to identify salient cues in te reo Māori and assess how environmental distortion affects these acoustic cues. In addition to being the first in depth acoustic vowel analysis on te reo Māori since the MAONZE project began over 20 years ago (King et al 2011), this research aims to contribute to the development of culturally and linguistically appropriate speech and hearing technologies, including hearing aids and speech processing algorithms, which are currently based on the English language.

#### **REFERENCES**

King, J., Maclagan, M., Harlow, R., Keegan, P., & Watson, C. (2011). The MAONZE project: Changing uses of an indigenous language database.

# AUTHENTICITY AND AUTHORITY: LANGUAGE IDEOLOGIES OF TRADITIONAL CHINESE SCRIPT AMONG MAINLAND CHINESE NETIZENS

#### **KAREN HUANG**

WAIPAPA TAUMATA RAU - UNIVERSITY OF AUCKLAND

Keywords: language ideologies, Chinese, identity, script

Writing systems carry indexical and metapragmatic meanings situated in sociocultural contexts. Scripts serve as symbolic resources in identity construction, reflecting cultural and political power dynamics. The Chinese writing system has historically played a central role in shaping language ideologies and national identity. It was used by the ruling class to unify mutually unintelligible Chinese dialects and exert social control. Today, two Chinese scripts are in use: the simplified script in mainland China and Singapore, and the traditional script in Taiwan, Hong Kong, and Macao. Although prior research has explored how marginalized Chinese communities use traditional script to index cultural authenticity and differentiate themselves from mainlanders, little is known about how simplified script users in the mainland engage with these competing ideological values.

This study investigates how simplified script users in mainland China perceive and negotiate the cultural authority and authenticity associated with traditional script. Drawing on user comments from social media discussions, multiple threads were identified via keyword searches and analyzed thematically. Gal and Irvine's (2019) concepts—rhematization, axis of differentiation, fractal recursivity, and erasure—were then applied to interpret how language ideologies unfold in this digital discourse.

Findings reveal that some mainland users rhematize traditional script as elegant and culturally rich, largely based on their engagement with Classical Chinese or calligraphy. These associations are tied more to handwriting than digital use. Meanwhile, simplified script users deploy two strategies to assert its authority. First, they erase the link between traditional script and peripheral communities, framing it instead as an internal variant of Chinese - invoking an ideology of anonymity. Second, they use the ideology of linguistic naturalism, casting traditional script as outdated and simplified script as modern and efficient. This study demonstrates how language ideologies of writing systems are shaped and contested in digital spaces where political and technological boundaries intersect.

### **REFERENCE**

Gal, S., & Irvine, J. T. (2019). Signs of Difference: Language and Ideology in Social Life. Cambridge University Press. <a href="https://doi.org/10.1017/9781108649209">https://doi.org/10.1017/9781108649209</a>

# OFFICIAL LANGUAGE LEGISLATION IN AOTEAROA NEW ZEALAND - TIME FOR CHANGE

#### **LUCY JESSEP**

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

**Keywords:** *language and the law, official language policy, non-instrumentalism, language policy, law reform* 

The National–New Zealand First 2023 Coalition Agreement committed to making English an official language in New Zealand. New Zealand's existing conceptual approach to official language policy, non-instrumentalism, has involved a focus on a providing the right to use te reo Māori and New Zealand Sign Language (NZSL) regardless of whether English could be used instead. However, this has been made more difficult by the lack of clarity on what rights official language status grants, and the weakness of existing protections. The Coalition Agreement represents a significant change in approach where English is symbolically re-established as the dominant language of New Zealand.

This paper argues that this is unnecessary and would reduce the coherence of an already confusing area of the law. It begins by examining the existing state of official language legislation in New Zealand, following with an examination of what reform would be required to better meet the demands of a non-instrumentalist approach. It rejects the nation-building approach of the Coalition Agreement, which aims to reinforce an English-dominated societal culture in New Zealand.

The paper then proposes alternative legislation which would further the non-instrumentalist approach by clarifying official language status and expanding the rights available to te reo Māori and NZSL speakers. The proposal is for an Official Languages Act which recognises the substantive protection which Te Reo Māori and New Zealand Sign Language require, and strengthens the existing protections. It draws on overseas legislation and language policy it provides a unique perspective on pathways to reform in New Zealand.

# INCORPORATING A SCEPTICAL STANCE TOWARDS GENAI ACROSS A LINGUISTICS PROGRAMME

#### **JACQ JONES**

LA TROBE UNIVERSITY

Keywords: GenAl, pegagogy, undergraduate linguistics, SoTL, SoLT, teaching

In this talk, we discuss a position statement on Generative AI (GenAI) in Teaching and Research that was developed at La Trobe University and implemented into all linguistics courses from Semester 2, 2025. The statement positions the department as taking a sceptical stance towards GenAI, outlines expectations for students, and commits the team to adopt the use of GenAI only after careful consideration of the potential benefits when weighed against the social, environmental, economic, and intellectual disadvantages.

This sceptical stance challenges both extremes of what Swartz & McElroy refer to as the Al-driven surveillance tools of "technosaviorism" (Swartz & McElroy, 2023). On one hand is the hype presented by the developers of these technologies and their cheerleaders within higher ed (Collier & Ross, 2020), on the other is the hypervigilant defensive stance that reframes the relationship between students and educators as one based on compliance rather than trust (Calderwood, 2025). Students benefit from clear guidelines about their expected performance and the quality of their work (Cooper & Krishnan, 2020, p.65), and linguistics as a discipline is uniquely situated to provide these guidelines while also educating students in the technical and social ramifications of GenAl. Providing a consistent message across linguistics offerings shows a commitment to constructive alignment between learning outcomes, class activities, and assessment.

We present a summary of the position statement and examples of how it has been integrated into undergraduate classes, including discussion, pre-bunking activities, and changes to assessment design to encourage authentic student engagement over punitive actions. We also present outcomes from the initial semester of implementation and impressions regarding strengths, weaknesses, challenges and changes that should be implemented in future semesters. Finally, we will solicit feedback regarding the statement and how it might be adapted for use at other institutions in Oceania.

#### **REFERENCES**

- Calderwood, S.J. Surveillance Digitisation, Performativity, and Teacher-Student Relationships in a Blended Learning Setting. *Postdigit Sci Educ* (2025). <a href="https://doi.org/10.1007/s42438-024-00537-6">https://doi.org/10.1007/s42438-024-00537-6</a>
- Collier, A., Ross, J. Higher Education After Surveillance? *Postdigit Sci Educ 2*, 275–279 (2020). <a href="https://doi.org/10.1007/s42438-019-00098-z">https://doi.org/10.1007/s42438-019-00098-z</a>
- Cooper, S. A., & Krishnan, S. (2020). *Effective Unit Design for Higher Education Courses: A Guide for Instructors*. Routledge.
- Swartz, M., & McElroy, K. (2023). The "Academicon": Al and Surveillance in Higher Education. Surveillance & Society, 21(3), 276-281. https://doi.org/10.24908/ss.v21i3.16105
- Wiggins, G. P., & McTighe, J. (2005). Chapter 1: Backwards Design. *Understanding by design*. Association for Supervision & Curriculum Development.

#### MARKING CONTRASTIVE FOCUS IN BAHASA INDONESIA

#### **USWATUN KHASANAH & SASHA CALHOUN**

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

**Keywords:** contrastive focus, prosody-syntax interface, Bahasa Indonesia, production experiment, Javanese

This study aims to investigate contrastive focus marking in Bahasa Indonesia. Across languages, contrastive focus is usually marked syntactically, e.g. cleft structures and/or using prosodic prominence (Kügler & Calhoun, 2020). In English, using pitch accent is mandatory to show contrast, e.g. by giving prominence to the word 'piano' and 'guitar' when saying "She wanted a piano not a guitar for her birthday". Conversely, limited research on Bahasa Indonesia shows contrastive focus can be marked syntactically. These syntactic constructions allow the focus word to be highlighted, such as changing SVO construction containing subject focus word into cleft construction to give more emphasis. However, even though there is a claim that focus prominence is universal, whether the focus in Bahasa Indonesia is also marked prosodically is still unclear. To address this, we have collected data from 20 Bahasa Indonesia speakers with Javanese as their substrate language. Their oral production was recorded using a spontaneous task eliciting contrastive focus in the subject, object or adjective, and broad focus. Participants were given 4 sets of all conditions. For the contrastive focus conditions, each item in each set consisted of two pictures. These two pictures were all similar except for one condition (e.g. difference in subject elicitation). For the broad focus condition, one picture for each item was given. Preliminary analysis will be presented on the syntactic construction used depending on the focused constituent. Preliminary analysis of the prosodic realisation of the utterances will also be presented using the Autosegmental-Metrical framework. It is anticipated that the findings will shed light on how syntax is used to signal focus and whether prominence is compulsory in contrastive focus realisation in Bahasa Indonesia. With these findings, we aim to add to the literature on how focus is marked across languages.





Perhatikan kedua gambar berikut ini dengan seksama.

Bayangkan jika Anda mendeskripsikan kedua gambar tersebut pada orang lain yang tidak bisa melihat kedua gambar tersebut. Deskripsikan kedua gambar tersebut dengan lengkap, termasuk perbedaannya. Anda bisa melihat perbedaan antara gambar di sebelah kiri dan gambar di sebelah kanan. Cobalah untuk berbicara senatural mungkin.
Anda hanya bisa merekam jawaban Anda sekali dan pada saat merekam.





Figure 1: Example of stimuli with contrastive focus subject condition

Perhatikan kedua gambar berikut ini dengan seksama.

Bayangkan jika Anda mendeskripsikan kedua gambar tersebut pada orang lain yang tidak bisa melihat kedua gambar tersebut. Deskripsikan kedua gambar tersebut dengan lengkap, termasuk perbedaannya. Anda bisa melihat perbedaan antara gambar di sebelah kiri dan gambar di sebelah kanan. Cobalah untuk berbicara senatural mungkin. Anda hanya bisa merekam jawaban Anda sekali dan pada saat merekam.





Figure 2: Example of stimuli with contrastive focus adjective condition



WELLINGTON

Perhatikan kedua gambar berikut ini dengan seksama.

Bayangkan jika Anda mendeskripsikan kedua gambar tersebut pada orang lain yang tidak bisa melihat kedua gambar tersebut. Deskripsikan kedua gambar tersebut dengan lengkap, termasuk perbedaannya. Anda bisa melihat perbedaan antara gambar di sebelah kiri dan gambar di sebelah kanan. Cobalah untuk berbicara senatural mungkin.

Anda hanya bisa merekam jawaban Anda sekali dan pada saat merekam.



Perhatikan gambar berikut ini dengan seksama.

Bayangkan jika Anda mendeskripsikan gambar di bawah ini pada orang lain yang tidak bisa melihatnya. Deskripsikan gambar tersebut dengan lengkap. Cobalah untuk berbicara senatural mungkin.

Anda hanya bisa merekam jawaban Anda sekali dan pada saat merekam.



Figure 3: Example of stimuli with contrastive object condition

Figure 4: Example of stimuli with broad focus condition

#### **REFERENCE**

Kügler, F., & Calhoun, S. (2020). Prosodic Encoding of Information Structure: A typological perspective. In C. Gussenhhoven & A. Chen (Eds.), The Oxford Handbook of Language Prosody (pp. 454–468). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780198832232.013.30

PROFILING L2 SPOKEN FORMULAIC LANGUAGE: THE RELATIONSHIP BETWEEN FORMULA FLUENCY, RICHNESS AND PROFICIENCY IN JAPANESE EFL LEARNERS

#### **AKIHIRO KOTOH**

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

**Keywords:** formulaic language, vocabulary profile, Corpus-based approach, L2 speaking proficiency, Japanese EFL learners

Formulaic Language (FL) is a central focus in L2 vocabulary studies, and research on learners' FL has grown exponentially over the past decade (Nation, 2022). Corpus-driven approaches identifying lexical bundles as one type of FL have revealed a close relationship between FL development and L2 proficiency (Hougham et al., 2024; Tavakoli & Uchihara, 2020). These approaches have used token frequency and association measures like mutual information scores as constructs of phraseological ability or phraseicon (Granger, 2021), and examined the link between single-word lexical richness and FL use (Bestgen, 2017). However, while type frequency is central in lexical richness research, the type frequency of FL has been largely overlooked.

This study examines both token and type frequency of FL used by 1,281 Japanese EFL learners and 20 native speakers in oral proficiency interviews, using the NICT JLE Corpus (Izumi, Uchimoto, & Isahara, 2004). To operationalise FL, 735 items from the Oxford Phrase List (Oxford University Press, n.d.) were searched in the corpus. Specifically, relative token frequency is profiled as formula fluency—the ability to use FL fluently in spontaneous speech—while type coverage, calculated as the proportion of phrase list types used by a speaker relative to the total list, is profiled as formula richness, another construct of L2 phraseological ability. Based on FL type and token frequency profiles of 1,301 speakers, a Random Forest classifier with repeated 10 × 5 cross-validation was applied to predict five proficiency levels.

The model classified the five proficiency levels with 72.56 % accuracy (95 % CI = 71.8–73.3 %), highlighting a clear link between phraseological ability and speaking proficiency. Further analysis of individual FL types (Figure 1) revealed the first appearance of each type in learners' proficiency progression. This suggests which types of FL teachers of this learner group should prioritise in instruction.

# THE PRAGMATIC SIGNIFICANCE OF NON-VERBAL (SILENCE) COMMUNICATION IN AN INTERCULTURAL WORKPLACE

#### PANISA KURAKAN

WAIPAPA TAUMATA RAU - UNIVERSITY OF AUCKLAND

**Keywords:** pragmatics, silence, communicative intent, intercultural communication, workplace, misinterpretation, politeness strategies

This study investigates how Thai interns' silence functions as a communicative device when responding to their supervisors in an intercultural communication workplace in the hospitality industry. The data were gathered from 70 unplanned workplace conversations on corrections through the fieldnote observations and member-checking recall technique during the two-month internship period. The project employs a discourse-pragmatic framework and speech act theory to analyse how silence communicates hesitation, disagreement, self-calming, and politeness according to cultural norms and power dynamics. Employing NVivo for qualitative coding, the findings revealed that silence was naturally implemented for pragmatic purposes such as face-saving, indirect refusal, and disagreement. Intercultural supervisors can probably misinterpret these nuances, resulting in communication breakdowns. This research underscores the understanding of silence as an indirect response in face-threatening situations in an intercultural workplace. It contributes to the importance of including politeness strategies in responsive communication training for intercultural workplace contexts.

# REDUPLICATED ATTRIBUTIVE ADJECTIVES: TOWARDS A TYPOLOGY AND SYNTACTIC THEORY

### CATHERINE LEE, SAUROV SYED & GOVE GREFNES

WAIPAPA TAUMATA RAU - UNIVERSITY OF AUCKLAND

Keywords: adjective reduplication, typology, syntax

Semantic effects of reduplication of attributive adjectives vary cross-linguistically. Such reduplication intensifies the meaning of the adjective in many languages, (e.g. small small means "very small" in Russian, Spanish, see (i), (ii)). This can happen when the adjective is fully reduplicated (Russian), or by reduplicating the diminutive suffix (Spanish). In some languages, such reduplication can have the opposite effect – in Rapa Nui, adjectival reduplication can result in a weaker meaning of the adjective (ripe ripe means "half-ripe", see(iii)). While on the surface the intensifying vs the weakening of the adjective seems like two distinct semantic effects of reduplication, we suggest that they fall under the same broad class: Type 1 - reduplication that affects the meaning of the adjective.

This is contrasted with reduplication of adjectives in Bangla, Madurese, Bahasa Indonesia, etc, where the meaning of the adjective is not impacted, but instead reduplication contributes to other aspects of the noun phrase. For example, small small house in Bangla means 'many small houses (see (iv));' thin thin cat means 'skinny cats' in Madurese (see (v)); We call this Type 2 semantic class of adjective reduplication: within this class, there can be subtle differences: reduplication can introduce plurality or affect/intensify the plurality.

Acknowledging Type 1 and Type 2 as two different classes has important consequences for syntactic theory. We propose that the different semantic effects arise from different syntactic structures. For Type 1, the reduplicated adjective is inside the AdjP, scoping over the adjective and thus, impacting its meaning (abstract shema in (1)).

#### (1) [AdiP ADJ ADJ [NP N]]

For Type 2, the reduplicated morpheme is outside the AdjP, and does not affect the adjective but instead affect the noun phrase. As such reduplication introduces/affects plurality, we suggest it is associated with a NumP, abstractly schematized in (2).

(2) [NumP ADJ [AdjP ADJ [NP N]]]

### **EXAMPLES:**

Uncited examples are authors' own.

(i) Russian
malenjkij malenjkij dom
Small small house
'a very small house'

#### (ii) Spanish

un perro chiquititito a dog small-dim.suffix.reduplicated suffix 'a very small dog'

### (iii) Rapa Nui (Kieviet, 2017)

mata mata ripe ripe "half-ripe"

### (iv) Bangla

choto choto bari small small house "many small houses"

### (v) Madurese (Davies, 2010)

koceng ros-koros cats Reduplication-thin "skinny cats"

### (vi) Bahasa Indonesia (Rafferty, 2002)

soal mudah-mudah problem easy-ea

#### **REFERENCES**

Davies, William. 2010. A grammar of Madurese. De Gruyter Mouton.

Kieviet, Paulus. 2017. A grammar of Rapa Nui (Studies in Diversity Linguistics 12). Berlin: Language Science Press.

Rafferty, Ellen. 2002. Reduplication of nouns and adjectives in Indonesian. In *tenth annual meeting of the southeast Asian linguistics society.* pp. 318

#### DEMONSTRATIVE SYSTEM IN THE YOUYANG DIALECT

#### **JINGFEI MA**

WAIPAPA TAUMATA RAU - UNIVERSITY OF AUCKLAND

Keywords: demonstratives, deixis, Southwestern Mandarin

Youyang (酉阳) is an autonomous county located in Southwestern China. Unlike many surrounding Southwestern Mandarin varieties, which typically have only two demonstrative morphemes, the Chinese dialect spoken in Youyang features three: [tsj²¹⁴], [ni²¹⁴], and [nai²¹⁴]. These are generally described as indicating objects that are near, far, and farther from the speaker, respectively. However, this study uses a picture-based elicitation task in which a participant selects demonstratives based on depicted scenarios. The results show that the demonstrative system in Youyang is not strictly anchored to the speaker's perspective; it may also be influenced by the addressee's location. Specifically, [ni²¹⁴] is often used to refer to objects near the addressee. These findings challenge the traditional view that Chinese dialects employ purely egocentric demonstrative systems.

# DO I MAKE MYSELF CLAIRE? RETHINKING THE DIRECTION OF THE NEAR-SQUARE MERGER IN NEW ZEALAND ENGLISH

#### **JULIETTE MacIVER**

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

**Keywords:** sociophonetics, New Zealand English, NEAR-SQUARE merger, semi-spontaneous elicitation, formant analysis

The near-merger of the front-centering diphthongs NEAR (/i/ə) and SQUARE (/eə/) in New Zealand English is a hallmark of ongoing phonological change. Previous studies have largely relied on readaloud data to track a merger that has conventionally been described as favouring a NEAR realisation, particularly among younger speakers, while older speakers typically maintain a distinction. To explore this phenomenon using more spontaneous speech, this study introduces an interactive sorting task designed to elicit a high density of NEAR/SQUARE tokens in natural discourse, alongside a traditional reading passage and minimal-pair wordlist for comparison. Ten Wellington-based, middle-class Pākehā women were recruited: five categorised as 'Young' (ages 15-23) and five as 'Kuia' (ages 75-92). Each participant completed three tasks in succession: an interactive card-sorting game, a 50-token reading passage, and a wordlist of 13 minimal pairs, yielding an average of 108 NEAR/SQUARE tokens in under 17 minutes. Auditory coding of spontaneous and read data was complemented by acoustic formant analysis in Praat (F1, F2) of the wordlist items. Contrary to expectations, seven of ten participants exhibited a full merger on SQUARE, with only three maintaining a clear NEAR/ SQUARE contrast. Both age groups showed strong tendencies to collapse on SQUARE, though Young speakers merged at a higher rate (80%) than Kuia (60%). Acoustic measurements confirmed that merger realisations clustered near traditional SQUARE formant values but were overall more open and backed than suggested in earlier studies. These findings challenge the prevailing narrative of a unidirectional merger onto NEAR and underscore the value of semi-spontaneous elicitation methods. The interactive task proved effective at masking linguistic focus while efficiently generating highvolume data. Implications include the need for updated, large-scale acoustic data collection and expanded sociophonetic variables (e.g., ethnicity, gender) to assess whether a directional reversal or an expanded "EAIR" approximation is emerging in New Zealand English.

# BREAST CANCER TALK: A CROSS-LINGUISTIC STUDY OF LEXICAL VERBS OCCURRING WITH GENERIC PRONOUN 'YOU'

#### SARA MALIK, ANDREEA CALUDE & JOSEPH ULATOWSKI

TE WHARE WĀNANGA O WAIKATO - UNIVERSITY OF WAIKATO

Keywords: lexical verbs, semantics, pragmatics, corpus linguistics, medical humanities

Breast cancer discourse is increasingly studied within medical humanities, reflecting a broader interest in illness narratives and patient-centered storytelling (DeShazer, 2005; Frank, 1995). Using a cognitive, usage-based approach, we explore how New Zealand (NZ) English and Pakistani (PK) Urdu speakers use language, particularly metaphor, speech acts, pronouns and verbs to express their cancer experiences on YouTube. This paper focuses on one aspect: the use of lexical verbs following generic second-person pronouns, analysing their semantic patterns which offer insight into how speakers construe illness. Drawing on Payne's (2011) verb categories and expanding Durst-Andersen et al.'s (2013) classification of state verbs, this study explores the range and types of verbs in both datasets.

The data includes 46 narratives from NZ and 36 from PK, posted between 2011 and 2023 by organisations such as the NZ Breast Cancer Foundation and Pink Ribbon Pakistan. These videos were transcribed using Whisper Al and filtered to include only patients' discourse, then organised into eight narrative topics. A mixed-method approach was used: quantitative analysis with AntConc extracted keyword-in-context (KWIC) instances of you, followed by qualitative analysis to identify generic uses of you and the types of verbs that follow it. The study investigates (a) shared and distinct lexical verbs across datasets, and (b) insights from the most frequent verbs.

Preliminary findings show that most verb types are similar across both datasets, with action and state verbs being the most frequently used. Building on Stirling and Manderson's (2011) findings about the use of generic you pronoun in Australian English, we report that speakers of both NZ English and PK Urdu similarly use generic you, along with state verbs to foster empathy and action verbs to convey credibility and authority in illness narratives. We argue that pronoun-verb pairings function as strategic tools for positioning cancer experiences within speaker narratives.

### **REFERENCES**

DeShazer, M. K. (2013). *Mammographies: The cultural discourses of breast cancer narratives.* University of Michigan Press.

Durst-Andersen, P. (2011). *Linguistic supertypes: A cognitive-semiotic theory of human communication* (Vol. 6). Walter de Gruyter.

Frank, A. W. (2013). The wounded storyteller: Body, illness & ethics. University of Chicago Press.

Payne, T. E. (2011). *Understanding English grammar: A linguistic introduction.* Cambridge University Press.

Stirling, L., & Manderson, L. (2011). About you: Empathy, objectivity and authority. *Journal of Pragmatics*, 43(6), 1581-1602.

# WHEN WE WERE EQUAL? EXAMINING GENDER EQUITY IN RESPONSES TO THE EQUAL PAY AMENDMENT ACT

#### **MEREDITH MARRA & JANET HOLMES**

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

Keywords: gender and language, discourse analysis, workplace communication, ideologies, identities

In the early 2000s, the New Zealand public joined gender and language scholars in heralding positive changes in the representation of women in leadership positions. As workplace discourse scholars, the Language in the Workplace team noted the potential for changes in gendered practices at work, and the corresponding erosion of the prioritisation of masculine norms. Revisiting those claims 20 years on, however, Vine and Holmes (2023) found that despite social beliefs, the reported aspirations remained simply aspirations. Ideologies around what was considered typical and what is dispreferred continued to impact on workplace talk in a range of industries, despite policies which claim to promote gender equality.

Given this background, the surprise introduction and passing of the Equal Pay Amendment Bill in May 2025 quickly brought understandings of gender equality to the fore, with protests and strong negative responses from the media and public alike. These reached peak visibility with a discussion in parliament about the use of "c\*\*\*" in an editorial on the topic in The Post. As linguists many of us have been approached to comment on the form and appropriateness of the expletive use, frustratingly distracted from the crux of the argument by a perceived taboo.

In this paper we focus on gender equity by analysing media and public responses to the introduction and passing of the Act, considering the ideologies and identity work which underpin the reactions. We question the impact that this historical debate will have on everyday practices, and the reversal of the change to gendered norms in workplace contexts. The analysis highlights the importance of metapragmatics to our sociolinguistic toolkit; by identifying the stereotypes and beliefs that impact on the minute-by-minute negotiation of meaning we can challenge and hopefully change their constraining effect on the ongoing debilitating prevalence of inequality.

#### **REFERENCE**

Vine Bernadette and Janet Holmes 2023. Doing leadership in style: Pragmatic markers in New Zealand workplace interaction. *Intercultural Pragmatics* 20:1: 1-27.

IMPLICIT GRAMMAR LEARNING IN A REAL-WORLD CONTEXT: WHAT NON-MĀORI-SPEAKING ADULTS IN NEW ZEALAND KNOW ABOUT MĀORI SYNTAX

### WAKAYO MATTINGLEY, JEANETTE KING, JENNIFER HAY & FORREST PANTHER TE WHARE WĀNANGA O WAITAHA - UNVERSITY OF CANTERBURY

Keywords: te reo Māori, syntax, non-native speakers, adult implicit learning

New Zealanders who do not speak te reo Māori are nonetheless regularly exposed to it through hearing Māori words in songs, media and public ceremonies, as well as through written forms. Recent work shows that this regular exposure leads them to develop detailed implicit knowledge of the language, including word forms, phonotactics (Oh et al., 2020; Panther et al., 2023), and morphology (Panther et al., 2024). A small pilot experiment has shown that there is also some implicit syntactic knowledge, but was unable to pinpoint the nature or extent of this knowledge (Hay et al. 2022). We use this population to investigate the detail and extent of what can be implicitly learned about grammar from the ambient environment.

Past research on the earliest stages of grammar learning has focussed either on infants (Gervain et al., 2008; De la Cruz-Pavía et al., 2021) or on highly artificial learning tasks (Robinson, 2005; Jiménez et al., 2020). Both approaches face considerable limitations: working with infants presents clear methodological challenges, while artificial grammar learning experiments are constrained by the limited amount of exposure that participants can realistically receive. In contrast, the unique linguistic landscape of New Zealand offers an excellent real-world context inwhich to study implicit language learning in ways that overcome these constraints.

We aim to comprehensively investigate adult non-Māori-speaking New Zealanders' knowledge of Māori sentence structures. Online data collection is underway. The stimuli are created based on 14 sentence types, with 10 grammatical sentences per type. Each grammatical sentence is paired with a corresponding ungrammatical counterpart, totalling 280 stimuli. Participants are presented with 140 Māori sentences—half grammatical and half ungrammatical —and asked to provide judgements about whether each sentence is correct or not, using a slider bar. In this talk, we will present preliminary findings from the experiment.

#### **REFERENCES**

- De la Cruz-Pavía, I., Marino, C., & Gervain, J. (2021). Learning word order: early beginnings. *Trends in Cognitive Sciences*, *25*(9), 802-812.
- Gervain, J., Nespor, M., Mazuka, R., Horie, R., & Mehler, J. (2008). Bootstrapping word order in prelexical infants: A Japanese–Italian cross-linguistic study. *Cognitive Psychology*, *57*(1), 56-74.
- Hay, J., King, J., Todd, S., Panther, F., Mattingley, W., Oh, Y., Beckner, C., Needle, J., & Keegan, P. (2022). Ko te mōhiotanga huna o te hunga kore kōrero i te reo Māori (The implicit knowledge of non-Māori speakers). *Te Reo* 65(1), 42-59.
- Jiménez, L., Oliveira, HM., Soares, AP (2020) Surface features can deeply affect artificial grammar learning, *Consciousness and Cognition*. Volume 80. <a href="https://doi.org/10.1016/j.concog.2020.102919">https://doi.org/10.1016/j.concog.2020.102919</a>

- Oh, Y., Todd, S., Beckner, C., Hay, J., King, J., & Needle, J. (2020). Non-Māori-speaking New Zealanders have a Māori proto-lexicon. *Scientific Reports*, *10*(1), 1–9.
- Panther, F., Mattingley, W., Todd, S., Hay, J., & King, J. (2023). Proto-lexicon size and phonotactic knowledge are linked in non-Māori speaking New Zealand adults. *Laboratory Phonology*, *14*(1). 1-27.
- Panther, F., Mattingley, W., Todd, S., Hay, J., King, J., & Keegan, P. J. (2024). Morphological segmentations of Non-Māori speaking New Zealanders match proficient speakers. *Bilingualism: Language and Cognition*, *27*(1). 1-15
- Robinson, P. (2005). Cognitive abilities, chunk-strength, and frequency effects in implicit artificial grammar and incidental L2 learning: Replications of Reber, Walkenfeld, and Hernstadt (1991) and Knowlton and Squire (1996) and their relevance for SLA. *Studies in Second Language Acquisition*, 27(2), 235-268

# ENGAGING WITH AN UNSEEN AUDIENCE: ADDRESS STRATEGIES IN ONLINE ANNOUNCEMENTS IN NEW ZEALAND SIGN LANGUAGE

#### **RACHEL McKEE & GEORGE MAJOR**

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

Keywords: New Zealand Sign Language, online modality, variation, audience address, metapragmatics

Traditionally, interaction and information sharing in the Deaf community occurred face-to-face within familiar networks. Nowadays, the accessibility of digital media tools and the normalisation of signing in public spaces have afforded new modes of communication in NZSL - notably, online sharing of information and announcements in video posts by Deaf individuals representing community groups and organisations. At the same time, the internet environment has expanded NZSL users' contact with overseas sign languages, and an awareness of non-Deaf onlookers to their own use of sign language; both factors appear to be prompting variation and change in contemporary NZSL usage (McKee et al. 2022; McKee et al. 2025).

In the context of an emerging genre of online, asynchronous information sharing in the NZSL community, this presentation will examine emerging pragmatic strategies that signers adopt to create engagement with unseen addressees. Based on evidence from a corpus of informational video posts in NZSL, we will examine discourse features that Deaf online presenters employ to position themselves in relation to a non-present audience. These include conversation openers and closers ('hey' and thumbs-up), and an open-handed pointing variant to refer to the audience.

Metapragmatic insights of NZSL signers (collected through focus groups) about the use of these features in online posts enriches our interpretation of the video data.

Analysis of variation in new uses of NZSL illustrates how change in communicative purposes and technological modality prompt innovation in discourse practices and forms of social interaction in a minority language community.

#### **REFERENCES**

McKee, R., Vale, M., Alexander, S. P., & McKee, D. (2022). Signs of Globalization: ASL Influence in the Lexicon of New Zealand Sign Language. *Sign Language Studies*, *22*(2), 283–319. <a href="https://doi.org/10.1353/sls.2021.0022">https://doi.org/10.1353/sls.2021.0022</a>

McKee, R., Vale, M., Major, G., Alexander, S. P., & Meyerhoff, M. (2025). "Two hands are powerful". Handedness variation and genre in New Zealand Sign Language. *Language & Communication, 100*, 60–76. https://doi.org/10.1016/J.LANGCOM.2024.07.003

#### INDIVIDUAL DIFFERENCES IN SILENT READING

#### **JOY MILLS & SASHA CALHOUN**

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

Keywords: implicit prosody, priming, reading, individual differences

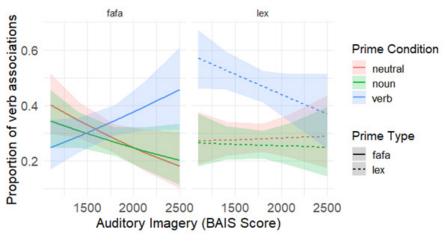
Prosody, or the musical aspects of language including pitch, rhythm, pauses and intonation, is known to be a key part of how we understand sentences. Importantly, it is also experienced when reading silently, and is a key part of our "inner voice". This phenomenon, known as implicit prosody (Fodor, 1998), involves both the production and perception of prosodic information, as the reader both creates and "listens" to the prosodic contours.

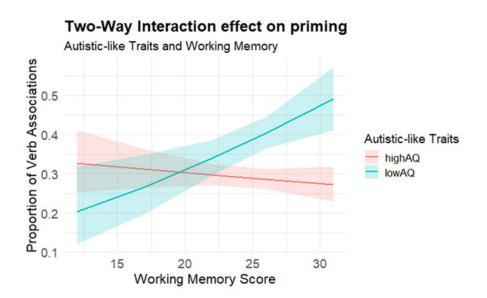
This study investigates individual differences in the experience of implicit prosody, including autistic-like qualities or AQ (Baron-Cohen et al., 2001), working memory (WM), which have both been shown to affect sentence parsing. It also looks at auditory imagery (Halpern, 2015) which measures both how vividly imagined sounds are experienced, and how easily the auditory image can be altered. Research has shown that people with higher auditory imagery scores have a closer match between their implicit and explicit production of sentences (Breen & Federenko, 2021) and that those with more Autistic-like qualities are less likely to perceive/produce prosodic pitch cues in silent reading (Jun & Bishop, 2015).

This study used a cross-modal structural priming paradigm to influence the interpretation of ambiguous sentences read silently. Preliminary results suggest an interaction between the effects of working memory and Autistic-like traits, showing an effect of working memory only for those with less Autistic-like traits. We also find an interaction between auditory imagery and whether the primes contain lexical information or only prosodic information which suggests people who have less vivid experiences of auditory imagery are more reliant on lexical or semantic cues. This has implications for understanding how individuals differ in their experience of implicit prosody, or the inner voice as they read.

#### Three-Way Interaction effect on priming







#### **REFERENCES**

Baron-Cohen, S., Wheelwright, S., Skinner, R., Martin, J., & Clubley, E. (2001). The Autism-Spectrum Quotient (AQ): Evidence from Asperger Syndrome/High-Functioning Autism, Malesand Females, Scientists and Mathematicians. *Journal of Autism and Developmental Disorders*, 31(1), 5–17.

Breen, M. & Fedorenko, E. (2021). Self-reported inner speech salience moderates implicit prosody effects. In Proceedings of the 34th Annual CUNY Conference on Human Sentence Processing.

Fodor, J. D. (1998). Learning to Parse? *Journal of Psycholinguistic Research*, *27*(2), 285–319. <a href="https://doi.org/10.1023/A:1023258301588">https://doi.org/10.1023/A:1023258301588</a>

Halpern, A. R. (2015). Differences in auditory imagery self-report predict neural and behavioral outcomes. Psychomusicology: *Music, Mind and Brain, 25*(1), 37–47. http://dx.doi.org/10.1037/pmu0000081

Jun, S.-A., & Bishop, J. (2015). Prominence in Relative Clause Attachment: Evidence from Prosodic Priming. In L. Frazier & E. Gibson (Eds.), *Explicit and Implicit Prosody in Sentence Processing:* Studies in Honor of Janet Dean Fodor (pp. 217–240). Springer International Publishing. <a href="https://doi.org/10.1007/978-3-319-12961-7">https://doi.org/10.1007/978-3-319-12961-7</a> 12

### AWAJÚN REPORTED SPEECH PRACTICES IN AREAL PERSPECTIVE

#### SIMON OVERALL

ŌTĀKOU WHAKAIHU WAKA - UNIVERSITY OF OTAGO

Keywords: Amazonian, grammaticalisation, evidentiality, speech report

Awajún (Chicham) is spoken in north Peru, between the Andes and the Amazon basin. Like many languages in the Amazonian discourse area (Beier et al. 2002), Awajún makes frequent use of speech reports. The speech report construction involves a verbatim quote followed by a form of the verb *tu*- 'say' (1). Reported speech plays an important role in narrative structure (Larson 1978) and is also used to report thought and intention (2) (Overall 2017).

The widespread use of reported speech can be attributed to a cultural value of careful speech (Aikhenvald 2004; Michael 2015). Speakers avoid attributing thoughts and intentions directly to others, instead assigning responsibility to the original speaker by reporting their words.

The Andean and Amazonian areas are also known for widespread evidentiality systems, and this has been similarly attributed to a cultural value of careful speech (Aikhenvald 2004; Aikhenvald 2022). Michael (2015) argues that the frequency of speech reports in Nanti (Arawak, north Peru) facilitated their grammaticalization into markers of evidentiality. In Awajún, by contrast, the speech verb is the source of a 'narrative' marker *tuwahami*, part of the mood paradigm. This marker is associated with the genre of traditional stories and imparts the authority of ancestral knowledge to the story (3). There is no fully grammaticalized evidentiality in Awajún, but there is a nascent 'nonfirsthand' evidentiality strategy, derived from a deverbal nominalization (Overall 2014; and see 1).

This presentation describes the formal properties and the functions of speech reports, as well as the constructions that have grammaticalized from them. It situates the grammatical data in the cultural context, which is part of a recognized discourse area. The study expands our understanding of the ways in which culture can influence grammar, and how this dynamic interacts with areal factors.

- nuwa "ai" ti-u=ai
   woman ok say.PFV-NMLZ=COP.3.DECL
   'The woman said "ok".' (ie 'the woman agreed')
- 2. aima-k imamkima-s "inta-ha-i-ŋ" tus fill.IPFV-SIM.3.SS take.care-SBD.3.SS break-PFV-APPR-1SG say.SBD.3.SS 'Filling them carefully, saying "lest I should break them".'
- 3. nu=na nuwa=n hu-a-ya tuwahami
  ANA=ACC woman=ACC take-IPFV-RIMPST.3 NARR

'They took those women, so the story goes.'

#### **REFERENCES**

- Aikhenvald, Alexandra Y. 2004. Evidentiality. Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. 2022. Perspectivism through language: A view from Amazonia. In Svenja Völkel & Nico Nassenstein (eds.), *Approaches to Language and Culture*, 425–442. Berlin: De Gruyter Mouton. <a href="https://doi.org/10.1515/9783110726626-015">https://doi.org/10.1515/9783110726626-015</a>.
- Beier, Christine, Lev Michael and Joel Sherzer (2002). Discourse forms and processes in indigenous lowland South America: An areal-typological perspective. *Annual Review of Anthropology 31*: 121–145.
- Larson, Mildred L. 1978. The Functions of Reported Speech in Discourse. Texas: SIL International.
- Michael, Lev. 2015. The cultural bases of linguistic form: The development of Nanti quotative evidentials. In R. De Busser & R. J. LaPolla (eds.), *Language Structure and Environment: Social, cultural, and natural factors* (Cognitive Linguistic Studies in Cultural Contexts), 99–130. Amsterdam/Philadephia: John Benjamins.
- Overall, Simon E. 2014. Nominalization, knowledge and information source in Aguaruna (Jivaroan), in A. Y Aikhenvald & R.M.W. Dixon (eds.), *The Grammar of Knowledge*, 227–244. Oxford: Oxford University Press.
- Overall, Simon E. 2017. A Grammar of Aguaruna (liniá Chicham). Berlin: Mouton de Gruyter.

### VERBAL SEMANTICS AND THE MĀORI PASSIVE SUFFIX

#### **FORREST PANTHER**

TE WHARE WĀNANGA O WAITAHA - UNVERSITY OF CANTERBURY

Keywords: Māori, morphology, Oceanic, semantics, Corpus linguistics

In Te Reo Māori, the passive form of a verb is marked through a suffix (Bauer 1993; Biggs 1998; Harlow 2007). There are 17 forms of this suffix (Harlow 2001, Table 1); several forms are quite rare. Many forms of the passive suffix begin with a consonant, known in the literature as the "thematic consonant" (e.g. Lichtenberk 2001). Thematic consonants recur in many Oceanic languages: Tongan *tanu-maki* 'cover with earth' (ACD, see Blust & Trussel 2013) Fijian *rogo-c* 'hear', (Arms 1973) etc. Importantly, in several Oceanic Languages, thematic consonants are assocated with semantic categories of verbs (see Table 2). In Manam, the consonant *r* is associated with verbs of secretion or wetting, and *n* is associated with collecting, gathering, etc (Lichtenberk 1978). In Fijian, *r* is associated with bodily posture, while *n* is associated with changes of state. There is evidence of the association of *r* with stances in Polynesian languages, and *n/ng* with ambient phenomena (Clark 2018). Examples of this are in Māori: *takoto-ria* 'laid down', *tupu-ria* 'grown', *ua-ina* 'rained upon', *pupuha-ina* 'blown', etc. Is there further evidence for the association between thematic consonant and verbal semantics in Māori?

I conduct a corpus analysis of Māori written and spoken texts, including the Māori Broadcast Corpus (Boyce 2006), MAONZE Corpus (King et al. 2010), and the 1868 *Paipera Tapu* (Māori bible translation), a total of 40,223 tokens. This analysis makes use of the *word2vec* method in the *Gensim* Python package (Radim & Sojka 2010), which estimates the semantics of verbs, such that verb with similar values closer semantically. Prelimilary results show semantic associations, including: *k* and verbs of physical manipulation or exertion (*hopu-kia* 'seized', *moto-kia* 'boxed'), *r* with verbs of mental states (*mātau-ria* 'known', *whakaū-ria* 'warned') and verbs of wearing or covering (*kākahu-ria* 'worn', *whakaū-ria* 'alighted').

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

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

Manam			Fijian		
r secretion, wetting, stirring, gathering		С	pliancy, gentle contact, bodily experience		
ŋ	moving, shaking, cutting, scraping	g	no correlation		
7	breaking, hitting, moving, twisting	k	hardness, force, opening out		
m	relation, folding, crowding around, planting	m	insertion, going inside		
n	collecting, punching, speaking	n	x-ify, en-, be-, form, support		
- 1	licking, clicking, whistling, hissing, slapping	r	location, posture, change of state		
t	biting, cutting, breaking, discussing, whispering, hanging, grabbing	t	use of limb or instrument, moderately force, performative		
-	hitting, cutting, talking to, joking with, transporting, rewarding, threatening, wrapping, dressing	٧	motion to, motion for, motion over		
S	smoothing, shaping	-	mild force, miscellaneous		

**Table 2:** Semantics of verbs in Manam and Fijian and the thematic consonants they are associated with. '-' indicates forms with no thematic consonant. Information summarised from Lichtenberk (1978: 189-190), Fijian data from Arms (1973).

#### **REFERENCES**

Arms, D. G. (1973). Whence the Fijian transitive endings? Oceanic Linguistics, 12(1/2), 503-558.

Bauer, Winifred. 1993. Māori. Routledge.

Biggs, Bruce. 1998. *Let's learn Māori: a guide to the study of the Māori language.* Auckland University Press.

Blust, R., & Trussel, S. (2013). The Austronesian comparative dictionary: A work in progress. *Oceanic Linguistics*, 493-523.

Boyce, Mary Teresa. 2006. A corpus of modern spoken Māori. Te Herenga Waka - Victoria University of Wellington dissertation.

Clark, Ross (2018). Oceanic Thematic Consonants - History of a Problem. Presented at 14 ICAL, Madagascar.

Harlow, Ray. 2001. A Māori Reference Grammar. Longman.

Harlow, Ray. 2007. Māori: a linguistic introduction. Cambridge University Press.

King, J., Maclagan, M., Harlow, R., Keegan, P., & Watson, C. (2010). The MAONZE Corpus: Establishing a corpus of Māori speech. *New Zealand Studies in Applied Linguistics*, *16*(2), 1-16.

Lichtenberk, F. (1978). Thematic consonants in Manam transitive verbs. *Anthropological Linguistics*, 20(5), 185-193.

Lichtenberk, F. (2001). On the morphological status of thematic consonants in two Oceanic languages.

Radim, R., & Sojka, P. (2010). Gensim: topic modelling for humans. In *Proceedings of the LREC 2010 workshop on new challenges for NLP frameworks*. ELRA, Valletta (pp. 45-50).

# ATTITUDES OF EAST ASIAN PEOPLE TOWARDS COMMUNICATION DISORDERS IN AOTEAROA

#### **NORIKO PANTHER**

TE WHARE WĀNANGA O WAITAHA - UNVERSITY OF CANTERBURY

Keywords: attitudes, communication disorders, East Asian cultures, speech-language therapy

Attitudes towards disabilities have been studied widely because they reveal what may lie behind people's behaviours towards people with these conditions, including those towards communication disorders (St. Louis, 2015). Attitudes towards communication disorders are mostly negative (St. Louis & Tellis, 2015). However, most research has been done in the West, and little is known about it in a New Zealand setting or within East Asian populations. Moreover, a great majority of previous studies examined people's selfreports of their own attitudes, resulting in a dearth of evidence on what they think about other people's attitudes. This study aimed to investigate the attitudes of Chinese, Japanese, and Korean residents in New Zealand about communication disorders from two perspectives: people's responses about the attitudes of their own, and also of others. Semi-structured interviews were conducted (N=25). The results were analysed based on three aspects of attitudes proposed by Eagly and Chaiken (1993), namely, cognitive (beliefs), affective (feelings), and behavioural (behavioural intentions) aspects. Participants' responses were classified into these three groups to analyse trends using discourse analysis (Gee, 2011, 2014), conversation analysis (Hutchby, 2019), and reflexive thematic analysis (Braun & Clarke, 2022). The results revealed that the cognitive aspects of attitudes were predominantly negative, while the affective and behavioural aspects were inconsistent in two ways. Participants typically reported that their own attitudes were better than others', while also exhibiting contradicting attitudes within themselves. The prevalence of negative attitudes will impact the lives of people with communication disorders and their significant others regarding their readiness for therapy, help-seeking behaviour, and relationship building. Moreover, cultural differences in the understanding of communication disorders were also revealed, indicating that cultural competence of clinicians and educators is essential.

### **REFERENCES**

Braun, V., & Clarke, V. (2022). Thematic analysis: a practical guide. SAGE.

Eagly, A. H., & Chaiken, S. (1993). The psychology of attitudes. Harcourt Brace Jovanovich.

Gee, J. P. (2011). An introduction to discourse analysis: theory and method (4th ed.). Routledge.

Gee, J. P. (2014). How to do discourse analysis: a toolkit (2nd, Ed.). Routledge.

Hutchby, I. (2019). Conversation analysis. In I. Hutchby, P. Atkinson, S. Delamont, A. Cernat, J. W. Sakshaug, & R. A. Williams (Eds.), Language and qualitative research. SAGE. <a href="https://doi.org/10.4135/9781526421036789623">https://doi.org/10.4135/9781526421036789623</a>

- St. Louis, K. O. (2015). Epidemiology of public attitudes towards stuttering. In K. O. St. Louis (Ed.), Stuttering meets sterotype, stigma, and discrimination: an overview of attitude research (pp. 7-42). West Virginia University Press.
- St. Louis, K. O., & Tellis, G. (Eds.). (2015). Stuttering meets sterotype, stigma, and discrimination: an overview of attitude research. West Virginia University Press.

# CONNECTED BY AROHA OR BY LOVE? ELICITING PREFERENCES FOR LEXICAL VARIATION IN AOTEAROA NEW ZEALAND

### NIKLAS ALEXANDER POHL, ANDREEA CALUDE, HĒMI WHAANGA, LAURA ROSSEEL & ELINE ZENNER

TE WHARE WĀNANGA O WAIKATO - UNIVERSITY OF WAIKATO

Keywords: sociolinguistics, lexical variation, loanwords

In Aotearoa, vast amounts of lexical materials are being borrowed from the Indigenous language - te reo Māori - into the de facto national language, New Zealand English (NZE) (Macalister, 2007; Trye et al., 2019). Primary schools are among the places people encounter te reo Māori, as teaching it there is highly encouraged. However, not all schools have the same resources and abilities to do so (Barr & Seals, 2018). In consideration of the presence of these borrowings in NZE and the position of te reo Māori in schools, it is of interest to further illuminate how children - as the next generation of speakers of NZE - assess speakers of NZE that use Māori loanwords.

To this end, we have devised a matched-guise study on the sociopragmatic evaluation of speakers of NZE. Specifically, it offers a comparison between speakers who use te reo Māori loanwords and speakers who do not use them. For the material of this study, two versions of a 76-word script were created. The first version of the script contained 14 Māori loanwords, and the second version of this script contained no loanwords but near-synonymous English counterparts. Recordings of both scripts were played to primary school teachers and pupils respectively. Data was collected through a combination of forced-choice questions inquiring about individual and projected preferences as well as participant group-specific questions. The projective questions target the impression pupils have of their teacher's preferences and vice versa. In this presentation we discuss insights gained from our matched-guise study. For teachers, attention is given to the urban/rural dimensions, and for pupils, the focus is on solidarity and prestige dimensions.

This study has implications for language contact and change, as well as varieties of English. For the language context in this country, our experiments present the first quantitative controlled experiment of Māori loanword attitudes.

#### **REFERENCES**

- Barr, S. & Seals, C. A. (2018). He reo for our future: Te reo Māori and teacher identities, attitudes, and micro-policies in mainstream New Zealand schools. *Journal of Language, Identity & Education*, 17(6), 434-447.
- Macalister, J. (2007a). Weka or woodhen? Nativization through lexical choice in New Zealand English. *World Englishes*, *26*(4), 492-5-6.
- Trye, D., Calude, A. S., Braco-Marquez, F. & Keegan, T. T. (2019). Māori loanwords: A corpus of New Zealand English tweets. In *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics: Student Research Workshop*, 136–142.

## PHRASE VERSUS SUBPART FREQUENCY EFFECTS IN PRODUCTION OF MULTI-WORD EXPRESSIONS

### YI QI

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

Keywords: multi-word expressions/MWEs, spoken corpora, frequency effects, language production, L1, L2

Whether or not multi-word expressions (MWEs) are stored and retrieved holistically in the mental lexicon has been a longstanding debate in language processing. While Wray (2002) proposed holistic storage of MWEs in her seminal work, studies have shown that MWE processing is unlikely to be holistic. Arnon and Cohen Priva (2014) showed that phrase frequency effects increased, while word frequency effects decreased but did not disappear, during the production of trigrams by L1 English speakers. Studies in this area have predominantly focused on L1 speakers and/or have relied on elicited data. L2 phrase frequency effects during language production, especially subpart frequency effects, have so far received very little attention, with no study to date looking at naturalistically produced (rather than laboratory elicited) data.

The present study uses L1 and L2 spoken corpora to investigate whether and how phrase frequency and subpart frequency influence articulatory durations of verb-preposition-noun (VPN, e.g., ask for help) sequences produced by L1 and L2 English speakers in spontaneous speech. The corpora consist of naturalistically elicited telephone conversations and interviews, which were transcribed with word-level timestamps. VPN sequences and their durations were extracted from the transcribed data. Mixed-effect models were used to analyse the data, with several factors being considered during modeling, such as, L2 speaker's language proficiency, phrase frequency, unigram frequency, bigram frequency, length of phrase, etc. The present study provides novel insights into L1 and L2 speaker sensitivity to subpart versus phrase frequency during language production, and further contributes to the ongoing debate as to the nature of MWE representation and processing.

### **REFERENCES**

Arnon, I., & Cohen Priva, U. (2014). Time and again: The changing effect of word and multi-word frequency on phonetic duration for highly frequent sequences. *The Mental Lexicon*, *9*(3), 377–400. <a href="https://doi.org/10.1075/ml.9.3.01arn">https://doi.org/10.1075/ml.9.3.01arn</a>

Wray, A. (2002). Formulaic language and the lexicon. Cambridge University Press.

### IS VOWEL CO-VARIATION SHARED BETWEEN BILINGUALS' TWO LANGUAGES?

### **TAO QIAN**

TE WHARE WĀNANGA O WAITAHA - UNVERSITY OF CANTERBURY

Keywords: vowel co-variation, cross-linguistic patterns, sociophonetics, social meaning

Studies have shown that subsystems of vowels systematically co-vary in New Zealand English<sup>1,2</sup>. If a speaker produces a more innovative TRAP vowel given their age and gender, for instance, we can predict that they will also be innovative in a set of linked vowels. This may be because of vowels co-vary systematically to index certain personas. But how stable is this across languages? If a bilingual speaker is innovative in vowels in one language, for instance, are they likely to be innovative in vowels in another language?

To explore this, we collected data from 60 Hui-Mandarin speakers completing a picture description task in each language. F1 and F2 values, measured at the midpoint, show that speakers are producing different realizations of vowels in each language (Figure 1).

Following¹ we control for gender and age, and conduct PCA. In both languages, PC1 captures covariation of vowels along the F2 dimension. A high degree of cross-language structural similarity is confirmed by Procrustes Analysis. Furthermore, a clear gender-based pattern is revealed in both languages, despite gender being controlled in the models. Speakers' position within the PCs from the two languages are highly correlated. As shown in Figure 2, vowel shifts along PC1 align with observed gender differences in F2 distributions in both languages.

In other words, in both languages, a set of vowels that is different between men and women, also varies within each gender, in a way that appears to be indexing gendered identities. Speakers who are at the more "feminine" end of their vowel realizations of one language are also at the more feminine end in the other language. In bilingual contexts, co-variation across the two languages can be linked, and social factors may transcend language boundaries, shaping a higher-order coherence across languages<sup>3</sup>.

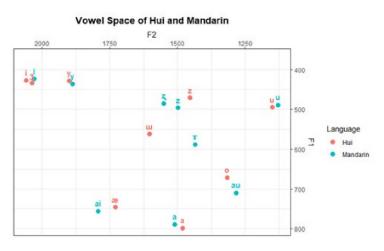
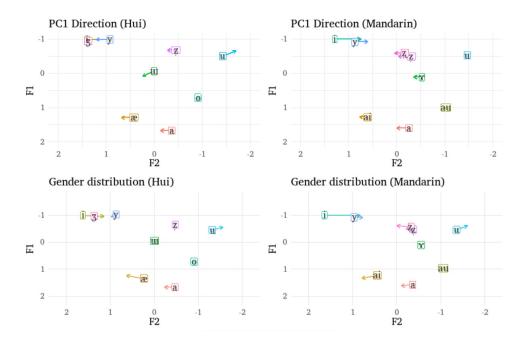


Figure 1: Vowel distinctions across Hui and Mandarin in vowel space



**Figure 2:** The upper panels depict the direction of vowel shifts along PC1 in Hui and Mandarin. The lower panels illustrate the gender-based differences in vowel positions, with arrows indicating the shift from male to female mean positions for each vowel. The PC1 direction closely corresponds to the gendered vowel fronting differences in both languages; vowels fronted by women also shift in the same fronting direction along PC1.

- J. Brand, J. Hay, L. Clark, K. Watson, and M. Sóskuthy, "Systematic co-variation of monophthongs across speakers of New Zealand English," J. *Phon.*, vol. 88, p.101096, Sept. 2021.
- G. Hurring, J. Wilson Black, J. Hay, and L. Clark, "How stable are patterns of covariation across time?," Lang. Var. Change, pp. 1–25, May 2025.
- J. Schertz, Y. Kang, and S. Han, "Cross-language correspondences in the face of change: Phonetic independence versus convergence in two Korean-Mandarin bilingual communities," *Int. J. Biling.*, vol. 23, no. 1, pp. 157–199, Feb. 2019.

### LINGUISTICS IN VANUATU 45 YEARS AFTER INDEPENDENCE

### TIHOMIR RANGELOV, ELEANOR RIDGE & LANA TAKAU

TE KUNENGA KI PŪREHUROA - MASSEY UNIVERSITY

**Keywords:** *language documentation and description, descriptive grammars, dictionaries, corpora, Vanuatu* 

This paper will present an overview of the progress of linguistic research and other language work in Vanuatu. Using a database of resources in and about Vanuatu languages, we investigate grammatical descriptions, lexical descriptions and other types of linguistic research about Vanuatu's Indigenous Oceanic languages. We visualise patterns in regional coverage using maps, as well as tracking progress over time. We further consider two types of texts that are particularly important to language documentation and language planning in Vanuatu: annotated multimedia corpora and Bible translations. We will also briefly discuss research on Vanuatu's official languages, Bislama, English and French. We see strong regional effects in coverage of Vanuatu languages, emphasising the importance of community and researcher networks. Languages of Vanuatu's two largest and most linguistically diverse islands, Espiritu Santo and Malekula, are the least researched. Overall, our investigation shows steady progress in documentation and analysis of Vanuatu's languages over the past seventy years, with occasional declines in response to specific events like the COVID-19 pandemic.

# TOWARDS DEVELOPING AN EMOTIONAL SPEECH DATABASE FOR TE REO MĀORI: A COMMUNITY-ORIENTED APPROACH

### HIMASHI RATHNAYAKE, JESIN JAMES, AKE NICHOLAS, GIANNA LEONI, CATHERINE WATSON & PETER KEEGAN

WAIPAPA TAUMATA RAU - UNIVERSITY OF AUCKLAND

Keywords: emotions, te reo Māori, community-oriented

This paper outlines a community-orientated approach to developing a te reo Māori emotional speech database. Emotion-based research is well-established in a few dominant languages such as English, German and Mandarin<sup>1</sup>, however, languages like te reo Māori remain underrepresented. There are limited studies exploring how emotions are categorised in te reo Māori.

In general emotion literature, studies often rely on six basic emotions or their translations<sup>2</sup>. However, studies attempting to verify the universality of these emotion categories have not been conducted in a culturally appropriate manner, raising the question whether emotions are categorised similarly or differently across cultures<sup>3,4</sup>. Psychological Studies on Māori emotions highlight that Māori emotional expressions can differ from those of Pākehā (New Zealand Europeans)<sup>5</sup>. When describing Māori emotions, literal translation from Māori to English can be challenging, and the nuances of Māori emotions can be lost in translation<sup>6,7</sup>.

To address these issues, the study conducted an online questionnaire and focus group discussions to gather feedback from Māori speakers on emotions in te reo Māori speech<sup>8</sup>. The analysis identified 16 emotion categories for te reo Māori. Building on this foundation, an emotional speech corpus comprising of 224 sentences was recorded by a professional Māori speaking voice actor.

To investigate whether these 16 emotion categories are acoustically distinct, we conducted an acoustic feature analysis using features such as fundamental frequency, mean intensity, harmonic-to-noise ratio, and glottal source features like zero-crossing rate. Principal component analysis (PCA) and t-distributed stochastic neighbour embedding (t-SNE) will be used to further explore these differences. Insights into how the Māori emotion categories identified differ from presumed universal emotion categories, along with the results of the acoustic analysis, will be presented at the conference.

- Taj, S., Mujtaba, G., Daudpota, S. M., & Mughal, M. H. (2023). Urdu Speech Emotion Recognition: A systematic Literature Review. ACM Transactions on Asian and Low-Resource Language Information Processing, 22(7), Article 186. <a href="https://doi.org/10.1145/3595377">https://doi.org/10.1145/3595377</a>
- Ekman, P. (1992). An argument for basic emotions. Cognition and Emotion, 6(3-4), 169–200. <a href="https://doi.org/10.1080/02699939208411068">https://doi.org/10.1080/02699939208411068</a>
- Crawford, K. (2021). Artificial intelligence is misreading human emotion. The Atlantic, 27. <a href="https://www.theatlantic.com/technology/archive/2021/04/artificial-intelligence-misreading-human-emotion/618696/">https://www.theatlantic.com/technology/archive/2021/04/artificial-intelligence-misreading-human-emotion/618696/</a>

- Russell, J. A. (1994). Is there universal recognition of emotion from facial expression? A review of the cross-cultural studies. *Psychological bulletin*, 115(1), 102.
- Banks, C. (1996). A comparison study of Māori and Pakeha emotional reactions to social situations that involve whakamaa [Doctoral dissertation, Massey University]. <a href="http://hdl.handle.net/10179/5838">http://hdl.handle.net/10179/5838</a>
- Ritchie, J. (2021). Staying with the Troubles of Colonised Emotional Well-Being of Young Children in Aotearoa (New Zealand). Open Access Te Herenga Waka-Victoria University of Wellington. <a href="https://doi.org/10.25455/wgtn.24923526">https://doi.org/10.25455/wgtn.24923526</a>
- <sup>7</sup> Elder, H. (2020). *Aroha: Māori wisdom for a contented life lived in harmony with our planet.* Penguin Random House New Zealand.
- Rathnayake, H., James, J., Nicholas, A., Leoni, G., I Watson, C., & J Keegan, P. Towards Identifying the Common Social Emotions in Spoken te reo Māori: A Community-Oriented Approach. In Proceedings of the Nineteenth Australasian International Conference on Speech Science and Technology. 2024.

# TRANS AND/OR ASIAN: DISCURSIVE CONSTRUCTIONS OF IDENTITY BY TRANSGENDER ASIAN YOUNG PEOPLE AND THEIR FAMILIES

### **TARA RAVI**

TE KUNENGA KI PŪREHUROA - MASSEY UNIVERSITY

Keywords: discourse analysis, identity, culture, LGBTQ+

Intersecting forms of oppression can impede access to suitable community and institutional support for Asian transgender (trans) young people (Pipkin & and Clarke, 2024). Additionally, the wellbeing of the transgender Asian diaspora has fallen through the cracks of contemporary trans health research (Tan et al., 2022), despite this group's special vulnerability to feeling unsafe at home (Fenaughty et al., 2022). On a personal level, institutional and in-group discourses can create a double bind for Asian trans young people's presentations of self, producing pressure to diminish their trans identity in Asian spaces and their Asian identity in other spaces.

My master's research focuses on Asian trans young people's experiences of positive family support in Aotearoa. I worked with three trans Asian young people of varying cultural heritages, and some of their self-selected most supportive family members (fourteen total participants). My data collection involved the participants drawing pictures of their experience of receiving or giving familial support and reflecting on these drawings in extended interviews. I conducted a multimodal, intersectional analysis of the drawings and interviews, looking for common themes in the discourses of individuals, and within and between families.

Across ethnic backgrounds, participants showed tension in negotiating features of their identities, often detaching their cultural identity from their main conceptions and presentations of self. Particularly, mixed-race Anglo Asian young people and family members actively distanced themselves from their Asian cultures and presented themselves as 'not like other Asians'. At the same time, they expressed connection to non-heritage cultures, including 'Kiwi' or 'New Zealand' culture and Japanese culture.

In my presentation, I will explore the participants' discursive constructions of the intersection of their trans and cultural identities, exploring what these might mean for their experience of gender, culture, and family support.

- Fenaughty, J., Ker, A., Alansari, M., Besley, T., Kerekere, E., Pasley, A., Saxton, P., Subramanian, P., Thomsen, P. & Veale, J. (2022). Identify survey: Community and advocacy report. Identify Survey Team.
- Pipkin, A., & and Clarke, C. (2024). You can't be too many things: The experiences of gender-affirming care for trans people of color a thematic analysis. *International Journal of Transgender Health*, *25*(4), 855–867. https://doi.org/10.1080/26895269.2023.2295380
- Tan, K. K. H., Yee, A., & Veale, J. F. (2022). "Being Trans Intersects with My Cultural Identity": Social Determinants of Mental Health Among Asian Transgender People. *Transgender Health*, *7*(4), 329–339. <a href="https://doi.org/10.1089/trgh.2021.0007">https://doi.org/10.1089/trgh.2021.0007</a>

"THE VERY FORMULAIC SIMPLE THINGS": STANCETAKING VIS-À-VIS TOKENISTIC LANGUAGE AS IDENTITY CONSTRUCTION AMONG NON-MĀORI LEARNER-SPEAKERS OF TE REO MĀORI

### TRAVIS E RICHARDSON

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

Keywords: te reo Māori, stancetaking, interactional sociolinguistics, identity

In popular Aotearoa New Zealand media, the public use of te reo Māori in Anglophonenormative spaces is commonly reviled as being tokenistic (Morrison-Young & de Bres, 2024), and linguistic studies have revealed that non-Māori adult learners of the language express anxiety as to whether their attempts to employ te reo will be interpreted as performatively tokenistic (Te Huia, 2020). Rooted theoretically in the tradition of interactional sociolinguistics (Gumperz, 1982; Tannen, 2005), positioning in narrative analysis (Bamberg, 1997), sociocultural constructivist approaches to identity via language use (Bucholtz & Hall, 2005), and translanguaging as a decolonial praxis for Indigenous language revitalisation (Cenoz & Gorter, 2017; Seals & Olsen-Reeder, 2020; Phyak, 2022), my research investigates how non-Māori learner-speakers of te reo Māori construct and position themselves vis-à-vis the notion of "tokenistic" te reo Māori. I present my analysis of sociolinguistic interview data from 10 selfidentified non-Māori learner-speakers of te reo Māori and demonstrate a) how participants interactionally construct, define, and evaluate their own notions of "tokenistic" reo Māori usage; b) how such learner-speakers position themselves as actual speakers of the language and nonIndigenous allies of te Ao Māori (Māori worldview/ epistemologies); c) construct tokenism along what I term a "cline of authenticity;" and d) that such speakers employ Discourses of racism and colonisation in their critiques against those who oppose the expansion of te reo Māori into broader public domains. I arque that taking up stances vis-à-vis tokenistic expressions allows non-Māori learner-speakers the unique opportunity to authenticate their speakership without inappropriately "claiming ownership" over the language in the same way that Māori heritage learners can. Additionally, doing so allows non-Māori learner-speakers the space to take epistemic stances which highlight their knowledge of te Ao Māori without being selfaggrandising and is thus an important means of constructing allyship of Māori kaupapa like te reo normalisation.

- Bamberg, M. (1997). Positioning between structure and performance. *Journal of Narrative and Life History*, 7(1-4), 335-342.
- Bucholtz, M., & Hall, K. (2005). Identity and interaction: A sociocultural linguistic approach. *Discourse Studies*, 7(4/5), 585-614.
- Cenoz, J., & Gorter, D. (2017). Minority languages and sustainable translanguaging: Threat or opportunity? *Journal of Multilingual and Multicultural Development, 38*(10), 901-912.
- Gumperz, J. J. (1982). Discourse strategies. Cambridge University Press.
- Morrison-Young, I., & de Bres, J. (2024). A world of light, or hurt? Māori metaphors in response to non-Māori use of te reo Māori. *Te Reo*, 66(2), 10-27.
- Phyak, P. (2022). Decolonizing translanguaging research methodologies: A commentary and self-reflection. *Research Methods in Applied Linguistics*, 1, 1-6.

Tannen, D. (2005). Conversational style: Analyzing talk among friends. Oxford University Press.

Te Huia, A. (2020). Aspirations for bilingualism in Aotearoa New Zealand: Pākehā motivations for learning te reo Māori. *New Zealand Journal of Psychology, 49*(2), 23-32.

Seals, C. A., & Olsen-Reeder, V. (2020). Translanguaging in conjunction with language revitalization. *System, 92*, 1-11.

### "LEADER-LAGGER" VOWELS AND CORRELATING IDEOLOGIES

### MARLEE ROSOFF

TE WHARE WĀNANGA O WAITAHA - UNVERSITY OF CANTERBURY

Keywords: Acoustic analysis, discourses and ideologies, New Zealand English, self-perception

Across speakers, are there shared beliefs and identities that are associated with being "leaders" or "laggers" of sound change in New Zealand English? In previous research, Brand et al. (2021) identified a subset of vowels, which they dubbed "leader-lagger" vowels for their correlating patterns across speakers; speakers who were advanced, or "leaders" in certain vowel changes tended to also be "leaders" in certain other vowel changes. Subsequent research from Sheard et al. (in prep) explored perception of social characteristics of "leaders" and "laggers", and found that "leaders" were characterized as sounding more rural and lower socioeconomic status. Building on this, I explore the relationship between speakers' self-perceptions of rurality and socioeconomic status and their vowel realisations using data collected from 20 L1 NZE-speaking women aged 45-60 in Canterbury. I employ a mixed-methods approach, utilizing acoustic analysis and PCA to observe patterns of vowel covariation, combined with Discourse Analysis to investigate patterns of ideological indexicalities. The acoustic measurements of speakers' vowel spaces are obtained from recordings of target sentences. This is paired with speakers' responses to a quantitative self-perception questionnaire. The questionnaire has participants rate themselves on a scale, asking things like 'how rural do you think you are compared to other New Zealanders?'. Participants are additionally asked to reflect on how someone else from NZ would categorise them from only hearing their speech. These metalinguistic questions are woven into semi-structured interviews which undergo Discourse Analysis. This analysis has an initial focus on the discourses emerging around rurality and socioeconomic status in NZ; however, it will extend to the exploration of wider ideologies being indexed by the speakers who are leading or lagging in sound change, and will analyse if, and how, these Discourses cluster around being a "leader" or a "lagger".

### **REFERENCES**

Brand, J., Hay, J., Clark, L., Watson, K., & Sóskuthy, M. (2021). Systematic co-variation of monophthongs across speakers of New Zealand English. *Journal of Phonetics, 88*, 101096. <a href="https://doi.org/10.1016/j.wocn.2021.101096">https://doi.org/10.1016/j.wocn.2021.101096</a>

Sheard, E., Hay, J., Fromont, R., Wilson Black, J., Clark, L. (in preparation). *Exploring the Social Meaning of the 'leader-lagger' yowels in New Zealand English.* 

# EXPLORING AUCKLAND'S ROLE IN THE DEVELOPMENT OF NEW ZEALAND ENGLISH

### **BROOKE ROSS, CATHERINE WATSON & ELAINE BALLARD**

WAIPAPA TAUMATA RAU - UNIVERSITY OF AUCKLAND

Keywords: New Zealand English, acoustic phonetics, historical linguistics, sound change

This study looks at New Zealand English (NZE) vowels, focussing on historical data from Auckland speakers. This study was prompted by our 2023 re-discovery of a 1921 thesis, written by G. E. Thompson. This technically reliable work, by a trained phonetician at a seminal point in NZE's development, challenges much received wisdom about the early New Zealand English vowel space. Notably, Thompson's findings suggest that New Zealand English's development may have occurred fastest in the North Island and particularly in Auckland (p31, p128). To date most work on historical NZE has relied on corpora with a South Island bias, often drawn from sparsely populated, non-urban parts of the country. Auckland, NZ's largest urban centre, has been notably underrepresented. Therefore, to test Thompson's observations we are undertaking an acoustic analysis of vowel data from Auckland born speakers whose birth years span 1896-1911 (recorded 1979-2003). The data comes from oral histories held by the Auckland Council Libraries and University of Auckland Library.

This paper presents a preliminary analysis of the vowels of eight speakers from this new corpus (4 men, 4 women) extracted from 15 minutes of interview speech from each speaker. Preliminary results show that most speakers have a vowel space more closely aligned with modern NZE than with its British antecedents. However, many speakers also display considerable intra-speaker variation, alternating between broad NZE pronunciations and more RP-like cultivated pronunciations. This variation reflects the transitional nature of the period during which the participants' dialects were formed. We conclude with a discussion about the challenges of working with historical NZE data and consider different methods for presenting data characterised by high variability.

#### REFERENCE

Thompson, G. E. (1921). The question of a New Zealand dialect of English, with a phonetic examination of New Zealand vowels (Doctoral dissertation, University of New Zealand, Otago College).

### ACTIVELY REDUCING SYMBOLIC VIOLENCE IN RESEARCH INTERACTIONS

### CORINNE SEALS, SARA KINDON, OLESKSII STEPURA & MAJA KRTALIC

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

**Keywords:** methodology, ethnical considerations, symbolic violence, qualitative research, vulnerable populations

Research with vulnerable populations, such as displaced persons, presents significant ethical and methodological challenges, particularly concerning the potential for symbolic violence (cf. Bourdieu, 1999, 2002). This form of violence arises from often unspoken power imbalances inherent in research encounters, which can be overlooked by researchers (Malpass et al, 2016) unless purposefully made an explicit area of inquiry. This presentation addresses these tensions, presenting our purposeful methodological choices to mitigate symbolic violence in ongoing collaborative research with displaced Ukrainians living in New Zealand following Russia's 2022 mass-scale invasion of Ukraine.

Our research team draws on expertise in sociolinguistics, information studies, international relations, and human geography. Recognising the extreme trauma and current stressors displaced persons face, our approach to this research purposefully centred on explicitly engaging with ethical considerations beyond standard procedural protocols, particularly focusing on relational dynamics and researcher reflexivity. As such, we adopted a collaborative ethnographic approach, guided also by principles of the Kaupapa Māori research framework to challenge hierarchical research relationships and foster trust. Specifically, we incorporated the principles of aroha (love/respect), manaakitanga (caring environment), mahaki (humility), and whanaungatanga (meaningful relationships).

In this presentation, we will outline our key methodological choices, as informed by trauma-informed research protocols and research into symbolic violence. Some of these choices included having researchers with shared sociocultural backgrounds with the participants facilitate interactions, utilising translingual communication and linguistic accommodation in interaction, balancing professional statuses and lived experiences to mitigate power differentials, ensuring participant well-being, utilising adaptive protocols, and minimising triggers. Finally, we used a phased approach and included semi-structured interviews, photovoice, and linguistic identity portraits, empowering participants as cocreators of knowledge. Our presentation will highlight how centring symbolic violence in ethical and methodological deliberations can lead to more trustworthy and human-centred research outcomes, honouring the dignity and agency of displaced persons.

# AGE-GRADING AND CENTRALISATION OF THE NEW ZEALAND ENGLISH VOWEL SPACE

### ELENA SHEARD, LYNN CLARK & MEGAN McAULIFFE

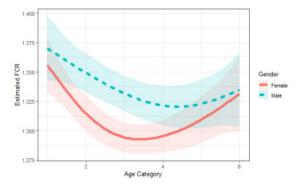
TE WHARE WĀNANGA O WAITAHA - UNVERSITY OF CANTERBURY

Keywords: New Zealand English, vowel space area, sociolinguistics, age-grading

Sociolinguistic and clinical speech science literatures have identified distinct, but overlapping, sets of factors that contribute to variation in vowel space area (VSA). From a sociolinguistic perspective, VSA centralisation and dispersion can vary according to social and stylistic factors such as the regional dialect, gender, and affective stance of a speaker (Fox and Jacewicz 2008; Heffernan 2010; Pratt 2023). From a physiological perspective, VSA can vary with factors such as talker speech rate, vowel duration, and motor control abilities (Fletcher et al. 2025; Fourakis 1991). Work comparing VSA across age groups has also indicated that adult vowel spaces may continue to disperse into middle-age (Gahl and Baayen 2019) before contracting in later life (e.g., Benjamin 1982; Torre III and Barlow 2009), consistent with the sociolinguistic model of age-grading (Wagner 2012). Most of this work, however, analyses read speech. Here, we investigate how VSA changes over the life span in uncontrolled New Zealand English speech (NZE).

Formant Centralisation Ratio (FCR) was calculated for Pākeha men (n = 76) and women (n = 170) across six age groups (18-35 to 76-85+) based on their mean Bark-transformed F1/F2 measurements for THOUGHT, FLEECE and START. We fit a Generalised Additive Mixed Model (GAMM) to the FCR measures, with gender as a parametric term, and age and vowel duration (and age in interaction with duration) by gender as smooth terms. The results in Figure 1 reveal: (1) VSA centralisation decreases up to middle age before increasing for both men and women, but (2), women show greater, and earlier, vowel space dispersion with age, resulting in more pronounced gender differences in middle age than for the oldest and youngest age groups.

The different trajectories with age for men and women point to variation in VSA that is not solely physiological. The greater centralisation of younger speakers is, nonetheless, consistent with their faster speed, shorter vowel durations and potentially growing vowel spaces. The increased vowel space centralisation of older speakers likely reflects physiological changes associated with aging (Baken 2005; Sataloff et al. 1997). As such, while the observed variation is consistent with the sociolinguistic model of age-grading, its interpretation is best informed by both clinical and sociolinguistic literatures.



**Figure 1:** Estimated Formant Centralisation Ratio by age and gender. Higher FCR corresponds to greater centralisation/less dispersion, lower FCR to less centralisation/more dispersion.

- Baken, R.J. 2005. The Aged Voice: A New Hypothesis. *Journal of Voice 19*(3). 317-325. <a href="https://doi.org/10.1016/j.jvoice.2004.07.005">https://doi.org/10.1016/j.jvoice.2004.07.005</a>
- Benjamin, Barbaranne J. 1982. Phonological performance in gerontological speech. *Journal of psycholinguistic research 11*. 159-167. https://doi.org/10.1007/BF01068218
- Fletcher, Annalise, Megan McAuliffe, Kaitlin L Lansford, and Julie M Liss. 2025. The relationship between speech segment duration and vowel centralization in a group of older speakers. *Journal of the Acoustical Society of America 138*. 2132–2139. https://doi.org/10.1121/1.4930563
- Fourakis, Marios. 1991. Tempo, stress, and vowel reduction in American English Available *Journal of the Acoustical Society of America* 90. 1816-1827. https://doi.org/10.1121/1.401662
- Fox, Robert A., and Ewa Jacewicz. 2008. Analysis of total vowel space areas in three regional dialects of American English, *Proceedings of Acoustics '08*, 495–500. Paris: SFA.
- Gahl, Susanne, and R Harald Baayen. 2019. Twenty-eight years of vowels: Tracking phonetic variation through young to middle age adulthood. *Journal of Phonetics* 74. 42-54. <a href="https://doi.org/10.1016/j.wocn.2019.02.001">https://doi.org/10.1016/j.wocn.2019.02.001</a>
- Heffernan, Kevin. 2010. Mumbling is macho: Phonetic distinctiveness in the speech of American radio DJs. *American Speech 85*(1). 67-90. <a href="https://doi.org/10.1215/00031283-2010-003">https://doi.org/10.1215/00031283-2010-003</a>
- Pratt, Teresa. 2023. The vowel space as sociolinguistic sign. *Journal of Sociolinguistics 27*. 526-545. 10.1111/josl.12617
- Sataloff, Robert T., Deborah Caputo Rosen, Mary Hawkshaw, and Joseph R. Spiegel. 1997. The Aging Adult Voice. *The Journal of Voice* 11(2). 156-160.
- Torre III, Peter, and Jessica A. Barlow. 2009. Age-related changes in acoustic characteristics of adult speech. *Journal of communication disorders* 42(5). 324-333.
- Wagner, Suzanne Evans. 2012. Age grading in sociolinguistic theory. *Language and Linguistics Compass* 6(6). 371-382. <a href="https://doi.org/10.1002/lnc3.343">https://doi.org/10.1002/lnc3.343</a>

### EXPLORING VARIATION IN THE NATURE AND DURATION OF MĀORI /R/

### ISABELLA SHIELDS, PETER KEEGAN & CATHERINE WATSON

WAIPAPA TAUMATA RAU - UNIVERSITY OF AUCKLAND

**Keywords:** te reo Māori, acoustic phonetics, rhotics, variation

This paper presents an analysis of the nature of the Māori /r/ sound, focusing in particular on the range of realisations of the sound and the variation of duration of the consonant. The analysis presented draws from a read-speech corpus consisting of 14 fluent speakers of Māori. In total, 5,079 tokens of the /r/ phoneme from this corpus were analysed. These occurred in several different words which can be grouped into five word forms (CVRV, RVCV, CV(V)CVRV, RVRV, CV(V)RVRV). These place /r/ in different segmental (/iri/, /ira/, /iro/, /ari/, /ara/, /aro/) and stress environments.

In total, nine variants of /r/ were found in the corpus speech. These were most often different realisations of taps, however other variants, such as trills, approximants, stops, and fricatives were also present. This paper first describes the acoustic features and segmentation criteria of these variants. An exploration of the duration of these /r/ tokens is then presented. The duration of Māori /r/ is unsurprisingly linked to its nature: an approximant is longer than a tap, for example. While Bauer (1993) suggests that stress may lengthen /r/ in Māori, this was not found to be the case for the present data. Instead, it was found that the duration of /r/ was impacted by other contextual factors. Its segmental environment plays an important role with adjacent high-front vowels encouraging lengthening. Placement of the phoneme within a word is also relevant, although each of these trends is obscured somewhat by interspeaker variation. In sum, the nature and duration of Māori /r/ is shown to be highly variable and responsive to its environment.

This work contributes to our growing understanding of the nature and variation of Māori /r/ and more generally of consonant variation in the Māori language.

### **REFERENCE**

Winifred Bauer. Māori. 1st ed. London, U.K.: Routledge, 1993.

# A CORPUS-BASED COMPARATIVE STUDY OF THE CONCEPTUAL METAPHORS RELATED TO "STONE" IN ENGLISH AND CHINESE

### LAIDONG (ANTHEAR) SONG

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

**Keywords:** conceptual metaphor, stone metaphor, corpus, mapping mechanism, cognitive linguistics, comparative study

Metaphors are the linguistic crystallisation of human civilisation. They are also regarded by cognitive science as the basic cognitive tools shaping our ways of thinking, which means that they are of great significance to our understanding towards human language and cognition. As one essential material on planet Earth, "Stone" is also one primary existent that accompanies the evolution of human beings and human civilisation. From the theoretical perspective of cognitive metaphor, this paper conducts a comparative study on the metaphors of "stone" (e.g. "The Rock of Gibraltar") in Chinese and English based on rich linguistic data collected from Chinese and English corpora including BNC, COCA and CCL. To identify the metaphors and classify them into suitable categories, the study reviewed about 1000 raw sentences following the steps of MIPVU (Metaphor Identification Procedure VU University Amsterdam). By combining qualitative analysis of the data with references to various dictionaries, the study also provides insights into the similarities and differences between the two from the perspectives of embodied philosophy, language, history and culture. The result shows that there is a large overlap in terms of the types of conceptual metaphors for "stone" in the two languages, and both languages possess a very rich diversity of cognitive mechanisms related to stone metaphors. Meanwhile, there are also more commonalities than differences in terms of the mechanisms of stone metaphors in the two languages though their commonalities also include minor differences. Based on the results, this paper argues that the cross-linguistic and cross-cultural study of basic metaphors like the stone metaphors is of profound significance to our comprehensive understanding of the embodiment, variability and diversity related to language and cognition, as well as to the promotion of mutual understanding and cross-cultural communications among different linguistic and cultural groups.

### PROTO-AUSTRONISIAN: A RECONSIDERATION OF THE FORMOSAN DATA

### **CRAIG STANSFIELD**

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

**Keywords:** historical linguistics, phonology, protolanguage

This study presents a reanalysis of the phoneme inventory of Proto-Austronesian, the hypothetical common ancestor of all Austronesian languages, including te reo Māori. Drawing on the comparative data from Formosan languages available in the online Austronesian Comparative Dictionary, it proposes a revised inventory consisting of 18 consonants, 4 vowels and 4 diphthongs. Building on this reanalysis, the study then re-evaluates existing subgrouping proposals for the Formosan languages and offers refinements based on the expanded comparative data and the revised phoneme inventory. It also explores the implications of these revisions for the classification of non-Formosan (Malayo-Polynesian) languages -such as te reo Māori - within the broader Austronesian family. The study concludes that a smaller, more coronally focussed Proto-Austronesian consonant system than existing proposals is likely, but that this has relatively few implications for Formosan subgrouping, with six primary branches of Austronesian being supported by application of the comparative method to and historical glottometrical analyses of the Proto-Austronesian reflexes in the Formosan daughter languages.

### alignment among community gardeners

### **RUEY FERN TAN**

TE WHARE WĀNANGA O WAITAHA - UNVERSITY OF CANTERBURY

Keywords: stancetaking, alignment, community, community gardening, identity

Community gardening, often understood as creating more healthy food access and providing education (e.g. Guitart et al., 2012), has become increasingly popular in New Zealand (Webb, 2017). Local studies report that it also creates strong social bonds (Shimpo et al., 2019; Morris et al., 2020), and as linguists we have the opportunity to consider the modes of belonging which emerge (Wenger, 1998). In my Master's Thesis I ask: how is community created linguistically and discursively on a micro-level within these community gardens?

Analysing focus group data, I apply an Interactional Sociolinguistic framework, which emphasizes the situated co-construction of meaning (Gordon & Tannen, 2021). I explore how participants at a community garden take stances to align with each other and position themselves as part of the same group, understanding alignment as demonstrating agreement with a stance and, by implication, a stance-taker (Du Bois, 2007). I consider stance "emergent" in interaction (Jaffe, 2009, p.4), constituted by the value-laden linguistic choices speakers make that position themselves with regards to the topics of conversation and other speakers.

The data demonstrates that focus group members align with each other through the use of supportive backchannelling and stance markers like "yeah". They also demonstrate strong uptake of stances, for example, one speaker who had already identified the "main thing" in his own response supports another speaker's response with "that's probably the main", creating alignment. Similarly supportive overlapping speech, which can be a sign of solidarity (e.g. Lazarro-Salazar, 2009), is prevalent in the focus groups. Meanwhile, disalignment is mitigated using strategies such as hedging or vague language. Based on these micro-level features and more macro-level shared identities (e.g. university student, forager, citizen, gardener, people who care about sustainability), I unpack the role of language use in creating various kinds of 'community' in community gardening (Wenger, 1998).

- Du Bois, J. W. 2007. The stance triangle. In Englebretson, Robert (Ed.), *Stancetaking in Discourse: Subjectivity, evaluation, interaction* (pp.139-182). John Benjamins Publishing Company.
- Gordon, C. & Tannen, D. (2021). Interactional sociolinguistics: Foundations, developments, and applications to language, gender, and sexuality. In Angouri, J. & Baxter, J., (Eds.), *The Routledge Handbook of Language, Gender, and Sexuality* (1st ed., pp. 181 196). Routledge.
- Guitart, D., Pickering, C. & Byrne, J. (2012). Past results and future directions in urban community gardens research. *Urban Forestry & Urban Greening*, 11(4), 364–373. <a href="https://doi.org/10.1016/j.ufug.2012.06.007">https://doi.org/10.1016/j.ufug.2012.06.007</a>
- Jaffe, A. (2009). "Introduction: The Sociolinguistics of Stance" In A. Jaffe (ed.), *Stance: Sociolinguistic Perspectives* (pp.1 -28). Oxford University Press.

- Lazzaro-Salazar, M. (2009). The role of /overlaps\ in intercultural workplace interaction. [Master's thesis, Victoria University of Wellington]. Open Access Te Herenga Waka-Victoria University of Wellington. https://doi.org/10.26686/wgtn.16968415.v1
- Morris, M., Loveridge, A., Janssen, M., Klenner, L. & Zavrel, O. (2020). Aotearoa New Zealand Community Gardens: Results from the first National Community Gardens Survey. The Village Garden Project.
- Shimpo, N., Wesener, A. & McWilliam, W. (2019). How community gardens may contribute to community resilience following an earthquake. *Urban Forestry & Urban Greening, 38*, 124–132.
- Webb, V. (2017). Good gardeners and bad plants: governing health in community gardens. *New Zealand Sociology, 32*(2), 117–138.
- Wenger, E. (1998). Communities of practice: learning, meaning, and identity. Cambridge University Press.

# PHRASE-FINAL LENGTHENING AS EVIDENCE FOR THE COGNITIVE REPRESENTATION OF 'PART OF SPEECH' IN TE REO MĀORI

### CONNOR TAYLOR-BROWN, MARLEE ROSOFF, RYAN SHRIVER, SARAH BARLOW, SHARMAINE ESTEBAN, JENNIFER HAY & KIRSTEN CULHANE

TE WHARE WĀNANGA O WAITAHA - UNVERSITY OF CANTERBURY

Keywords: te reo Māori, phrase-final lengthening, part of speech

It is widely assumed that the distinction between nouns and verbs is universal. But how fundamental and universal are these part-of-speech categories? We investigate this question by probing the cognitive representation of contested parts-of-speech in te reo Māori. We focus on the word class of 'universals' identified by [1], which can occur in nominal, verbal and modifier positions. 'Kai' for example, could mean 'to eat', or 'food'. Is this really one single 'universal' representation, or is it two distinct related words with different parts of speech (V, N, as assumed by, e.g. [2])?

Our evidence comes from the phenomenon of phrase-final-lengthening, in which words at the end of a phrase tend to be lengthened [3,5]. Several studies have also shown that the position that a particular word tends to occur in has an overall influence on its phonetics [4,5]. Words that are often phrase-final tend to be longer than words that are infrequently phrase-final, and this difference exists in all positions in the phrase. That is, the overall phonetics of a word is shaped by the environments in which it most occurs. This enables us to ask whether this word-specific effect is best modelled if we treat, e.g. kai (V) and kai (N) as one representation, or as separate representations.

We examine this in the MAONZE corpus [6], using two notions of phrase-finality: Biggsian boundaries (phrase edges defined according to Biggs' [1] account of grammar, identified automatically with a phrase-based parser), and prepausal boundaries (immediately before a pause of 200ms or more). Using these boundaries, we ask whether the frequency with which a word occurs phrase-finally affects its typical pronunciation. We test two opposing assumptions: one where each 'universal' has a single stored representation, and another where universals may have multiple separate representations for each 'part of speech'.

### **REFERENCES**

Biggs, B. (1969). Let's learn Māori: a guide to the study of the Māori language. Reed.

Bauer, W. (1993). Māori. Routledge.

Oller, D. K. (1973). The effect of position in utterance on speech segment duration in English. The Journal of the Acoustical Society of America, 54(5), 1235-1247.

Seyfarth, S. (2014). Word informativity influences acoustic duration: Effects of contextual predictability on lexical representation. Cognition, 133(1), 140-155.

Sóskuthy, M., & Hay, J. (2017). Changing word usage predicts changing word durations in New Zealand English. Cognition, 166, 298-313.

King, J., Maclagan, M., Harlow, R., Keegan, P., & Watson, C. (2010). The MAONZE Corpus: Establishing a corpus of Māori speech. New Zealand Studies in Applied Linguistics, 16(2), 1-16.

### LINGUISITIC LANDSCAPE OF EATERIES: MENU, METHODS AND MORE

### **ANIL KUMAR THAKUR**

INDIAN INSTITUTE OF TECHNOLOTY (BHU), VARANASI CITY

Keywords: linguistic landscape, eateries, Varanasi city, Wellington city, multilingualism

In the field of linguistic landscape, the choice of language (including the scripts) in the public spaces has been put to investigation from diverse perspectives including that of market communication. The present paper is an attempt to linguistically and culturally contextualize the linguistic landscape associated with the eateries, particularly to understand the triggers for linguistic (and cultural) choices including the commercial concerns in market communication. Eateries occupy a significant space and get great attention in a market space, particularly in and around the places of popular tourist destinations. This makes the linguistic representation (in the form of shop signages and names, menu, methods of preparation, socio-cultural and health concerns, etc.) of the eateries an important source of insights in the linguistic landscape study. For the present paper, the examples are collected from Varanasi, an important and popular tourist destination city in India, which is as sacred for the domestic pilgrims as it is popular among the international tourists seeking a glance of Indian socio-cultural diversities and spiritual depths and dimensions. The city has undergone a significant infrastructural development in the recent years with a lot of eateries coming up across the major tourist and market localities. Some of the immediate observations are the choice of multilingual and multiscript shop signages and menu descriptions, blending of linguistic and cultural symbols and almost a blind craze for creativity in the choice of both the linguistic and socio-cultural symbols.

Although the socio-economic factors seem to play a role in causing divergences of the linguistic landscapes across the eateries, the commercial compulsions of the people (the eateries owners) and the socio-cultural concerns (of the eateries owners as well as the target customers) greatly homogenise them. The multilingual and multiscript linguistic landscape reflects, as a strategy in market communication, how the eateries owners make all possible efforts to reach out and attract the multilingual target customers (both domestic and international) whereas the blending of socio-cultural symbols in the linguistic landscape reflects their socio-cultural affinity and aspirations. The paper also attempts to compare the characteristic features of the linguistic landscape of the eateries in Varanasi with those of the Wellington city. The data from the Varanasi city have been collected over last one year, and the data from the Wellington city are collected during a visit to the city during July – August 2025. The present paper examines the data using insights obtained in some of the existing literature on linguistic landscape (Landry and Bourhis 1997, Shanga and Libo 2017, Yang 2029, Artawal, et al 2023 among others).

### **REFERENCES:**

Artawal, Ketut, et al (2023). Language Choice and Multilingualism on Restaurant Signs: A Linguistic Landscape Analysis. *International Journal of Society, Culture and Language, 11*(3). <a href="http://dx.doi.org/10.22034/ijscl.2023.2007382.3106">http://dx.doi.org/10.22034/ijscl.2023.2007382.3106</a>.

Landry, Rodrigue, and Richard Y. Bourhis (1997). Linguistic landscape and ethnolinguistic vitality: An empirical study. *Journal of Language and Social Psychology 16*.1: 23–49.

Shanga, Guowen and Guo, Libo (2017). Linguistic landscape in Singapore: what shop names reveal about Singapore's multilingualism. *International Journal of Multilingualism*, vol. 14, no. 2, 183–201. Routledge. <a href="http://dx.doi.org/10.1080/14790718.2016.1218497">http://dx.doi.org/10.1080/14790718.2016.1218497</a>

Yang, Ping (2019). Language and Visual Communication: How Multimodality Works in Intercultural Marketing Communication. DOI: 10.4018/978-1-5225-5778-4.ch002

# PUBLIC HEALTH COMMUNICATION ON INSTAGRAM: LINGUISTIC AND MULTIMODAL STRATEGIES OF SOCIAL MEDIA JOURNALISTS

### **ANGELICIA ANTHONY THANE**

TE KUNENGA KI PŪREHUROA - MASSEY UNIVERSITY

Keywords: public health communication, multimodality, social media, Instagram, journalism

This paper investigates how public health news is linguistically and visually adapted for Instagram by social media journalists (SMJs). It explores how SMJs select and reshape content to fit the platform's style, using simplified language, engaging visuals, and strategic storytelling techniques. Drawing on expert interviews, the study shows how SMJs balance journalistic integrity with audience engagement, making health information more accessible and relevant. By combining text and images in platform specific ways, SMJs help users better understand and interact with public health messages. This multimodal recontextualisation not only improves communication but also reinforces institutional credibility and encourages public participation. The paper contributes to our understanding of how expert knowledge is communicated in digital spaces, and how language and media practices shape public engagement with health information.

## ASIAN-PACIFIC INDIGENOUS AND MINORITY LANGUAGE PRESERVATION THROUGH GENERATIVE AI: A SYSTEMATIC REVIEW

### LE THI THACH THAO & LE THANH NHAN

NATIONAL TAIWAN UNIVERSITY, FU JEN CATHOLIC UNIVERSITY

**Keywords:** data sovereignty, decolonisation, generative AI, indigenous languages, language preservation

With over 40% of the world's 7,000 languages facing extinction by 2100 (UNESCO, 2024), generative AI (GenAI) presents unprecedented opportunities for language preservation. This systematic review examines GenAI applications for Indigenous and minority language preservation across Aotearoa New Zealand, the Pacific, and Taiwan—regions connected by Austronesian linguistic heritage.

Following PRISMA 2020 guidelines (Page et al., 2021), we analyze around 100 studies (2010- 2025) from academic databases and endangered language repositories. The corpus includes peerreviewed articles and institutional reports on GenAl applications for low-resource languages, with marked growth post-2020 coinciding with LLM advances. Our analysis addresses: (1) GenAl's efficacy in language preservation; (2) ethical challenges around data sovereignty; and (3) community-led decolonial approaches.

The findings reveal diverse GenAl applications including speech recognition, content generation, and interactive learning platforms. Case studies such as Te Hiku Media's Papa Reo achieves 92% Māori speech recognition accuracy while ensuring Indigenous data control through their Kaitiakitanga License (Lee, 2024; Jones et al., 2023). Hawaiian language tools demonstrate technical feasibility despite infrastructure limitations, while Taiwan's initiatives such as Glossika Al Platform for Austronesian languages (e.g. Paiwan) navigate complex political landscapes while advancing linguistic rights.

Our study explores GenAl's role in linguistic self-determination when aligned with CARE Principles (Collective benefit, Authority, Responsibility, Ethics) (Carroll et al., 2020) and community-led, decolonial frameworks. Success hinges on Indigenous control over Al development, not just participation. This analysis is expected to advance applied sociolinguistics and policy, noting that sustainable language preservation requires Indigenous-centered methodologies, offering valuable insights for global efforts in revitalizing endangered languages.

- Carroll, S. R., Garba, I., Figueroa-Rodriguez, O. L., Holbrook, J., Lovett, R., Materechera, S., Parsons, M., ... & Hudson, M. (2020). The CARE Principles for Indigenous data governance. Data Science *Journal*, *19*(1), 43. <a href="https://doi.org/10.5334/dsj-2020-043">https://doi.org/10.5334/dsj-2020-043</a>
- Jones, P.-L., Mahelona, K., Keegan, T. T.-M., & Apperley, M. (2023). Kia tangata whenua: Artificial intelligence that grows from the land and people. *Ethical Space: The International Journal of Communication Ethics*, 20(2/3). https://doi.org/10.21428/0af3f4c0.9092b177
- Lee, A. (2024). Māori speech Al model helps preserve and promote New Zealand Indigenous language. NVIDIA Blog. https://blogs.nvidia.com/blog/te-hiku-media-maori-speech-ai/

- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hrobjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., McGuinness, L. A., Stewart, L. A., Thomas, J., Tricco, A. C., Welch, V. A., Whiting, P., & Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, *372*. <a href="https://doi.org/10.1136/bmj.n71">https://doi.org/10.1136/bmj.n71</a>
- UNESCO. (2024). Multilingual education, the bet to preserve Indigenous languages and justice. *UNESCO*. <a href="https://www.unesco.org/en/articles/multilingual-education-bet-preserveindigenous-languages-and-justice">https://www.unesco.org/en/articles/multilingual-education-bet-preserveindigenous-languages-and-justice</a>

# DESIGNING SEMI-CONTROLLED ELICITATION TASKS FOR PROSODIC PROMINENCE STUDY IN THAI: BALANCING NATURALNESS AND PHONETIC CONTROL

#### PRAPATSORN TIRATANTI

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

Keywords: prosodic prominence, phonetic analysis, spontaneous speech, tonal language method

This presentation discusses the design of an experimental task developed to elicit speech data for the study of prosodic prominence and information structure in conversational Thai. Free conversation should indeed be the utmost ideal data type for this study because it offers highly naturalistic speech and aligns with the growing interest in using such data in phonetic research. However, free conversation poses challenges for segmentation and detailed acoustic analysis, especially in tonal languages. In the case of Thai, control over lexical tones is essential. Preliminary findings from the earlier stage of this project suggest that different lexical tones are realised in distinct patterns that signal prosodic prominence.

To balance naturalness with experimental control, this study proposed a set of two semi-controlled elicitation tasks incorporating a set list of target words. They were designed as two interactive, game-based activities conducted in pairs. The first task, a compare-the-differences game adapted from Diapix (Baker & Hazan, 2011), was employed to elicit contrastive focus. The second, a picture arrangement game based on QUIS (Skopeteas et al., 2006), targeted given—new information contrasts. These tasks enabled the elicitation of conversational-style speech with controlled phonemic content, facilitating detailed acoustic analysis. To demonstrate its validity, sixteen participants were recruited to take part.

Despite the controlled word list, the data come with natural variation. Preliminary observations show differences in syntactic structure, optional use of final particles, and varied prosodic phrasing. Moreover, participants may omit or alter target words, or they may produce them with hesitations or pauses, which affect prosodic phrasing.

In conclusion, this presentation suggests that the semi-controlled elicitation task can offer a practical balance: capturing speech that more closely resembles natural interaction while retaining enough control to support phonetic analysis. However, it also introduces confounding factors that must be carefully considered during analysis.

### **REFERENCES**

Baker, R., & Hazan, V. (2011). DiapixUK: Task materials for the elicitation of multiple spontaneous speech dialogs. *Behavior Research Methods*, 43(3), 761–770. <a href="https://doi.org/10.3758/s13428-011-0075-y">https://doi.org/10.3758/s13428-011-0075-y</a>

Skopeteas, S., Fiedler, I., Hellmuth, S., Schwarz, A., Stoel, R., Fanselow, G., Féry, C., & Krifka, M. (2006). *Questionnaire on information structure (QUIS): Reference manual.* Universitätsverlag Potsdam.

# CAN VOWEL SPACE VISUALISATION REVEAL HOW TEXT-TO-SPEECH SYSTEMS LEARN?

### PASINDU UDAWATTA, JESIN JAMES, CATHERINE WATSON, AKE NICHOLAS & B T BALAMURALI

WAIPAPA TAUMATA RAU - UNIVERSITY OF AUCKLAND

Keywords: vowel space, visualisation, text-to-speech, low-resource language, language bias

Modern text-to-speech development is predominantly data-driven<sup>1</sup>, relying on large datasets. This benefits high-resource languages such as General American English (GAE) and Mandarin Chinese. However, it is less effective for low-resource languages like New Zealand English (NZE) and te reo Māori, often resulting in artificially generated speech that is difficult to understand<sup>2</sup>. Therefore, to generate speech in low-resource languages, a text-to-speech system developed on a high-resource language is adapted using a small dataset from the low-resource language. However, any issues only become apparent after development<sup>3</sup>, making them challenging to compensate. Therefore, it is essential to identify which sounds are accurately learned during development and which are not.

Variations in vowel pronunciations are the primary differences among English accents<sup>4</sup>, and the vowel space serves as a linguistic tool for visually representing vowel sounds based on their formant frequencies<sup>5</sup>. Therefore, we propose using vowel space visualisation to assess how well a text-to-speech system learns vowel sounds during development, thereby bridging linguistic knowledge and text-to-speech development.

An automated workflow was first created for generating vowel spaces during text-to-speech development. Then we adapted a text-to-speech system from GAE to NZE, and generated vowel spaces using the created workflow. Analysing the changes in the generated vowel spaces during development revealed a shift towards the real NZE vowel space, indicating an accent shift from GAE to NZE. Perception test results reinforced this, with an increase in perception of the produced speech as NZE and a decrease in perception as GAE. This confirms that the generated vowel spaces reflect human perception and can be used to assess artificially generated vowel sounds during development. This work will also be extended to te reo Māori.

- A.R. Gladston and K.V. Pradeep, "Exploring Solutions for Text-to-Speech Synthesis of Low-Resource Languages," in *International Conference on Signal Processing and Communication (ICSPC)*, 2023, pp. 168-172.
- <sup>2</sup> K. Seaborn, N.P. Miyake, P. Pennefather, and M Otake-Matsuura, "Voice in Human–Agent Interaction: A Survey," *ACM Computing Surveys*, vol. 54, no. 81, 2021.
- <sup>3</sup> P. C. Loizou, *Multimedia Analysis, Processing and Communications*. Springer Berlin Heidelberg, 2011, vol. 346, ch. Speech Quality Assessment, pp. 623–654.
- <sup>4</sup> J. C. Wells, *Accents of English 1: An Introduction.* Cambridge University Press, 1982, vol. 1.
- S. Sandoval, V. Berisha, R. L. Utianski, J. M. Liss, and A. Spanias, "Automatic assessment of vowel space area," *The Journal of the Acoustical Society of America*, vol. 134, no. 5, pp. 477–483, 2013.

# RHETORICAL MOVES AND LINGUISTIC STRATEGIES IN NEW ZEALAND CEO SUSTAINABILITY LETTERS: A GENRE-BASED APPROACH

### PAKKAWAN UDOMPHOL

TE KUNENGA KI PŪREHUROA - MASSEY UNIVERSITY

**Keywords:** Applied Linguistics/Genre-based Studies

New Zealand's emissions profile stands out among developed nations, with a legislative commitment to achieve carbon neutrality by 2050, a milestone highlighted by the Ministry for the Environment (2022). Despite efforts to promote environmental practices, concerns about the integrity of environmental reporting have emerged. Some organizations face accusations of 'greenwashing,' using non-financial reports to potentially mislead stakeholders about their sustainability efforts (De Freitas Netto et al., 2020). This study adopts a critical rhetorical move analysis to examine how such reporting practices are shaped by the rhetorical and linguistic objectives of discourse communities. Focusing specifically on CEO letters that commonly introduce sustainability reports produced by New Zealand registered businesses, the research explores how these texts pursue rhetorical communicative goals within the genre of sustainability reporting.

This study investigates how corporate sustainability narratives are rhetorically structured in CEO letters - a key component of sustainability reports produced by New Zealand registered businesses. It explores how these letters function as structured communicative events that reflect the rhetorical and linguistic goals of their discourse communities. Adapting Swales's (1990) move-step framework, the study conducts a genre-based rhetorical analysis of 48 CEO letters from companies across the agriculture, transportation, energy, and construction sectors, each representing varied greenhouse gas emissions profiles. The analysis identifies recurring rhetorical moves and steps and examines how linguistic resources are employed to construct credibility, foster reader engagement, and shape the interpretation of sustainability messages.

Preliminary findings reveal that the CEO letter emerges as a strategically constructed genre within corporate sustainability reporting - one that goes beyond formal introduction to serve persuasive and relational purposes. The frequent use of moves such as Demonstrating the Company's Efforts on Sustainable Development and Showing Commitment underscores how companies actively frame their environmental actions and long-term vision to build credibility and stakeholder trust. Likewise, the inclusion of Introducing the Company and Building Connection reveals an intention to foster rapport and invite readers into the sustainability narrative as engaged participants. These rhetorical patterns collectively illustrate that CEO letters are not merely informative texts but carefully designed communicative events that shape perception, reinforce values, and align organizational messaging with stakeholder expectations. As such, the CEO letter plays a critical role in advancing transparency, engagement, and leadership positioning in the discourse of corporate sustainability.

By examining the rhetorical structures and linguistic strategies employed in CEO letters, this study offers a nuanced understanding of how language shapes perceptions of environmental commitment and accountability. It highlights the role of rhetorical moves in revealing the communicative intent behind the discourse, thereby influencing how readers comprehend and interpret the core

sustainability message. The findings underscore the importance of rhetorical structure in enhancing organizational transparency and fostering stakeholder engagement - particularly in how readers assess the author's credibility, identify key arguments, and interpret the text with critical awareness. As Bhatia (2008) contends, a deeper analysis of genre rationale, lexico-grammatical choices, and audience relationships can reveal important insights into how corporate sustainability messages are constructed and received.

- Bhatia, V. K. (2008). Towards critical genre analysis. In V. K. Bhatia, J. Flowerdew, & R. H. Jones (Eds.), *Advances in discourse studies* (pp. 166-177). London; New York: Routledge.
- De Freitas Netto, S. V., Sobral, M. F., Ribeiro, A. R., & Soares, G. R. (2020). Concepts and forms of greenwashing: A systematic review. *Environmental Sciences Europe*, *32*(19), 1-12.
- Ministry for the Environment. (2022). *Te hau mārohi ki anamata Towards a productive, sustainable and inclusive economy: Aotearoa New Zealand's first emission reduction plans* (Report No. ME1639). Ministry for the Environment.
- Swales, J. M. (1990). *Genre Analysis: English in Academic and Research Settings*. Cambridge University Press.

# IDENTITY, LANGUAGE SHIFT AND MAINTENANCE AMONG NEW ZEALAND'S 19TH CENTURY SCOTTISH IMMIGRANTS

### SARAH VAN EYNDHOVEN

TE WHARE WĀNANGA O WAITAHA - UNVERSITY OF CANTERBURY

**Keywords:** migration, identity, NZ history, settlers, lexis

Emigration scenarios offer a unique window into the interaction between language features and their potential to perform national or ethnic identity (i.e. Babel 2010). Migrants frequently experience conflicting loyalties, which can encourage processes of language shift or maintenance (Dossena 2013). The large number of Scottish immigrants arriving on New Zealand's shores during the nineteenth century represent a particularly prominent example. Recent literature has highlighted the strength of transnationalism and dense social networks characterising these Scots (McCarthy 2011; Bueltmann 2011), but simultaneously they were coming into contact with other British migrants for whom southern Standard English was the prestige norm (Britain 2005). Yet, how these opposing influences interacted with their language use, particularly in the many thousands of letters sent back to Scotland, is still unknown. This paper explores linguistic adaptation in New Zealand's early Scottish diasporic community through quantitative and qualitative analysis of their use of heritage and adopted lexis in correspondence, which has been manually digitised and compiled into a novel corpus (SCOTIA - the Scottish Corpus of Original Texts from Immigrants to Aotearoa). This paper describes the building and development of the online text corpus using high-powered transcription software Transkribus (Kahle et al. 2017) and the corpus-building platform LaBB-CAT (Fromont & Hay 2008). It the explores who was more likely to adopt new linguistic features - in the form of early New Zealand English and te reo Māori lexis - early on. A shift towards new lexis appears to correlate with high levels of geographic and social mobility characterising certain Scottish migrants, suggesting an identity shift taking place that has complex ties to gender and occupation. The use of Scots language features is also examined, with results indicating these were often employed for performative and style-oriented goals. This elucidates the multifaceted interaction between language and identity within colonial settings.

- Babel, M. 2010. Dialect divergence and convergence in New Zealand English. *Language in Society,* 39(4):437–456.
- Britain, D. 2005. Where did New Zealand English come from? *Essex Research Reports in Linguistics*, University of Essex, 156-93.
- Bueltmann, T. 2011. *Scottish Ethnicity and the Making of New Zealand Society, 1850-1930.* Edinburgh: Edinburgh University Press.
- Dossena, M. 2013. Mixing genres and reinforcing community ties in nineteenth-century Scottish correspondence. *Communities of Practice in the History of English, 235*: 47–60.
- Fromont, R., & Hay, J. 2008. ONZE Miner: the development of a browser-based research tool. Corpora, 3(2), 173-193

- Kahle, P., Colutto, S., Hackl, G., & Mühlberger, G. 2017. Transkribus-a service platform for transcription, recognition and retrieval of historical documents. *14th IAPR International Conference on Document Analysis and Recognition (ICDAR)* 4, 19-24. IEEE.
- McCarthy, A. 2011. Scottish migrant ethnic identities in the British Empire since the nineteenth century. In J. M. MacKenzie & T. M. Devine (Eds.), *Scotland and the British Empire*, 118–14. Oxford: Oxford University Press.

# "YOU CAN HAVE A VIRTUAL CHOCOLATE FISH": HYBRID MEETINGS DURING COVID-19

### **BERNADETTE VINE**

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

**Keywords:** workplace interaction, interactional sociolinguistics, social talk, humour, meeting management

One aspect of working during the pandemic which changed the way people interacted was the need to work remotely when lockdowns were imposed and meetings no longer took place face-to-face. People had to adapt to online meetings. Since the pandemic there have been an increasing number of situations where even when people can meet face-to-face some may choose to join these meetings online.

This paper examines five hybrid senior leadership team meetings recorded in 2021 in an education-focussed NZ organization and explores the ways the meeting attendees adapted to the hybrid context. Research on meetings in such hybrid contexts has shown the impact on the way people contribute and noted in particular the asymmetrical access to interactional resources (Büyükgüzel and Balaman 2023; Oittinen 2018). Discussions where several people contribute is one obvious situation where attending online may restrict a meeting attendee's contributions. Being online also typically excludes people from joining in pre- and post-meeting social talk and makes it difficult to join in with humour and other relationally focussed talk during meetings.

However, the hybrid nature of meetings can also be regarded as a resource. The meeting participants in these meetings take advantage of this aspect of the meetings, for example, using it to help them keep to time limits, include speakers in other places, and as a topic of social talk and humour. Hence, although hybrid meetings present interactional challenges, the analysis demonstrates how the team has not only adapted to this way of working but also exploit the advantages it offers.

Discourse analysis is the method used to analyse the data, using an interactional sociolinguistics approach with a social constructionist understanding of interaction as contextualised and negotiated. The analysis explores what people say and how they say it, along with how people jointly construct meaning in interaction.

### **REFERENCES**

Büyükgüzel, Safinaz and Ufuk Balaman 2023. The Spatial Organization of Hybrid Scrum Meetings: A Multimodal Conversation Analysis Study. *Discourse & Communication* 17/3, 253–277.

Oittinen, Tuire 2018. Multimodal Accomplishment of the Alignment and Affiliation in the Local Space of Distant Meetings. *Culture and Organization 24*/1, 31-53.

### EXPLORING CHINESE EFL LEARNERS' SELF-REGULATED STRATEGIES IN LEARNING SPOKEN ENGLISH BEYOND THE CLASSROOM

### **HAIXIA WANG**

TE KUNENGA KI PŪREHUROA - MASSEY UNIVERSITY

**Keywords:** spoken English, self-regulation, out-of-class learning

EFL (English as a Foreign Language) learners in China often face challenges in developing speaking proficiency due to limited opportunities for practice and restricted access to authentic resources in traditional classroom settings. This is particularly acute for disadvantaged students in western China, who have even fewer opportunities to engage in meaningful spoken English use. To address this gap, learners must self-regulate their learning by creating language opportunities beyond the classroom. However, little research has examined spoken English learning outside the classroom in relation to self-regulation. To bridge the gap, this study investigates the self-regulated strategies employed by EFL learners in western China to develop spoken English. Using a multiple case study approach, data were collected from seven university students through language learning diaries and semi-structured interviews. Given the richness of the data, this presentation focuses on two participants. Their activities - such as participating in English competitions, building international friendships, and engaging with authentic English media - demonstrate the use of key self-regulated learning strategies, including goal setting, structuring social and learning environments, and self-evaluating. These strategies were shaped by factors such as motivation, self-efficacy, social and learning contexts, and learning beliefs. The findings offer insights into how self-regulated learning ability can foster spoken English development and expand equitable learning opportunities for disadvantaged learners.

# INVESTIGATING THE EFFECT OF HIGH-VARIABILITY PHONETIC TRAINING UNDER VARIOUS ACOUSTIC ENVIRONMENTS ON VOWEL LENGTH IDENTIFICATION FOR L2 LISTENERS

#### **XIN WANG**

WAIPAPA TAUMATA RAU - UNIVERSITY OF AUCKLAND

**Keywords:** speech perception, second language listener, high-variability phonetic training, reverberation, Japanese vowel length contrast

The acoustic environment with different levels of reverberation can influence how listeners perceive vowel length contrasts (differences in vowel length that create distinct meanings between words). Second language (L2) listeners often find it more difficult than their first language (L1) counterparts when perceiving vowel length contrasts, particularly when such contrasts do not exist in their first language. L1 listeners have been exposed to speech across various acoustic environments and have learned to generalise variations in speech sounds. L2 listeners often study in a single acoustic setting and may find it harder to generalise these variations, where high-variability phonetic training (HVPT) may offer a potential way to expose L2 listeners to different acoustic variations in speech. The current study investigated the effects of HVPT on Japanese vowel length identification in various acoustic environments. L2 Japanese listeners were tested using the pretest-training-posttest design. One group of L2 Japanese listeners was trained under five different acoustic conditions (HVPT), while the other group was trained under the non-reverberant condition. L1 Japanese listeners group was recruited to complete an identification test to provide baseline levels. Results indicated that, when compared to training L2 Japanese listeners in the non-reverberant condition, HVPT more effectively decreased the influence of reverberation on vowel length perception and narrowed response differences between L2 and L1 listeners.

# REDDIT AS A SOURCE FOR PERCEPTUAL DIALECTOLOGY IN NEW ZEALAND ENGLISH

### **SIDNEY WONG**

UNIVERITY OF CANTERBURY

Keywords: Reddit, social media, New Zealand English, perceptual dialectology

Social media is a valuable source of linguistic information especially users' attitudes and ideologies towards variation and change (Sun et al., 2021). With a focus on Reddit, we analysed the situated meanings in one submission post on r/newzealand taking a passive data collection approach (Rocha-Silva et al., 2024). We then use building tasks from Gee's (2010) discourse analysis framework to ask what changes Reddit users have noticed in New Zealand English. Some Reddit users noted that some lexical features (such as tea towels, flannel, pudding, and tea) were being replaced by lexical equivalents from other varieties of English (dish cloth, face cloth, dessert, and dinner) and concluding that New Zealand English is being influenced by American English through social media. Some users saw this change as a threat to New Zealand English and in extension, a threat to their New Zealand identity. In order to build connections throughout the submission post, we use content analysis to categorise the changes noted by users in the comment thread to identify perceived changes to New Zealand English phonology, lexis, and morphosyntax, as well as semantic and pragmatic phenomena. Based on the building tasks and content analysis, we conclude that users on Reddit are aware of changes to New Zealand English. However, while users have attributed the majority of these innovative forms to American English, not all features originated from American English (such as servo from Australian English). We propose New Zealand-affiliated Reddit users' have indexed linguistic forms associated with New Zealand English to their own identity; and in turn indexing innovative linguistic forms to a 'non-New Zealand', or 'other', identity associated with American English regardless of the source of these innovative forms. This study contributes to our understanding how social media users construct a sense of place through language-use in New Zealand.

### **REFERENCES**

Gee, J. P. (2010). Introduction to Discourse Analysis: Theory and Method. Taylor & Francis Group.

Rocha-Silva, T., Nogueira, C., & Rodrigues, L. (2024). Passive data collection on Reddit: A practical approach. *Research Ethics*, 20(3), 453–470.

Sun, Y., Wang, G., & Feng, H. (2021). Linguistic Studies on Social Media: A Bibliometric Analysis. *Sage Open, 11*(3), 21582440211047572.

# PHILIPPINE LANGUAGES THAT ARE NOT PHILIPPINE-TYPE: NOMINATIVE-ACCUSATIVITY IN THE BUHIDIC SUBGROUP

### HANNAH WOODFIELD

ŌTĀKOU WHAKAIHU WAKA - UNIVERSITY OF OTAGO

**Keywords:** Philippine languages, comparative morphosyntax, fieldwork

The Buhidic languages are a small cluster of Austronesian languages spoken on the island of Mindoro in the Philippines (Pennoyer 1980, Lobel 2013). Based primarily on lexical evidence, this cluster of language varieties is typically treated as part of a 'Southern Mangyan' grouping, which Blust (1991) assigns to the Greater Central Philippine (GCP) group. GCP includes such well-known Philippine languages as Tagalog and Cebuano. Philippine languages, and GCP languages in particular, are associated with a typologically-unusual system of case marking and verbal 'voice' which enables noun phrases with a range of different semantic roles to function as the clausal pivot. It is often assumed in the literature that all Philippine languages reflect this system, but past survey work on the Buhidic languages (Zorc 1974, Lobel 2013:188-193) has shown anomalies in how these languages reflect the expected 'Philippine-type voice'.

This presentation pulls together evidence from survey work, archival sources, and the presenter's own fieldwork on Buhidic languages (Fleming 2022, Woodfield forthcoming) to argue that the grammar of contemporary Buhidic languages does not reflect Philippine-type voice. Instead, these languages have an alignment system which is straightforwardly nominative-accusative. While none of these languages casemark all NPs, when case marking is present, they consistently mark the agent of a transitive clause (A) with the same case as the sole argument (S) of an intransitive clause. Some reflexes of affixes which are present in other Philippine-type languages as voice markers for verbs are present in Buhidic languages, but function only as nominalising affixes; others have been repurposed as TAM markers. The data presented in this study highlight the systematic nature of the divergences between Buhidic and typical Philippine morphosyntax, and when taken together with research on the nearby Northern Mangyan languages (Zorc 1974, Reid 2017) suggest that morphosyntactic divergences from Philippine norms may be an areal feature in Mindoro.

### **REFERENCES**

Blust, Robert. 1991. The Greater Central Philippine hypothesis. *Oceanic Linguistics* 30:73-129.

Fleming, Hannah M. 2022. A Grammar of Eastern Tawbuid. SIL International.

Lobel, Jason William. 2013. *Philippine and North Bornean languages: Issues in description, subgrouping, and reconstruction.* [Doctoral dissertation.] University of Hawai'i.

Pennoyer, F. Douglas. 1980. Buhid and Tawbuid: A new subgroup in Mindoro, Philippines. In *Papers from the Second Eastern Conference on Austronesian Languages*. University of Michigan Press.

Reid, Lawrence A. 2017. Re-evaluating the position of Iraya among Philippine languages. *Issues in Austronesian Historical Linguistics, JSEALS Special Publication, 1*, 23-47.

Woodfield, Hannah M. For publication. "Nominative-accusative case marking in the Buhidic subgroup of Mangyan languages." In Mercedes D. Arzadon, Antonio D. Igcalinos, and Thomas E. Payne (Eds.), *Philippine languages and education reform: Papers in honor of Ricardo Ma Duran Nolasco.* University of Sorsogon Press.

Zorc, R. David. 1974. Internal and external relationships of the Mangyan languages. *Oceanic Linguistics* 13(1/2):561–600.

# NOT QUITE A VOWEL, NOT QUITE A FRICATIVE: RETHINKING CATEGORISATION OF FRICATIVE VOWELS THROUGH ACOUSTIC AND ULTRASOUND EVIDENCE

#### **AIXIN YUAN**

WAIPAPA TAUMATA RAU - UNIVERSITY OF AUCKLAND

**Keywords:** fricative vowels, apical vowels, segment classification, fricative-vowel continuum, Chinese phonetics, phonological categories

Fricative vowels are segments that exhibit both sustained frication and vocalic formant structure, challenging the traditional consonant-vowel dichotomy. While prior studies (e.g., Faytak 2018; Shao 2020; Westerberg 2020) have documented such segments in languages including Suzhou Chinese, Jixi Hui Chinese, and Swedish, no principled framework currently exists for classifying these sounds within the segmental system.

This study draws on coronal fricative vowels [x, y] in Changzhou Chinese and proposes a fricative-vowel continuum to capture their ambiguous phonological status. Forty native speakers participated in a production experiment. Acoustic data were collected and analysed using Praat (formants, Harmonic-to-Noise Ratio, Zero-Crossing Rate), while midsagittal ultrasound tongue imaging was obtained from six participants and processed using EdgeTrak. All data were analysed and visualized using (SS)ANOVA in R. Stimuli were CV-structured and included both sibilant and non-sibilant onsets.

The results reveal mixed properties: fricative vowels show clear formant structure, syllabicity, and tone-bearing capacity, supporting a vocalic classification. However, they also exhibit low HNR, high ZCR, and spectrogram patterns typical of fricatives. Ultrasound imaging further shows tongue postures highly overlapping with the alveolo-palatal affricate [tɛ].

These findings suggest that fricative vowels do not fit neatly into the consonant-vowel dichotomy and are best analysed along a fricative-vowel continuum. This continuum spans high vowels, apical vowels, fricative vowels, and fricatives, reflecting the gradient nature of their phonetic realization and phonological behaviour (cf. Chitoran et al. 2009; Cohn 2006). Placement along the continuum draws on Pike's (1947) criteria: syllabicity, frication type, contextual dependence, and inter-/intra-speaker variability. However, this also raises questions such as how language-specific phonotactic constraints influence the positioning of fricative vowels along the continuum, and to what extent acoustic properties shape their phonological categorization. These remain important issues for future research.

# LEARNING OF SEMANTIC PROSODY IN THE FIRST AND SECOND LANGUAGE

### ZHENTONG (FRANCIS) ZHAN, IRINA ELGORT & ANNA SIYANOVA-CHANTURIA

TE HERENGA WAKA - VICTORIA UNIVERSITY OF WELLINGTON OF WELLINGTON

Keywords: semantic prosody, novel word learning, affective priming, vocabulary acquisition, valence

The present experimental laboratory study investigates whether L1 and L2 English speakers can acquire semantic prosody of novel words through exposure to contexts that differ in their emotional valence (positive, negative, or neutral). Semantic prosody (Hunston, 2007; Louw, 1993; Sinclair, 2004) is operationalised as emotional meaning bias resulting from encountering a novel words in emotionally positive or negative contexts, compared with neutral contexts (e.g., Hauser & Schwarz, 2016, 2018; Xiao & McEnery, 2006). L1 and L2 participants (n=50 per language group) were instructed to infer the meanings of nine novel words (pseudowords) by reading five short passages with these words that were consistently positive, negative, or neutral. The learning materials were adopted and adapted from Snefjella et al. (2020). To measure the acquisition of semantic prosody, an affective priming task (Ellis et al., 2009; Hauser & Schwarz, 2022) was administered immediately after the learning phase. We hypothesised that, participants' emotional judgement of the target words as positive or negative will be significantly faster in the emotionally congruent (when the semantic prosody of the prime is aligned with the emotional valence of the target) compared to the incongruent conditions. Two additional post-tests were administered, immediately after the priming task (in the lab) and again after one week (independently, online): an emotional valence rating task and a form-meaning matching task. We expected the novel words that were presented in emotionally non-neutral conditions to be rated higher on the emotional scale than neutral words, if their semantic prosody was acquired. We also tested whether contexts carrying emotional meanings influence the accuracy of novel word meaning inference and recall, as found by Snefjella et al. (2020) in L1 speakers. A linear mixed-effects model, a cumulative link mixed model and a logistic regression model were respectively fitted to the data from the three tasks.

# WILL LEARNERS' ATTITUDES TO CHATGPT-GENERATED WRITTEN CORRECTIVE FEEDBACK CHANGE FOLLOWING USE?

### **MENGXUAN ZHANG**

TE KUNENGA KI PŪREHUROA - MASSEY UNIVERSITY

**Keywords:** ChatGPT, written corrective feedback, attitudes, R Language

ChatGPT and related large language models are increasingly used to generate written corrective feedback (WCF) for L2 writing. While Al-assisted feedback promises immediacy and consistency, its pedagogical value depends on learners' attitudes and whether those attitudes change through authentic use. This study will examine if and how learners' attitudes toward ChatGPT-generated WCF will shift after applying it to revise their writing, and how learners will characterize the strengths and limitations of ChatGPT-generated feedback, drawing on the Feedback Literacy literature and constructs from Technology Acceptance Model and the Unified Theory of Acceptance and Use of Technology. Twenty CEFR B2 ESL learners will complete a pre-survey before exposure and a post-survey after revision. Measures will draw on 5-point Likert scales targeting learners' attitudes such as perceived usefulness, ease of use, trust/credibility, and intention to use. Each learner will produce one IELTS-style argumentative essay (~300 words) and will revise it using ChatGPT-generated WCF produced via a standardized prompt with masked provenance. Semi-structured interviews will probe rationales for acceptance or skepticism. The study will address two primary questions: (1) Will ESL learners' attitude toward ChatGPT-generated WCF change after hands-on use? (2) How will learners characterize the strengths and limitations of this feedback based on their perceptions and experiences?

As data collection is scheduled for after the conference, the presentation will present a focused review of the literature and outline the study protocol, specifying the instruments, sampling procedures, and planned analyses.

