

IN THE FIELD

No Woman No Kraj: A Linguistic Analysis of the Slogans in Protest Against the Abortion Ban in Poland

A HANDS-ON Approach

Constructing the Unconstructable: The Case(s) of Esperanto



Behind The Bookshelves

Gender-inclusive Language and Mental Representation



CONTENTS

Editor's Letter A Welcome from ULAB's Chairs

6





In The Field: Politics

8 No Woman No Kraj: A Linguistic Analysis of the Slogans in Protests Against the Abortion Ban in Poland

12 Reporting Extinction Rebellion: Furious Commuters and Mobs

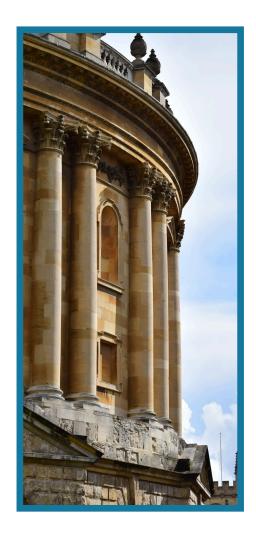
14
BEHIND THE BOOKSHELVES: THE MIND
16 Gender-inclusive Language and Mental Representation
18 A Closer Look at the Contextual Linguistics Profile Questionnaire (CLiP-Q)
20 Abstract Spotlight: Recent and Present PhD Research into "The Mind"

THE REAL WORLD: FORENSICS 26 In Conversation with: Dr Claire Hardaker

28 A HANDS-ON APPROACH: WRITING SYSTEMS 30 Constructing the

24

Unconstructable: The Case(s) of Esperanto **34** Thaana Puzzle **35** Mandombe Puzzle





34

Contributors Social Media

EDITOR'S LETTER

As now seems standard at ULAB, this issue of U-Lingua has attempted to innovate further from its previous two. What's new this time? We've introduced themes! With Section Editors now established in their roles, it was felt that having themes could help guide article recruitment, writing, and the general reading experience. The content within this issue broadly centres around four themes: politics, the mind, forensics, and writing systems. If this is something you enjoy, or if you have recommendations for future themes, we'd love to hear from you!

An interesting point of note concerns the specific writers for this quarter's publication. I'm pleased that the pool of writers we've drawn from has been able to expand into the postgraduate realm; many PhD students in Linguistics or related fields have contributed to *Behind the Bookshelves*! From an editorial perspective, it's exciting that the magazine's reach continues to grow in ways that provide interesting reading for all of you! I'm also quite excited about the interview with Dr Claire Hardaker, expert in forensic linguistics at Lancaster University, about her wonderful podcast (called *en clair*; it's a hit with my family on long car journeys!). Thanks must be given to Section Editors, writers, and contributing photographers, as well as to Anne for designing the magazine over the festive time!

I hope you all enjoyed a restful holiday period leading up to New Year's Eve. Wherever you are, please stay safe, take care of yourself and loved ones, and, from us, keep going!

T. R. Williamson Editor-in-Chief, U-Lingua Archivist, Undergraduate Linguistics Association of Britain University of Cambridge

U-Língua

I know you didn't think ULAB could get any bigger, but over the last few months we've managed to grow our team even more! We've welcomed in some Copyeditors and a Secretary for the Journal, and a whopping eleven new Institutional Representatives, and I'm pleased to say we now have four different countries represented among our IR board! On the topic of international collaborations, in November I had the pleasure of being involved in a presentation at StuTS, a student linguistics conference based in Germany, where I got to talk to representatives from other student linguistics organisations around Europe about the similarities and differences between our organisations. This was a really enjoyable experience and I am looking forward to hopefully collaborating more with our friends in Europe and the rest of the world in the future.

As we know it can sometimes be difficult to find linguisticsy things to do in the summer, we have compiled a list of linguistics-related summer schools and student conferences for you to attend in 2021, which can now be found on our website, under 'Summer Opportunities'. We've also been running a number of online social and academic events over the last few months, including a super cool workshop on creating language puzzles by Prof. Graeme Trousdale and Dr. Pavel losad. We are currently in the early stages of planning our online events for 2021, so if there's anything you want to see from us in terms of events, feel free to drop us an email! I hope that you all enjoy the rest of the winter break, and I'll throw in a cheese pun here just in Käse you're still reading.

Cliodhna Hughes National Chair, Undergraduate Linguistics Association of Britain University of Edinburgh

The move to an online conference has been really exciting for a number of reasons. We're hoping to welcome people from across the world, including our plenary speakers, who hail from Aberdeen to Japan. The local committee was successful in gaining a grant from the University of Aberdeen Development Trust, which will be used to provide access to British Sign Language (BSL) users, and will allow students to present their research in BSL. We will be asking for access needs of individual attendees once we open registration for the conference. Although an online conference is a compromise in the midst of the pandemic, it considerably widens the reach and accessibility of ULAB, and you can even attend from the comfort of your bed if you want. The call for papers was recently released, which you can access through our website www.ulab.org.uk/conferences/conferences/42. It closes on January 31, 2021. We are accepting abstracts from all over the world, and on any topic related to linguistics, from corpus linguistics to philosophy of language. While we can't wait to read your abstracts, we hope you have a well-deserved rest over the winter break and that your university assignments were all bearable.

Beatrix Livesey-Stephens Local Chair, Undergraduate Linguistics Association of Britain University of Aberdeen

IN THE FIELD Politics

8 No Woman No Kraj: A Linguistic Analysis of the Slogans in Protests Against the Abortion Ban in Poland

12 Reporting Extinction Rebellion: Furious Commuters and Mobs

U-Lîngua

THERE IS NO PLANET B d.de **#ACTNOW**

No Woman No Kraj: A Linguistic Analysis of the Slogans in Protests Against the Abortion Ban in Poland

Olivia Szczerbakiewicz, 4th year MA English Language and Literature, University of Edinburgh

O n the 22nd of October, the most expansive wave of protests in decades began in Poland in response to a new, strict, anti-abortion law. In this article, I will consider the linguistic content of poster slogans used by the protesters. In my analysis, I will use frame theory and concepts of metaphor as theorised in cognitive linguistics, context as outlined in pragmatics, and rhetoric figures as defined in stylistics.

In *The Oxford Handbook of Pragmatics*, Fetzer argues that common context is synonymous with sociocultural context, with speakers sharing not only a grammar, but 'ways of orienting themselves in social context'^[1]. Thus, the slogans chosen for the purposes of this article can be divided in into two categories: • Those situated either in a 'native' context, relating to shared sociocultural background of the protesters or in a 'world' context, which utilise interlanguage schemata and linguistic parallels with English.

• Those generated directly in response to the specific content of either the abortion ban itself or the ideological discourse of the ruling party.

Let us begin with an example of a slogan utilising the shared sociocultural context of the protesters:





Jeszcze Polka nie zginęła. The Polish [woman] hasn't died yet.

In order to deconstruct the mechanism of this slogan, a parallel is drawn with the opening of the Polish national hymn:

Jeszcze Polska nie zginęła. Poland hasn't died yet.

The minute phonological difference between the words *Polska/Polka* achieved by the elision of the consonant [s], maintains the same rhythmic pattern as the lyric known to every citizen and thus belonging to a deeply

U-Lîngua



entrenched cognitive schema, making it particularly salient in context of the nation-wide protests. From a stylistic viewpoint, the slogan utilises hyperbole, which underscores the stance of the speaker and appeals to the audience emotionally. This, too, operates on a double level, as it subverts the ruling party's levelling of its political support with patriotism. It is also an example of metaphor as understood in context of cognitive linguistics. Lakoff's Conceptual Metaphor Theory outlines metaphor as the mapping of a token from the source into the target domain matrix, 'A understood in terms of B' where A does not typically function in the scope of terms of B^[2]. Here, this means *Country-as-Woman*, or more specifically *Poland-As-Woman*, made even more salient by the feminine grammatical form of the word *Polska*.

A complimentary pattern of context can be observed in another slogan:

No woman no kraj. No woman no country. Similarly, as in the case of the previous example, the slogan appeals to the significance of the figure of a woman in the specific context of the strike and the abortion ban; as once again the *Country-as-Woman* metaphor is utilised through the implicature of a nation being unable to exist without women. This time, the rhetoric effect is achieved through the utilised homonymous pronunciation of the Polish word *kraj* and English *cry*, drawing a parallel to the song *'No Woman no Cry'* by Bob Marley. This appeals to a different, but similarly salient, schema pertaining to popular culture.

Let us consider another example located in world context:

PiS off (Prawo i Sprawiedliwość = the ruling party) off

Once again, the slogan uses the homonymous pronunciation of the English colloquial phrase *piss off* and the abbreviation of Poland's ruling party. Parsed in context of the strikes, it has a double meaning: both appealing directly to the absent addressee. This particular use of rhetoric links to a parallel pattern of development observed in the slogans, which I will analyse in the next section of this article.

First, I will consider at a slogan relating directly to the contested abortion ban:

Rząd nie ciąża, można usunąć. The government is not a pregnancy, it can be terminated.

As opposed to the previously considered examples, which were either considerably more whimsical or subtle, this rhetoric is more direct and visceral. As suggested by Cockroft & Cockroft (2005), rhetors follow 'patterns of expectation' and thus select particular *topoi* relevant given audience expectation of particular discourse content^[3]. There is a clear shift in the utilisation of *ethos* (personality and stance of the speaker) and *pathos* (arousal of emotion); here it appeals to a shared context of disillusionment between the protesters and directs an accusation at the government rather than calling for unity.

Next, let us consider a slogan woven in direct response to the ideology posited by the ruling party:

Niewola Boża. God's captivity.

Here, morpheme affixation is utilised in order to achieve its rhetoric effect and relates to a commonly entrenched phrase:

> *Wola Boża.* God's will.



Through the introduction of the prefix *nie*-, the slogan works on two levels: the first is the negation of the word *will*, which subverts the use of religious dogmas by pro-life advocates. The second, more nuanced, relates to the lexical meaning of the word *niewola* ('captivity'). The abortion ban is hence linked to the influence of the Catholic Church on the conservative policies of the government. Thus, it relates to a new shared context and responds directly to the use of religious values as a justification for the abortion ban.

The final example of slogans developed in response to discourse is the use of profanation as a direct response to the statement that protests ought to be 'cultured'. Various iterations of slogans combining cordial syntactic structure with profanity followed, such as: *Uprzejmie proszę wypierdalać.* I cordially invite you to get out.

The most striking example has been the popularisation of the slogan *wypierdalać* as the leading motto of the protest. The explicit term, literally meaning 'get out' or 'to get out' shares the 4-syllable pattern ending with the soft consonant $-\dot{c}$ with the word *solidarność* the name of the leading opposition movement in the collapse of communism in late Soviet era Poland of 1980s. *Solidarność* translates literally to solidarity, and the name itself was initially used as a slogan. The link between the protests at the collapse of communism and the current situation persists in:

Nasi rodzice obalili komunę, my obalimy PiS. Our parents struck down communism, we will strike down PiS.

> Parallels drawn thus combine the ways of appeal I have discussed, by both uniting the protesters in the entrenched historical context and addressing the party directly.

> The slogans created in the protests in Poland are reflective of an array of varied linguistic properties. Their development relates both to diachronically and synchronically occurring contexts and utilises the nuance of language in order to effectively broadcast the message and appeal to the audience. Given the dynamic nature of the linguistic environment of the protests, new patterns like the ones demonstrated are likely to emerge as the protests continue.

References:

[1] Huang, Y. (Ed.). (2017). The Oxford Handbook of Pragmatics. Oxford: Oxford University Press.

[2] Lakoff, G. (2008). The neural theory of metaphor. In Raymond W. Gibbs Jr., ed. The Cambridge Handbook of Metaphor and Thought. Cambridge: Cambridge University Press: 53-67.

[3] Cockroft, R., & Cockcroft, S. (2013). Persuading people: An introduction to rhetoric. Macmillan International Higher Education.



Reporting Extinction Rebellion:

Furious Commuters and Mobs

Poppy Plumb, MA Discourse Studies, Lancaster University

It's hard to choose one adjective that can summarise 2020: unprecedented? Tumultuous? Something more explicit? News outlets in all their forms certainly haven't had a 'slow news day' for quite some time, between COVID-19, the U.S. Presidential election, the Black Lives Matter protests, and of course, climate change. For us linguists, news reports can provide a wealth of data to uncover the discourses that permeate our lives. As Fowler argues, news outlets use language to "reflect, and in turn reshape, the prevailing attitudes of a society"[1]. In this vein, I will compare how two news report headlines about an Extinction Rebellion protest frame the organisation via the reporters' linguistic choices. I will consider these representations particularly through the lens of 'non-protestors', or, of those who do not have a represented political affiliation or institutional power. This particular choice of approach is motivated by Stamou, who argues that readers can interpret protests through the lens of non-protestors because they are seen as regular members of the public, which in turn affects how news outlets frame protest organisers such as Extinction Rebellion^[2].

Self-defined as an 'international movement', *Extinction Rebellion* use 'non-violent civil disobedience' to bring awareness and change around the climate crisis, meaning members aim to avoid violence in their protests^[3]. However, this was not the case in an October 2019 protest, when two protestors climbed on top of a London Tube carriage to prevent it from departing the station. Subsequent video footage depicted these protestors being pulled from the train by non-protestors (members of the public) in violent scenes, from which *Extinction Rebellion* later distanced themselves^[4]. This protest was reported by news outlets across the UK, including *The Sun* and *The Guardian*. These two papers have diametrically opposing political leanings, *The Sun* being a right-wing tabloid, and *The Guardian* a left-wing broadsheet^[5]. Given that differing political biases of these newspapers may shape

the ways in which *Extinction Rebelli*on are represented through the lens of non-protestors, analysing their linguistic choices may uncover the underlying ideologies and discourse

surrounding Extinction Rebellion and their protest involvement.

To dissect these headlines, I'll be employing methods of transitivity analysis combining approaches by Halliday and Van Leeuwen^[6]. Transitivity is a framework of linguistic analysis that focuses on the clause-as-representation, allowing analysts to interpret how social actors and processes, or people and the actions in which they participate, are represented at the clausal level. These individual lexico-grammatical choices can be analysed to uncover more nuanced representations across both texts. Whilst there are abundant social actor and process categories offered by Halliday and Van Leeuwen respectively, here I'll be discussing those that are most pertinent for analysis.

Let us then turn to the headlines of these two newspaper reports as we begin to uncover how the representation of non-protestors frame the newspapers' attitudes towards *Extinction Rebellion*.

The Sun: 'VIGILANTE ATTACK': Cops investigate COMMUTERS caught up in Extinction Rebellion chaos after protestor was pulled off Tube train roof^[7]

The Guardian: Extinction Rebellion rush-hour protest sparks clash on London Underground: Commuters clash with demonstrators over morning rush hour disruption^[8]

Non-protestors are represented as 'commuters' in both headlines; an example of what Van Leeuwen calls 'functionalization', or when social actors are represented by what they do. 'Com-



U-Língua



muters', as opposed to 'passengers' or the 'public', implies that the non-protestors are regular train-users trying to get to work, and could invoke sympathy for the non-protestors because their journey has been disrupted. In this sense, Extinction Rebellion are framed as a disruptive organisation, perhaps unsurprisingly given their self-proclaimed aims of 'civil disobedience'.

Where the two headlines differ is in terms of the processes in which these non-protesting commuters are participating, whether actively or passively. In The Sun's headline, 'ATTACK' has undergone a process of nominalization and is pre-modified by the adjective 'VIGILANTE', leaving the role of non-protestors carrying out this 'vigilante attack' ambiguous. This is an example of what Van Leeuwen labels 'suppression' as the role of non-commuters is not explicitly represented in the clause, and functions to mystify the non-commuters' responsibility. A similar linguistic act of suppression is present in the headline's final clause: 'after protestor was pulled off Tube train roof'. As a passive clause with no explicit responsible agent, this is an example of passive-agent deletion in which the non-protestors involved are suppressed, thus further diminishing non-protestors' responsibility in their actions against Extinction Rebellion. Instead, non-commuters are 'caught up' in the protest, an example of Halliday's more ambiguous behavioural process that represents physiological and psychological behaviour. In being 'caught up' in the protest, non-protestors are represented as patients of Extinction Rebellion's actions and not as causing violence, ultimately serving to diminish non-protestors' responsibility and frame Extinction Rebellion more negatively.

Contrastingly, in The Guardian, the 'commuters' participate in

a material process as they 'clash' with Extinction Rebellion 'demonstrators'. Here, the non-protestors' role is represented more clearly than in The Sun's headline in relation to the processes in which they participate. In this 'clash', one could assume that the commuters and demonstrators are in equal opposition because the two social actor groups must input some energy for the clash to occur. However, findings from cognitive approaches to discourse analysis suggest differently: Hart found that whilst 'clash' may initially demonstrate 'reciprocal action', there is in fact an asymmetrical relationship in the social actor groups' roles depending on which group precedes the verb^[9]. The non-protesting 'commuters' precedes the verb in this example, and therefore suggests that the foregrounded commuters have more agency in causing this clash, thus more responsibility for causing violence. This in turn alleviates Extinction Rebellion's associations with violence.

We have determined through a transitivity analysis across the two headlines that The Sun represents non-protestors as holding comparatively little responsibility in the violent protest event, whereas they hold more responsibility in *The Guardian*'s headline. So why is this the case, and what does this mean for the representation of Extinction Rebellion? The political orientations of both newspapers are certainly at play here. Cottle suggests that 'drama, spectacle and violence' have become more central to media representations of protest, and it may be that violence is more likely to be sensationalised in right-wing media^[10]. Similarly, The Guardian as a left-wing broadsheet may be more sympathetic to Extinction Rebellion's aims because of Extinction Rebellion's own stance as an organisation advocating for an issue that has been politicised to the left (climate change), meaning that blame for violence is attributed more towards the non-protestors. What is clear is that scrutinizing the lexico-grammatical choices around non-protestor representation can reveal how differing political stances and ideologies can shape the representation of protest organisers. The lens of non-protestors is therefore a fruitful tool for analysing demonstrations portrayed in future news reports, especially in our turbulent world where protests are becoming all too common.

References:

[1] Fowler, R. (1991). Language in the News: Discourse and Ideology in the Press (1st ed.). London: Routledge [2] Stamou, A. (2001). The Representation of Non-Protestors in a Student and Teacher Protest: A Critical Discourse Analysis of News Reporting in a Greek Newspaper. Discourse Soc., 12(5), 653-680.

[3] About Us - Extinction Rebellion. (2020). Retrieved from https://rebellion.earth/the-truth/about-us/

2020, from https://www.theguardian.com/environment/2019/oct/17/extinction-rebellion-activists-london-underground [9] Hart, C. (2013). Event-construal in Press Reports of Violence in Two Recent Political Protests. JLP, 12(3), 400-423.
 [10] Cottle, S. (2008). Reporting Demonstrations: The Changing Media Politics of Dissent. Media Cult Soc, 30(6), 853-872.

^[4] The Telegraph. (2019). Commuters Turn on Extinction Rebellion as Protesters Target the Tube [Video]. Retrieved from https:// www.youtube.com/watch?v=9P1UXYS6Bmg

Www.youtubecommerce of the control of the contro

^[6] Halliday, M., & Matthiessen, C. (2013). An Introduction to Functional Grammar (3rd ed.). London: Arnold. [7] Diebelius, G. (2019). Cops Investigate Commuters Caught Up in Extinction Rebellion Chaos. Retrieved from https://www.thesun.

 ^[1] Skowa Processor (1997)
 [2] Saver and Skowa Processor (1997)
 [3] Gayle, D., & Quinn, B. (2019). Extinction Rebellion Rush-Hour Protest Sparks Clash on London Underground. Retrieved 7 January

BEHIND THE BOOKSHELVES The Mind

16 Gender-inclusive Language and Mental Representation

18 A Closer Look at the Contextual Linguistics Profile Questionnaire (CLiP-Q)

20 Abstract Spotlight: Recent and Present PhD Research into "The Mind"

U-Lîngua



Gender -inclusive Language and Mental Representation

Ashley Thornton, Linguistics and Languages PhD, University of Brighton

eborah Prentice said at the heart of language reforms is the idea U that they can help to change people's way of thinking^[1]. More specifically, by changing gender norms in language we can invite changes in society and vice versa^[2]. Epicene pronouns are a good example of the interaction between mental imagery - how we think - and language use - how we communicate. In English, there are a few choices for epicene pronouns: singular they, generic he, coordinate he or she, and generic she. Of these, only singular they is truly gender-inclusive. This article will explore how the usage and mental representation of different types of epicene pronouns reflects and contributes to deeper-rooted societal androcentrism, through excluding feminine and non-binary identities. Androcentrism is where masculine is seen as the centre and the default experience of a people, and in doing so it excludes both the feminine and non-binary identities. It is hoped that, by altering the current usage of gender-inclusive language, the associated androcentric mental representations can change, and this will, in turn, change society.

The debates and studies on the usage of epicene pronouns are many. Studies are primarily interested in how language and society interact, but some research focuses inward on how epicene pronouns are produced and affected by our mental representation of a person. For instance, reading a text that uses generic he is more likely to generate male imagery than either female or mixed imagery for both children and adults^[3]. This tendency can affect both the gender-related thoughts and the behaviour of the speaker. Take the noun surgeon in English; it is not formally marked for gender, but it does tend to be used more with generic he and generate the image of a man^{[4][5]}. Continued usage of generic he and the associated male imagery it generates, can result in implicit gender marking of the noun. This marking is referred to as the noun's social gender. Strong social gender marking tends to occur with occupational roles that have high levels of gender segregation, meaning that the workers are highly skewed towards one gender or there is a skewed historical perception^{[6][7][8]}. It is this 'male as norm' perception that can lead to the occlusion of the women and non-binary people in those roles, rendering non-male identities 'invisible'.

It is important to note that studies have found a difference between mental imagery and language use depending on the speaker's gender identity^{[1][9]}. Women show a tendency towards greater sensitivity for

gender in language than men, likely because it is more consequential for them^[1]. For example, when imagining the referent of the coordinate he or she and singular they, women are more likely to imagine a higher ratio of mixed gender images than men^[9]. Men tend to imagine a more mixed ratio of referents with singular they than with the coordinate he or she; however, men still imagine less feminine referents than wo-men^[9].

To counteract androcentrism, gender-inclusive language reforms have recommended the usage of more inclusive pronoun alternatives like singular they, a current favourite in most English contexts, and the coordinate he or she, which tends to be more frequent in formal contexts^[2]. It is thought that these pronoun choices might be adopted more quickly and easily than others as English speakers already know and understand how they operate grammatically^[10]. Changings people's mental representation of nouns, however, might be harder to do as it requires continued reinforcement of gender-inclusive language elements across both spoken and written language. Therefore, while the increased efforts to reduce sexist language and adopt gender-inclusive forms might contribute to reducing the visibility of gender bias, it has not yet corrected it^[11].

There have been studies on the relationship between gender-inclusive language use and the mental imagery produced by speakers. One study conducted by Gastil^[10] consisted of 12 sentence prompts that participants read and then described verbally the images they brought to mind. The study found that, of the three pronoun options investigated (generic he, coordinate he or she, singular they), generic he produced mostly male imagery whereas singular they produced mostly mixed gender



images. The coordinate he or she was found to be somewhere in the middle. This suggests that while the coordinate he or she has not yet overcome gender bias, singular they possibly has.

Another study conducted by Prentice^[1] investigated the effects of language reform on thought. The study divided the students of an Intro Psychology class, with half functioning as the control group and half as the experimental group. Over the course of the semester, the experimental group had their usage of generic he corrected to more gender-inclusive pronouns. At the end of the semester, they found that only the students' usage, and not their mental imagery or attitudes towards language reforms had changed. However, it is important to note that Gastil and Prentice conducted their studies in the 1990s. Their findings might be different if the experiment was replicated today, partly due to changing gender roles and expectations over the last thirty years. The increased visibility of non-binary identities may also influence the gender balance of the mental images produced.

It is difficult to measure a person's mental imagery and it is even more difficult to pinpoint the factors that contribute to the generation of that image. It is possible, however, to demonstrate a link between language and one's behaviour and mental imagery. The studies mentioned above have shown that all three of these elements can be affected, however temporarily, by environment and experience. Perhaps, given enough time, language reform can create an inclusive environment and inclusive language experiences that will permanently alter the mental imagery that accompanies socially marked nouns.

References:

Prentice, D. A. (1994). Do language reforms change our way of thinking? Journal of Language and Social Psychology, 13(1), 3-19.
 Stormborn, C. (2018). Epicene pronouns in intermediate to advanced EFL writing. International Journal of Learner Corpus Research, 4(1), 1-22.

 [3] Bigler, R. S., & Leaper, C. (2015). Gendered language: Psychological principles, evolving practices, and inclusive policies. Policy Insights from the Behavioral and Brain Sciences, 2(1), 187-194.
 [4] Mucchi-Faina, A. (2005). Visible or influential? Language reforms and gender (in) equality. Social Science Information, 44(1),

189-215. [5] Prewitt-Freilino, J. L., Caswell, T. A., & Lakso, E. K. (2012). The gendering of language: A comparison of gender equality in provide and advantaged activity and and data (activity). Second 2010, 2010.

countries with gendered, natural gender, and genderless languages. Sex roles, 66(3-4), 268-281. (6) Blackburn, R. M., Jarman, J., & Brocks, B. (2000). The puzzle of gender segregation and inequality: A cross-national analysis. European Sociological Review, 16(2), 119-135. (7) Blackburn, R. M., & Jarman, J. (2006). Gendered occupations: Exploring the relationship between gender segregation and

[7] Blackburn, R. M., & Jarman, J. (2006). Gendered occupations: Exploring the relationship between gender segregation and inequality. International Sociology, 21(2), 289-315.

 Blackburn, R. M., Browne, J., Brooks, B., & Jarman, J. (2002). Explaining gender segregation. The British journal of sociology, 53(4), 513-536.
 Gastil, J. (1990). Generic pronouns and sexist language: The oxymoronic character of masculine generics. Sex roles, 23(11),

(10) Jostan J. (100): Jostan Printeino and Jostan Englogigi. The symptomic undered of macdening generation of the symptomic on additional control (2014).
 (10) Koeser, S., Kuhn, E. A., & Sczesny, S. (2014). Just reading? How gender-fair language triggers readers' use of gender-fair forms.

Journal of Language and Social Psychology, 34(3), 343-357. [11] Gabriel, U., Gygaz, P. M., & Kuhn, E. A. (2018). Neutralising linguistic sexism: Promising but cumbersome? Group Processes & Intergroup Relations, 21(5), 844-868.



A CLOSER LOOK AT THE CONTEX-TUAL LINGUISTIC PROFILE QUESTI-ONNAIRE (CLIP-Q)

Mandy Wigdorowitz, Third-year PhD candidate, Theoretical and Applied Linguistics, University of Cambridge

A core aim of linguistic research is to describe and quan-Atify language experience systematically and accurately. Typically, this involves using some sort of language profiling measure where linguistic information of input and usage, age of acquisition and exposure, and proficiency is captured either through self-report or, in the case of children, by their parents, guardians, or teachers. This information may be further derived from performance or screening measures which aim to capture specific linguistic skills, such as lexical knowledge, grammar, semantics, morphosyntax, phonology, and so forth. The application and suitability of a language profiling measure is of particular importance when psycholinguistic inferences are to be made based on linguistic distinctions, such as whether one group has greater cognitive flexibility than another, for instance.

Language profiling is commonly the first point of data collection in empirical studies aimed at investigating differences across designated language groups. The information gleaned from these measures plays a vital role in the description, division, and comparison of participants, usually according to their language proficiency, use, or dominance. Therefore, it is essential that such tools incorporate a broad and valid range of linguistic information that can be used, at minimum, as a baseline for describing an individual's language experience.

Although much work has been done in this regard, there is little to no uniformity or standard method as to how and by what measure language experience should be captured, which has led to insufficient language profiling in many studies. However, given the appeal and expansive interest in bilingualism and multilingualism research, it seems unlikely that a one-sizefits-all method will prevail. Rather, the goal should be attaining language experience about the participants that satisfies best practices. This entails having a flexible measure that also captures sociolinguistic experience, which adds vital information to overall language knowledge, in addition to dominance and similar indicators.

As it stands, language measures have largely focused on the language repertoires of children^[1]. Most language profile questionnaires have been designed to investigate active linguistic input and experience of child populations, while there are far fewer that capture aspects of language history, use, and proficiency of adults^{[e.g., 2][3]}. Even more surprising is that none of these measures evaluate both individual and contextual linguistic diversity as distinct features comprising the language profile.

To address this gap in the literature, my colleagues and I have developed the Contextual Linguistic Profile Questionnaire (CLiP-Q)^[4]. The CLiP-Q is a holistic language profiling measure that captures key information about individual and contextual linguistic diversity in addition to general language background and usage information. It comprises four sections (demographic information; language history, background and usage; socio-economic status; and the Contextual and Individual Linguistic Diversity Questionnaire), which, taken together, provide a comprehensive linguistic profile of adults situated across various sociolinguistic contexts.

As part of the CLiP-Q, we developed a novel measure, the Contextual and Individual Linguistic Diversity Questionnaire (CILD-Q). The CILD-Q is designed to investigate linguistic diversity within the individual and as a feature of their contextual linguistic exposure. To evaluate the psychometric validity and reliability of the CILD-Q, we surveyed participants across two linguistically different contexts, but where English is dominant: South Africa and the United Kingdom^[4]. The validated questionnaire comprises 18 statements concerning sociolinguistic diversity that range on a scale from strongly agree to strongly disagree. The questions are phrased in relation to the country that participants report having lived in for the majority of their lives (i.e., where they have received the greatest sociolinguistic exposure). Given its dominance in both contexts, English is the reference language also used to frame the questions. For example, "Most people from South Africa can communicate in more than one language" and "It is not often that I am exposed to people speaking languages other than English". Participants indicate how much they agree with each statement and receive a score that corresponds to three scales that we found, through an exploratory factor analysis, to measure contextual linguistic diversity. These scales include multilingualism in context (contextual use, societal practice, and community language norms of multiple languages in addition to English), multilingualism in practice (exposure to linguistic

diversity as a feature of direct or indirect spoken communication), and linguistic diversity promotion (societal and governmental promotion and encouragement of linguistic diversity).

In order to appropriately characterise speakers within dynamic language contexts, we need to consider their diverse experiences with respect to contextual language use. Having a holistic and flexible measure of language experience that captures information about sociolinguistic context will indicate where the speaker is linguistically situated and provide a rigorous and reliable starting point for making group comparisons in psycholinguistic research, as is particularly crucial in studies investigating the 'bilingual advantage'. Moreover, the CILD-Q can tell us more about how certain languages may be valued more or less than others and how language can be used in a dynamic and contextual manner, thus providing a more comprehensive measure of one's language experience. We encourage language researchers working with individuals in linguistically diverse contexts, both in and beyond the Global North, to use and adapt the CLiP-Q to address the needs of their research.

References:

 Kaścien, D., Prevost, P., Serratrice, L., Tuller, L., Unsworth, S., & De Cat, C. (2020, October 20). A Review of questionnaires quantifying bilingual experience in children: Do we document the same constructs? https://doi.org/10.31219/sf.io/nny2s
 Li, P., Zhang, F., Yu, A., & Zhao, X. (2019). Language History Questionnaire (LHQ3): An enhanced tool for assessing multilingual experience. Bilingualism: Language and Cognition, 1–7. doi:10.1017/S1366728918001153
 Marian, V., Blumenfeld, H. K., & Kaushanskaya, M. (2007). The Language Experience and Proficiency Questionnaire (LEAP-Q): Assessing language profiles in bilinguals and multilinguals. Journal of Speech, Language, and Hearing Research, 50, 940–967.
 Wigdorowitz, M., Pérez, A. I., & Tsimpli, I. M. (2020). A holistic measure of contextual and individual linguistic diversity. International Journal of Multifingualism. Advance online publication. https://doi.org/10.1080/14790 718.2022.01858921



Abstract Spotlight Recent and Present PhD Research into "The Mind"

Mind the verbs!

Irene Fally is a 2nd year PhD student in Romance Linguistics at the University of Vienna.

Imagine you are sitting in front of a dark screen. Suddenly a light flashes on. There is a word on the screen – or is there? No, you are not in a sci-fi movie, you have been selected as a participant for a psycholinguistic experiment and are performing a lexical decision task, and if you are a native speaker of French or Italian, you might very well be participating in one of my experiments.

What I am trying to find out? My PhD research focuses on how verb formation works in French and Italian. Usually, word formation is studied in corpora; large collections of texts allow you to look for patterns, to see how often a certain prefix or suffix is used, and to discover how words from other languages are incorporated into the system of the target language. So, what do we need experiments for? While corpus studies are an integral part of studying word formation, they only allow us to see how the different word formation mechanisms are used; we learn nothing about what is going on in the speakers' minds.

How are the complex verbs resulting from verb formation stored in the mental lexicon, and how are they accessed? These are crucial questions for understanding why certain verb formation strategies are used and others are not. When we look at language it is important to remember that it is a product of our mind, a fact that needs to be taken into account when analyzing linguistic phenomena. The objective of my research is to go beyond a simple description of verb formation in French and Italian. Combining linguistic theory, descriptive accounts and psycholinguistic methods, I aim to gain a deeper understanding of how verb formation works in the two languages and why these strategies are used.

Who has the best profile to learn a tone language?

Tim Laméris is a PhD student in the Phonetics Lab at the University of Cambridge. He is interested in phonetics and second language acquisition, and particularly in second language acquisition of prosody. Before he started his PhD, he studied Japanese and worked in Japanese companies before returning to the academic world.

Why are some language learners better than others at mastering the sound patterns of a second language (L2)? Do they benefit from similarities to their native tongue, or are they simply good at listening or retaining information? What about L2 learners who embark on the challenge of learning a tone language, in which the relative pitch on words is crucial for lexical meaning?

My PhD research in the Phonetics Lab at the University of Cambridge is driven by these questions. I aim to find which individual learner "tools", both linguistic (such as language background) and extralinguistic (such as musical experience, pitch sensitivity, and working memory), form the ideal "toolkit" to learn lexical tones.

To investigate this, I conduct behavioural experiments, both in the phonetics recording studio and online. In these experiments, I train participants to learn words in an artificial tone language, and I look at the extent to which their language background and familiarity with lexical tones, as well as their extralinguistic skills, predict success in learning my artificial tone language.

Although I am still in the midst of collecting data from different groups of learners (Mandarin, Thai, Swedish, Japanese, English, and Dutch), it seems that first language (L1) knowledge of lexical tone is helpful but does not guarantee a default advantage in L2 acquisition of tones. Luckily, it seems that learners are quite good at using their available tools (either linguistic or linguistic) to help them acquire tones. I hope that the findings of my research will contribute to better speech training methods that are tailored to individual learner profiles.

The impact of socio-cognitive factors on language perception across the lifespan

Johanna Mechler studied English and Biology at Leipzig University, Germany, from which she obtained her First State Examinations (teaching degree for secondary schools) and MA in Anglophone Studies in 2018. In her graduation thesis she focused on language variation and change, mainly investigating the (in)stability of (ing) across the lifespan of six individuals from the Tyneside area. In 2020, Johanna joined the Sociolinguistics Lab at the University of Duisburg-Essen, where she is currently pursuing her PhD under the supervision of Prof. Dr. Isabelle Buchstaller (University Duisburg-Essen).

My research aims to investigate how the sociolinguistic perception of age is mediated by cognitive factors, using trend and panel data from the North East of England.

While Northern English varieties are well-described regarding variation and change in production^{[1][2]}, relatively few perception experiments have been conducted^{[3][4]}, none of which focus on the relevance of age for sociolinguistic perception. My PhD project addresses this gap by investigating the perception of vernacular features across the lifespan through three consecutive studies.

The first study explores the relevance of speaker age and gender, using stimuli-rich speech samples of the large LaVaLi corpus, that contains approximately 100 hours of sociolinguistic interviews. Applying interactive online tools^{[5][6]}, different informant groups will be asked to rate these samples according to perceived friendliness and professionalism. To test for effects of listeners' cognitive dispositions^{[3][7]}, the study design also includes questions on language attitudes, and the BAPQ^[8]. The second study relies on a similar experimental setup but includes listener age in the analysis; the third adds a post hoc commentary function to consider participants' motivations for a particular rating^[6].

Results of all three studies will be analysed using advanced statistical methods conducted in R. The cutting-edge experimental design and use of novel online tools contribute to a more holistic understanding of the cognitive underpinnings of age-related variability in language perception and the impact of such findings for language change across the lifespan.

References

[1] Watt, Dominic. 2002. 'I don't speak with a Geordie accent, I speak, like, the Northern accent': Contact induced levelling in the Tyneside vowel system. Journal of Sociolinguistics 6(1). 44-63.

[2] Buchstaller, Isabelle & Karen P. Corrigan. 2015. Morphosyntactic features of Northern English. In Raymond Hickey (ed.), Researching Northern English, 71-98. Amsterdam; Philadelphia: John Benjamins.

[3]Buchstaller, Isabelle & Erez Levon. 2015. Perception, cognition, and linguistic structure: The effect of linguistic modularity and cognitive style on sociolinguistic processing. Language Variation and Change 27(3). 319-348.

[4] Levon, Erez, Isabelle Buchstaller & Adam Mearns. 2020. Towards an integrated model of perception: Linguistic architecture and the dynamics of sociolinguistic cognition. In Karen Beaman, Isabelle Buchstaller, Susan Fox & James Walker (eds.), Advancing socio-grammatical variation and change: In honour of Jenny Cheshire, 32-54. London: Routledge.
 [5] Montgomery, Chris & Emma Moore. 2018. Evaluating S(c)illy Voices: The effects of salience, stereotypes, and co-present language variables on real-time reactions to regional speech. Language 94 (3). 629-661.

[6] Clark, Lynn & Kevin Watson. 2016. Phonological leveling, diffusion, and divergence: *Itl* lenition in Liverpool and its hinterland. Language Variation and Change 28(1). 31-62.
[7] Wagner, Suzanne Evans & Ashley Hesson. 2014. Individual sensitivity to the frequency of socially meaningful linguistic cues affects language attitudes." Journal of Language and Social Psychology 33(6). 651-666.

[8] Hurley, Robert, Molly Losh, Morgan Parlier, J. Steven Reznick & Joseph Piven. 2007. The Broad Autism Phenotype Questionnaire. Journal of Autism and Developmental Disorders 37. 1679-1690.

Developing production skills through implicit learning

Giulia Bovolenta completed a PhD in Theoretical and Applied Linguistics in 2019, focusing on the psycholinguistics of L2 learning, and specifically implicit learning mechanisms. Before coming to Cambridge, she did a BA in Philosophy and an MA in Cognitive Studies at the University of Sheffield, then an MPhil in Linguistics at the University of Oxford. She is now working at the University of York as a postdoc on the project "Processing for Acquisition", which looks at the role of prediction and error-based learning in second language acquisition.

Language proficiency largely relies on implicit knowledge, which is unconscious and operates independently of voluntary control. Implicit learning is a process of incidental learning which results in the acquisition of implicit knowledge. We know that adult learners can acquire knowledge of novel second language (L2) linguistic rules through implicit learning, as evidenced by their performance on receptive tasks. However, it is unclear whether implicit learning processes can also support the development of L2 production skills. The central question of this dissertation was whether it would be possible for learners to acquire implicit knowledge of a new rule through implicit learning and use it directly in spoken production. Our second question concerns the relationship between production and comprehension: we asked whether implicit knowledge acquired through a production task would also lead to improved performance in comprehension. To address these questions, we trained participants on a semiartificial language based on a rule naturally found in Czech: specifically, the usage rule for a pair of spatial prepositions (v and na) which alternate depending on the distinction between open and enclosed spaces. Training was carried out using a novel methodology based on elicited oral imitation, which was also used to test productive knowledge. Participants were also tested on comprehension, using both reaction time and recognition memory paradigms. Our findings suggest that it is possible to acquire implicit productive knowledge through a production-based task, and to generalise it to new instances in spoken production. The results of our experiments also show that learning outcomes were sensitive to the specific procedure used to train participants, which appeared to interact with individual differences in working memory. Finally, we found limited evidence that implicit knowledge acquired through production could be transferred to comprehension, supporting a skill-specific account of implicit knowledge.

Using structural priming to probe speakers' grammatical networks

Tobias Ungerer is a third-year PhD student in Linguistics and English Language at the University of Edinburgh. Before that, he did his undergrad at Leipzig University (Germany) and completed a Master's in Linguistics at Edinburgh.

From a cognitive perspective, speakers' linguistic knowledge can be thought of as a vast mental network in which various units - morphemes, words, syntactic structures, etc. - are interrelated by different kinds of links. In my research, I use a psycholinguistic method called "structural priming" to investigate the organisation of this network. If speakers' processing of a structure A changes the way they subsequently respond to a structure B, then A can be said to "prime" B, and it is likely that speakers' mental representations for A and B share similarities. In one of my experiments, I asked English native speakers to read instances of the caused-motion construction (He rolled the ball down the hill) and the resultative construction (She hammered the metal flat). By measuring participants' reaction times at each word, I found that reading an instance of one construction slows down participants' subsequent responses to the other construction. This suggests that speakers' mental representations of the two constructions are related. The next step is to extend this method to other constructions and thus gain further insights about the types of links that hold speakers' grammatical networks together.

Learning your first language isn't always successful: Comparing monolingual children with Specific Language Impairment and Child Heritage Speakers

Jiuzhou Hao is a 2nd year PhD in Linguistics and English Language at the University of Edinburgh.

As adults, we use our first language (L1) without a hitch. The process of acquiring our L1, when we were children, did not pose any significant difficulties either. However, the ease of acquiring and using an L1 is not always guaranteed. In cases where children exhibit difficulties in acquiring their L1, it might be caused by a child-internal factor (a multifactorial but possibly genetically determined language deficit, Specific Language Impairment, in monolingual and bilingual children) or a child-external factor (a linguistic environment where the L1 constitutes the societal minority heritage language in bilingual children).

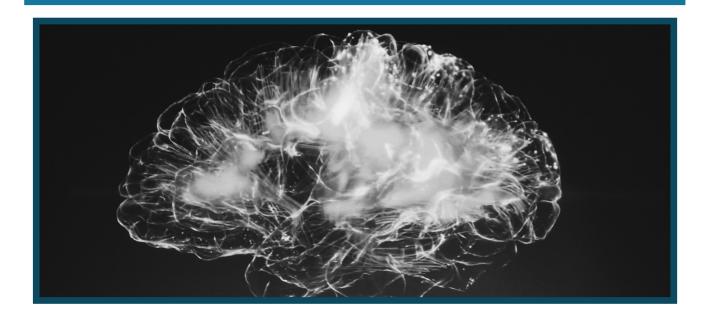
Although bilingual children and monolingual children with Specific Language Impairment (L1-SLIs) have different aetiologies of language difficulties^{[1][2]}, research has found striking similarities in their acquisition and processing of syntax in their second language (L2) or L1 respectively^[3]. It would be more interesting, however, to see what the case will be when we compare their L1s. To do so, my research compares L1-SLIs and Child Heritage Speakers (CHSs) to see how L1 syntax is wired in their minds and how the process is modulated by different factors.

Using a time-sensitive measure for their sentence comprehension (self-paced listening) coupled with an end-state comprehension task (picture verification), we hypothesise that although the two populations might not be distinguishable in their end-state comprehension performances, a qualitative difference during the process of their sentence processing should be observed. On the other hand, we would also be able to see a drastic difference in their sentence production by adopting a priming task, given the fact that the L2 might have an influence on the L1 in CHSs while such an interplay between languages does not apply in L1-SLIs.

References

- [1] Leonard, L. B. (2014). Children with specific language impairment (Second edition). The MIT Press.
- [2] Montrul, S. (2016). The acquisition of heritage languages. Cambridge, United Kingdom: Cambridge University Press.

[3] Marinis, T., & Saddy, D. (2013). Parsing the Passive: Comparing Children with Specific Language Impairment to Sequential Bilingual Children. Language Acquisition, 20(2), 155–179. https://doi.org/10.1080/10489223.2013.766743



The Real World Forensics

32 In Conversation with: Dr Claire Hardaker





IN CONVERSATION WITH: Dr Claire Hardaker

Dr Claire Hardaker is a senior forensic corpus linguist at the Lancaster University. She is also the writer and producer of en clair, the first podcast dedicated solely to forensic linguistics. In this interview, Dr Hardaker speaks to Wing Yin Ho, fourth-year MA Linguistics student at the University of Edinburgh. She gives us her insights into her experience in the field, the story behind her podcast, and future directions of her research.



Could you tell the readers a bit about yourself?

"My name is Claire Hardaker and I'm a senior forensic corpus linguist."

What drew you to forensic linguistics and how did you come to learn about it?

"I got into it completely by accident. My passion in life was horses, and I spent a lot of time on the internet on horse message boards. Occasionally, someone would post something outrageous like "Oh, my horse was bad today, so I set it on fire". We would all be horrified. then a new person would join and post something similar. We started to realise that there was a pattern of behaviour - of course, we now know this as trolling, but at the time nobody knew about this.

When I started my undergraduate degree, I was already reasonably good on computers and liked the idea of looking at massive amounts of data. When I was asked what I would like to do for my dissertation, I was interested in online horrible behaviour. I started investigating online aggressive behaviour, manipulative behaviour, or deception and it snowballed from there.

I went from just looking at people who are creating these trolling identities into looking at people who were trolling in an elaborate way to effectively spread this information. For instance, one of the things that I now look at are people who are creating fake profiles and identities to carry out fraud and phishing."

What does forensic linguistics encompass?

"In a strict interpretation, the word forensic means 'court', and forensic linguistics would refer only to any language that somehow appears in a court, either as evidence or as part of the procedure. I take a broader view: I consider anything that could end up as part of any kind of investigative process, like a text message on your phone, a blackmail note, or a forged document."

How did you eventually become a forensic linguist at Lancaster University?

"It's all been a series of weird, brilliant accidents. I suspect the catalyst was when The Guardian newspaper wrote an article about my first published journal article. They have taken a slightly satirical approach to it, but the piece got picked up by Time magazine and a couple of other notable outlets. They took it seriously and tied it in with the context to the consequences of cyberbullying.

When Caroline Criado Perez campaigned to have a woman [Jane Austen] on a bank-note because the only existing woman [Elizabeth Fry] was being replaced by a man [Winston Churchill], she received torrents of abuse because of it, and I was the only person in the country who had any kind of publication or research on the matter. I was invited to do TV interviews, radio interviews, newspaper interviews. Everybody needed to interview the expert, and, at that point, I didn't feel like an expert as I'd literally just finished my PhD."

What spurred you into producing the podcast en clair?

"What's interesting to me was that people are really interested in crime procedurals, police procedurals, crime dramas, detective murder stories. There's been a long-standing human fascination with violence and crime.

Almost nobody except for people within linguistics would consider the connection and overlap between language, linguistics, and crime. When you do talk about it to people who aren't linguists, they're immediately gripped.

It fulfils a number of things that I find interesting. Number one, it's telling a story about a particular crime or event. Num-



ber two, it informs people that more research and funding are needed in this area. Number three, it is in this accessible format that anyone can enjoy while doing things such as cooking or going for a run."

Why did you choose the name en clair for your podcast?

"Obviously, my name is Claire, so there's a slight pun in there. En clair is part of the specialist terminology used in code making and code-breaking. If you are sending a message "en clair", that means you're going to send it in clear, meaning it's legible and could be read by anyone, in contrast to a message "en chiffre" in cypher, which would be a code that is unclear and needs encoding. It's working on two levels of it being in codes but hopefully still being clear and simple."

What is your favourite episode of en clair and why?

"I think they're all my favourite. But I think the episode on the Yorkshire Ripper, although the case itself involves brutal murders of lots of women, the actual linguistic aspects and elements make it my favourite."

Do you have any advice on how to deal with online trolls?

"One popular strategy is to engage and argue. This tends to lead to escalation because, if the person is looking to offend you, they are looking for a reaction.

The other route is to ignore the troll and start talking about them and not to them. This tends not to work well because the person can see that you're talking about them and they know they've had an impact on you.

One of the other options, the one that everybody hates and yet is incredibly powerful and effective, is muting and/or blocking. They've got no feedback whatsoever because silence is ambiguous, and it gives you the ultimate power of basically deciding they are not worthy of your time. You rarely get escalation in this route. One thing to be aware of is muting tends to be more effective than blocking. If the person sees that you've blocked them then it's a sign that they've gotten under your skin."

What advice would you give people who want to pursue forensic linguistics?

"Go for it! Lots of roles are good for forensic linguists but it won't be in the title of jobs. Your grounding in linguistics needs to be broad and solid. If you start with being a good linguist, you should turn into a good forensic linguist.

The next thing you need to decide is what to specialise in because there are a few different areas like authorship, analysis, trademark disputes, police procedures etc. Figure out what you think you could cope with every single day then start to narrow down your interests as you go through your academic career."

Do you have any exciting episodes planned for en clair?

"I'm working on an episode that has to do with confessions. I'm also doing a three-part special centred around British literature and British authors who have been involved in authorship controversies. I have an old case from Australia of a man who turns up murdered on a beach and then there are spy things involved. It will come to no one's surprise but the Unabomber is going to come up at some point."

Do you have any other projects that you are working on?

"I am working on two projects. One is looking into mental health issues on Twitter, particularly during COVID-19 and how that seems to have affected mental health. The other one is about pro-vaccine and anti-vaccine discourse in light of the COVID-19 vaccine."

If you like the sound of Dr Hardaker's podcast, en clair, we recommend you go and listen to it! It's available through all major podcast streaming platforms (including Spotify and Apple Podcasts), and more information can also be found on her website via the following link: https://wp.lancs.ac.uk/ enclair/



U-Língua

A HANDS-ON Approach

WRITING SYSTEMS

32 Constructing the Unconstructable: The Case(s) of Esperanto

16 Thaana Puzzle

16 Mandombe Puzzle

CONSTRUCTING THE UNCONSTRUC-TABLE: The Case(s) of Esperanto

Jamie Bailey completed a BA and an MPhil in Linguistics at the University of Cambridge. Having brought his academic involvement in linguistics to an end in the summer, he is currently enjoying some time off at home in North Yorkshire before confronting the world of work!



anguage is full of patterns. Even English, with its notable absence of inflectional morphology to the near-certain delight of second language learners the world over, shows a regular pattern in the present tense verbal paradigm, as neatly summed up by my German exchange partner: "he, she, it: '-s' muss mit". For another example, take comparative and superlative adjectives. Sure, we have two ways of forming these in English, but we know that nearly all adjectives follow either the 'big-bigger-biggest' pattern or the 'sizeable-more sizeable-most sizeable' pattern—and the handful that don't at least resemble one of the two. In language, patterns abound.

The reason for this is simply that they condense information. Instead of having to learn a different set of inflections for every single verb and noun in a given language, for instance, it is more efficient for speakers to generalise a single set of inflections across a large number of vocabulary items.

It happens that some of these patterns in language are more obvious than others. While any speaker can readily identify that most English plurals end in -s, a much less obvious set of patterns is defined by the so-called *ABA restriction. This restriction states that, in a paradigm containing elements that use more than one stem (known as suppletion), non-adjacent forms may share a property (such as a stem) only if that property is also shared by all the intervening forms^[1]. Hence while English 'good-better-best' may be described as an ABB pattern, in theory (and I'm simplifying here for brevity-it doesn't seem like AAB patterns exist in adjectival paradigms like these specifically, but they do in other domains) other languages may permit equivalents of 'good-gooder-goodest' (AAA) and 'good-gooder-best' (AAB), but what we hardly ever find attested is a pattern resembling 'good-better-goodest' (*ABA). This restriction appears to be a robust cross-linguistic generalisation (see Andersson (2018) for a good summary of the various proposed theoretical accounts^[2]), and is found not only in adjectival but also nominal, verbal, pronominal and other types of paradigm in natural language. Bobaljik & Sauerland (2018) use personal pronouns in German to demonstrate an example of each of the attested patterns, as shown in the table below^[1].

		nominative	accusative	dative
AAA	2sg	du	dich	dir
AAB	3sg.fem	sie	sie	ihr
ABB	1sg	ich	mich	mir

This is where we bring in Esperanto, the conlang created by L. L. Zamenhof in 1887, who intended it to be a universal second language to promote international cooperation and peace. More than a century after its inception, it is thought there are now a few thousand native speakers, although estimates vary^[3]. However, the morphosyntactic theories of 1887 weren't quite what they are today, which led to what I contend to be a violation of the *ABA restriction in the Esperanto case system.

Grammars of Esperanto state that the language has two cases: nominative, with no overt marking, and accusative, marked by the suffix -n. As we can see in example (1) below, case is used to distinguish subjects, marked with the nominative, from objects, marked with the accusative. (There is another use of the accusative without prepositions as a substitute to 'indefinite' prepositional phrases, but we'll leave that aside here.)

(1) La malgranda-Ø knabino-Ø vidas la granda-n elefanto-n. the small.NOM girl.NOM sees the big.ACC elephant.ACC "The small girl sees the big elephant."

This usage is common in natural language, with nominative vs. accusative (or ergative vs. absolutive) being the primary distinction in a typical two-case system. Where Esperanto diverges from natural language is in its use of the nominative for objects of prepositions. Many languages use case to make a distinction between events that are static and events that involve a change in location. In languages which have a specific case for this latter function, including some Uralic, Dido and South Caucasian languages, the case is called the lative. This generally contrasts with the locative, which tends to indicate a static event. Alternatively, some languages make this distinction using cases which already have a more general role; German uses the accusative to mark a change of location and the da-

> tive when such a change is lacking. However, no German preposition triggers nouns to appear in the nominative, which may be argued to be an example of redundancy, something that Zamenhof seems to have been keen to avoid. When he incorporated the locative-lative distinction into Esperanto, he did so using only the nominative and accusative cases that already existed, without having to invent a third, as shown in the examples below.

(2) a. (no change of location)

La nigra-Ø kato-Ø ĉasis la bruna-n muso-n en la blanka-Ø domo-Ø.

the black.NOM cat.NOM chased the brown.ACC

Esperanto flag

mouse.ACC in the white.NOM house.NOM "The black cat chased the brown mouse in(side of) the white house."

b. (change of location)

La nigra-Ø kato-Ø ĉasis la bruna-n muso-n en la blanka-n domo-n.

the black.NOM cat.NOM chased the brown.ACC mouse.ACC in the white.ACC house.ACC

"The black cat chased the brown mouse into the white house."

Thus, a functional distinction is highlighted with the use of the same two cases in a different syntactic context-a rather elegant system.

Despite the system's perceived efficiency, though, the use of the nominative case following prepositions in a language that also has accusative seems to be completely unattested, a pattern which is reflected by the following general case hierarchy from Blake (1992) [4]

nominative > accusative/ergative > genitive > dative > (3) locative > ablative/instrumental > others

In other words, what always seems to be true is that, whenever a language makes a nominative-accusative distinction, prepositional objects will appear in the accusative case, or else the language has at least one additional case for prepositional objects. This leads to the conclusion that, if one were to analyse Esperanto according to this generalisation, the non-accusative case that marks prepositional objects in Esperanto would actually be analysed as a third case which merely resembles the nominative in form, instead of being the nominative itself:

(4) nominative > accusative > 'prepositional'

*ABA tells us that if a language combines the inflections for more

than one case (known as syncretism), the combined cases must all be adjacent in the hierarchy^[5]. Given both this and the position of prepositional cases to the right of the accusative in case hierarchies, we are drawn to conclude that the nominative and prepositional cases cannot combine into one form to the exclusion of the accusative; yet this is exactly what happens in Esperanto.

Where this story gets really interesting is in the observation that can be made about native Esperanto speakers. Specifically, Bergen (2001) identifies one of the hallmarks of native Esperanto as the deterioration of the use of the accusative case, although considerable variation exists between learners^[6]. Furthermore, he shows that this happens despite fully functioning case systems in native learners' other languages, and despite very consistent use of the accusative case in non-native parental input. As Bergen puts it, "some more general motive is pushing [native Esperanto] speakers not to use the accusative" (p. 590)^[6]. Could it be that children acquiring Esperanto find that it violates the *ABA rule, and so try to adapt it so that it conforms to the laws of natural language?

Native acquisition is arguably the ultimate testing ground for conlangers and theoretical linguists: design a linguistic system that you think does or does not conform to the rules of natural language, and see if children acquire it with ease as a native language, or if they start trying to make their own changes to it, a process that can be compared to some theories of creole formation^{[7][8][9]}. Back in 1887, Zamenhof could have had no inkling of the existence of the *ABA rule, so he had no reason to take it into consideration when designing his brainchild, but the evidence suggests that he certainly missed something. And if Zamenhof missed the *ABA rule in 1887, what, I wonder, are today's conlangers missing that we have no idea exists yet?

The wider issue here is one of detail. Like Zamenhof, we do not currently have full knowledge of how the amazingly intricate and detailed system that is natural language-or indeed the natural world—works. Even if one day we do, we may never be able to prove it. There will always be the possibility that even our most diligently formulated theories have missed one tiny but crucial detail: Donald Rumsfeld's "unknown unknowns". No matter how hard we try, perhaps our models will never quite be perfect replications of the true nature of language.

References:

^[1] Bobaljik, Jonathan D. & Uli Sauerland (2018). ABA and the combinatorics of morphological features. Glossa: A Journal of General Linguistics, 3(1), 15. DOI: http://doi.org/10.5334/gjgl.345

^[2] Andersson, Samuel (2018). (*)ABA in Germanic verbs. Glossa: A Journal of General Linguistics, 3(1), 119. DOI: http://doi org/10.5334/gjgl.733

^[3] Corsetti, Renato, Maria Antonietta Pinto & Maria Tolomeo (2004). Regularizing the regular: The phenomenon of overregularization in Esperanto-speaking children. Language Problems & Language Planning 28(3), 261-282. [4] Blake, Barry (1992). The Case Hierarchy. La Trobe Working Papers in Linguistics 5, 1–6.

 ^[5] Caha, Pavel (2009). The Nanosyntax of Case. Ph.D. dissertation, University of Tromsø.
 [6] Bergen, Benjamin K. (2001). Nativization processes in L1 Esperanto. Journal of Child Language 28, 575–95.

 ^[9] Forging brighting (Eco), rectangly proceeding proceeding proceeding and the proceeding of the second proceeding proceeding of the proceedin

^[9] Corsetti, Renata (1996). Esperanto kaj kreolaj lingvoj: komunaj kaj malkomunaj trajtoj en la kreoliĝo. In: Stanislav Košecký (ed.), Multkulturaj Familioj de Nuntempa Eŭropo. Aktoj de la Seminario Okazinta 01-02.08.1996, 11-36. Bratislava: Esprima.

THAANA PUZZLE

Puz

Dhivehi is an Indo-Aryan language spoken by around 340,000 people in the Maldives, where it is the official language. Here are some words written in Dhivehi (also spelled Divehi), in the native Thaana script, along with their transliterations and their English translations.

בעכי דעפי געי געי געי געי געי געי געי געי געי גע	mādamā divehi rājjē bae ? lakka mīhun ra ^ŋ ga l u	tomorrow Dhivehi country some 100,000 people good	۸ سري مرّب مَّوْدُ ۸ مَحْدُ ۲ ۸ مَحْدُ ۲ کُرُمْ عَادُ	i ^ŋ girēsi sāfu ato l u muazzafu ga q i	English clean atoll emplo- yee hour			
1. Transliterate the following: 2. Transliterate the following:								
ی توسیر sweet دریویز دریویز دhild دریویز دhild دریویز دریویز دhild دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز در دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریویز دریوی دریوی دریوی دریوی دریوی دریوی دریوی دریوی دریوی دریوی دریوی دریوی دریوی دریوی دریوی دریوی در دریوی دریوی دریوی در دریوی دریوی دریوی در د د د د د د د د د د د د د د د د د د		sūfāsūfi kokko uªdagū vaddanī	small creatures younger sibling difficulty lets in					
3. What does تَحْسَرُ mean?								

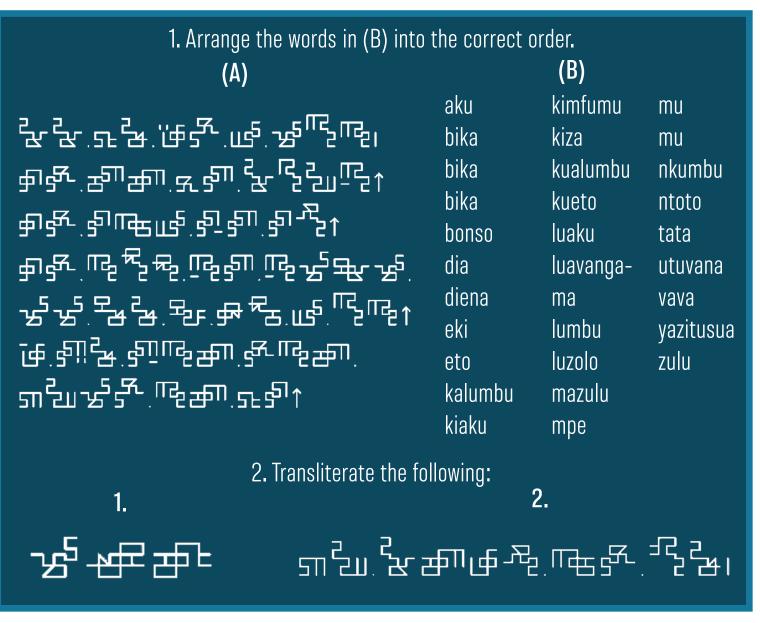
A macron (as in **ā**) indicates that a vowel is long. A superscript nasal before a consonant (as in **"d**) indicates that the consonant is prenasalised. **n d l** are pronounced like English *n d l*, but with retroflexion (the tongue tip is turned behind the hard palate). **n** is as in *sing*. **?** is the glottal stop (the sound in the middle of *uh-oh*).

Puzzle by Liam McKnight, BA Linguistics, University of Cambridge

ZLES

Mandombe

The Mandombe script was invented in 1978 by Wabeladio Payi in the Democratic Republic of the Congo, and is now taught in Kimbanguist church schools there and in Angola and the Republic of the Congo. It is used to write Kikongo, spoken by around 7 million people in those countries, as well as the related Bantu languages Tshiluba, Lingala and Swahili. Below is an excerpt from the Lord's Prayer in Kikongo, written in the Mandombe script (A), along with each word transliterated individually, arranged in alphabetical order (B). The Lord's Prayer is a central prayer in Christianity; knowledge of it is not required in order to solve this problem.



Puzzle by Benedict Randall Shaw, BA Mathematics, University of Cambridge Solutions to all puzzles will be posted on our social media.

Editorial Team

Editor-in-Chief T. R. Williamson Section Editor for News Caitlin Wilson Section Editor for Academia Hayley Hilson Section Editor for Industry Blue Bates Cambridge Section Editor for Puzzles Liam McKnight Editorial Designer Anne Eschenbruecher

Authors

No Woman No Kraj Olivia Szczerbakiewicz Reporting Extinction Rebellion Poppy Plumb Gender-inclusive Language Ashley Thornton Contextual Linguistics Profile Questionnaire Mandy Wigdorowitz Abstract Spotlight Hayley Hilson Dr Claire Hardaker Wing Yin Ho Constructing the Unconstructable Jamie Bailey Thaana Puzzle Liam McKnight Mandombe Puzzle Benedict Randall Shaw

Photo Credits

Cover Photo of the University of Oxford Yoonsuh Park Content Photo Page 2 (top) Sidharth Bhatia on Unsplash Content Photo Page 2 (bottom) Darya Tryfanava on Unsplash **Content Photo Page 3 (top)** Matthew Waring on Unsplash **Content Photo Page 3 (bottom)** Delfi de la Rua on Unsplash Section Cover "In The Field" Markus Spiske on Unsplash Story Photo "Abortion Protests" Polish Press Archive Story Photo "Extinction Rebellion" |oël de Vriend on Unsplash Section Cover "Behind The Bookshelves" Robina Weermeijer on Unsplash Story Photo "Gender-inclusive Language" Markus Winkler on Unsplash Abstract Spotlight Photo Alina Grubnyak Section Cover "The Real World" Lai Man Nung "en clair" Logo Dr Claire Hardaker Story Photo "Dr Claire Hardaker" Hansjörg Keller Section Cover "A Hands-On Approach" |ailam Rashad Story Photo "Constructing the Unconstructable" Gabriel Ehrnst Grundin **Back Cover Photo** Dave Axelgard



U-Lîngua

Join us on our social media!

^{My name is:} Artie Q. Later **Facebook** Undergraduate Linguistics Association of Britain

Twitter

@ULAB_Ling

Instagram

@ulab_ling

LinkedIn

Undergraduate Linguistics Association of Britain

Discord

www.ulab.org.uk/discord

Strava

www.strava.com/clubs/ulab

