# The Book of Abstracts

DGfS Summer School

GEORG-AUGUST-UNIVERSITÄT GÖTTINGEN

12.08 – 23.08.2024

# Contents

# Session 1

## Beyond Binary Bounds—Classifying Hope in Online Discourse⋆

Amna Naseeb, Kawo Lemlem Eyob, Grigori Sidorov and Olga Kolesnikova

Instituto Politécnico Nacional (IPN) and. Centro de Investigación en Computación, Mexico

This study uses binary classification algorithms to investigate the detection of "hope speech" in Twitter messages. Hope speech expresses the possibility of positive outcomes in the face of difficulties in an effort that fosters optimism and resilience. We studied the dataset provided to us and used logistic regression, support vector machines, and deep neural networks to distinguish between hopeful and non-hopeful remarks.

As part of the collaborative effort for HOPE at IberLEF 2024, we conducted our study primarily using a Twitter data-set, which guaranteed a comprehensive analysis of context influence and the application of ethical principles. This study aims to improve knowledge of how technology solutions might foster positive online interactions.

Our experiments provided key findings such as a maximum accuracy of 0.72, overall macro average precision and recall of 0.73, and an F1-score of 0.72. These findings demonstrate the effectiveness of the chosen classification algorithms in detecting hope speech in the cluttered and unpredictable environment of Twitter.

This study makes significant contributions to the area by revealing the potential of computational resources to encourage and foster constructive conversation online. Networks that acknowledge and encourage hope speech have the ability to reduce the propagation of negativity while also improving user experience, resulting in a more supportive and resilient online community. Future objectives include further optimizing the algorithms, exploring larger and more diverse datasets, and using real-time analysis to react to changing online interactions.

In conclusion, this research highlights the need to use technology not just for analysis but also to establish an online environment beneficial to a positive outlook in the face of adversity.

# The interpretation of underinformative disjunctive sentences in a cross-linguistic perspective

Longo, F.1, van Tiel, B.2, Panizza, D.1, Mazzaggio, G.3

1 Università degli Studi di Messina, Italy
2 Radboud University Nijmegen, Netherlands
3 Università degli Studi di Firenze, Italy

Disjunctions can have two different readings. Consider a so-called underinformative sentence like the word 'cane' has the letter 'c' or the letter 'n': under an inclusive interpretation (i.e., 'c' or 'n' and possibly both) this sentence is true, whereas under an exclusive interpretation (i.e., 'c' or 'n' but not both) it is false. The exclusive reading of disjunction is argued to come about as a scalar implicature (Grice, 1975; Horn, 1972; Levinson, 2000).

We present two studies on disjunction interpretation in a cross-linguistic perspective.

Study 1 employed a Sentence Evaluation Task with 30 English L1, 30 Italian L1, and 31 Italian L2 English speakers. Participants were presented with underinformative disjunctive sentences (e.g. The word 'lake' has the letter 'l' or the letter 'k') and control sentences with true/false conjunctions/disjunctions, and had to evaluate whether they agreed or disagreed with the statement (Chevallier et al., 2008).

Participants performed at the ceiling with conjunctions and false disjunctions and accepted underinformative disjunctions in 77% of the trials. Unexpectedly, they answered 'Disagree' to true disjunctions (e.g. The word 'rate' has the letter 'r' or the letter 'f') in 58% of trials (cfr. Chevallier et al., 2010 for similar results). We hypothesise that true disjunctions were judged infelicitous because they violated the assertiveness conditions of disjunction, namely speaker ignorance about the truth of either disjunct (Fox, 2007).

Study 2 is designed to empirically assess this hypothesis. We will manipulate the speaker's epistemic state with a novel Card Game Sentence Evaluation Task in Prediction, Description and Guess mode respectively. We predict that when the speaker is ignorant about the truth of the two disjuncts, the participant will accept true disjunctions to a much higher degree (i.e. at a comparable rate to false disjunctions).

## References

Chevallier, C., Noveck, I. A., Nazir, T., Bott, L., Lanzetti, V., & Sperber, D. (2008), Making disjunctions exclusive, in Quarterly Journal of Experimental Psychology, 61(11), 1741-1760.

Chevallier, C., Wilson, D., Happé, F., & Noveck, I. (2010), Scalar inferences in autism spectrum disorders, in Journal of Autism and Developmental Disorders, 40, 1104-1117.

Fox, D. (2007). Free choice and the theory of scalar implicatures, in Presupposition and implicature in compositional semantics, London: Palgrave Macmillan UK, 71-120.

Grice, P. H. (1975), Logic and conversation, in P. Cole, J. L. Morgan (eds.), Speech acts, London, Academic Press 1975, 41-58.

Horn, L. (1972), On the Semantic Properties of Logical Operators in English, PhD thesis, UCLA.

Levinson, S. C. (2000), Presumptive meanings: The theory of generalized conversational implicature, MA, MIT press.

# LLMs and Reflexive Binding Intuitions: Do LLMs encode native speakers' reflexive binding intuitions?

Lona Carslaw

Nativists (e.g. Chomsky, 1989; Crain and Pietroski, 2001) and empiricists (e.g. Clark and Lappin, 2011) have long debated if syntactic acquisition utilises statistical learning/general learning biases or if instead it utilises innate language biases. However, this debate has reached a new level with the rise of LLMs and NLP models which can now model language to a highly grammatical degree (Piantadosi, 2023). Past work has investigated if neural architectures have acquired specific grammatical principles, e.g. island constraints (Kobzeva et., 2023; Wilcox et al., 2018, 2019). If language models have in fact encoded certain grammatical principles, such as island constraints, then it is possible to acquire these grammatical principles without a specific language learning bias. However, there has yet to be any work investigating how binding relations are encoded in language models. Thus, I fill this gap by investigating if the LLM *Llama2* has encoded the reflexive binding relations that native English speakers judge in ditransitive constructions. Wh-question prompting was used to probe *Llama2* for these binding relations, and the LLM's responses did not match the human judgements. Thus, LLMs have not encoded the binding relations which humans observe within ditransitive constructions, suggesting that, in part, binding cannot be learnt through statistical learning or general learning biases.

## References

Noam Chomsky. 1989. Knowledge of languages: Its nature, origin, and use. *Language Sciences,* 11(4): 409 - 423.

Alexander Clark and Shalom Lappin. 2011. *Linguistic nativism and the poverty of the stimulus*. Wiley-Blackwell.

Stephen Crain and Paul Pietrosku. 2001. Nature, nurture and universal grammar. *Linguistics and philosophy,* 24(2): 139 - 186.

Anastasia Kobzeva, Sushas Arehalli, Tal Linzen, and Dave Kush. 2023. Neural networks can learn patterns of island-insensitivity in norwegian. In *Proceedings of the Society for Computation in Linguistics 2023,* 175 - 185.

Steven Piantadosi. 2023. Modern language models refute Chomsky's approach to language. *Lingbuzz Preprint*, 7180.

Ethan Wilcox, Roger Levy, and Richard Futrell. 2019. What syntactic structures block dependencies in rnn language models? *arXiv preprint arXiv:1905.10431.*

Ethan Wilcox, Roger Levy, Takashi Morita, and Richard Futrell. 2018. What do rnn language models learn about filler-gap dependencies? *arXiv preprint arXiv:1809.00042.*

# Manual Actions and Language Supression in PJM-Polish Bilinguals Spoken Production Tasks

Joanna Wójcicka1, Anna Kuder2, Justyna Kotowicz3

1Department of General Linguistics, Sign Language Linguistics and Baltic Studies, University of Warsaw, Poland; 2Department of Linguistics, General Linguistics, University of Cologne, Cologne, Germany; 3Institute of Pedagogy, University of Silesia Katowice, Poland

akuder@uni-koeln.de

This paper presents an analysis of the multimodal behavior among bimodal native hearing users of spoken Polish and Polish Sign Language (PJM, polski język migowy) during the production of language tasks performed in spoken Polish. The aims of the study were: (1) to investigate the use of manual gestures, code-switching and code-blending occurring in the participant's productions and (2) to examine the sign language suppression present in the participants' productions as well as expressed in the self-assesment questionnaires on the language-mixing practices.

Data sample included two types of elicitation tasks (Canary row (1950) and a route description based on the shown map). The informants were video-recorded, while a moderator fluent in PJM and Polish was present in the room. We examined linguistic material from 7 informants (6 F, 1 M; age M=33,5, SD=11,3), who use both languages in their everyday communication.

As a result of the annotation process, we have identified 138 manual activities: 92 were categorized as non-referential gestures, 46 – as referential gestures. None of the manual activities in the data were interpreted as PJM signs, which means that no instances of code-mixing, code-switching or code-blending were found.

The obtained results suggest that the participants do not use PJM during spoken language monolingual tasks. This suppression of sign language was observed even though the tasks were managed in a signed-spoken bilingual environment.

As there is evidence that mixing of signed and spoken language is generally seen as inappropriate in the Polish Deaf community, we speculate that participants' language suppression might stem from their internalized language ideologies. This is supported by the observation that their behavior is in line with their self-assessment overtly expressed in the questionnaire answers. We also address some of the limitations of the study, i.e. the influence of the elicitation task, the participant's professional background etc.

## References

1. F. M. Branzi, P. A. Della Rosa, M. Canini, A. Costa and J. Abutalebi, "Language control in bilinguals: monitoring and response selection," Cereb Cortex, vol. 26, no. 6, pp. 2367–80, 2016. doi: 10.1093/cercor/bhv052.

2. S. Matthes, T. Hanke, A. Regen, J. Storz, S. Worseck, E. Efthimiou, A. L. Dimou, A. Braffort, J. Glauert and E. Safar, "Dicta-Sign – building a multilingual sign language corpus", 5th Workshop on the Representation and Processing of Sign Languages: Interactions between Corpus and Lexicon, pp. 117–122, Istanbul, 2012.

3. P. Rohrer, I. Vilà-Giménez, J. Florit-Pons, N. Esteve-Gibert, A. Ren, S. Shattuck-Hufnagel and P. Prieto, "The MultiModal MultiDimensional (M3D) labeling scheme for the annotation of audiovisual corpora," Proceedings of the 7th Gesture and Speech in Interaction (GESPIN), Stockholm, 2020.

4. K. Emmorey, H. Borinstein and R. Thompson, "Bimodal Bilingualism: Code-blending between Spoken English and American Sign Language," Proceedings of the 4th International Symposium on Bilingualism, Somerville MA, 2005.

5. P. Tomaszewski, T. Gałkowski and P. Rosik, „Nauczanie polskiego języka migowego jako obcego języka: Czy osoby słyszące mogą przyswoić język wizualny?," Studia nad kompetencją językową i komunikacją niesłyszących, Warszawa, 2003.

6. M. R. Giezen, H. K. Blumenfeld, A. Shook, V. Marian and K. Emmorey, „Parallel language activation and inhibitory control in bimodal bilinguals," Cognition, vol. 141, pp. 9–25, 2015. doi: 10.1016/j.cognition.2015.04.009.

# Agreement phenomena in Mòore?

Kouka Samuel ZONGO
kouka.zongo@ling.uni-stuttgart.de
Linguistics Department
Keplerstraße 7 70174 Stuttgart Germany

The Gur languages, spoken in West Africa, are known to not have verbal agreement with nominal features, as it is familiar from e.g. European languages; rather there exist only particles expressing aspect, mood, non-finiteness (see Hantgan 2014) and showing up in preverbal position. However, in Mòore, certain pronominal elements can attach to the finite verb to the right - in some cases co-occurring with the nominal argument. This leads to the question whether this suffixed pronoun is developing into an agreement marker, lacking a theta role and also loosing phonetic substance/erodes phonetically (cf. Haig 2020).

The highly underspecified element a (and its plural counterpart b(a)) - originally the nominal class marker(s) for [+human] - occurs besides being attached to the finite verb - as a pronoun and even in determiner-like functions. Furthermore, difference in tone marks (in)definiteness. Thus, it has developed into an element with further grammatical functions.

The aim of this presentation is to provide evidence showing that the element a attached to the finite verb has to be perceived as an affix, for the reason that it regains its pronominal status when it is focused.

The presentation is structured as follows. After the introduction, I will present the occurrences of the a and ba in the nominal domain. The third and fourth sections will deal with a and ba in the verbal domain: on the one hand as an agreement marker and on the other as a (resumptive) pronoun. The last section will conclude the presentation.

# Two types of tough-constructions in Romance

Leonardo Russo Cardona
University of Cambridge

Tough-constructions (TCs) in most Romance languages (as in Italian 1) are an A- dependency. It has been suggested that in this type of TCs the embedded verb has passive syntax (e.g. Giurgea and Soare, 2010), which raises the question of why it does not also have passive morphology.

(1) Questi libri sono di1icili da leggere.
   these books are hard DA read.INF
   'These books are hard to read.'

I show that these constructions involve a very small clausal complement (just a VoiceP), as evidenced by various tests including the ungrammaticality of high restructuring verbs (2), auxiliaries (3), and clausal negation (4) which are T projections (Cinque 2006, Rizzi 2000 among others).

(2) Il cibo italiano è facile da (*voler) mangiare ogni giorno.
   the food Italian is easy DA want.INF eat.INF every day
   'Italian food is easy to (want to) eat every day.'

(3) *Il problema è impossibile da aver già risolto.
   the problem is impossible DA have.INF already solve.PPRT
   'The problem is impossible to have already solved.'

(4) *I libri di filosofia sono facili da non capire mai.
   the books of philosophy are easy DA NEG understand.INF ever
   'Philosophy books are easy to not ever understand.'

I propose that such a complement must be headed by a defective Voice head (cf. Wurmbrand 2016), which cannot assign accusative but has default active morphology. Microvariation data suggests there is a connection between defective Voice and clause size: in Romance varieties where TCs employ a bigger complement, the embedded verb cannot be a bare infinitive but must have either a resumptive object clitic or an overt passive marker.

(5) Sti libbri su di1icili cu *(li) pozza leggire nu piccinnu. (Salentino)
   these books are hard CU OCL.3MPL can.SUBJ.3SG read.INF a child
   'These books are hard for a child to be able to read .'

(6) Les llengües orientals són difícils d'haver-*(les) après en sis mesos. (Colloquial Catalan)
   the languages Eastern are hard DE=have.INF=OCL.3FPL learn.PPRT in six months
   'Asian languages are hard to have learnt after six months.'

(7) Cust'arbur el fazil a no esser vidu. (Logudorese Sardinian)
   this=tree is easy A NEG be.INF see.PPRT
   'This tree is easy not to see'

These results suggest the existence of (at least) two types of TCs in Romance:

- Type 1: VoiceP complement and defective Voice.

- Type 2: TP/CP complement with overt passivisation (passive Voice) or a resumptive object clitic (active Voice).

TCs with functional structure above defective Voice are not attested. I explain this as a constraint on selection: defective Voice must be directly selected by the lexical matrix predicate.

## References

Cinque, G. (2006). Complement and Adverbial PPs: Implications for Clause Structure. In G. Cinque, Restructuring and Functional Heads (pp. 145–166). Oxford University PressNew York, NY.

Giurgea, I., & Soare, E. (2010). Modal non-finite relatives in Romance. In M. Becker & E.-M. Remberger (Eds.), Modality and Mood in Romance (pp. 67–94). De Gruyter.

Rizzi, L. (2000). Some notes on Romance cliticization. In Comparative Syntax and Language Acquisition (pp. 102–131). Routledge.

Wurmbrand, S. (2016). Complex Predicate Formation via Voice Incorporation. In L. Nash & P. Samvelian (Eds.), Approaches to Complex Predicates (pp. 248–290). Brill.

# Are you certain that presuppositions project universally from attitudes?

Maik Thalmann & Andrea Matticchio
University of Göttingen, UMass Amherst

Presupposition projection from attitude predicates like be certain is often taken to be universal such that all of the attitude holder's doxastic alternatives must be such that the presupposition holds in order to avoid presupposition failure. This is most evident in dynamic approaches to presuppositions like Heim's, which forms the standard response to the projection problem from attitude predicates.

Notably, while there has been ample empirical work into presupposition from quantifiers over individuals, there is currently no experimental work on quantifiers over worlds in this domain. In our experiment, we find that both soft and hard presuppositions (stop and again, respectively) do not project universally from the attitude predicate be certain. Rather, we find that our results are best captured using a trivalent Strong Kleene approach to presupposition projection, which predicts falsity even when not all of the certainty worlds make the presupposition true, as long as falsity obtains at some of those worlds. This is aligns with what Fox argues for individual-based quantifiers. In this way, our results motivate an analysis according to which presupposition projection patterns from quantificational environments are derived using Strong Kleene, instead of having to assume separate mechanisms for different kinds of quantification.

Interestingly, while the empirical results for presupposition projection from quantifiers like all tend to find various sources of variation (including speaker- and trigger-related effects), our results for presupposition projection look relatively uniform. Different from individual-based quantificational environments, where additional mechanisms like local accommodation are often invoked to explain some of the intricacies, our results warrant no such extra assumptions.

# Components of lconicity in German Sign Language (DGS): Hearing Non-Signer's Perception of Phonological and Semantic Parameters of lconicity

Gehlbach, P.[1], Trettenbrein, P.C.[1,2,] Steinbach, M.[1], Meister, N.-K.[1]

[1]SignLab, Department of German Philology, Göttingen University

[2] Department of Neuropsychology, Max Planck Institute for Human Cognitive & Brain Sciences, Leipzig

lconicity is defined as a perceived resemblance between aspects of a linguistic form and aspects of its associated meaning (Perniss et al. 201O; Perniss and Vigliocco 2014; Dingemanse 2019). Transparency describes a degree of this resemblance, in which a signs meaning can be correctly inferred solely based on its form (Pizzuto and Volterra 2013; Occhino et al. 2017; Sehyr and Emmorey 2019). While interest in iconicity and transparency has increased in recent years, they are predominantly considered in their entirety, rather than with regards to their individual components. In this study, we investigate various components of iconicity, by examining 50 lexical signs in DGS regarding the question which phonological parameters, as well as instantiations of semantic attributes, carry the most iconic potential for hearing non- signers.

In our study, we provide a new analysis of qualitative data for 50 lexical signs which was collected within a study by Trettenbrein and Pendzich et al. 2021. The data cons ists of responses by 30 hearing non-signers regarding the aspects of meaning they recognized in the examined signs. The answers were coded according to four phonological parameters; location, handshape, path movement, and facial expressions, as well as to iconic instantiations of semantic attributes, which we c ategorized into action, state, item, creature, and body part.

In this poster, we present a first analysis of this qualitative data with the goal of ascertaining which phonological and semantic parameters carry the most iconic potential for hearing non-signers. A preliminary analysis of the data indicates that movement, handshape, and location seem to carry the most iconic potential for hearing non-signers with regards to phonology. Semantically, aspects of meaning depicted by iconic instantiations of actions, items, and body parts seem to be the most recognizable and transparent to hearing non-signers.

## References

Dingemanse, M. (2019) Chapter 1. ' ldeophone' as a comparative concept. In K. Akita and P. Pardeshi (eds). ldeophones,  mimetics and expressives, 13- 34. Amsterdam, Philadelphia: John Benjamins Publishing Company.

Occhino, C., Anible, B., Wilkinson, E. and Morford, J. P. (2017) lconicity is in the eye of the beholder. Gesture 16 (1): 100- 126.

Perniss, P., Thomp son, R. L. and Vigliocco, G. (2010) lconicity as a general property of language: evidence from spoken and signed languages. Frontiers in psychology 1: 227.

Perniss, P. and Vigliocco, G. (2014) The bridge of iconicity: from a world of experience to the experience of language. Philosophical transactions of the Royal Society of London. Series B, Biological sciences 369 (1651): 20130300.

Pizzuto, E. and Volterra, V. (2013) lconicity and transparency in sign languages: A cross-linguistic cross-cultural view. In H. L. Lane (ed). The Signs of Language Revisited: An Anthology To Honor Ursula Bellugi and Edward Klima, 261-286. Hoboken: Taylor and Francis.

Sehyr, Z. S. and Emmorey, K. (2019) The perceived mapping between form and meaning in American Sign Language depends on linguistic knowledge and task: evidence from iconicity and transparency judgments . Language and Cognition 11 (2): 208-234.

Trettenbrein, P. C ., Pend zich, N.-K., Steinbach, M., Cramer, J.-M. and Zaccarella Emiliano (2021) Psycholinguistic norms for more than 300 lexical signs in German Sign Language (DGS). Behavior research methods (53): 1817-1832.

# Gestures update common ground and progress discourse with referential information

Sofia Koutalidis

Recent research demonstrates that communication is an inherently multimodal phenomenon. This also applies to updating the common ground through the process of information structuring. Information structure refers to the means of marking information on utterance level for the sake of both serving immediate communicative goals and establishing coherence with previous and upcoming discourse. In German, the resources for marking information structure can be prosodic or syntactical [1]. Recent research has emphasized the role of gestures in marking information [2]; beat gestures in particular have been considered to have an important function to establish links to previous discourse and support progressing discourse [3, 4].

Research on information structure has so far been mainly focused on the investigation of context-free or context-reduced sentences. However, in authentic everyday conversations, utterances are produced in a rich conversational context and co-constructed by interactants who make use of multimodal resources that are at their disposal [5].

This study focuses on the ways information structure is multimodally marked to most optimally update the common ground according to the current communicative goals that arise. Data stem from interactions between 45 German preschool children and their caregivers. Initial results show that children, will often solely employ gestures to update the common ground. The referential and iconic properties of gestures are utilised when current conversational needs are most effectively served that way. Findings show in certain cases the common ground is successfully updated through gesture and their referential properties and that interactants jointly adjust the state of information to progress the discourse.

## References

[1] Dipper, S., Goetze, M., & Skopeteas, S. (2007). Information structure in cross-linguistic corpora : annotation guidelines for phonology, morphology, syntax, semantics and information structure (p. 210). Universitätsverlag Potsdam.

[2] Ebert, C., Evert, S., & Wilmes, K. (2011). Focus Marking via Gestures. Sinn & Bedeutung, 15, 1–15.

[3] Lohmer, V., Lutz, T., & Kern, F. (2023, April 26-28). Explaining the Technical Artifact Quarto!: How Gestures are used in Everyday Explanations [Poster Abstract]. 2023 1st International Multimodal Communication Symposium, Barcelona, Spain.

[4] Rohrer, P. L., Florit-Pons, J., Vilà-Giménez, I., & Prieto, P. (2022). Children Use Non-referential Gestures in Narrative Speech to Mark Discourse Elements Which Update Common Ground. Frontiers in Psychology, 12.

[5] Goodwin, C. (2014): The intelligibility of gesture within a framework of co-operative action. In: Seyfeddinipur, M., Gullberg, M. (eds.) From Gesture in Conversation to Visible Action as Utterance, pp. 199–216. John Benjamins, Amsterdam and Philadelphia

# Inner Aspect Hypothesis of Directional Serial Verb in Mandarin

Tong Wu

This study intends to investigate directional constructions in Chinese from aspect perspective by focusing on decomposing complex directional serial verb constructions, and expanding to other variants.

"Directional verb compounds" or "directional constructions" in Mandarin Chinese have two key features. On the one hand, these constructions have more than one verb in surface string. On the other, they have a high flexibility in surface form that the directionals can either be pre-object (being adjacent to matrix verb) or post-object (being split to matrix verb). Past studies in Chinese categorized them as directional complement or verb compounds (Chao, 1986, Li & Thompson 1981). One major analysis (Paul 2022) analyzes them as serial verb constructions sharing internal argument, yet is lack of the motivation for raising. Another influential analysis embraces Ramchand's (2008) First Phase Syntax, yet brings along various pre-assumptions to get the correct linear order and situation type explanations (cf. Hu 2022, Chen 2023).

This analysis embraces Sybesma (1999)'s spirit that an inner aspect (between vP and VP) exists in Chinese with three layers (Asp1P, Asp2P, Asp3P) hosted between vP and VP. This study proposes that adjacent directional serial verb constructions (the pre-object type) are hosted in inner aspect while split directional serial verb constructions (the post-object type) are not. To be more specific, this study believes that simple adjacent directionals possess Asp1P0, possessing gradable achievement reading. Complex adjacent directionals possess Asp1P0 and Asp2P0, making the gradable achievement receive a deictic phasal end.

This work extends the hypothesis to directionals and enhances the idea that Aktionsart in Mandarin not only lies in the lexicon but more in syntactic structures. This work also helps in sub-categorization of directionals encoded in Chinese.

**References**:
Chao, Yuen Ren, A Grammar of Spoken Chinese, Berkeley: University of California Press, 1968.
Chen, Z. (2023). Directional serial constructions in Mandarin: A neo-constructionist approach. Journal of Linguistics, 59(4): 697-736.
Hu, X. (2022). Same root, different categories: Encoding direction in Chinese. Linguistic Inquiry, 53 (1): 41-85.
Li, C. N., & Thompson, S. A. (1989). Mandarin Chinese: A functional reference grammar. University of California Press.
Paul, W. (2022). SVCs in disguise: the so-called "directional verb compounds" in Mandarin Chinese [Review of SVCs in disguise: the so-called "directional verb compounds" in Mandarin Chinese]. In A. Simpson (Ed.), New Explorations in Chinese Theoretical Syntax: Studies in honor of Yen-Hui Audrey Li (pp. 134-161). Benjamins.
Ramchand, G. (Eds.). (2008) Verb meaning and the lexicon: A first-phase syntax. Cambridge: Cambridge University Press
Sybesma, R. 1999. The Mandarin VP. Dordrecht: Kluwer.

# Session 2

## The Anatomy of Handshape: A feature geometric phonetic analysis of handshapes across sign languages

Aaron Golish

Handshape, the configuration of the digits of the hand, is one of the key formational units of sign languages. In early formational analysis the configuration of the hand was viewed as an atomic unit (Stokoe *et al.* 1976). However, more recent analysis has discovered that the handshape is formed from smaller primitive subunits. However, identifying an exhaustive set of primitives and what structural relation they bear to each other remains a problem. Work in the late 90s by Diane Brentari (1998), Els van der Kooij, and Harry van der Hulst (1998, 2021), proposed using a feature geometry tree *à la* Clements (1985) that divided Handshape into two major nodes; Finger Selection, and Joint Configuration.
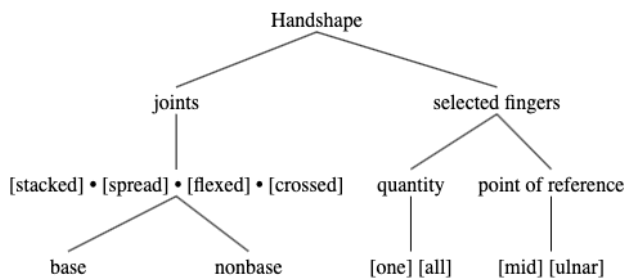


**Fig 1**. Joint configurationa and finger selection in the handshape structure of the Prosodic Model (Brentari 1998).
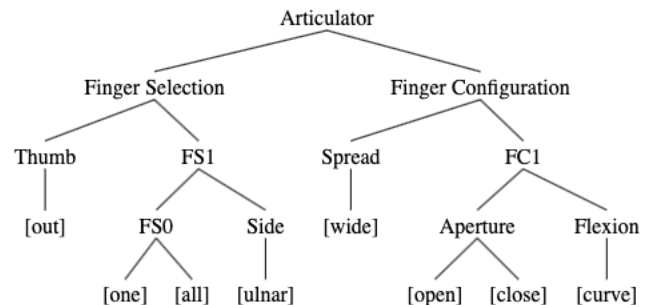
**Fig 2**. Articulator feature geometry for handshape. Adapted from (van der Hulst and van der Kooij, 2021).

The division of handshape into these two independent nodes was motivated largely by earlier observations by Mandel (1981) that there appears to be a distinction between the behaviour of what he called 'selected fingers' (the active and focused fingers) and 'unselected fingers.' However, Mandel proposed a series of constraints on selected finger behaviour don't reliably hold cross linguistically or even in the sign inventory of ASL, from which Mandel based his account.

In this poster I use a survey of the anatomy of the hand and forearm in order to identify the active articulators and their interaction in the phonology of sign languages. I use this anatomically informed set of primitives to critique the feature geometries of Brentari (1998) and van der Hulst and van der Kooij (2021). I show the theoretical limits of these two models, particularly how they both under-generate and over-generate attested handshapes. I draw especially attention to the "configuration" node in their models, which is left unstructured and therefore under-constrained as well as lacking key features (i.e. [Lateral], [Interossei]). The features listed under Configuration are treated as though they can freely combine, when in fact they're highly constrained and share a complex dependency relation to 'finger selection.' Finally, the free variation of the finger selection fails to account for the asymmetries between what fingers can be selected for extension and which fingers can be selected for flexion. I conclude with a different feature geometry that takes the intrinsic and extrinsic muscles of the hand as the primes of the handshape. Starting from

'phonetic' primes instead of post-hoc observation allows for a feature geometry that more closely reflects articulatory reality of handshape articulation.
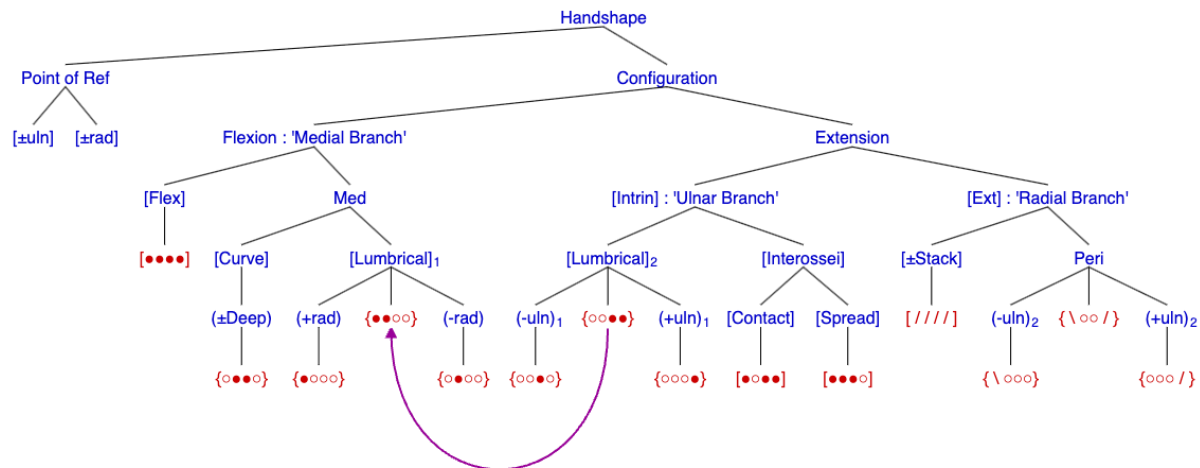


Fig. 3. The neuromuscular model of Handshape. Square brackets [ ] represent major configuration features of the extrinsic and intrinsic muscles of the hand. Round brackets ( ) represent terminal selectional features and are governed by the c-commanding *Point of Ref* feature. Red terminal { } brackets serve as a visual reference for the selected fingers.

## Works Cited

Brentari, D. (1998). *A prosodic model of sign language phonology.* MIT Press.

Clements, G. N. (1985). "The geometry of phonological features." *Phonology Yearbook*, 2. 225-252.

Mandel, M. & Univesity of California, Berkeley. (1981). *Phonotactics and morphophonology in ASL* [Dissertation].

Stokoe, W.C., Casterline, D. C., & Croneberg, C. G. (1976). *A Dictionary of American Sign Language on Linguistic Principles* (New Edition). Linstok Press.

van der Hulst, H. & van der Kooij, E. (2021). Sign Language Phonology – Theoretical Perspectives. In J. Quer, R. Pfau, & A. Herrmann (Eds.), *The Routledge Handbookm of Theroetical and Experimental Sign Language Research*. Routledge Taylor & Francis Group.

van der Kooij, E. (1998). The Position of Unselected Fingers. *Linguistics in the Netherlands*, 15(1), 149-162.

# Biased Polar Questions in Turkish

Ateş İsmail Çalışır

This poster explores the biased polar questions in Turkish, questions that carry implicit assumptions or expectations (bias) about the answer. Generally, this type of questions act as assertions as well, this assertion has the opposite truth value of the question. Thus, a sentence like "Isn't Jane coming?" implies that the speaker believes that Jane is coming. Furthermore, the expected answer to the question is also different compared to general questions, while a polar question is open to both answers and is asking the truth value of the proposition, a biased polar question expects an affirmative answer.

Polar questions in Turkish can be categorized into two main forms depending on where the polar question marker surfaces: the immediately preverbal position, the canonical focus position; or after the verb, which seems to deal with truth-conditional operations. Biased questions are marked by specific syntactic and prosodic features, including the position of question particle mI and intonation patterns. Biased polar questions in Turkish also shed light on question particle mI's distribution, as both postverbal and preverbal positions are said to deal with broad focus. However, only post-verbal mI results in epistemic bias.

# Form-meaning mismatch and focus sensitivity in Kusaal

Daniel Aremu
Goethe University

**Introduction:** Kusaal, a Mabia (Gur) language spoken in Northern Ghana has both an adfocal-exclusive particle *ma'a* 'afdocal-*only*' (1a) and an adverbial-exclusive particle *kʊdim* 'afverbial-*only*' (1b). In this study, I present two sets of novel data which provide evidence for form-meaning mismatches, as in (a) one form = ambiguous meaning, and (b) double forms = a single meaning (concord). I argue that an *Operator-Particle Approach* best captures the observed phenomenon (Lee 2005, Quek & Hirsch 2017, Branan & Erlewine 2023, a.o.)

(1) a.  Adam  di  nɛ  [mui]F  **ma'a**.
        Adam  eat  FOC  rice        only_adf
        'Adam ate only RICE.'

   b.  Adam  **kʊdim**  di  nɛ  [mui]F.
        Adam  only_adv  eat  FOC  rice
        'Adam only ate RICE.'

**Form-meaning mismatches:** Following Taglicht (1984), afocal-*only* (but not adverbial-*only*) shows scope ambiguity in the presence of modals. This is true in Kusaal. While adfocal-*ma'a* can take either wide or narrow scope in relation with the modal *tun'e* 'may' (2a), adverbial-*kʊdim* is scope-rigid, and can only take wide scope (2b).

(2) a.  Adam  tun'e  di-d  nɛ  [mui]F  **ma'a**.          [only > may; may> only]
        Adam  may  eat-IPFV  FOC rice  only_adf
        'Adam may eat only RICE.'

   b.  Adam  **kʊdim**  tun'e  di-d  nɛ  [mui]F.  [only > may; *may> only]
        Adam  only_adv  may  eat-IPFV  FOC  rice
        'Adam only may eat RICE.'

In the second mismatch case, the co-occurrence of both particles results in a single exclusive reading (3): Adam ate only rice and nothing else. This is similar to negative concord (Zeiljstra 2007, a.o.)

(3) Adam  **kʊdim**  di  nɛ  [mui]F  **ma'a**.
    Adam  only_adv  eat  FOC  rice  only_adf
    'Adam only ate RICE.'

**An Operator-particle analysis:** For both cases, I argue for an Op-PRT approach whereby a high exclusive Op agrees with adfocal-*ma'a*. The idea is that the exclusive interpretation actually comes from a higher head, and not the adfocal-*ma'a* itself. I present evidence from split-scope and ellipsis to support my claim.

(4) [CP/TP Adam [ExclP **Op/kʊdim**[iExcl] [vP di [DP nɛ [DP mui] **ma'a**[uExcl]]]]]]

**References:**

Branan, K. & Erlewine , M. Y. (2023). Anti-pied-piping. *Language* 99(3), 603–653.

Lee, Y. (2005). Exhaustivity as agreement: The case of Korean man 'only'. *Natural Language Semantics* 13(2), 169–200.

Quek, Y. & Hirsch, A. 2017. Separating focus meanings and focus forms in standard and colloquial Singapore English. *Proceedings for NELS47*.

Taglicht, J. 1984. *Message and emphasis: On focus and scope in English*. London: Longman.

# Adverb Raising – Production Error or Actually Productive?

Julie Maria Rohde

PhD student, Aarhus University

Sentential adverbials are assumed to modify the clause they sit within, as seen by the fact that an adverbial will yield two distinct interpretations of a sentence depending on whether it occurs in the main clause or the embedded clause. This generalisation can seemingly only be violated by sentential negation under a well-researched phenomenon known as Neg-Raising (Fillmore 1963; Lakoff 1969; Horn 2001; Collins and Postal 2014; 2017).

However, research suggests that a similar mechanism may be available for sentential adverbials at large, in languages such as Dutch (de Schepper et al. 2014; Barbiers 2018), English (Edelstein 2013; 2018), and Danish (Hansen 2000; Boye 2007; Ørsnes 2018). In these papers, it is argued that sentences such as I soon hope to finish my book (Edelstein 2013, 21) and Jeg tror altid at han har kendt til mine følelser for ham 'I always think that he has known of my feelings for him' ('KorpusDK') are instances of so-called Adverb Raising (AR), in which an adverbial moves from an embedded clause to a matrix clause while still being interpreted in the embedded clause, rather than in situ in the matrix clause.

As part of my PhD project, I have conducted corpus searches investigating the prevalence of Adverb Raising in the corpora, the conditions under which AR can occur, and the possible constraints on this phenomenon, such as the syntactic availability of the raised adverbial, as well as the semantic features of the adverbial that might facilitate raising.

## References

Barbiers, Sjef. 2018. 'Adverbs in Strange Places: On the Syntax of Adverbs in Dutch'. Nederlandse Taalkunde 23 (1): 57–88. https://doi.org/10.5117/NEDTAA2018.1.BARB.

Boye, Kasper. 2007. 'Ikke at Tro'. Mål Og Mæle 30. (3): 17–23.

Collins, Chris, and Paul M. Postal. 2014. Classical NEG Raising: An Essay on the Syntax of Negation. Linguistic Inquiry Monographs V67. Cambridge, Massachusetts: The MIT Press.

———. 2017. 'Interclausal NEG Raising and the Scope of Negatio n'. Glossa: A Journal of General Linguistics 2 (1). https://doi.org/10.5334/gjgl.79.

De Schepper, Kees de, Geertje van Bergen, Sander Lestrade, and Wessel Stoop. 2014. 'Prag-Raising versus Neg-Raising'. Nederlandse Taalkunde 19 (1): 105–17. https://doi.org/10.5117/NEDTAA2014.1.SCHE.

Edelstein, Elspeth Claire. 2013. 'Adverb Climbing as Evidence for the Structure of Non-Finite Complements in English'. The International Society for the Linguistics of English. https://www.isle-linguistics.org/.

———. 2018. 'Insight into English Non-Finite Complements from Adverb Climbing'. McGill Working Papers in Linguistics 25 (1): 123–35.

Fillmore, Charles J. 1963. 'The Position of Embedding Transformations in a Grammar'. WORD 19 (2): 208–31. https://doi.org/10.1080/00437956.1963.11659796.

Hansen, Erik. 2000. 'Anteponeret adverbial'. Ny forskning i grammatik, no. 7 (October). https://doi.org/10.7146/nfg.v8i7.23954.

Horn, Laurence R. 2001. A Natural History of Negation. The David Hume Series. Stanford, Calif: CSLI.

'KorpusDK'. n.d. Ordnet.Dk. Accessed 4 January 2021. https://ordnet.dk/korpusdk/teksteksempler/sogeresultat.

Lakoff, Robin. 1969. 'A Syntactic Argument for Negative Transportation'. Edited by Robert Binnick, Alice Davison, Georgia M. Green, and Jerry L. Morgan. Papers from the Fifth Regional Meeting of the Chicago Linguistic Society, Chicago Linguistic Society, , 140–47.

Ørsnes, Bjarne. 2018. 'Pragmatik i ordbogen: Hvordan kan fokusadverbiet godt beskrives i en dansk-tysk ordbog?' NyS, Nydanske Sprogstudier, no. 55 (November), 96–124. https://doi.org/10.7146/nys.v1i55.104884.

# Present is Perfect: The "Extended Now" Theory

Lin Dewes

The semantics of the German present perfect is assumed compositionally as a relation of E<S, R (E: event time; S: speech time; R: reference time). The perfect aspect, which is morphologically expressed by the auxiliary verbs with the past participle *sein/haben + Partzip II*, means that the event denoted by the VP must precede the reference time and be completed (*Vorzeitigkeit* and *Abgeschlossenheit*). The present tense locates the reference time at/around the speech time. The crucial difference between the present perfect in German and in English is that the English present perfect has the continuous perfect function, whereas the German does not. For example, when the sentence *I have lived here* is uttered, the situation denoted by the predicate is not necessarily terminated at the speech time. On the contrary, *Ich habe hier gewohnt* 'I have lived here' is assumed that the speaker lived here before, but not anymore at the speech time.

In my master's thesis a pilot corpus study in Deutscher Referenzkorpus (DeReKo) was conducted. The imperfective predicates (aktionsarts of state and activity) such as *bleiben* 'stay', *lieben* 'love' and *zunehmen* 'increase' used in the present perfect construction have been analyzed. It is concluded that: 1) In contexts where no temporal adverbials that quantify the imperfective predicates, the situations denoted by those predicates must neither be anterior nor completed before the reference time/speech time; 2) In preterite contexts, both interpretations of the preterite and the perfect are available, which supports the ambiguity analysis in the literature (e.g., Löbner 2002).

These findings above contradict to the classic analysis in the literature (e.g. Löbner 2002, 2015). Thus, an alternative theory called "Extended Now" based on Fabricius-Hansen (1986) and von Stechow (1999) is introduced. Accordingly, what so called perfect aspect should not be treated as an aspect but as a relative tense, which denotes a reference time into the past and with its right boundary in a deictic tense, in this case the present tense.

## References (selected)

Fabricius-Hansen, Cathrine. 1986. *Tempus fugit.* Düsseldorf: Schwann.

Löbner, Sebastian. 2002. Is the German Perfekt a Perfekt Perfekt? In: *Sinn & Bedeutung VI, Proceedings of the Sixth Annual Meeting of the Gesellschaft für Semantik*. Universität of Osnabrück.

Löbner, Sebastian. 2015. *Semantik. Eine Einführung.* Berlin: de Gruyter.

von Stechow, A. 1999. Eine erweiterte Extended Now-Theorie für Perfekt und Futur. *Zeitschrift und Literaturwissenschaft Linguistik* 29, 86–118. https://doi.org/10.1007/BF03379171

Musan, Renate. 1999. The Lesarten des Perfekts. *Zeitschrift für Literatur und Lintuistik* 29, 6-51.

# Some German polar questions are "eh"-biased

Maya Cortez Espinoza

from joint work with Simon Dampfhofer

In German, polar questions may signal a speaker bias towards one particular answer by virtue of using one of several discourse particles. The Austrian German particle eh has been described as adding a [+ positive epistemic] bias, in the sense of Sudo, 2013, into polar questions. This bias comes with two modal flavors: belief-based (Csipak and Zobel, 2014) and bouletic (Zobel, 2017) bias, that is, questions with eh are restricted to contexts in which a speaker considers or previously considered the highlighted answer more likely or favors the highlighted answer. (1) exemplifies the use of eh with English paraphrases showing these modal flavors.

When used in assertions, eh signals i) recognition of an existing bias and ii) the denoted proposition to be in line with that bias. While Zobel, 2017 assumes the holder of this bias to be necessarily the

(1) Hast du eh an den Kuchen gedacht?
Have you EH about the cake thought?
*Approx. You have remembered the cake, right?*

    a. I **thought** you would remember the cake. Did you?
    b. I **hoped** you would remember the cake. Did you?

addressee, example (2) shows it to be more flexible.

(2) [I always dreamed of owning a horse farm.]

    a. Den Traum habe ich mir eh erfüllt.
    This dream have I Refl. eh fulfilled.
    I did fulfill this dream.

The intended poster spells out how discourse temporarily stores interlocutors' wishes and unconfirmed beliefs in order to account for the functionality of eh. Following Csipak and Zobel, 2014 and Zobel, 2017, I assume eh to introduce a [+ positive epistemic] bias towards phi in eh$\phi$? and eh$\phi$. (assertions and questions). With eh in polar questions, that bias is necessarily held by the speaker as no bias concerning this question can exist prior to uttering the question. For assertions, the added bias is matched with a previously known preference. If no such preference (doxastic or bouletic) is identifiable, an assertion with eh either i) is infelicitous ii) understood ironically or iii) triggers accomodation of a matching bias.

## References

Csipak, Eva and Sarah Zobel (2014). "A condition on the distribution of discourse particles across types of questions". In: Proceedings of NELS. Vol. 44. 1, pp. 83–94.

Sudo, Yasutada (2013). "Biased Polar Questions in English and Japanese". In: Beyond Expressives: Explorations in Use-Conditional Meaning. Ed. by Daniel Gutzmann and Hans-Martin G̈artner. Brill.

Zobel, Sarah (2017). "'Eh ist eh anders'– Eh and sowieso in Federal German and Austrian German". In: Wiener Linguistische Gazette 82, pp. 323–330.

# Be in the Right Place: Morphosyntactic Peculiarities of the Macedonian Article

Metodi Efremov

Macedonian has a definite article that simultaneously appears to be a clitic and an affix[1] (Tomić, 1996; Franks, 2001). It must always appear on the structurally highest φ-feature agreeing item, hence being a 2P Wackernagel clitic, as illustrated in (1).

1. a. Mnogu     dobri       leba.
       very       good.Pl       bread.Pl
   b. Mnogu      dobrite        leba.
       very        good.Pl+the.Pl      bread.Pl
   c. *Mnogute       dobri       leba.
       very+the.Pl       good.Pl      bread.Pl
   e. Site[2]         tri       dobri      leba.
       all.Pl+the.Pl     three      good.Pl    bread.Pl
   f. *Site       trite        dobri      leba.
       all.Pl+the.Pl   three+the.Pl      good.Pl    bread.Pl

As observable in (1), the definiteness marker can only appear once, as the contrast between (1e) and (1f) shows, and on virtually any item as long as it agrees with the noun, as (1c) shows. It can also appear on a quantifier, as shown in (1e), which I assume is hierarchically above D, and selects the DP as its complement (Cardinaletti & Giusti, 1992).

However, it also affects the phonological domain of its host, as shown in (2): final devoicing is blocked in (2b) – unlike (2a) – while deletion and epenthesis must occur in (2b).

2. a. Maž      –     mažot.
       [Maš]       [Mažot]
       man.M.Sg      man.M.Sg+the.M.Sg
   b. Dobar        maž     –     dobriot          maž.
       good.M.Sg       man.M.Sg       good.M.Sg+the.M.Sg    man.M.Sg

I propose that the dual nature (affixal clitic) of this item and its 2P requirement is due to an interaction of bidirectional Agree (see Bejar, 2003; Baker, 2008; Bejar & Rezac, 2009) and a global (phasal) impoverishment rule that occurs at PF (see Fongang, 2024) that deletes every uninterpretable DEF feature in the extended nominal domain (following contextual phasehood (Bosković, 2014)) except the structurally highest one.

## References:

Baker, M. C. (2008). *The syntax of agreement and concord* (Vol. 115). Cambridge University Press.

Bejar, Susana. 2003. *Phi-syntax: A theory of agreement*: University of Toronto dissertation.

---

[1] Bulgarian exhibits a similar, if not identical, paradigm that I abstract away due to time and space.

[2] The quantifier *site* in Macedonian must always have a definiteness marker; otherwise, the structure is unacceptable.

Bejar, Susana & Milan Rezac. 2009. Cyclic Agree. *Linguistic Inquiry* 40(1). 35–73.

Bošković, Ž. (2014). Now I'ma phase, now I'm not a phase: On the variability of phases with extraction and ellipsis. *Linguistic inquiry*, *45*(1), 27-89.

Cardinaletti, A., & Giusti, G. (1992). Partitive ne and the QP-hypothesis. A case study. In *Proceedings of the XVII Meeting of Generative Grammar. Trieste, February 22-24, 1991* (pp. 121-141). Rosenberg & Sellier.

Fongang, L. T. Exponent Drop in Aghem: Agree, Impoverishment, and the Unity of Phases in Syntax and Morphology.

Franks, S. (2001). The internal structure of Slavic NPs, with special reference to Bulgarian. *Generative linguistics in Poland: Syntax and morphosyntax*, 53-69.

Tomić, O. M. (1996). The Balkan Slavic clausal clitics. *Natural Language & Linguistic Theory*, *14*, 811-872.

# Exploring Inclusivity in Language Learning: Examining the Teaching and Learning Processes Among Signers with Learning Difficulties

Purva Basarkar

According to the World Health Organisation (WHO), an approximate of 5% of the population struggles with auditory dysfunction. Furthermore, an average of 0.1% to 0.2% of the population is profoundly deaf and relies on sign language as a means of communication. A seamless integration of minority communities and devices to cater to their needs forms an important part of promoting inclusivity. Keeping in line with this thought process, I would like to present a poster on the topic of inclusive teaching tools for signers with learning disabilities.

Over the past few decades, extensive research has transformed language teaching into a thriving and ever-evolving field. The field of study has broadened its scope to include not just the acquisition of second and third languages, but also the acquisition of second modalities. It is evident that there is a substantial focus on spoken language, but research has expanded to encompass non-verbal forms of communication, such as conventional sign languages. Numerous significant studies have been conducted in this area. In addition to language learning, extensive research has been conducted on individuals facing challenges with learning disabilities. Upon further examination, it becomes evident that the study primarily concentrates on learning disabilities associated with verbal communication.

My aim with this poster is to start a conversation about bridging the gap in research, and starting a conversation about the better implementation of the teaching tools to accommodate the minorities. My research focuses mainly on dyslexia, visual processing disorder (VPD), non-verbal learning disorders (NVLD) and executive functioning disorders. The background for this poster comes through literature available on the topic as well as input from medical professionals that specialise in the field of learning disabilities. With this research, the aim is to come up with ideas that encourage language instructors and learners alike to come up with a robust and all-encompassing relationship between language training and learning.

# On two developments in deontic MUST in L1 South African English

Rebecca Pitt

This poster focuses on two related developments in the functional domain of deontic *must* in L1 South African English (SAE). Deontic *must* traditionally involves the obligation of some controlling agent to bring about a state of affairs (Palmer 1990). I present data showing that phonologically variant forms of the modal express different speaker-orientated meanings that do not induce the addressee to act per se, but instead relate to speaker attitude/opinion (1) and speaker desire/wish (2):

(1) SAE *must*: <u>speaker attitude/opinion</u>
  a. You [**mʌs**]   *maar*   write the test again.
     you must    but.PRT     write the test again.
     'Well, I think you should then write the test again.'
  b. Let us know if we **mustn't** just walk. It's not far!
     'Don't you think we should just walk?'

(2) SAE *must*: <u>speaker desire/wish</u>
  a. You [**məs**] rest well!
     "Rest well!"
  b. You [**məsnt**] be worried about this!
     'You needn't be worried about this!/Don't worry about this!'

Speaker orientation is normally associated with epistemic modality, as the speaker makes a judgement regarding the truth of the proposition (Barbiers & van Dooren 2017). Diachronically, the direction of change for deontic *must* is typically thought to be towards epistemic modality (Lightfoot 1979). The speaker-orientated meanings of SAE *must* in (1) and (2), however, do not invoke an epistemic meaning.

I consider how the two SAE *must*-types might emerge in the modality system, proposing two separate routes: for (1)-type SAE *must*-uses, I hypothesise the relevance of high negation in negative questions with modals, and for the weak imperative-like *must* in (2), an alternative pathway which reflects the fact that this option is also possible for *must*-cognates in other Germanic languages.

## References

Barbiers, S. & van Dooren, A. 2017. 'The syntax of modal verbs.' In Everaert, M. &   van Riemsdijk, H. (eds.), *The Wiley Blackwell's companion to syntax.* 2nd edn.   New Jersey: John Wiley & Sons, Inc. 1-22.

Lighfoot, D. 1979. *Principles of diachronic syntax*. Cambridge: CUP

Palmer, F.R. 1990. *Modality and the English Modals*. London, New York: Longman Group.

# Form and Meaning Mismatches in Spanish Essays by Filipino Learners: The Interplay of Tagalog and English Influences

Royce Randall Lim

University of Santo Tomas

Manila, Philippines

It is widely accepted that language transfer plays an essential role in the process of language acquisition. Early research in the field revealed that cross-linguistic influence (CLI) was affected by the linguistic or typological distances between the languages involved (Bild & Swain, 1989). Experts commonly believe that if the languages involved are considered to be typologically similar, some facilitating effects in acquisition will appear (positive transfer).

On the other hand, when there is divergence between the native and the non-native language, CLI can occur in the form of errors, overproduction, underproduction, and miscomprehension (negative transfer) (Odlin,1989). Thus, in the present study, it was theorized that one's knowledge of a Mother tongue - Tagalog (L1) and Second language – English (L2) will affect their knowledge or use of the Foreign Language -Spanish (L3) when they lack knowledge in the target language (Spanish).

Tagalog and English exhibit distinct grammatical and syntactic structures compared to Spanish, leading to frequent mismatches in learners' Spanish essays. Tagalog's verb-subject-object (VSO) order often results in incorrect Spanish syntax (Odlin, 1989; Ringbom, 2007). Additionally, the lack of complex verb conjugations in Tagalog contributes to errors like "Yo estudiar" instead of "Yo estudio" (Ellis, 1997).

This study examines how form and meaning mismatches affect the written production of the L3 of Twenty-five (25) University students enrolled in Spanish 4 (A2) Level - Common European Framework of Reference for Languages -CEFR) course. It examines the students' written compositions of several texts in Spanish over one semester to ascertain how they express themselves in Spanish. The analysis of the study focuses on several essays written in response to various prompts, exploring Spanish as their third language (L3), with Tagalog as their mother tongue (L1) and English as their second language (L2). The study identifies cross-linguistic transfer as a significant factor influencing learners' Spanish sentence construction, highlighting the interplay between L1 and L2 in shaping L3 production.

# Experimental Studies on Korean Multi-tonal Imperatives: Sentence-type Conventions and Politeness Inferences

HONG Seungyeon

This study examines the use of multi-tonal boundary tones in Korean impera- tives to understand their impact on perceived politeness and acceptability. Korean prosody, especially boundary tones, plays a crucial role in conveying nuanced meanings and speaker intentions. This research focuses on five types of multi- tonal boundary tones (LHL%, HLH%, LHLH%, HLHL%, LHLHL%) and their usage in three types of imperatives: positive, negative, and insulting. An experi- ment on its politeness and acceptability of various imperative sentences with dif- ferent boundary tones was conducted. The results show that positive imperatives ending with LHLH% and LHLHL% tones are perceived as less acceptable, while negative and insulting imperatives with LHLHL% tones do not show reduced acceptability. Additionally, more complex tonal patterns, such as LHLHL%, gen- erally increase perceived politeness, especially in face-threatening situations. The findings suggest that specific combinations of imperative types and boundary tones lead to predictable social and emotional responses, highlighting the im- portance of prosodic variations in managing social interactions in Korean. This research contributes to our understanding of how boundary tones influence the pragmatics of politeness and the perception of imperatives in Korean. Further empirical surveys are needed to clarify these observations.

## References

Culpeper (1996). Towards an anatomy of impoliteness. Journal of Pragmatics (JPrag), 25.

Culpeper (2010). Conventionalised impolitness formulae. Journal of Pragmatics (JPrag), 42.

Jeong, S. (2021). Deriving politeness from an extended lewisian model: The case of rising declaratives. Journal of Pragmatics, 177:183–207.

Jeong, S. and Potts, C. (2016). Intonational sentence-type conventions for perlocution- ary effects: An experimental investigation. Semantics and Linguistic Theory, pages 1–22.

Jun, S.-A. (2004). Intonational phonology of seoul korean revisited. UCLA Working Papers in Phonetics, 104.

Jun, S.-A. (2005). Prosodic Typology: The Phonology of Intonation and Phrasing, volume 25. Oxford University Press, Oxford.

Jun, S.-A. (2006). The role of intonation in sentence processing. 인문학연구, pages 195–211.

Jun, S.-A. (2012). Prosodic typology revisited: Adding macro-rhythm. Organization, 13:22.

Ladd, D. R. (2008). Intonational Phonology. Cambridge University Press.

Lee, H. (1976). Intonation in Korean 한국어 단음절어의 억양연구. (사)한국언어학회, 1:131–143.

Park, M.-J. (2013). The meaning of Korean prosodic boundary tones. Global Oriental, Leiden.

# Cross-world reference

Squid Tamar-Mattis

One way for semanticists to analyze truth in fiction is by relativizing propositions to fictional worlds. However, there exist some sentences in natural language which require information from multiple worlds to be interpreted. These include referential cross-world sentences, where the name of an actor from the real world appears to replace the name of the fictional character they play (downward) (1), or vice versa (upward) (2).

(1) Mark Hamill is a Jedi.

(2) Luke Skywalker was interviewed on CBS.

Previous literature (Cook 2017, i.a.) has generally assumed that in these cases, the name of an individual from one world actually does reference the related individual in another. I present several empirical asymmetries between upward and downward cross-world reference that demonstrate problems with this analysis. Instead, I propose a covert operator FICT, which takes a predicate P, and returns a predicate that roughly means `plays a character of whom P is true in a (contextually relevant) fictional world.' FICT can be applied to sentential predicates to form downward referential cross-world sentences, or within DPs to form upward referential cross-world sentences, provided we make certain (merited) assumptions about the structure of name and pronoun DPs. In addition to the aforementioned asymmetries, this accounts for apparent differences between English and languages like Italian in how gender is handled in upward referential cross-world sentences, as well as for some previously studied facts about dream reports (Percus & Sauerland 2003, Anand 2007), which I analyze as a type of downward referential cross-world sentence.

## References

Anand, Pranav. 2007. Dream report pronouns, local binding, and attitudes' de se'. Pages 1–18 of: Proceedings of Semantics and Linguistic Theory.

Cook, Catherine Leanne. 2017. I Rolled a One and I'm Dead: Person Reference Across the Multiple Worlds of Table-Top Roleplaying Games. Ph.D. thesis, Monash University.

Percus, Orin, & Sauerland, Uli. 2003. Pronoun movement in dream reports. Pages 265–284 of: Proceedings of the Northeast Linguistic Society, vol. 33.

# How to end an explanatory interaction

Vivien Lohmer

Faculty of Linguistics and Literature, Bielefeld University, Germany

vivien.lohmer@uni-bielefeld.de

Supervisor: Prof. Dr. Friederike Kern

Faculty of Linguistics and Literature, Bielefeld University, Germany

friederike.kern@uni-bielefeld.de

Everyday explanatory interactions are usually embedded in larger conversational contexts, e.g. a dinner conversation or small talk, and follow a specific global structure [1], [2]. This structure consists of a series of communicative tasks that are co-constructively implemented by the participants. During explanatory interactions, turn-taking is paused and a principal speaker [3], the explainer (EX), to whom the right is assigned to talk for a longer period of time, is established [4], [5]. However, the other participant(s) are equally involved in successfully accomplishing the explanatory interaction, for example by signalling ongoing attention, asking questions, or indicating their (non-)understanding. Even if the EX as the principal speaker provides the content of the explanatory interaction, the Explainees (EEs) are equally involved in fulfilling the communicative tasks (jobs) [2].

The present analyses focused on how the final communicative task – closing the explanation – is mutually achieved. To address this question, 26 dyadic explanatory interactions of the boardgame Quarto! were videotaped, subsequently transcribed according to GAT2 (minimal transcript) [6] and then annotated according to a previously established coding scheme (cf. [4, p. 320]. The analyses follow the principles of ethnomethodological conversation analysis [7], [8], [9].

The results show that if one participant – e.g the EX – initiates a closing sequence [10], the other participant – the EE – has three options and regularly employs either one of them or a combination of these: (1) accepting the closing sequence by producing formulations that display understanding [11]; (2) accepting the pre-closing without further (re-)formulations and co-constructively fulfilling the closing of the explanatory interaction; (3) declining the offer to close by, e.g., asking a question or producing a remark on the previously explained content. In this case, further content regarding the explanandum is explained. Both participants return to the core job of the explanatory interaction.

## References

[1] M. Morek, Kinder erklären: Interaktionen in Familie und Unterricht im Vergleich. in Stauffenburg Linguistik, no. Bd. 60. Tübingen: Stauffenburg, 2012.

[2] U. Quasthoff, V. Heller, and M. Morek, 'On the sequential organization and genre-orientation of discourse units in interaction: An analytic framework', Discourse Studies, vol. 19, no. 1, pp. 84–110, Feb. 2017, doi: 10.1177/1461445616683596.

[3] B. Wald, 'Zur Einheitlichkeit und Einleitung von Diskurseinheiten', U. Quasthoff (ed.), 1978.

[4] J. B. Fisher, V. Lohmer, F. Kern, W. Barthlen, S. Gaus, and K. J. Rohlfing, 'Exploring Monological and Dialogical Phases in Naturally Occurring Explanations', Künstl Intell, vol. 36, no. 3–4, pp. 317–326, Dec. 2022, doi: 10.1007/s13218-022-00787-1.

[5] H. Sacks, E. A. Schegloff, and G. Jefferson, 'A Simplest Systematics for the Organization of Turn Taking for Conversation', in Studies in the Organization of Conversational Interaction, Elsevier, 1974, pp. 7–55. doi: 10.1016/B978-0-12-623550-0.50008-2.

[6] M. Selting et al., 'Gesprächsanalytisches Transkriptionssystem 2 (GAT 2)', Gesprächsforschung : Online-Zeitschrift zur verbalen Interaktion, 2009, Accessed: Apr. 05, 2023. [Online]. Available: https://orbilu.uni.lu/handle/10993/4358

[7] J. Bergmann, 'Ethnomethodologische Konversationsanalyse', in Sprachwissenschaft: ein Reader, 4., Aktualisierte und erweiterte Auflage., L. Hoffmann, Ed., in De Gruyter Studium. , Berlin ; Boston: De Gruyter, 2019.

[8] C. Goodwin and J. Heritage, 'Conversation Analysis', Annual Review of Anthropology, vol. 19, pp. 283–307, 1990.

[9] F. Kern and M. Selting, 'Conversation Analysis and Interactional Linguistics', C. A., 2020.

[10] E. A. Schegloff and H. Sacks, 'Opening up Closings', Semiotica, vol. 8, no. 4, 1973, doi: 10.1515/semi.1973.8.4.289.

[11] F. Kern, 'Prosody as a resource in children's game explanations: Some aspects of turn construction and recipiency', Journal of Pragmatics, vol. 39, no. 1, pp. 111–133, Jan. 2007, doi: 10.1016/j.pragma.2005.01.017.

# Temporality and asymmetric conjunction

Zeming Xu

University of Göttingen

Unlike the symmetric logical operation of conjunction, sentences conjoined by the natural linguistic coordinator and can be asymmetric, since the temporal or causal relation between the coordinated clauses might change as the order of the conjuncts is reversed, resulting in asymmetric conjunctions (Schmerling, 1975). In (1-a), the event in the first conjunct is normally interpreted as temporally and causally prior to that in the second conjunct, and reversing the conjuncts leads to a different interpretation in (1-b).

(1)  a. [I left the door open] and [the cat got in].

   b. [The cat got in] and [I left the door open].

Current approaches to asymmetric conjunction can be divided into two categories. On the one hand, pragmatic approaches following the Gricean tradition maintain the position that the semantics of the natural linguistic conjunction and is equivalent to the logical operator $\wedge$, and all other meaning components are derived through pragmatic mechanisms (Carston, 2002; Grice, 1975; Levinson, 2000). On the other hand, semantic approaches propose that and has a semantics which blocks certain semantic relations between the conjuncts like EXPLANATION, which involve backward temporal or causal relations between the conjuncts (Altshuler & Truswell, 2022; Bar-Lev & Palacas, 1980; Txurruka, 2003).

Carston (2002) observed that sentences like (1-a) involve two separate relations: a temporal relation and a causal relation. The present study addresses the question of which semantic relation is blocked by and: the reversed temporal relation, the reversed causal relation, or both. Results of an experiment show that although the reversed temporal relation was rated as less preferable but still acceptable, the reversed causal relation received higher ratings, similar to sentences with symmetric relations. These results provide empirical support for the pragmatic approaches.

## References

Altshuler, D., & Truswell, R. (2022). Coordination and the Syntax-Discourse Interface. Oxford University Press. https://doi.org/10.1093/oso/9780198804239.001.0001

Bar-Lev, Z., & Palacas, A. (1980). Semantic command over pragmatic priority. Lingua, 51, 137–146.

Carston, R. (2002). Thoughts and Utterances: The Pragmatics of Explicit Communication. Blackwell. https://doi.org/10.1002/9780470754603

Grice, H. P. (1975). Logic and conversation. In P. Cole & J. Morgan (Eds.), Syntax and Semantics 3: Speech Acts. (pp. 41–58). Acadamic Press.

Levinson, S. C. (2000). Presumptive Meanings: The Theory of Generalized Conversational Implicature. MIT Press. https://doi.org/10.7551/mitpress/5526.001.0001

Schmerling, S. (1975). Asymmetric conjunction and rules of conversation. In P. Cole & J. L. Morgan (Eds.), Syntax and Semantics (pp. 211–231). Academic Press.

Txurruka, I. G. (2003). The natural language conjunction and. Linguistics and Philosophy, 26(3), 255–285.

# Serial verb reduplications in Asian and African languages: A contrastive look at Zhuang and Dàgáárè

Wenjiu Du (joint work with Prof. Adams Bodomo)
Goethe-Universität, Frankfurt and Universität Wien

This paper investigates the interaction between serial verb constructions (SVCs) and verb reduplications (VRs), a grammatical process we term **serial verb reduplications (SVRs)** (Bodomo & Abubakari 2022). We conduct a contrastive study that takes two genetically unrelated and understudied languages, Zhuang (a Tai langauge spoken in southern China) and Dàgáárè (a Mabia language spoken in northwestern Ghana), as a stepping stone to uncover the uniformity and diversity within SVRs.

## SVRs as a comparative concept

SVRs refer to constructions derived from SVCs in which at least one verb in the series is reduplicated. SVCs are defined as productive, monoclausal constructions consisting of different independent verbs without any linking element or predicate-argument relation between them (Haspelmath 2016; Bodomo 2019). VRs involve the full or partial repetition of the verb base (Haspelmath & Sim 2013).

In both Zhuang and Dàgáárè, SVRs are characterized by lexical full reduplication.

## Comparison of semantic types

Based on a verbal semantic typology (Luke & Bodomo 2001), we identify the following types of SVRs in Zhuang and Dàgáárè (cf. Pan 2010; Bodomo 2019).

| Type | Motion | Benefactive | Instrumental | Manner | Posture | Resultative | Purposive | Inceptive |
|------|--------|-------------|--------------|--------|---------|-------------|-----------|-----------|
| Zhuang | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Dàgáárè | ✓ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✓ |

As shown in the table, Zhuang exhibits a broader range of semantic types of SVRs compared to Dàgáárè.

## Comparison of reduplication patterns

In Dàgáárè, verb reduplication is governed by two constraints (Bodomo & Abubakari 2022): (1) semantically full-fledged verbs are available for reduplication across all SVR types, and (2) semantically bleached verbs can only be reduplicated in benefactive and causative pluractional SVRs, where reduplication marks plurality by virtue of agents, themes, or patients. In contrast, Zhuang does not adhere to constraint (2); in other words, number does not trigger reduplication in Zhuang SVRs.

## Comparison of syntactic structures

Although Zhuang and Dàgáárè bear close surface resemblance in shared SVR types (regardless of the distribution of TAM and negation markers), they differ structurally, particularly in resultative and purposive SVRs.

In Dàgáárè resultative (causative) SVRs, both verbs are transitive and share an object. In Zhuang counterparts, however, the object of a transitive V1 is shared with the subject of an unaccusative V2.

In purposive SVRs, also known as reference-sharing SVRs (Du 2024), Dàgáárè uniquely displays symmetric sharing (cf. Hirawa & Bodomo, 2008), whereas Zhuang is better represented by a complementation structure with *pro*.

**References**

Bodomo, A. (2019). A Dagaare Pandora's box: The syntax of verb serialization in an oral literature context. In   J. Essegbey, D. Kallulli, & A. Bodomo (eds.), *The Grammar of verbs and their arguments* (pp. 115-149). Köln: Rüdiger Köppe Verlag.

Bodomo, A., & Abubakari, H. (2022). Serial verb reduplication in the Mabia languages of West Africa. *Legon Journal of the Humanities, 33*(2), 29-58.

Du, W. (2024). Two types of benefactive serial verb reduplications in Tsat. Paper presented at AFLA 31.

Haspelmath, M. (2016). The serial verb construction: Comparative concept and cross-linguistic generalizations. *Language and linguistics, 17*(3), 291-319.

Haspelmath, M., & Sims, A. (2013). *Understanding morphology*. New York: Routledge.

Hiraiwa, K., & Bodomo, A. (2008). Object-sharing as symmetric sharing: Predicate clefting and serial verbs in Dàgáárè. *Natural Language & Linguistic Theory, 26*(4), 795-832.

Luke, K. K., & Bodomo, A. (2000). A comparative study of the semantics of serial verb constructions in Dagaare and Cantonese. *Languages in Contrast, 3*(2), 165-180.

Pan, Y. (2010). *On the verb phrase in Qinzhou Zhuang: An LFG analysis of serial verb constructions*. Ph.D. dissertation, University of Hong Kong.

# Session 3

## Unraveling Pointing in Turkish Sign Language (TİD)

Ece Eroğlu, Kadir Gökgöz

This paper aims to unfold the functional diversity of pointing signs in Turkish Sign Language (TİD). They may be identified through syntactic evidence, as well as phonetic evidence which may sometimes consist of subtle cues and thus prove difficult to detect with impressionistic methods. To enhance categorization accuracy, we employ Pose Estimation, a cutting-edge computer vision technique. This method precisely transforms phonetic cues into solid numeric ranges upon which hypotheses can be built. The calculations enable disambiguating mappings onto primary classes— nominals and locatives, including subcategories like *pronouns, demonstratives, and clitics* in the nominal domain. Our categorization aligns with Pfau's (2010) proposed grammaticalization path for pointing signs. We argue that the morpho-phonological features separating these classes predominantly utilize spatial information, especially the distance along the x (horizontal) and y (vertical) axes.

This study builds upon the theoretical framework of feature geometry by integrating *Demonstratives* into the model developed by Harley and Ritter (2002) for the nominal domain in spoken languages and extended by Grose (2021) for sign languages. The findings support that the higher the number of features a category holds, the higher the amount of phonological specifications are, extending (Pfau, 2010). Therefore, the arguably semantically strong class, *Locative*, exploits the signing space along with other parameters to the fullest while other classes (e.g. *Demonstratives*) are phonologically weaker.

In summary, our comprehensive approach integrates insights from various domains, including distributional evidence, grammaticalization processes, feature geometry, and a novel computer vision method to offer a robust categorization perspective on the diverse functions of pointing in TİD.

## References

Grose, D. (2021). Person, Number and Location: A Feature Geometric Approach to Sign Language Pronoun.

Harley, H., & Ritter, E. (2002). Person and number in pronouns: A feature-geometric analysis.

Pfau, R. (2010). A point well taken.

# Children's interpretation of Disjunctive Antecedent Conditionals

Eleonora Zani[1], Emanuela Sanfelici[2], and Ivano Ciardelli[2]

[1] Goethe University Frankfurt

[2] University of Padua

This study investigates how monolingual Italian children and adults interpret *disjunctive antecedent conditionals* (DACs), i.e., sentences of the form "if A or B, then C". DACs are associated with the debated phenomenon of *simplification of disjunctive antecedents* (SDA), an interpretation whereby a conditional "if A or B, then C" is analysed as equivalent to "(if A, then C) and (if B, then C)". Accounts of SDA fall into two camps: semantic accounts regard SDA as a logically valid principle [1, 4, 6, 3, 12]; while pragmatic accounts posit that it arises as an implicature [2, 10]. The aim is to provide empirical data to inform the theoretical debate on the source of SDA. Investigating whether SDA interpretation is acquired early could provide valuable insight into its nature, given children's delayed development of pragmatic skills [5].

140 children aged 5;0 to 9;11 and 28 adults were administered a Truth Value Judgment Task. Participants were asked to judge a total of 16 DACs, involving conditionals of different kinds (indicatives vs. counterfactuals). Our results indicate that SDA is the preferred reading of DACs in all age groups, regardless of mode. However, the preference for this reading increases with age, becoming near universal in adults.

A second reading of DACs (*disjunctive conditional reading* - DCR, whose structure is "(if A, then C) or (if B, then C)") is widely attested in children, decreasing with age in line with the increase of SDA.

Our data pose a special challenge to Lewis's classical theory [8] and Bar Lev and Fox's pragmatic account [2]. They are best explained by the theories of Santorio [11] and Cariani and Goldstein [3], which combine the idea that disjunctions give rise to alternatives, as in alternative and inquisitive semantics, with the idea that they involve homogeneity [9, 7].
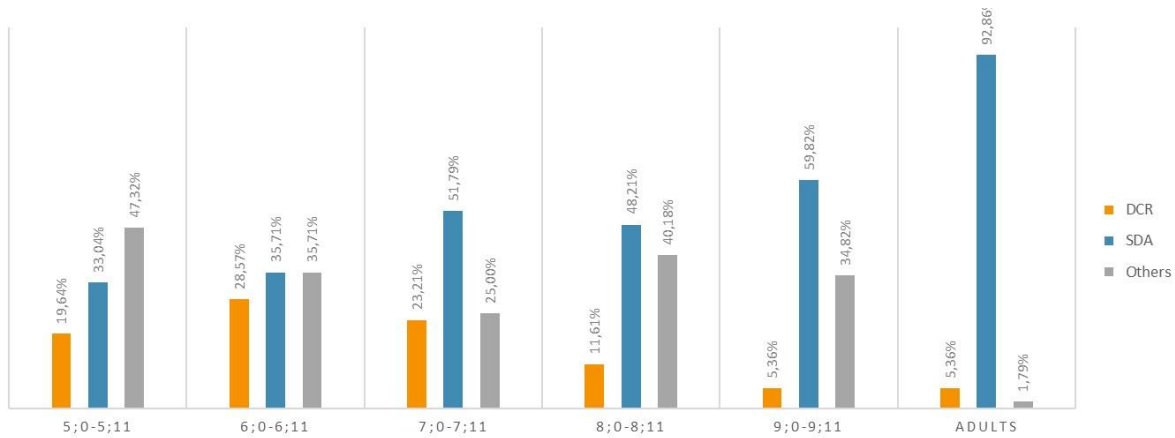


Figure 1: Percentage of interpretative patterns among age groups

# References

[1] Luis Alonso-Ovalle. "Counterfactuals, Correlatives, and Disjunction." In: Linguistics and Philosophy 32.2 (2009), pp. 207-244.

[2] Moshe E. Bar-Lev and Danny Fox. "Free Choice, Simplification, and Innocent Inclusion." In: Natural Language Semantics 28.3 (2020), pp. 175-223.

[3] Fabrizio Cariani and Simon Goldstein. "Conditional Heresies." In: Philosophy and Phenomenological Research 101.2 (2020), pp. 251-282.

[4] Ivano Ciardelli, Linmin Zhang, and Lucas Champollion. "Two Switches in the Theory of Counterfactuals: A Study of Truth Conditionality and Minimal Change." In: Linguistics and Philosophy 6 (2018).

[5] Napoleon Katsos and Dorothy V.M. Bishop. "Pragmatic Tolerance: Implications for the Acquisition of Informativeness and Implicature." In: Cognition 120.1 (2011), pp. 67-81.

[6] Justin Khoo. "Disjunctive Antecedent Conditionals." In: Synthese 198.8 (2018), pp. 7401-7430.

[7] Manuel Križ. "Homogeneity Effects in Natural Language Semantics." In: Language and Linguistics Compass 13.11 (2019), e12350. doi: 10.1111/lnc3.12350.

[8] David Lewis. "Possible-world Semantics for Counterfactual Logics: A Rejoinder." In: Journal of Philosophical Logic (1977), pp. 359-363.

[9] Sebastian Löbner. "Polarity in Natural Language: Predication, Quantification and Negation in Particular and Characterizing Sentences." In: Linguistics and Philosophy 23 (2000), pp. 213-308.

[10] Dean McHugh. Causation and Modality. ILLC dissertation series. Institute for Logic, Language and Computation, 2023.

[11] Paolo Santorio. "Alternatives and Truthmakers in Conditional Semantics." In: The Journal of Philosophy 115.10 (2018), pp. 513-549.

[12] Paolo Santorio. "Simplification is not Scalar Strengthening." In: Semantics and Linguistic Theory 30 (Mar. 2021).

# Classifier handshape choice in German Sign Language

### - a poster presentation by Isabeau Lettow

Classifier constructions map groups of entities according to their iconic properties [1]. For instance, a person is shown by the 1-handshape, whereas a car is depicted by the b-handshape in German Sign Language (DGS) [2]. These classifiers are different from their lexical sign counterparts because they can be used to show movement in space, for example how a car drives up a mountain or how a man runs in circles. The handshape and its orientation represent the classified entity and then combine with a verb that indicates their movement or location [2]. The fact that the entity as well as its movement can be shown simultaneously in one sign is a modality-specific phenomenon for sign languages [2]. Overall, the use of a classifier construction is a complex morphological process [2].

In our research, we focus on the handshape of classifier constructions and whether signers choose different handshapes to highlight different aspects of the referent they want to present. We are especially interested in the distinction between the 1-handshape representing the whole body of the referent in contrast to the h-handshape focusing on their legs. To answer this question, we analysed retellings of 6 episodes of Tweety and Silvester cartoons by 13 signers of DGS. We annotated every classifier construction they used to show how the cat Silvester flies up a catapult, climbs up a pipe or swings on a rope or how the bird Tweety flies around to escape. Not only the handshape was annotated but also 16 other factors, for example which movement and direction the handshape has, if the classifier is accompanied by mouthing or constructed action or whether it interacts with the second hand of the signer. Finally, the data was evaluated quantitatively, focusing on the difference between the 1- or h-handshapes to understand for which purpose each handshape is used.

## References

[1] Quer, J., Cecchetto, C., Donati, C., Geraci, C., Kelepir, M., Pfau, R., & Steinbach, M. (2017). SignGram Blueprint. A Guide to Sign Language Grammar Writing. Walter de Gruyter, 250–260. https://doi.org/10.1515/9781501511806

[2] Baker, A., van den Bogaerde, B., Pfau, R., & Schermer, T. (2016). The Linguistics of Sign Languages. An introduction. John Benjamins Publishing Company, 221–224. https://doi.org/10.1075/z.199

# A Preliminary Study on Negative Nonmanual Markers in Brazilian Sign Language

Lorena Figueiredo

Different sign languages express negation using manual and/or nonmanual markers. Manual markers include the standard negative sign NOT, negative pronouns, or verbs with incorporated negation. Nonmanual markers vary across languages and can involve head movements or mouth shapes. This paper presents a preliminary study on negative nonmanual markers in Libras, using corpus data and a Computer Vision approach.

Previous research on Libras suggests that the obligatory negative marker in this language is nonmanual (Quadros, 1999; Arrotéia, 2005; Quadros, 2019). Arrotéia (2005) describes the negative nonmanual markers in Libras as a negation face and a headshake. The negation face, the obligatory marker, involves eyebrow lowering, mouth shape modification, and a slight head nod. The headshake is optional, with a less strict scope over the negative manual sign or the VP, and has a less precise onset and offset compared to the negation face.

This study analyzed five Libras signers, whose videos were extracted from the Corpus Libras (Quadros et al., 2020), resulting in 91 minutes of annotated data. We additionally annotated ELAN files for headshakes, mouth marking, and negative signs. We found 243 negated sentences and 300 negative signs. Mouth marking was present in 68.5% of the sentences, with 'puckered lips,' 'lips corners down,' and 'dimpled lips' being the most frequent shapes. About 61.7% of the sentences included headshake. Most sentences containing headshake also included a manual negative sign, emphasizing the secondary role of headshake.

Following Kimmelman et al. (2024), we used Computer Vision to study kinetic properties of the headshakes, employing OpenFace (Baltrusaitis et. al 2018) to extract head rotation measurements (yaw axis representing the headshake). We found significant differences in measures such as amplitude of movement and frequency of turns per second between the signers, but not between headshakes with and without spreading.

## References

Arrotéia, Jéssica. (2005) O papel da marcação não-manual nas sentenças negativas em Língua de Sinais Brasileira (LSB). MA Thesis. Instituto de Estudos da Linguagem, Campinas: Unicamp.

Baltrusaitis, Tadas; Zadeh, Amir; Lim, Yao Chong; Morency, Louis-Philippe. 2018. Openface 2.0: Facial behavior analysis toolkit. In: 2018 13th IEEE International Conference on Automatic Face & Gesture Recognition (FG 2018), 59–66. IEEE.

Kimmelman, Vadim; Oomen, Marloes; Pfau, Roland (2024). Headshakes in NGT: Relation between Phonetic Properties & Linguistic Functions. Proceedings of LREC-SL 2024.

Quadros, Ronice (1999) Phrase structure of Brazilian Sign Language. PhD Dissertation. Escola de Humanidades, Porto Alegre: PUCRS.

Quadros, Ronice (2019) Libras (Linguística para o ensino superior; 5) - 1. ed. – São Paulo: Parábola.

Quadros, Ronice M. de.; Schmitt, Deonísio; Lohn, Juliana T.; Leite, Tarcísio de A. (2020) Corpus de Libras. http://corpuslibras.ufsc.br/.

# The view of past and perfect from Vietnamese

Thomas Truong

Previous work has often viewed perfect as distinct from past tense, though some have analyzed perfect as an embedded past tense operator (McCawley 1998, Arregi & Klecha 2015). I provide novel data from Vietnamese for the latter view. Vietnamese is a "superficially tenseless language", unmarked sentences can refer to past or present time reference but not future time reference.

(1)  (Nam ngoai / Bay gio / #Nam sau) Michael song o Amherst

(Last year / Now        / Next year)    Michael live in Amherst

'(Last year / Now      / #Next year) Michael lives/lived in Amherst'

Following Matthewson (2006), I assume a covert NONFUT tense operator in sentences like (1). An optional auxiliary morpheme da forces anteriority. The puzzle is that da is ambiguous between past tense and perfect aspect, as shown by the sentences below.

(2)  (Nam ngoai / #Bay gio / #Nam sau) Michael **da**      song o Amherst

(Last year /    Now      / Next year)    Michael DA    live in Amherst

'(Last year /    Now    / #Next year) Michael lived/ has lived in Amherst'

(3)  Luc 3 gio Minh **da**    lam        banh mi

At 3 hour Minh DA make sandwich

'At 3p.m. Minh made a sandwich / At 3.p.m Minh had made a sandwich'

The fact that (3) is ambiguous between the two interpretations suggests that da is genuinely ambiguous between a past tense and a perfect. This ambiguity does not occur with unmarked sentences. In my proposal, I give a uniform semantics for an operator DA (6) and derive the ambiguity in (2)-(3) from a structural ambiguity such that sentences like (2) have one LF where DA occupies the T-head as in (4) and one LF where DA is embedded under NONFUT as in (5).

(4)  [t*[TPDAj[AspPPFV[VPMichael live in Amherst]]]]

(5)  [t*[TPNONFUTi [DAj[AspPPFV[VPMichael live in Amherst]]]]]

(6)  $[[DA]]=[\lambda P\langle i,t\rangle.[\lambda t'i.\exists t'':t''<t'\&t''\in g(j)\&P(t'')]]$

## References

Arregi, Karlos & Peter Klecha. 2015. The morphosemantics of past tense. Proceedings of NELS 45.53–66.

Matthewson, Lisa. 2006. Temporal semantics in a superficially tenseless language. Linguistics and Philosophy 29(6). 673–713.

McCawley, James D. 1998. The syntactic phenomena of English. University of Chicago Press.

# On the Syntax of Adverbial Classifier Reduplication in Mandarin

Yan Wang

The syntactic reduplication in Indo-European languages, reported in previous studies as NPN constructions like one by one, have attracted much attention in the generative literature: they are argued to semantically function as a distributive phrase that targets plural participants and syntactically involve a reduplicative head Q bearing a quantity feature (Travis 2001; Jackendoff 2008). This study examines their understudied Mandarin counterpart, Num-Cl P Num-Cl (hereafter NCPNC) structure. Having discovered a fine-grained four-way ambiguity of Mandarin NCPNC constructions, I argue that an NCPNC construction enters the derivation as a V complement and moves to its surface pre-VP position (cf. Larson 2018).

Being a typical numeral classifier language, Mandarin requires a matching relationship between classifiers and nominal targets. Hence, in a transitive sentence with an adverbial NCPNC construction, if the subject and object may share the same classifier, the NCPNC construction is ambiguous between a subject-targeted (ST) and an object-targeted (OT) reading. Meanwhile, depending on the target of universal quantification, an NCPNC construction may either be interpreted as a manner adverbial (MA), or as a subject-oriented adverbial (SOA) emphasizing the quality of the subject (Jackendoff 1972; McConnell-Ginet 1982; Ernst 2002; Li et al. 2012). Hence, a single NCPNC construction may show a four-way (2*2) ambiguity:

(1) [tamen]$_j$       [yi-ge       jie       yi-ge]$_{j/i}$       de   chi   [pingguo]$_i$.

     [they-PL]$_j$      [one-Cl      following      one-Cl]$_{j/i}$      DE   eat   [apples]$_i$.

     '[They]$_j$ eat [apples]$_i$ [one by one]$_{j/i}$.'

     (i)'Every single person of them all eat one apple after another.'            [SOA-OT]

     (ii)'Every single person of them in turn, all eat apples .'             [SOA-ST]

     (iii)'They (possibly together) eat one apple after another.'             [MA-OT]

     (iv)'They, one person after another, eat apples in turn.'             [MA-ST]

Moreover, it is observed that the linear order between an NCPNC construction and another quantificational element, e.g. modal or negation correlates with the availability of the abovementioned four readings. In particular, only [MA-OT] and [MA-ST] are attested when modal/negation scopes over yige jie yige (2a) but only [SOA-ST] when yige jie yige scopes over modal/negation (2b):

(2)    a. [tamen]$_j$ bixu/meiyou       [**yige**    **jie**      **yige**]$_{j/i}$ de   chi   [pingguo]$_i$.

     [they-PL]$_j$ must/NEG        [one-Cl   following one-Cl]$_{j/i}$ DE   eat   [apples]$_i$.

     '[They]$_j$ must/didn't eat [apples]$_i$ [one by one]$_{j/i}$.'

                               (Modal/Neg > *yige jie yige*: [MA-ST] √ [MA-OT] √)

     b. [tamen]$_j$ [**yige**    **jie**      **yige**]$_{j/*i}$      de      bixu/meiyou      chi      [pingguo]$_i$.

     [they-PL]$_j$ [one-Cl following one-Cl]$_{j/*i}$           DE           must/NEG      eat      [apples]$_i$.

     '[They]$_j$ must/didn't eat [apples]$_i$ [one by one]$_{j/*i}$.'

Based on the above data, we may assume that an SOA NCPNC construction surfaces above the modal/neg while an MA NCPNC construction under the modal/neg, and OT reading would be

ruled out only under SOA reading. Adopting Larson's (2018) proposal, I argue that the NCPNC construction is base-generated in a V-complement position, whereas de behaves like a functional head ("concordializer") and forces the NCPNC construction to move to its surface position to receive Case through Agreement. Hence, the OT reading is explained by assuming a binding relationship between yige jie yige and the c-commanding object antecedent after reconstruction (3); while ST reading is always available since the subject always c-commands yige jie yige. When it moves to the position under the scope of a quantificational element, both subject-targeted and object-targeted reading are allowed (MA-ST, MA-OT; 4b). When it moves across the quantificational phrase, only SOA-ST interpretation is allowed (4a); the OT reading is ruled out due to the lack of reconstruction which would have violated The Isomorphic Principle (Aoun & Li 1989, based on Huang 1982), i.e., Chinese bans the inverse scope reading in the sentence with more than one quantifier.

(3) [$_{TP}$ tamen [$_{SOAP}$ {yige jie yige de}] [$_{ModalP}$ bixu [$_{vP}$ [$_{MAP}$ {yige jie yige de}] tamen chi pingguo [$_{vP}$ chi {yige jie yige de}]]]].

(4)    a. *[$_{TP}$ tamen [yige jie yige de]$_j$ [$_{ModalP}$ bixu] [$_{vP}$ chi [pingguo]$_j$ t$_j$]].        (*yige jie yige* > Modal, SOA)

       b. [$_{TP}$ tamen [$_{ModalP}$ bixu] [$_{vP}$ [yige jie yige de]$_j$ [$_{vP}$ chi [pingguo]$_j$ t$_j$]]]].        (Modal > *yige jie yige*, MA)

This study therefore supports the V-complement analysis of manner adverb (Alexiadou 1997; Stroik 1990), as well as Larson's Agreement-based movement account; and the analysis for its quantificational scopal relationship reflects the scope rigidity of quantifiers in Chinese (C.-T. J. Huang 1982; Lee 1986; Aoun & Li 1989).

## Selected References

Alexiadou, A. 1997. Adverb placement: A case study in antisymmetric syntax. Amsterdam: John Benjamins Publishing Company.

Aoun, J., & Li, Y. H. A. 1989. Scope and constituency. Linguistic inquiry, 20(2), 141-172.

Ernst, T. 2002. The syntax of adjuncts. Cambridge: Cambridge University Press.

Huang, C-T. J. 1982. Logical relations in Chinese and the theory of grammar (Doctoral dissertation, MIT).

Huang, C-T James, Y.-H. Audrey Li & Yafei Li. 2009. The syntax of Chinese. Cambridge, UK: Cambridge University Press.

Jackendoff, R. 2008. 'Construction after Construction' and its theoretical challenges. Language, 8-28.

Larson, R. K. 2018. AP-de (地) adverbs in Mandarin. Studies in Chinese Linguistics, 39(1), 1-28.

Lee, T. H. T. 1986. Studies on quantification in chinese. (Doctoral dissertation, UCLA).

Li, Y., Shields R. & Lin V. 2012. Adverb classes and the nature of minimality. Natural Language and Linguistic Theory, 30(1), 217−260.

McConnell-Ginet, S. 1982. Adverbs and logical form: A linguistically realistic theory. Language, 58(1), 144–184.

Stroik, T. 1990. Adverbs as V-sisters. Linguistic Inquiry, 21(4), 654-661.

# The Interpretation of Mandarin Bare Numeral Phrases: (In)definiteness without Articles

Zeqi Zhao

The interpretation of Bare Numeral Phrases (BNP) is ambiguous between the **quantity(q)-denoting** reading and **individual (i)-denoting** reading (terminology in Li 1998).

(1) Two people can complete the task.

　　a. The task requires at least two people to be completed.

　　b. There are two people (e.g., John and Mary) such that they are able to complete the task.

The distinction between the two readings of BNPs can be signaled by whether they bring about the inference that there exit two individuals that satisfy the description.

(2) a. Two people can complete the task, (but sadly we don't have two people).

　　b. Two people (John and Mary) can complete the task, #(but sadly we don't have two people).

The contrast above is further complicated when the Mandarin data is concerned: with a structure [num–clf–N], Mandarin BNPs in subject positions seem to only allow the q-denoting reading. In order to get the i-denoting reading, the morpheme you or dou must be inserted overtly.

(3) liang ge　　ren　　keyi wancheng renwu

　　two CLF　　person can complete　　task

　　'Two people are required to complete the task.'

(4) *you* **introduces indefiniteness:**

　　(you) liang ge　　ren　　keyi wancheng renwu

　　YOU two CLF person　　can complete　　task

　　**'There are two people** who can complete the task.'　　　　contextual anti-uniqueness

(5) *dou* **introduces definiteness:**

　　liang ge　　ren (dou)　　keyi wancheng renwu

　　two CLF person DOU can　　complete　　task

　　'**The two people** both can complete the task.'　　　　　contextual uniqueness

In this talk, I will explore in depth the distribution of Mandarin BNP and how their i-denoting vs q-denoting interpretations are derived; more importantly, how (in)definiteness arises with the insertion of *you/dou*.

# Obligatory 'OV' in Wu Chinese: a Case-based approach

Zhixian Huang & Andrew Simpson

In many varieties of Wu Chinese, OV order is required in various instances:

(1) a.    *$lε^0$-$tεε^{44}$     $ɕy^0$-$vu^{44}$ $tɕy^{44}$ - $ɦɔ^0$ $p^hai^{53}$          *S V O     *Wenzhou (Wu)*

       old-Zhang    cook-burn-PFV     dish

       Intended: 'Old Zhang overcooked the dish.'

   b.    $lε^0$-$tεε^{44}$       $p^hai^{53}$    $ɕy^0$-$vu^{44}$ $tɕy^{44}$ - $ɦɔ^0$       ✓S O V     *Wenzhou (Wu)*

       old-Zhang      dish      cook-burn-PFV

       'Old Zhang overcooked the dish.' (Xie 2023:311)

While Mandarin *optional* OV suggests that objects are fronted for reasons of information structure (Ernst and Wang, 1995, Paul 2005), evidence shows that *obligatory* OV in other varieties of Chinese such as Taiwanese Southern Min and Hakka, is an automatic reflex of syntax (Wang and Wu, 2020). The question then is what properties of syntax account for such patterns?

The paper proposes a Case-based analysis to capture the complex range of patterns found with Jiaxing Wu OV. We show that the crucial properties of obligatory OV are the following:

A. OV order appears to be required when the verb is combined with certain aspectual suffixes which result in telic interpretations of the predicate. However, there are two significant exceptions, described in (B) and (C):

B. Obligatory OV occurs with definite objects (names, pronouns, Dem-CL-N) but is not required with indefinite Num-CL-N objects.

C. Obligatory OV is only required with definite objects which are affected by a telic event, and not with definite objects that are non-affected.

The paper suggests that properties A and B can be accounted for if it is assumed that the combination of verbs with certain aspect markers results in a loss of the availability of Accusative case, so that (most) definite objects are constrained to raise to higher pre-verbal positions for Case. However, an inherent Partitive case is unaffected and remains available to license indefinite objects. Property C suggests that there is a connection between Acc case and affected objects.

**References:**

Ernst, Thomas and Chengchi Wang. 1995. Object preposing in Mandarin Chinese. *Journal of East Asian Linguistics* 4:3:235-260.

Paul, Waltraud. 2005. Low IP area and left periphery in Mandarin Chinese. *Recherches linguistiques de Vincennes* 33:111-134.

Wang, Chyan-an Arthur and Hsiao-hung Iris Wu. 2020. Telicity and object position in Taiwanese Southern Min and Hakka. *The Linguistic Review* 37:3:331-357.

Xie, Chen. 2023. The *de*-construction in Wenzhounese: how it differs from the *ba*-construction in Mandarin. *Journal of East Asian Linguistics* 32:303-339.

# Session 4

## (Polar) Question Particles in Marathi

Aaditya Kulkarni

Independent Researcher | aaditya.kulkarni.94@gmail.com

In Indo-Aryan languages, a polar question is syntactically identical to declaratives, and is marked by final rising intonation and an optional polar question particle. Unlike its counterparts in languages such as Bangla and Hindi-Urdu, two different particles can be employed to mark a polar question in Marathi- each of which is form-identical with a different question word. In this ongoing work, I present a preliminary account of the syntax, semantics, and pragmatics of Marathi polar questions and polar question particles to place them on the larger landscape of question particles in South Asian languages. Given the form-identity of the particles marking polar questions with other question and question-adjacent particles in Marathi, I also explore whether it is possible to provide a unified account of the same. In doing so, I argue that the usage of two different particles to mark polar questions in Marathi is indicative of the language employing two different strategies of marking polar questions.

**Selected References:**

Bhatt, R. and V. Dayal. 2020. Polar Question Particles: Hindi-Urdu Kya. Natural Language & Linguistic Theory 38: 1115–1144.

Biezma, M., Butt, M., Jabeen, F., and Mumtaz, B. 2022. Urdu/Hindi polar kya as an expression of uncertainty. https://lingbuzz.net/lingbuzz/006997.

Dayal, V. 2023. The Interrogative Left Periphery: How a Clause Becomes a Question. Linguistic Inquiry; doi: https://doi.org/10.1162/ling_a_00507.

Deo, A. 2023. Invoking a wh-question by asking a polar question. Paper presented at the 13th (formal) Approaches to South Asian Languages, University of Michigan.

Jayaseelan, K. A. 2008. Question Particles and Disjunction. https://ling.auf.net/lingbuzz/000644.

Syed, S. and B. Dash. 2017. A unified account of the yes/no particle in Hindi, Bangla and Odia. In Erlewine, M. A. ed., GLOW in Asia 11, volume 1, pages 201-212. Cambridge: MITWPL.

Walkden, G. 2022. Sources for Question Particles. Talk delivered at Diachronic Generative Syntax (DiGS) 23, New York University.

# Concordant Subject Marking in Mauritian Creole Serial Verb Constructions

Donna Park

A unique feature of Mauritian Creole's Serial Verb Constructions cited in recent literature (e.g. Syea 2013, Muysken & Veenstra 2017) is concordant subject marking. The current work extends those findings by examining the effect of Serial Verb Construction (SVC) type, symmetric or asymmetric, on subject marking, using data collected from native speakers.

In this study, three 25-year-old speakers of Mauritian Creole were presented with three sets of sentences. The sets were distinguished by type of SVC, based on Aikhevald's (2006) categorization of symmetric (all open class verbs) vs. asymmetric (closed semantic or morphological class of one of the verbs) SVCs, as well as by concordant vs. single negation, type of subject (referential or pronominal), and single (1a) vs. concordant subject (1b) marking. One set of SVCs was asymmetric while the other two sets consisted of symmetric SVCs. The difference between the two symmetric sets was a temporal relation (either sequential or simultaneous).

| 1) | a) | *Mari* | *pran* | *balye* | *koko* | *bat* | *Kazer* | |
| | | Mary | take | broom | coconut | beat | Kaiser | |
| | | 'Mary beats the Kaiser with a coconut broom.' | | | | | | |
| | b) | *zot* | *pran* | *balye* | *koko* | *zot* | *bat* | Kazer |
| | | 3PL | take | broom | coconut | 3PL | beat | Kaiser |
| | | 'They beat the Kaiser with a coconut broom.' | | | | | | |

asymmetric SVC, Seya (2013; p. 33)

The data collected showed a difference between symmetric and asymmetric SVCs: symmetric ones require concordant subject marking regardless of the type of subject and regardless of negation, and asymmetric ones show optionality of concordant subject marking when the subject is referential and there is concordant negation. These results suggest that parameters for subject marking in SVCs is more complex than was described in Muysken & Veenstra (2017), let alone that of Syea (2013).

## References

Aikhenvald, A. Y. (2006). Serial Verb Constructions in Typological Perspective. In A. Y. Aikhenvald, & R. M. Dixon, Serial Verb Constructions (pp. 1-60). New York: Oxford Univeristy Press.

Muysken, P., & Veenstra, T. (2017). Serial Verb Constructions. Dans The Wiley Blackwell Comparison to Syntax, Second Edition (pp. 1-51). Martin Everaert & Henk C. van Riemsdijk.

Syea, A. (2013). Serial verb constructions in Indian Ocean French Creoles (IOCs) . Journal of Pidgin and Creole Languages 28:1, 13-64.

# WHX Construction : Non-lexical Intensification and Speaker Constraint

Jaewon Oh (Department of Linguistics, Seoul National University, Korea)

ann0207@snu.ac.kr

This sutdy investigates the semantics of "WHX" constructions    (e.g., What the hell..?), proposing the-hell elements intensify the speaker's unexpectedness toward a contextually salient situation, which precedes and motivates the utterance. Previous studies have limitations in accounting for "Of-course-John" reading of WHX rhetorical questions (e.g., Who the hell would help Mary?) (Den Dikken and Giannakidou, 2002; Rawlins, 2009; Martin, 2020; Ippolito, 2024). My proposal provides a comprehensive explanation for various usages of WHX construction including the "Of-course-John" reading.

Also, I expand the discussion to 'How-the-hell-is-it?' puzzle. For instance, when my friend tries mint chocolate for the first time and answers it's neither tasty nor not tasty, I might ask, 'How the hell is it?'. Unlike in English, Korean and Japanese restrict the correspondents and requires an evidential or a reportative. I propose this is due to their speaker constraint which restricts addressing others' direct experiences and can be lifted with evidential markers (Tenny, 2006). Also, the speaker constraint in K/J is manifested in WHX constructions since the unexpectedness intensified by the-hell elements is anchored to the speaker. Thus, in order for a WHX construction to be felicitous in languages with the speaker constraint, such as Korean and Japanese, the contextually salient situation must be directly addressable by the speaker.

The study suggests extending Beltrama(2018)'s notion of intensification. Unlike typical non-lexical intensifiers that amplify the speaker's attitude within a sentence, WHX construction relates to the contextually salient situation.

## References

Beltrama, A. (2018). Totally between subjectivity and discourse. exploring the pragmatic side of intensification. Journal of Semantics, 35(2):219–261.

Den Dikken, M. and Giannakidou, A. (2002). From hell to polarity: "aggressively non-d-linked" wh-phrases as polarity items. Linguistic Inquiry, 33(1):31–61.

Hugou, V. (2017). The whx construction (what the hell. . . ?) and intensity. a corpus-based study. Lexis. Journal in English Lexicology, (10).

Ippolito, M. (2024). The hell with questions. Journal of Semantics, page ffae001.

Martin, J. R. (2020). Wh-the-hell as a polarity-insensitive, speaker-oriented domain restrictor. In Semantics and linguistic theory, pages 334–354.

Rawlins, K. (2009). Extreme ignorance questions. LSA 2009.

Tenny, C. L. (2006). Evidentiality, experiencers, and the syntax of sentience in japanese. Journal of East Asian Linguistics, 15(3):245–288.

# A Phasal Overflow-Pattern Analysis of Czech Verb Periphrasis

Kit Grigoleit, M.A. Linguistics (Leipzig University)

Email: pf49piwu@studserv.uni-leipzig.de

This poster analyzes the morpho-syntax of the periphrastic past and passive in Czech as an overflow pattern (Bjorkman 2011, Fenger 2020). Building on Fenger's (2020: 63, 287) phase head approach, I propose that under the lack of an aspect phase head, voice functions as a phase head which sends the passive participle to the interfaces before it can move to TenseP. Thus the passive auxiliary gets inserted as a repair mechanism to host the past tense features.

I further argue that the past participle l-stem marks past tense rather than aspect. Since the aspect and voice phase heads remain empty, the l-stem can move to TenseP while the past auxiliary realizes the subject agreement features in a higher projection (Lenertová 2004: 167). This resolves the apparent non-compositionality of the construction (Adam 2024: 94-95) and affirms the claim that the past participle functions as the finite verb of the periphrasis (Bonami & Webelhuth 2021: 90-91, Adam 2024: 93).

Under this analysis, the passive auxiliary comprises a tense head which maps onto the claim of it constituting its own prosodic word and therefore classifying as a copula rather than a clitic (Fried 1994: 165, Lenertová 2004: 141). The past auxiliary by itself, on the other hand, does not form a prosodic word but does so together with the l-stem (Fried 1994: 165, Lenertová 2004: 141) by cliticizing onto it in a specifier position. Through this overflow-pattern analysis I motivate the feature distribution in Czech verb periphrasis through phase boundaries. Further I model the locus of the past tense meaning in the past construction as well as the different pro-sodic word-hood of the auxiliaries in the morpho-syntax.

## References

Adam, Nina (2024). "Optimal Clitic Positioning in Czech and Beyond". PhD thesis.

Bjorkman, Bronwyn Alma Moore (2011). "BE-ing default: The morphosyntax of auxiliaries". PhD thesis. Massachusetts Institute of Technology.

Bonami, Olivier and Gert Webelhuth (2021). "Periphrasis and morphosyntatic mismatch in Czech". In: One-to-many relations in morphology, syntax, and semantics, pp. 85–115.

Fenger, Paula (2020): "Words within Words: The Internal Syntax of Verbs". PhD thesis.

Fried, Mirjam (1994). "Second-position clitics in Czech: Syntactic or phonological?" In: Lin-gua 94.2-3, pp. 155–175.

Lenertová, Denisa (2004). "Czech pronominal clitics". In: Journal of Slavic linguistics, pp. 135–171.

# Integrating Co-Speech Gestures into Sentence Meaning Comprehension

Ludmila Reimer

Ruhr-Universität Bochum

Everyday human communication is multimodal; we employ spoken language, facial expressions, and various gestures to express ourselves. These various sources of information streams seem to be smoothly understood by conversation partners, yet it is not fully uncovered, how they are integrated on a cognitive level. Gestures interact with speech in many ways: they facilitate language comprehension, production, and acquisition; they are found to prime or activate internal action representations. We are interested in this latter kind, i.e., iconic co-speech gestures that accompany action verbs and provide detailed information on actions and tools used in comparison to the spoken utterances on their own. We aim to explain how iconic co-speech gestures influence speech processing and to produce a series of experiments, inlcuding EEG, to test our models and hypothesis.

To illuminate how the different relationships between iconic co-speech gesture and utterance modulate semantic comprehension during communication, we investigate the semantic predictions generated by the speaker in the listener. Prior EEG research has shown that gestures can modify the N400 component or even elicit a similar effect themselves. In such studies, gestures elicited an N400-like effect when they did not match a preceding video or picture, referred to as N450. Moreover, words as well as pictures elicit an N400 effect when they do not match a preceding (silent) gesture, suggesting that gestures can establish expectations about upcoming linguistic input. The N400-effect has been linked to the computation of semantic content; thus, it can be assumed that gestures at least interact with meaning and possibly carry meaning themselves.

# The Role of Semantic Dependency in Preposition Omission

Miriam Schiele

The phenomenon of ellipsis has been a topic of debate for decades. The case of P(reposition)-omission, as in (1B′), serves as a particularly insightful example, where both the processing dynamics and grammatical constraints of ellipsis are at play.

(1) A:  Paul hat mit seinem Bruder auf etwas gewartet.
    'Paul waited for something with his brother.'

B:  Ja, auf den Zug.                  B′:  Ja, den Zug
    'Yes, on the train.'                   'Yes, the train.'

(own stimulus)

According to Merchant's (2001) generalization, P-omission is licensed in English, but not German. In fact, a general preference for PP fragments (1B) over NP fragments (1B') has been observed in German (Molimpakis, 2019).

Nykiel (2015) suggests that P-omission in English is linked to semantic dependencies between the verb and the preposition. That is, PPs are either obligatorily required as complements to a verb, as in (1), or optional, as in (2) (Hawkins, 2004). In English, NP fragments are highly preferred in the presence of semantic dependencies (Nykiel & Hawkins, 2020).

(2) A:  Paul hat mit jemandem auf den Zug gewartet.
    'Paul waited for the train with someone.'

B:  Ja, mit seinem Bruder.        B′:  Ja, seinem Bruder.
    'Yes, with his brother.'            'Yes, his brother.'

(own stimulus)

The aim of the present study was to investigate whether the presence of semantic dependency enhances the acceptability of P-omission in German. 32 German monolinguals participated in an acceptability judgment task, crossing the DEPENDENCY (required or optional) and FRAGMENT TYPE (PP or NP). Participants' raw ratings were z-scored and analyzed using linear mixed models (LMMs) in R's *lmer*.

German is expected to prohibit P-omission (Merchant 2001). However, the results indicate that P-omission in German is merely degraded rather than ungrammatical. In addition, P-omission was found to be more acceptable in the presence of semantic dependencies. Together, the results suggest that the strength of semantic dependency between a verb and a PP is a more reliable predictor of P-omission than Merchant's generalization.

## References

Hawkins, J. A. 2004. *Efficiency and complexity in grammars.* Oxford University Press.

Merchant, J. 2001. *The Syntax of Silence: Sluicing, islands, and the theory of ellipsis*. Oxford University Press.

Molimpakis, E. 2019. *Accepting Preposition-Stranding under Sluicing Cross-linguistically; a Noisy-Channel Approach*. Doctoral thesis. University College London.

Nykiel, J. 2015. Constraints on ellipsis alternation: A view from the history of English. *Language Variation and Change 27,* 227-254.

Nykiel, J. & J. A. Hawkins. 2020. English fragments, minimize domains, and minimize forms. *Language and Cognition 12*(3), 411-443.

# On the unreliability of the principle C reconstruction test

Timea Szarvas

University of Potsdam, timea.szarvas@uni-potsdam.de

A'-moved constituents reconstruct to their base positions for interpretation (Büring 2005). Whether PP modifiers of nouns reconstruct along with them is controversial (Barss 1988; Freidin 1986; Lebeaux 1988; van Riemsdijk & Williams 1981; Sauerland 1998; Takahashi & Hulsey 2009 vs. Bianchi 1995; Fox 1999; Henderson 2007; Kuno 2004; Lasnik 1998; Safir 1999). Principle C violations are often used to test this: researchers agree that which investigation near Nixon's house did he resent, where the PP is semantically an adjunct, does not yield a violation, allowing for coreference between Nixon and he. On the other hand, whether the two can corefer if the PP is an argument, is unclear. Introspective judgments diverge, and while the body of experimental work has been growing, the studies seem to further fuel the controversy instead of settling it (Adger et al. 2017; Bruening & Al Khalaf 2019; Salzmann, Wierzba & Georgi 2023; Stockwell, Meltzer-Asscher & Sportiche 2021, 2022). A closer inspection of the principle C test underlying these claims may reveal why: I argue that the logic of the test is flawed due to overlooking the difference between coreference and proper binding (Sag 1976; Reinhart 1983; Heim & Kratzer 1998). If only binding requires c-command, while two NPs referring to the same entity do not require any syntactic relation to hold between them, the lack of clarity in both introspective and experimental data follows naturally (Reinhart 1983). Based on novel experimental work, I show that the outcome can be manipulated via the experimental task and item structure, in line with work arguing for the importance of non-syntactic factors (cf. Gor 2020; Temme & Verhoeven 2017; Varaschin, Culicover & Winkler 2023). I argue that the principle C reconstruction test does not probe into underlying syntactic structures and that it is inadequate for establishing the properties of movement dependencies.

## References

Adger, David et al. 2017. Is there Condition C reconstruction? In Andrew Lamont & Katerina Tetzloff (eds.), Proceedings of the 47th Annual Meeting of the North East Linguistics Society (NELS 47), 21–31. Amherst, MA: GLSA.

Barss, Andrew. 1988. Paths, connectivity, and featureless empty categories. Annali di Ca'Foscari. Rivista della Facoltà di Lingue e Letterature straniere dell'Università di Venezia 27(4). 247–279.

Bianchi, Valentina. 1995. Consequences of antisymmetry for the syntax of headed relative clauses. Scuola Normale Superiore, Pisa dissertation. https://www.researchgate.net/publication/245772483_Consequences_of_Antisymmetry_for_the_Syntax_of_headed_relative_Clauses.

Büring, Daniel. 2005. Binding Theory. Cambridge: Cambridge University Press.

Fox, Danny. 1999. Reconstruction, Binding Theory, and the Interpretation of Chains. Linguistic Inquiry 2(30). 157–196.

Freidin, Robert. 1986. Fundamental Issues in the Theory of Binding. In Barbara Lust (ed.), Studies in the Aquisition of Anaphora, 151–188. Reidel: Dordrecht.

Gor, Vera. 2020. Experimental investigations of Principle C at the syntax-pragmatics interface. Rutgers University dissertation.

Heim, Irene & Angelika Kratzer. 1998. Semantics in Generative Grammar. Wiley-Blackwell.

Henderson, Brent. 2007. Matching and raising unified. Lingua 117. 202–220

Kuno, Susumu. 2004. Empathy and direct discourse perspectives. In Laurence R. Horn & Gregory Ward (eds.), The handbook of pragmatics, 315–343. Blackwell publishing.

Lasnik, Howard. 1998. Some Reconstruction Riddles. In Alexis Dimitriadis, Hikyoung Lee, Christine Moisse & Alexander Williams (eds.), Proceedings of the 22nd Annual Penn Linguistics Colloquium (PLC 22), 83–98.

Lebeaux, David. 1988. Language Acquisition and the Form of Grammar. Amherst: University of Massachussetts dissertation.

Reinhart, Tanya. 1983. Coreference and bound anaphora. Linguistics and Philosophy 6. 47–88.

van Riemsdijk, Henk & Edwin Williams. 1981. NP-structure. The Linguistic Review 1. 171–217.

Safir, Ken. 1999. Vehicle change and reconstruction in Ā-chains. Linguistic Inquiry 30(4). 587–620.

Sag, Ivan A. 1976. Deletion and Logical Form. MIT dissertation. https://dspace.mit.edu/handle/1721.1/16401.

Salzmann, Martin, Marta Wierzba & Doreen Georgi. 2023. Condition C in German A'-movement: Tackling challenges in experimental research on reconstruction. Journal of Linguistics 59(3). 577–622.

Sauerland, Uli. 1998. The meaning of chains. MIT dissertation. https://www.leibniz-zas.de/en/research/publications/details/publications/3384-the-meaning-of-chains.

Stockwell, Richard, Aya Meltzer-Asscher & Dominique Sportiche. 2021. There is reconstruction for Condition C in English questions. In Alessa Farinella & Angelica Hill (eds.), Proceedings of the 51st Annual Meeting of the North Eastern Linguistic Society (NELS 51), 205–214. Amherst, MA: GLSA.

Stockwell, Richard, Aya Meltzer-Asscher & Dominique Sportiche. 2022. Experimental evidence for the Condition C argument-adjunct asymmetry in English questions. In Özge Bakay et al. (eds.), Proceedings of the 52nd Annual Meeting of the North Eastern Linguistic Society (NELS 52), 145–158. Amherst, MA: GLSA.

Takahashi, Shoichi & Sarah Hulsey. 2009. Wholesale Late Merger: beyond the A/Ā-distinction. Linguistic Inquiry 40(3). 387–426.

Temme, Anne & Elisabeth Verhoeven. 2017. Backward binding as a psych effect: A binding illusion? Zeitschrift für Sprachwissenschaft 36(2). 279–308.

Varaschin, Giuseppe, Peter W. Culicover & Susanne Winkler. 2023. In pursuit of Condition C: (non-)coreference in grammar, discourse and processing. In Andreas Konietzko

# Negation in Jing-le Chinese

Zhen LI

1155167798@link.cuhk.edu.hk, Chinese University of Hong Kong

**Introduction:** Mandarin Chinese possesses two negation forms in declarative sentences: meiyou 'not' and bu 'not'. Scholars such as Ernst (1995), Lin (2003), and Chen and Pan (2017) have analyzed the aspectual sensitivity of negation in Mandarin Chinese. Building upon the existing analysis of negation with aspectual interaction in Mandarin, this report introduces two negation forms found in Jing-le Chinese, a subgroup of Chinese. These two forms are məlɑ and pə, can be roughly considered as the counterpart of Mandarin meiyou and bu respectively.

**Picture of Core Analysis:** Like the negation in Mandarin, məlɑ and pə also exhibit sensitivity to aspect. However, this report attempts to argue that məlɑ is sensitive to viewpoint aspect, while pə is sensitive to situation aspect. Correspondingly, this report argues that məlɑ is a tense morpheme in negative sentences, resulting in its spell-out in T. Its sensitivity to viewpoint aspect is realized through its complement-sectional property, specifically, məlɑ selects AspP as its complement. On the other hand, pə is not a functional head but rather functions as an adverb that adjoins to vP/VP. Its sensitivity to aspect is realized through a spec-head relation. The proposal of two negation forms in different syntactic projection layers can effectively account for the co-occurrence and order directionality of the two negations.

**Remarks and Puzzles:** The head vs. adverbial analysis of negation is reminiscent of Zanuttini's (1996) analysis of negation in Romance languages. Furthermore, the examination of negation in Jing-le Chinese offers valuable insights into the intricate interplay between tense, negation, and aspect. This report also highlights intriguing puzzles, with a notable one being the connection between the adverb pə and present time reference in the default context of Jing-le Chinese, as well as similar observations with bu in Mandarin, which warrant further investigation and exploration.

**Selected References**

Ernst, Thomas. 1995. Negation in mandarin Chinese. Natural Language & Linguistic Theory 13(4):665-707.

Lin, Jo-Wang. 2003. Aspectual selection and negation in Mandarin Chinese. Linguistics 41(3):425-459.

Zanuttini, Raffaella. 1996. On the relevance of tense for sentential negation. Parameters and functional heads, 181-207.

# Same Type of Comparatives, But with Different Semantics

Yaqing Hu
yaqinghu@usc.edu
University of Southern California

**I. Introduction** Chinese is categorized as having a positive setting for the 'Degree Semantics Parameter', i.e., [+DSP] (Beck et al. 2009). This parameter predicts that Chinese allow for a direct comparison with a degree (e.g., a measure phrase (MP) like 180cm). However, Chinese adjectival *bi*-comparatives disallow MPs to serve as the standard of comparison, as in (1). It seems that degrees are accessible in some configurations, but not in others. Interestingly, the presence of appropriate discourse contexts would allow MPs to be the standard of comparison.

**II. Core Data**
(1) a. **Bare *bi*-Comparatives**

| Zhangsan | bi | **Lisi/(*180-gongfen**) | gao(*-**chu**). |
|---|---|---|---|
| Zhangsan | BI | Lisi/180-cm | tall-beyond |

'Zhangsan is taller than Lisi.'/* 'Zhangsan is taller than 180cm.'

b. **Differential *bi*-Comparatives**

| Zhangsan | bi | **Lisi/(*180-gongfen**) | gao(-**chu**) | 5-gongfen. |
|---|---|---|---|---|
| Zhangsan | BI | Lisi/180-cm | tall-beyond | 5-cm |

'Zhangsan is 5cm taller than Lisi.'/* 'Zhangsan is 5cm taller than 180cm.'

However, if a specific context is provided, such as A and B being PE teachers discussing Zhangsan's height, the MP in (1) may be permitted to serve as the standard of comparison.

**III. The Main Proposal** *First*, built on Bale (2006), Wellwood (2015), and Schwarzschild (2020), I posit that comparatives makes use of quantification over scalar segments, parts of a scale. A segment is a connected region ordering equivalency classes (E), whose ordering base is states held by individuals. Each E is linearly ordered and comprises a set of states. *Second*, bare *bi*-comparatives access equivalency classes of sets of states, and differential *bi*-comparatives access degrees indirectly via a functional morpheme, thereby precluding degree-denoting MPs to be the standard of comparison. *Third*, when an MP serves as the standard within an appropriate discourse context, the internal structure of the standard clause is not a bare MP, but a relative clause.

# Comparative Construction in Formosan Languages

Ching Wen Yang

National Tsing Hua University

Comparative construction has been widely discussed cross-linguistically (Beck et al., 2009; Hohaus, 2018; Bhatt & Takahashi, 2011). However, not many studies have focused on Austronesian languages. To address this gap, this project investigated the comparative construction in four Formosan languages: Amis, Saisiyat, Bunun, and Paiwan. Interestingly, despite shared similarities, the strategies they adopted to express comparative ideas are quite different. Based on the degree parameters proposed by Beck et al. (2009), this project suggests that, unlike Amis, Saisiyat, and Bunun, Paiwan has positive settings on [+DSP] and also allows Degree Questions and Measure phrases. However, it does not have a clear scope mechanism. According to Beck et al. (2009), the discovery of this kind of language may falsify their proposal.

Besides the challenge Paiwan may pose to the current theory, the presence of comparative and superlative morphemes is also unique among Formosan languages. Unlike typical comparative languages with comparative and superlative morphemes, such as English, which can have a superlative meaning when the comparative construction involves Negative Polarity Items like "anyone," the counterpart in Paiwan is restricted to the superlative form when forming such expressions. This finding suggests there might be a form-meaning mismatch in the superlative construction in Paiwan.

This study aims to provide an overview of the comparative construction of Formosan languages to fill the gap in current studies and offer a preliminary analysis to explain why Paiwan shows a distinct pattern contrary to current theories and provide empirical data to argue that the superlative construction in Paiwan may be a pragmatic mechanism instead of morphosyntactic structure.


**Keywords:** Austronesian languages, comparative construction, degree semantics

# On the At-issueness of Ideophones in Vietnamese: An Experiment

Kim Tien Nguyen, Son Dao, Thi Bich Phuong Dang

Kimtien.nguyen@em.uni-frankfurt.de, dao@stud.uni-frankfurt.de , dang@em.uni-frankfurt.de

Goethe Universität Frankfurt

Recently, some new data regarding the at-issueness of ideophones has been published; this research suggests that the at-issue status of ideophones is lower than comparable adverbials for German and English (Barnes et al., 2022). These two languages may be considered non-prototypical; the findings are not consistent with a similar experiment conducted for Akan (Asiedu et al., 2024), a language in which ideophones are more commonly used in everyday speech. The results of the second experiment suggest that ideophones may be just as at-issue as adverbial constructions in such prototypical ideophone languages.

Our study design is a replication of an experiment which has been adapted from Barnes et al. (2022) and Asiedu et al. (2024), which in turn have been adapted from Ebert et al (2020), to Vietnamese which is a language that may also be classified as a prototypical ideophone language, like Akan. Our aim is to provide further data and to test the findings of the experiment conducted for Akan regarding the at-issue status of ideophones in prototypical ideophone languages and to provide another data point on the status of ideophones and their (non-)at-issueness in general.

**References**:

Barnes, K., Ebert, C., Hörnig, R., Stender, T. (2022). The at-issue status of ideophones in German: An experimental approach. Glossa: a journal of general linguistics, 7(1).

Asiedu, P., Asamoah, M. B., Barnes, K., Duah, R., Ebert, C., Neequaye, J. N. A., ... & Stender, T. (2023, June). On the information status of ideophones in Akan. In Annual Conference of African Languages (Vol. 45).

Ebert, C., Ebert, C., & Hörnig, R. (2020). Demonstratives as dimension shifters. Proceedings of Sinn Und Bedeutung, 24(1), 161–178. https://doi.org/10.18148/sub/2020.v24i1.859