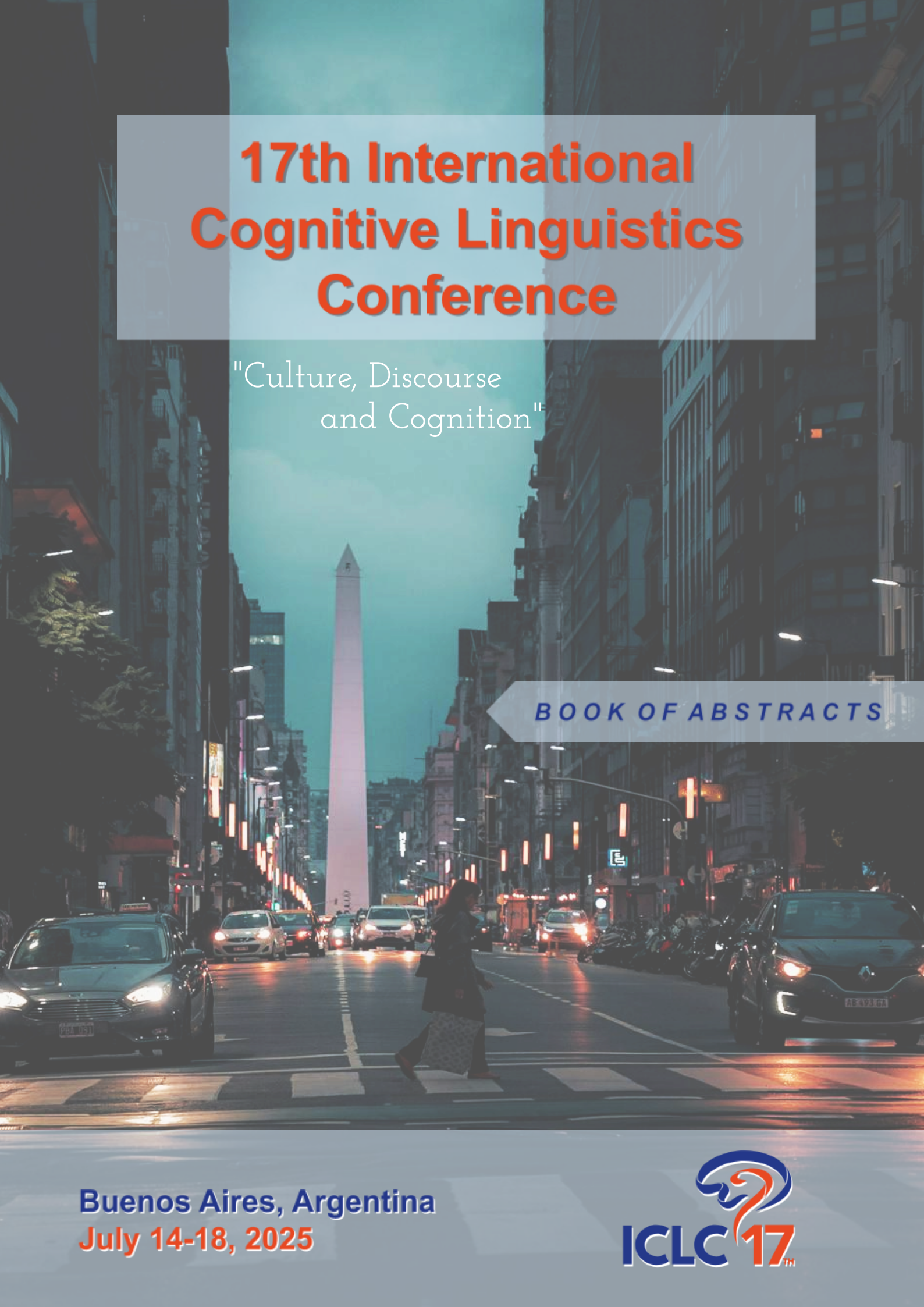

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"Culture, Discourse and Cognition"

BOOK OF ABSTRACTS

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Preface

This *Book of Abstracts* is the result of the conscious and dedicated work of the authors, the Scientific Committee, and the members of the Argentine Association of Cognitive Linguistics (AALiCo).

It is a great pleasure for AALiCo to welcome the ICLA community to the 17th International Cognitive Linguistics Conference (ICLC), held at a time when AALiCo is celebrating its 22nd anniversary. It is also an honor for the Faculty of Philosophy and Letters at the University of Buenos Aires to host so many distinguished scholars from around the world.

It should be noted that this is the first time the ICLC is being held in Argentina—and in Latin America. We believe this will encourage other countries in our region to engage with the theoretical framework and to help disseminate and expand the cognitivist approach.

This conference especially celebrates the diversity of cultures and languages, which is reflected in the rich spectrum of proposals featured in this *Book*. Argentina, as a multicultural nation where vernacular languages coexist with Spanish and many others introduced after waves of immigration over time, is currently engaged in discussions about how to renew and adapt the teaching of both mother tongues and foreign languages to meet today's needs. We are confident that ICLC17 will contribute valuable insights toward addressing this challenge.

We welcome you to ICLC17 and hope you enjoy the meeting.

Claudia Borzi

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Claudia Borzi

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Context: A unit of language change.
From speech verb to evidentiality in Spanish

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Keywords

grammaticalization; context; unit of change; evidentiality, *dizque*.

Abstract

Grammaticalization theoretical framework has traditionally considered context as the locus of change, playing a passive and secondary role in the process, compared to the form or construction undergoing the change, which has been, until now, the true protagonist of grammaticalization (and variants like pragmaticalization, constructionalization, secondary grammaticalization, refunctionalization, etc.), and protagonist of grammatical change, in general.

The proposal of this paper is to resignify the role of context in grammatical change. Context plays an active and essential role in language change, being a unit of the process of change, besides the form-construction. Context generates a symbiotic and imperceptible relation with the form, and, reciprocally, the form establishes a symbiotic and imperceptible relation with the context. Throughout time, minimally different contexts work together with the "same" form, acting both as a symbiotic macro-unit in grammatical change.

The empirical evidence to show this theoretical aim is the pragmaticalization, and later the grammaticalization, of the Spanish speech verb *decir* 'to say / to tell' into the evidential marker *dizque* 'supposedly', as in (1), and later into the evidential adjective *dizque* 'supposed', (2). This verb + the subordinate conjunction que 'that' underwent univerbation, creating an evidential adverbial marker *dizque*, through specific, successful and imperceptible different contexts, coworking symbiotically with the form, and later this same evidential marker evolved into the evidential adjective *dizque*, where specific contexts and form worked together. Both the adverbial marker

and the adjective have evidential meaning: the speaker doubts about the source of the information, or he believes that the information is a hearsay.

(1) y me levantó testimonio que **dizque** *dixe* yo quándo dizen los artículos en la yglesia, que así como dizen el primero creer en un solo dios todopoderoso, que **disque** *dezía* yo en lugar desto, el primero, echo a dios en el fuego [Legal document, 1537, Mexico, *CORDIAM*]
'And he raised me a false accusation (he falsely accused me) that supposedly I said that… instead that supposedly I said I put god into the fire'

(2) los transeúntes viles, amparados por **la dizque ley**, solían correr tras el ladrón [Fernando Vallejo, La virgen de los sicarios, 1994, Peru, *CREA*]
'Vile people, protected by the supposed-bad law, used to run behind the thief'

The paper will analyze diachronically the successive context-units, and the minimally different distributions, that triggered the changes displayed in (1) and (2) above.

Biases in language, cognition and linguists

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Keywords

linguistic relativity, spatial frames of reference, metaphor.

Abstract

Humans the world over share a common experience of the world: we walk, we sleep, we eat and drink, we tell stories, we live on the planet earth and are subject to its gravitational force. But the 7000+ languages we speak vary in myriad ways. Of particular interest to cognitive linguists are structural parallels between the language a person speaks and their mental representation of the world. Some such parallels (such as the distinction between SELF and OTHER being grammaticized as person distinctions in pronouns) are (near-)universal across speech communities, and can be explained as language reflecting the basic architecture of our minds. But in other cases, we see marked differences between speech communities. Debates over whether these differences are attributable to language shaping thought, or thought shaping language, or both language and thought being shaped by some external force, are as old as linguistics as a discipline.

This talk will review a range of evidence that languages bias their speakers towards certain descriptions of the world they inhabit, and that these linguistic biases in turn feed and reinforce biases in cognition. Such biases include Spanish speakers habitually describing spatial relationships using terms like *izquierda* 'left', rather than este 'east', while the reverse is true for Kune speakers. Or the fact that English speakers think of *the generations ahead* as their future descendants, while for the Yanyuwa they are the ancestors. Or the fact that Kuuk Thaayorre speakers represent the flow of time from east-to-west but English speakers represent it from left-to-right. This talk will also consider a different kind of bias—the binary bias fed by the framing of the 'linguistic relativity' debate—which I argue impedes our understanding of language, cognition and the relationship between the two. Here I will reflect on how my understanding of my

own (and collaborators') findings has evolved over time, arguing that the empirical data point to a more nuanced relationship between language and thought than a polarized debate can do justice to. There is no single cause that explains why reflexes of Proto-Paman **kungkarr* denote 'north' in Umpila, 'east' in Kukatj and 'northwest' (Kuuk Thaayorre); or why cardinal direction terms like these are used more frequently by some subpopulations (e.g. fishermen in the Maldives) than others; or why for many English speakers *north* is not interpreted as a cardinal direction at all, but rather denotes the direction extending forwards from the speaker's viewpoint. Each of these phenomena result from human attempts to resolve a multiplicity of competing cognitive and communicative pressures. Cumulatively, these studies point to the fact that Cognitive Linguistics as a field is strengthened by a diversity of perspectives, diversity in methods, diversity in researchers and diversity in languages studied.

The cognitive and social impact of words: From manner of location to perinatal loss

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Keywords

lexical semantics, posture verbs, perinatal loss, neologisms, hypostatization.

Abstract

Cognitive models of language stipulate, quite convincingly, that there is no strict dichotomy between lexicon and grammar; the basic fabric of language are symbolic form-meaning pairings. At the same time, words do occupy a privileged position in our minds and in our society as (considered to be) basic units of language and thought. This lecture presents two larger case studies that illustrate this status and that confirm the cognitive as well as social importance of words.

The first study pertains to the domain of spatial expressions, and more particularly, expressions referring to location. In my own research (see references), I have focussed on "manner of location" as expressed via posture verbs (SIT, LIE and STAND), which in most Germanic language (English being an odd exception) occupy a central place as opposed to Romance languages (e.g., French) that settle for neutral verbs, like *être* 'be' (partially in line with Talmy's (2000) typological distinction for manner of motion). Explicitly building on this research, I will present some contrastive case studies (Dutch-English-French) showing the possible cognitive impact that the habitual coding via these posture verbs may have on speaker's representations (Lesuisse & Lemmens 2022; Lesuisse 2022a,b). The studies look into (possible) memorization effects as well as eye-gazing as a window to (typologically differentiated) conceptual representation.

The second study switches the perspective to the social impact of words or their absence of words (in some cases I will present), applied to the domain of perinatal loss.[1] More specifically, the absence of a specific word to designate bereaved parents and their prematurely deceased babies contributes to the stigmatization that surrounds this

event, leading to a feeling of “epistemic injustice” (Fricker 2007). Based on a questionnaire survey, we investigate parents’ attitudes towards neologisms to see what the dimension are underlying possible neologisms that accurately capture the emotional and psychological experience of perinatal bereavement. Our analysis (Caliendo, Lemmens & Iannario, subm.) shows that the choices that parents make line up with how they define themselves, their children and their experience along lines that may not otherwise have been clear. Our study touches upon the issue of hypostatization, the belief that the existence of a unique and/or special term renders what is denoted conceptually real to language users, creating the impression that there is a corresponding entity to which the word refers (see also Schmid 2008). This is where the cognitive and social merge seamlessly.

[1] see: https://perinat.univ-lille.fr/

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Pinkie first: Digital list constructions in Brazilian Portuguese

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Keywords

Brazilian Portuguese, digital list, manual aspects, discourse functions, Libras.

Abstract

Making lists is a common practice among humans. Most studies on list constructions in spoken languages have focused on their oral (segmental and suprasegmental) aspects. More recently, researchers have given more attention to gestures that accompany spoken lists, among which are digital lists. Such lists consist of associating a spoken listed item with a finger in a list hand, typically the nondominant one. Previous research has analyzed a similar resource in signed language. This paper aims to first offer an overview of some formal aspects and discourse functions of digital list constructions in Brazilian Portuguese. Precisely, on one hand, we intend to describe formal aspects of the digital lists that accompany spoken lists and search for possible motivations for their use. On the other hand, we aim to describe different functions those lists may have. Secondly, we also intend to compare list constructions in both Brazilian Portuguese and Brazilian Sign Language, Libras, in order to identify similarities and differences between them. To achieve these two goals, we collected naturalistic data from 77 videos, which last altogether 5 hours, 42 minutes, and 52 seconds, from four internet platforms, namely, Facebook, Instagram, YouTube, and Twitter/X. We identified in those videos 117 digital list constructions in Brazilian Portuguese, produced by 68 Brazilian speakers: 43 men and 25 women. Using Elan, we delimited each list and each listed item in the speech stream to make their analysis easier. Using Microsoft Access, we created a database to store and retrieve information resulting from our data coding, which included several formal aspects such as the number of hands, the occurrence of perseveration, the finger at which the digital list starts, etc. In relation to our first goal, our results suggest that (1) formal features of digital list constructions (e.g. the number of hands) seem to vary freely in certain circumstances, while in others they

seem to be contextually motivated, and (2) discourse functions of digital list constructions involve the introduction and anaphoric reference to entities/events, as well as discourse structuring. In relation to our second goal, our analysis suggests that Brazilian Portuguese and Libras share similarities in the way they produce and use digital list constructions, but also exhibit remarkable differences. Among the former is the linguistic relevance of the dominant hand not only as a pointing device but also as a resource to group items/fingers and create higher-order entities. Among the latter is the prevalence of perseveration, which may be attributed to a modality effect. While in signed languages the elaboration of each listed item must be done manually (which implies the dropping of the digital list construction), in spoken language such elaboration can be totally or mostly oral (which allows digital list constructions to perseverate).

Conceptual Blending Operations in Constructions of Brazilian Portuguese: An Approach Based on the Articulation of Conceptual Blending Theory and Construction Grammar

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Keywords

conceptual blending theory, mental spaces, construction grammar, brazilian portuguese.

Abstract

The Conceptual Blending Theory (CBT), proposed by Fauconnier and Turner (2002), revolutionized cognitive linguistics by describing the dynamic fusion of multiple mental spaces as an essential mechanism in meaning construction. Despite its explanatory potential, its broad applicability raises questions regarding theoretical and methodological boundaries. Gibbs (2000) argues that CBT functions more as a descriptive model than an empirically testable theory, while Grady (2000) questions whether blending processes operate uniformly across different cognitive domains. Furthermore, Coulson and Oakley (2000) suggest that CBT lacks more refined distinctions, as conceptual blending mechanisms seem to function differently when applied to linguistic constructions involving concrete physical events and those relying on metaphorical abstractions.

Given this scenario, this study proposes applying CBT to the analysis of linguistic constructions in Brazilian Portuguese (BP) to assess its descriptive adequacy and contribute to a more detailed formulation of its operational principles. In line with Mandelblit (2000), who expanded the explanatory scope of CBT by applying it to linguistic construction analysis, we investigate how certain syntactic-semantic patterns in BP facilitate recurrent blending processes. By articulating CBT with Construction Grammar, we seek a model that not only clarifies the underlying mechanisms of

blending but also advances the formalization of the theory, introducing more systematic criteria for identifying and analyzing these operations.

Methodologically, we adopted a corpus-based approach, analyzing data collected between January and March 2025 from news websites accessed through the Google search engine using the “news” filter. Excerpts were selected based on the presence of verbs such as 'dar' (to give), 'empurrar' (to push), and 'causar' (to cause), which activate cognitive schemas like possession transfer, caused motion, and cause-effect. The analysis focused on dative constructions of the type [X causes Y to receive Z], in which conceptual integration operations occur—with or without blending—as described by Coulson and Oakley (2000).

Our findings indicate that certain conceptual blending patterns observed in other languages also emerge in BP, though with structural adaptations suggesting new operational principles for the theory. Thus, this study not only reinforces CBT’s productivity as an analytical tool but also proposes a model aimed at enhancing its applicability. By demonstrating how specific syntactic-semantic schemas favor recurrent blending processes in BP, this study addresses methodological challenges raised in the literature and introduces new possibilities for analyzing constructions in other languages and cognitive domains. Additionally, it contributes to the development of the theory and its interaction with emerging approaches in cognitive linguistics, including computational modeling and interdisciplinary investigations into language and cognition.

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Material anchors for experiential blending: The case of 7th to 5th century BCE catabatic stories and artefacts

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Keywords

Multimodality; Blending Theory; material anchors; cognitive compression; tombs

Abstract

Katábasis (from ancient Greek *katá-baínein*, 'going down') in Bernabé's words (2015: 17) is "a tale of the journey to the subterranean world of the dead led by an extraordinary character while alive who has a determined purpose and is keen on returning." Research on ancient catabatic stories regard exclusively the dangerous journeys of mythical heroes such as Gilgamesh, Orpheus, Odysseus, Theseus, and Heracles.

This paper shifts the attention from the content of these stories to the experience of listeners to/knowers of them. The focus is new, namely on ordinary human beings entering underground tombs. Whenever the access to tombs requires a descent of stairs, visitors come to cognize *katabasis* through image-schematic trajectory UP-DOWN: they temporarily enter the underworld and then return to the sunlight.

Such an experience, which is not openly coded in rituals, can be achieved because visitors project material structure to a blended space, to use Hutchins' terms (2005: 1555). In this case the blend results from a. the input space of a dead person permanently reaching the land of the dead; b. the input space of burying someone in a subterranean area; c. the input space of visiting the dead in any given or prescribed subsequent times. Key material anchors to this blend are the stairs, the burial chamber with its props, pictorial artefacts illustrating the liminal moment of entering the land of

the dead, and, most of all, the physical body performing the going down movement. All this supports Hutchins's crucial point about material anchors in blending: "the association of conceptual structure with material structure can stabilize conceptual representations" (2005: 1555).

Data come from Ancient Greek texts and from images from the Etruscan necropolises of Cerveteri and Tarquinia (Italy). The interconnection between Ancient Greek and Etruscan cultures concerning burial practices and beliefs is known; a representative example is Etruscan Charun resembling Greek Charon in function, namely a daemon escorting the dead to the Underworld. Some frescoes from the Etruscan necropolis of Tarquinia seem to deliberately blur the distinction between imagination and reality by incorporating in the representation of the gates to the land of the dead the physical access to the funeral chamber.

The final point is about time. Ancient Greek catabatic stories capture one-time-only journeys to the underground. However, in a quite bizarre Pindaric mention of *khrónos* ("time") in connection to Heracles' catabasis in *Nemean* 1.46 Tatsi 2008 sees an Orphic allusion to an all-encompassing dimension of time that surpasses the human limits of space and life. I suggest that this indirectly Orphic reference to time discloses the cognitive compression of the vital relation of time underlying both the mystic experience of *katábasis* and the blend I argue for.

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AI and the Nature of Poetic Creativity

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Keywords

artificial intelligence (AI), poetry, embodied cognition, education.

Abstract

AI: threat or promise? Poetic creativity: what is it, exactly? Both questions are up in the air, above the stars. Will AI advance or destroy human creative intelligence? How much can the general decline of reading in the twentieth century be ascribed to the rise of electronic systems and the increasing development and advancement of artificial intelligence (Birkerts 1994)? Does recent literary research say more about the dangers of unlimited AI or the poverty of human response to poetry? A recent study discovered that participants found it difficult to distinguish between AI-generated and human-generated poems, with many nonexpert readers preferring AI-generated poetry (Porter and Machery 2024). These questions invite a new approach to the way poetry has historically been taught, experienced, and understood.

In this presentation, I show how a refined model of Fauconnier and Turner's conceptual blending theory incorporating the notion of embodied cognition in the creation of metaphor as a dynamic process structuring the way we perceive and construe our world experience can contribute to the question of how well an AI algorithm can replicate human creative activity in creating and responding to poetry. Inclusion of the subliminal forces of embodied sensory-motor-emotive cognition into conceptual blending theory rounds out a more complete neurocognitive theory linking brain and bodily processes (Johnson 2007). This ability for a richer cognitive blending characterizes what it means to be alive and respond to experience in our movements, sensory perceptions and emotive forces, something a bodiless AI algorithm cannot do. I suggest that we do not have to succumb to a subsidiary role in allowing artificial intelligence to rule our lives, but rather embrace it as a tool in furthering our own cognitive capabilities.

In my own research into how AI algorithms are developing in creating and responding to poetry, I have been interacting with Anthropic's algorithm CLAUDE. While CLAUDE has proven excellent in distinguishing AI-created from human-created poetry, it recognizes its own limitations in being restricted to a derivative account of the sensory-motor-emotive underpinnings of our conceptual thinking. In particular, I demonstrate the differences between metaphorical usage in a Ted Hughes' poem and the one CLAUDE created based on Hughes' strategies in the poem. I conclude that CLAUDE has not (at least not yet) been able to master the principles of cognitive blending that operate to make Hughes' poem resonate with its human readers.

CLAUDE's detailed literary analysis of poetic features in Hughes' poem nevertheless invites the thought that AI might very well serve as instructor and coach to students on how to approach the reading of a poem, something that is currently lacking in the way poetry has been taught: not simple interpretation of meaning, but imaginative understanding through enactive experience. This approach would encourage students to engage with AI tools, not as threats but as collaborators, utilizing them to explore new poetic forms, generate novel imagery, and deepen their understanding of the creative process in order to develop a richer and more nuanced understanding of language, imagination, and human experience.

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Integrating Conceptual Blending and Learning from the Future for Innovation

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Keywords

creativity, emergent innovation, counterfactual scenarios, future potentials, CBT

Abstract

In this conceptual paper, we combine two powerful theoretical frameworks - Conceptual Blending Theory (CBT, 2002) and Peschl's *Learning from the Future* (2023) to explore creativity and innovation as nonlinear, emergent processes. Peschl emphasizes “learning as becoming", where the innovator actively shapes and is shaped by future-oriented thinking. We propose that this aligns well with Fauconnier and Turner’s idea of counterfactual spaces where hypothetical scenarios ("what if") play a central role in generating radically new ideas.

More specifically, Peschl discusses how traditional organizational learning, focused on past experiences and existing knowledge, is insufficient for navigating the volatile, uncertain, complex, and ambiguous (VUCA) environment. He proposes a shift towards "learning from the future" as it emerges, which involves proactively engaging with future potentials rather than reacting to past events. The approach emphasizes the importance of being receptive to novel knowledge and perspectives and creating new niches where novelty can emerge. Fauconnier and Turner, on the other hand, focus on the cognitive mechanisms that underlie human creativity and meaning-making. They argue that the process of conceptual blending, which involves integrating elements from different mental spaces, is fundamental to everyday thought and exceptional human creativity. Importantly, they emphasize that blending is not deterministic, and the same inputs can lead to different integration networks. This process can lead to "emergent structure" in the blend that was not present in any of the input spaces. As previously stated, they highlight the role of counterfactual thinking and how our minds can work with incompatible representations. In other words, they describe a cognitive model for how disparate ideas are synthesized into new, transformative concepts.

Drawing from the two frameworks, we argue that conceptual blending can formalize how counterfactual scenarios and future potentials are imaginatively explored and combined. Learners, creators, and innovators can create speculative models, test their implications, and refine them based on their resonance with emergent trends. The integration of the two frameworks highlights their shared focus on making hidden connections visible. Conceptual blending provides a structured methodology for integrating future-oriented insights with existing knowledge by identifying and combining key input spaces, such as present realities and speculative future scenarios.

Together, these approaches have the potential to create a powerful roadmap for synthesizing disparate ideas into actionable innovations.

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Selective projection: How blending theory clarifies metaphoric framing in RELIGION metaphors pertaining to climate change

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Keywords

metaphor, climate change, blending theory, religion.

Abstract

Prior metaphor research has established that ideologically divergent framing of a single TARGET frame can be evinced via the same SOURCE frame, by making use of different elements within the metaphorical mapping (e.g. Musolff, 2016). Blending Theory (BT) (Fauconnier & Turner, 2002) provides a theoretical framework that clarifies why divergent communicative goals can be achieved within the same SOURCE frame: it stipulates that metaphors can be thought of as single scope conceptual blends in which there exists a governing input space (the SOURCE) in relation to a secondary input space (the TARGET), and that there is "selective projection" from both inputs. This process licenses conceptual content availability (Fauconnier & Turner, 2002), and foregrounds that what is utilized from the SOURCE frame determines what salient aspects are projected to the blend (the metaphoric construal), while others are backgrounded or negated.

As a means of exploring opposing viewpoints that use the same metaphorical SOURCE frame, we assess Religion metaphors and their use in framing climate change in English-language news media, with periodicals chosen for their prominence and range of editorial positions. We developed a list of 86 metaphoric search terms combining the religion lexemes with climate terms, e.g. *climate cult, climate religion, altar of climate change, climate hell and climate sin*; this list was used to create a corpus of articles containing religious metaphors for climate change. The articles were collected by searching for each metaphoric term in all the articles published between 2017 2023 by each newspaper, as hosted on the Nexis Uni (LexisNexis, n.d.) and Factiva (Dow Jones, n.d.) databases. The full corpus comprises 283 (126 American; 157 Canadian) articles that contain 324 instances of the metaphor. We utilize BT to elucidate how the Religion frame is used to make wildly divergent arguments regarding climate change's validity.

Previous work has found that Religion metaphors are used to invalidate the veracity of anthropogenic climate change in the US and the UK (Atanasova & Koteyko, 2017; Nerlich, 2010; Woods, Fernández & Coen, 2012); we find that different Religion metaphors are used to either invalidate or validate climate change, and that these opposing framings correlate with conservative and liberal ideologies in the US and Canada. Conservative viewpoints project a majority of Religion frame elements, via a variety of religious terms, while liberal viewpoints selectively project aspects of the Religion frame directly related to immorality and punishment. Conservatives use Religion

metaphors to discredit the validity of climate change mitigation and insinuate that climate change belief is subjective adherence to a false religion, as shown in (1) and (2).

(1) ...it's just one more falsehood that the **climate cult** portrays as fact. (conservative viewpoint, United States; New American, 2023)

(2) ...the extreme overreach and economic destruction of the left's **climate religion**. (conservative viewpoint, Canada; The National Post, 2022)

Liberals also use Religion metaphors, specifically Sin and Hell frames, to support a very different epistemic stance: actions contributing to climate change are immoral, and climate change needs to be urgently mitigated to avert further consequences, as seen in (3) and (4).

(3) And I got to thinking that what we need is a little green leaf, like the tip option on ride-hailing apps, that pops up on our phones, to **atone for our environmental sins.** (liberal viewpoint, Canada; Globe and Mail, 2019)

(4) This has been the summer from **climate hell** all across Earth, when it ceased being possible to escape or deny what we have done to our planet and ourselves. (liberal viewpoint, United States; The New York Times, 2023)

BT also foregrounds that what Viewpoint Space inputs are accessed from determines ensuing meaning construction (Fauconnier, 1994). This accounts for ironic use of metaphor used by those with conservative viewpoints, as can be seen in (5):

(5) Not even the watery pilgrimage of the **sainted Greta Thunberg** to our shores, and the emptying of half the schoolrooms of the nation for what was called a climate emergency march, had any perceptible effect on Monday's vote. (conservative viewpoint, Canada; National Post, 2019)

By analyzing these contradictory Religion metaphors as single-scope conceptual blends with different selective projections, we can clarify how meaning is constructed, resulting in divergent semantic content that support different epistemic viewpoints on climate change.

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Formal Conceptual Blending As A Fundamental Tool For Developing Artificial Mathematical Intelligence And For Training Large Language Models

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Keywords

Formal conceptual blending, metamathematical cognitive ability, artificial mathematical intelligence, conceptual computation, pseudo-pre-code.

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Abstract

One of the most important foundational pillars of Artificial Mathematical Intelligence is the first global taxonomy of seminal cognitive mechanisms that structures the abstract mathematical capabilities of the human mind. Among these central abilities is general conceptual blending. We provide an elementary introduction to how different formal models of conceptual blending have been applied to generate and guide reasoning patterns in general mathematics.

This approach enables a significant leap in the development of artificial mathematical co-creative agents and addresses the longstanding challenge/gap of abstract conceptual generation in formal reasoning. We show a vast collection of central notions in pure and applied mathematics, econometrics, physics, and/or finances that can be easily generated using categorical models of general conceptual blending. Furthermore, we describe the most universal and powerful formalization of conceptual blending parametrizing in a precise fashion all its structural components, i.e., partial cross-space mappings, selective projection to the blend, emerging structure, topology, unpacking and integration.

On the other hand, are there New and More Powerful Ways to Train Large Language Models in STEM, Mathematics, and Scientific Thinking Beyond Traditional Artificial Neural Networks?

Yes, and surprisingly, most leading high-tech companies have yet to realize the full potential of the first global taxonomy of cognitive abilities developed in Artificial Mathematical Intelligence for fine-tuning pre-trained LLMs.

A key innovation in this paradigm is the concept of pseudo-pre-code and conceptual computation. Rather than relying solely on the traditional approach of simulating brain-like processes through artificial neural networks, we advance beyond this framework by directly modeling the core cognitive processes responsible for human scientific creativity—such as *conceptual blending*, analogy-making, metaphorical reasoning, generalization, and exemplification, among others.

We illustrate with simple examples how Large Language Models are fine-tuned through a training phase involving elementary and highly challenging problems. These are presented via suitable prompts that include a constructive chain of thought (featuring instances of formal conceptual blending) and culminate in a coherent, sound response.

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Creative Construction Grammar, CCxG

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Keywords

Conceptual Blending, Construction Grammar, Cognitive Linguistics, Creativity, Multimodality

Abstract

Constructions are pairings of form and meaning that are stored in long-term memory. How are they created and learned, how do they change, and how do they combine into new utterances (constructs, communicative performances) in working memory? Drawing on evidence across many categories of grammatical structure—from word-formation to idioms to argument structure to multimodal communication—we argue that computational metaphors such as 'unification' or 'constraint-satisfaction' do not constitute a cognitively adequate explanation. Instead, construction combination is performed by Conceptual Blending – a domain-general process of higher cognition that has been used to explain complex human behavior such as, inter alia, scientific discovery, reasoning, art, music, dance, math, social cognition, and religion.

A theory of creative combination is the indispensable heart of Construction Grammar. But, surprisingly, so far, Construction Grammar does not offer such a theory; it has a gaping hole at its center. Our central claim is that the best candidate for a theory of creative construction combination is the theory of Conceptual Integration, also known as "Blending." We call the approach to CxG that takes Conceptual Blending as its central cognitive process "Creative Construction Grammar", CCxG.

We review alternative proposals in linguistics for the creative combination of linguistic units – inter alia, 'merge', unification, constraint-satisfaction, juxtaposition and superimposition, coverage, as well as associative links. While all of these approaches have considerable empirical descriptive power, we show that for virtually all phenomena across the lexicon-syntax cline, a more creative mental operation is required to fully

explain how speakers combine constructions in the working memory – one that accounts for the selectivity of the process and the resulting emergent meaning. We argue that Conceptual Blending is the cognitive mechanism that best accounts for all of these phenomena. Moreover, we show that, implicitly and in some cases explicitly, Cognitive Grammar already assumes that blending is at the heart of composition in grammar.

We lay out the principles of the mental operation of blending and then analyze blending in action in a range of constructions, from morphological to clausal to discursive. We explore how multimodal communication, which involves speech, gesture, action, the manipulation of elements in the environment, and other aspects of human communicative performance, crucially requires Conceptual Blending as an operation for assembling multimodal constructs.

In essence, we argue that any cognitive linguistic theory, and Construction Grammar in particular, requires a theory of creative combination that does not postulate a domain-specific combinatory mechanism. The theory of Conceptual Blending satisfies that requirement, and it is the only theory we are aware of that does satisfy this requirement. So far, there is no plausible alternative hypothesis.

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“Conscience, You Counsel Well!”: A Multimodal and Polysemiotic Fictive Interaction Blend for Internal Dialogue Externalisation in Shakespearean Theatre

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Keywords

multimodality, blending, theatre, inner speech, viewpoint shift.

Abstract

We examine a particularly complex conceptual blend in a two-minute monologue from a theatre performance of Shakespeare’s The Merchant of Venice. There, the character Lancelet, alone on stage, confides a moral dilemma to the audience through engaging in imagined conversations with two invisible interlocutors: his conscience and the fiend. These represent Lancelet’s good and bad side, his virtuous vs. his selfish thoughts appearing as opposite advice from each, as he weighs up the pros and cons of leaving his master. Using linguistic, vocal, and gestural elements, along with spatial and material structures, he constantly and swiftly shifts viewpoint between himself and his two conflicting sides. We analyse the intricate mappings between elements in the HERE-AND-NOW, STORY, and THOUGHT spaces. In the HERE-AND-NOW space, the audience is appreciating the actor’s performance on the theatre stage, while in the STORY space, the plot created by Shakespeare is unfolding. These two spaces are fused into a blend in which the individual on stage is both an actor performing and a character living. In the character’s THOUGHT space are his inner conflicting thoughts. Thus, the frame of FACE-TO-FACE CONVERSATION (Goffman 1963), with basic roles such as addresser, addressee, and message, is mapped onto the THOUGHT space into a simplex blend: a ‘Fictive Interaction blend’ (Pascual 2002, 2008, 2014). This integration facilitates the incorporation of the character’s conflicting thoughts by personifying his good and bad sides as two different ‘advisors’ talking to him as though he were a separate being.

His good side, personified as his conscience, and his bad side, personified as a fiend, come from the MORALITY space. These are metonymically represented on stage by Lancelet's moving body, along with his hat, thereby serving as 'material anchors' (cf. Hutchins [2002] 2005; Dudis 2004), which help run the blend of Lancelet's conflicting thoughts as contradictory advice by two external agents.

Far from being restricted to theatre, the Fictive Interaction blend is frequently used in argumentation, both in the law (e.g. legal evidence as 'speaking', Pascual 2002, 2008) and in philosophy (e.g. the modern philosopher's 'debate' with Kant, Fauconnier & Turner 2002; Brandt 2008, or the imaginary dialogues between animals or even abstract concepts, Xiang 2016). This notwithstanding, we propose that the Fictive Interaction blend is pivotal, particularly powerful, and perhaps essential, in organizing theatre discourse. We think this may be due to the prototypical interactional structure of theatre, which lacks third-person descriptions, thus mimicking face-to-face conversation in a way no other art form does. Through these imaginary dialogues a character's inner world is rendered accessible to the audience, turned fictive bystanders (cf. Xiang 2016; Pascual & Królak 2018). This represents the externalization of inner dialogue through a split self, thoughts and emotions appearing as having their own voice (cf. Pang 2005). It also evidences that fictive interaction is construed and produced as ACTUAL interaction, in a similar fashion as fictive motion (e.g. The road goes through the desert; The fence runs along the property line) is construed as actual physical motion (Matlock, 2001, 2004).

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Teaching Conceptual Blending Theory

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Keywords

Conceptual Blending, Multimodality, Frame Semantics, Fictive representations, Applied Linguistics

Abstract

Conceptual Blending is possibly the most wide-reaching concept in the study of cognition. Work on the topic in the past 30 years has advanced the Cognitive Sciences in many directions and into many fields, from linguistics, philosophy and psychology to evolutionary and cultural anthropology, creativity studies, literary analysis, mathematical analysis, communications, rhetoric, education, visual arts and music (Fauconnier and Turner 2002, Turner 2006, Coulson 2006, Cienki 2016, Gill 2010, Fredrikson and Pelger 2020—a small selection of a vast array of literature across all the fields mentioned and more).

From a teaching standpoint Conceptual Blending Theory has the advantage of appealing to a vast range of interests. It allows students to find creative applications that connect with almost anything they are interested in. Further, the centrality of the concept of multimodality gives both instructor and students the opportunity to present blending analyses using absorbing multimedia materials appealing to the senses.

I will show how Blending theory can be applied pedagogically. My course in Language, Thought, and Mind, an upper-level undergraduate class at Rice University, serves Linguistics and Cognitive Sciences majors. A requirement is that students work together to present group projects using an analytical framework chosen from a small set of related frameworks. Conceptual Blending theory is the most often selected.

In class, while we work through the first 6 chapters of F&T (2002), I present a number of my own blending analyses starting with cartoons and moving to other domains including simple data visualizations, which blend quantitative information with

visual features. Students are very familiar with data visualizations but have typically taken for granted many conventional mappings found in graphs, pie charts etc., not realizing their nature or complexity. The examples given become more dynamic and complex, until students thoroughly understand how to proceed with an analysis of such blends, and others from domains like complex cartoons, political satire skits and movies.

When the students choose presentation topics, I tell them that the presentations should be given as though they are presenting at a Cognitive Science conference. In effect, the classroom becomes a blended space of classroom activity and fictive conference, complete with submitted abstracts.

The results are creative and enjoyable to watch. Here are a few examples of presentations from recent years, with students' own short descriptions, and in the last case, a full abstract:

I HAD FRIENDS ON THAT DEATH STAR: Analyzing the Conceptual Blends in College Humor's *StormTroopers 9/11* Skit: We investigate how the skit blends Star Wars and the terrorist attack on the Twin Towers using Fauconnier and Turner's Conceptual Blending Model. We also analyze the frames used in the skit to facilitate our comprehension using Lakoff's Image Schema Model.

Blending in Pixar: An analysis of conceptual blends in Disney Pixar movies. We are interested in seeing how they take shape and the subtlety of some blends in movies. Examples include the character Gusteau from "Ratatouille"; good versus bad in "The Emperor's New Groove"; and the Cars movie franchise.

Conceptual Blending in Visual Media: Our presentation is on conceptual blending within visual media, specifically blends of actors and their characters in TV, film, skits etc., and different effects on what aspects of the inputs are preserved in the blended space of the character portrayal.

"Anyone Can Wear the Mask": Conceptual Blending in the Spider-Verse: This project uses conceptual blending theory to analyze how the movie *Spider-Man: Into the Spider-Verse* unifies multiple distinct versions of Spider-Man into a single coherent narrative. Each character - Miles, Peter, Gwen, Spider-Ham, Peni, & Noir - comes from a different universe with its own visual style, tone, and logic. Despite these differences, the film blends them into one story using a shared generic space:

the core Spider-Man narrative involving a spider bite, personal loss, and heroic responsibility. This analysis highlights how input spaces are mapped onto one another, forming a blended space where emotional depth and visual coherence emerge. The container image schema structures the multiverse by representing each universe as a bounded space; breaches between them are visualized through glitching and instability. I argue that the film succeeds by blending not just characters, but also their universes' aesthetics, emotional, & cultural factors to deliver the message that Spider-Man is a role anyone can inhabit.

Students like using Conceptual Blending Theory for various reasons. They often report surprise that they have learned to do "an incredibly complex analysis" on topics of great interest but which did not seem cognitively complex. Another likely reason is that by its nature Blending theory is so well adapted for analysis of creative multimodal media in popular culture, of which students are generally avid consumers.

In sum, Conceptual Blending Theory can be used to teach analytical thinking in a creative way. I demonstrate this with the intent of giving others ideas for how to implement the ideas in a classroom.

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Disanalogy in Digital Writing

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Keywords

conceptual blending, disanalogy, Digital Writing, emoji, eye-tracking.

Abstract

Proceeding from original eye-tracking experiments involving visual readings of digital texts, this study presents unique evidence of Conceptual Blending in action that helps define Digital Writing as a concept in online communication. This is accomplished by applying CBT processes of compression and decompression, along with Fauconnier & Turner's concept of disanalogy (Fauconnier & Turner 2002, 2003), to acts of digital communication, arguing that Digital Writing can be described as "physical space- free" (digital) communication and as "digital space-free" in (physical) acts of non-mediated communication. In the experiment, we identify two main typologies of emoji: emoji functioning as determiners and word-replacing emoji (Paggio and Tse 2022). We contrasted visual readings of these two types of emoji with plain text readings and analysed the results using the CBT framework.

Our findings suggest that digital communication is at first blended with the mental space for print or handwritten media, in the domain of texting or email communication. This domain lacks vocal and expressive components of physical communication such as gestures, posture, facial features or tone of voice. This yields a new mental space in which the digital is associated with the lack of non-verbal components of communication. This mental space of digital-as-non-expressive is disanalogous with the mental space of multimodal Digital Writing, where emoji are combined with text or other modalities. These two disanalogous spaces are inputs to a new blend, in which the disanalogy is compressed into the property of Digital Writing. With the implementation of visual and multimodal features such as emoji, the mental space of the digital becomes disanalogous with the mental space of the expressive due to the lack of non-verbal pragmatic features. As our eye-tracking measurements

demonstrate, people process emoji functioning as determiners faster than words or than word-replacing emoji, showing that emoji as digital gestures carry a blended role of non-verbal communication pragmatics and the writing constraints of digital media.

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Dative blends in Mexican Spanish

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Keywords

blend, dative, applicative, dative constructions, extended transitive verbs.

Abstract

The dative clitic *le* (*me* 1st, *te* 2nd, *le(s)* 3rd (pl)) in Spanish encodes recipients in a canonical transfer construction:

1. Tachita le dio un regalo
   'Tachita gave him a gift'

As defined in Cognitive Grammar, datives encode active participants in the goal domain. From this basic characterization, dative constructions extend to an ample array of constructions depicting different kinds of affectedness imposed on the recipient. At stake are several dative constructions involving root transitive verbs (1-2), where affectedness cannot come from the valence of the verb:

2. Tachita les cocinó una paella deliciosa a sus invitados
   'Tachita cooked a delicious paella for her guests'

3. ¿Me cuidas la bolsa?
   'Can you watch my bag for me?

Arguments are provided to question the Construction Grammar "maximal projection" hypothesis, where root transitive verbs like *cooking*, *building*, and so forth belong in the three-participant-construal. Moreover, the proposal, by which *le* is an applicative marker increasing the verb argument structure, is also questioned since *le* is a basic dative transfer marker as shown in (1). In contrast, I propose that the dative extensions in (2-3)

are best accounted for in Blend Theory: here, the verb projects its root transitive meaning (change-of-state/mental contact), and, on the other hand, the transfer dative schema imposes a subjective projection of an active recipient. Thus, the basic transitive action is now projected for the recipient's benefit. The affectedness imposed on the recipient is accounted for by the basic function of the clitic *le*, which signals a higher degree of proximal interaction between the subject and the dative beneficiary. The indirect affectedness schema of (2-3) predicts the emergence of more extended subjective constructions such as ethical datives (4), where some external participant to the happening is indirectly involved in the event:

4. El maestro le reprobó a su hijo
   'The teacher failed her son [on her]'

Here, the mother "suffers" the affection her son undergoes as she is indirectly linked by empathy in the event to her son's affectedness. The dative clitic *le* subsumes the responsibility of increasing the potential proximity among participants in the event. The mother is outside the event, yet she is involved, via empathy, with her son's failure. Since affectedness is determined by mental distance, a set of dative constructions can be differentiated based on the mental distance established among participants. In all cases, the dative marker imposes proximity in the blend.

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The Mythological Mind: Blendings & Memory

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Keywords

mythological mental space, blending, conceptual metaphor, analogy, myth, memory

Abstract

The study of myth is a wide-spread practice, in particular in anthropology (Lévi-Strauss, 1955), in psychology (Jung, 1959) and in philology (Kerényi, 1941). Many studies have been conducted on this topic, identifying the influence of myth in the construction of society and in our subconscious life.

Myths are the basis of everyday narratives as they present, like proverbs (Lakoff & Turner, 1989), general characteristics applicable to different situations. Indeed, they are forms of explanation, and they are culturally significant (Cane, Dihal & Dillon, 2024).

In recent years, researches on conceptual metaphors (Lakoff and Johnson, 1980, 1999) and conceptual blending (Fauconnier & Turner, 1996, 1998, 2002) reveal the dissemination of some mythological ideas in discourses and narratives.

In this study, we highlight the importance of mythological mental spaces in the construction of conceptual blending and in memory (Albano, 2020).

Specifically, mythological mental spaces are similar to narrative spaces (Dancygier, 2012) as they present structures and linguistic expressions linked to essential elements of the narrative or of the discourse. However, in our opinion, mythological spaces precede narrative spaces in the construction of blending as they construct a mental M(ediatic) space which is linked to the R(eality) space. Between the two inputs there is a continuous circular movement where the elements of the real world are part of the mapping of space M which acquires them by loading them with new inferences and returns them to space R.

The blending space, deriving from these inputs, is the fruit of the connections between several organizing frames which are projected equally.

The research therefore aims to show the functioning of this conceptual structure and the role of mythological mental spaces within different types of discourse. Our corpus consists of 50 texts in French language which essentially concern scientific discourses (i.e. ecology, construction, medicine, artificial intelligence), advertising discourses (i.e. tourism), educational discourses (i.e. manuals), institutional discourses and literature.

The aim of our research is to observe the functioning of mythological mental spaces within texts and discourses, the type of similarity that analogy implies in narrative memory and how blending is the result of an inventive form of analogy.

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Kinesthetic Spaces: Bodily origins of advanced blending

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Keywords

Conceptual Integration, Embodied Cognition, Cognitive Semiotics, Language Evolution.

Abstract

Like so many other elements of human experience, cars began as motorized carriages; the internet began as an information superhighway; words like "basketball" and "dragonfly" also began as the emergent integration of something new from the consort of profoundly unlike domains. All such innovations are created through processes of Advanced Conceptual Blending. This form of blending (also known as double-scope integration, multi-scope integration, and multi-blending) occurs when the frame and identity properties of two or more input spaces eachoffer unique elements to a blend space that serves to resolve their incongruencies into a new compression or conceptual integration (Faconnier & Turner 2002, 2003). While many other modes of Conceptual Blending are arguably shared across species, the capacity for Advanced Blending is apparently unique to human cognition (Fauconnier & Turner 2002, 2008; Turner 2014). As such, CBT is an evolutionary theory that situates human cognition in a gradient cline of alloanimal cognition while also accounting for the emergence of human consciousness (Turner et al. 2021). While these claims are promising and plausible, much work remains to adequately theorize, test, and understand the nature of this continuity and the origins of its rupture. To better account for the evolution of advanced blending, this paper builds on a three-part model of cognitive grammar, embodied cognition, and cognitive poetics through the lens of Bernd Heine's (1997) cognitive foundations of grammar, Maxine Sheets-Johnstone's (2011) sensory-kinesthetic framework, and Margaret Freeman's (2020) cognitive poetics of aesthetic cognition, respectively, to consolidate evidence for the bodily emergence of advanced blending from the reorganization of the anatomical planes as new “Kinesthetic Spaces” in

habitual upright posture, including the novel mereological analogies and markedness relations these changes afforded.

This is accomplished through a review of relevant claims and findings from these theorists related to key mandates of Cognitive Linguistics and recent findings from Cognitive Semiotics (Pelkey 2013, 2017, 2018, 2022), with a focus the extension of novel part-whole analogies afforded by upright posture. In perpendicular relation to the earth, the anatomical planes are resituated in non-trivial ways relative to the default stances of other animals, creating new experiential meanings for FRONT-BACK, UP-DOWN and LEFT-RIGHT relations. Of particular salience for the emergence of Advanced Blending is the analogical configuration of UP-DOWN relations and their functional marking. The mereological input sets that emerge (e.g., between experiential compounds based on comparative arm-leg and hand-foot meronymies) would have naturally formed new kinesthetic blend spaces. These in turn would have naturally played a vital role in the origin of Advanced Blending as a useful, generalizable capacity. The conceptual lateralization of LEFT-RIGHT relations and the temporal-spatial directionality of FRONT-BACK relations may also have played a role. After a summary of the argument and evidence for these claims, the paper proposes a list of priority research questions and ongoing lines of inquiry to better develop and test a theory of kinesthetic blend spaces as key to understanding the bodily origins of Advanced Blending.

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“PANDEMIC IS WAR” metaphors: multimodal blends with varied inputs and meanings

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Keywords

war metaphors, multimodal blends, COVID-19, Mandarin, US English, Canadian English

Abstract

Warfare/Combat metaphors abound in discourse about the COVID pandemic (e.g., Augé, 2022; Chapman & Miller, 2020; Gui, 2023; Liu & Tay, 2023; Musolff, 2022; Qin, 2023; Yu, 2023; many others); as a class, they are often contrasted with Journey or Natural Disaster metaphors (Semino, 2020; Wicke & Bolognesi, 2020; Gui, 2021; Zhang et al., 2022; Deng et al., 2022; Xu, 2023). But the apparent assumption of a single/shared War input frame may be limiting our understanding of crosslinguistic variation in COVID blends. We here examine and contrast the different War input frames and metaphoric blends attested in Mandarin, Canadian English, and US English COVID discourses, using data collected for a multilingual database of COVID metaphors (Browning & Stickles, 2022; Stickles et al., 2022; Stickles et al., 2023; Sweetser & Stickles, 2024) and in accompanying visual images. War metaphors illustrate how each country’s military history shapes the input space, and can thus produce unique inferences in the blend.

In both the US and Canada, events catalyzing unification behind the war effort are used to encourage COVID precaution measures. While WWII was a time of national unity for both Canada and the US, the WWI Battle of Vimy Ridge was a uniquely major force in Canadian national identity-development. Thus, only in Canadian contexts is it used to unite Canadians against the pandemic (Browning & Stickles, 2022). In contrast, the WWII “Rosie the Riveter” meme wearing a medical mask occurs in both Canadian and American media (Figures 1 and 2).

Figure 1

Canadian WWII "Rosie the Riveter" political cartoon (Shimooka, 2020)

Figure 2

American WWII "Rosie the Riveter" political cartoon (Thompson, 2020)

Although both countries' COVID discourse evokes WWII homefront unity and the heroism of D-Day, only US discourse treats COVID as an attack on US soil, referencing 9/11 and Pearl Harbor.

1) Today, in the midst of this pandemic and the 75th anniversary of the end of the war, we continue to wonder where we are in the long fight. [...] And yet our **D-Day** is still some time ahead in an unknowable future.
   (Canadian; Cook, 2020)
2) This is our **D-Day**. This is our day in the war against COVID-19 that, just like with **D-Day in World War II**, where the war shifts.
   (American; Colbert, 2020)
3) This is worse than **Pearl Harbor**, this is worse than the **World Trade Center**. There's never been an attack like this.
   (American; BBC, 2020)

Mandarin COVID discourse references traditional Chinese warfare – the Great Wall, the Forbidden City's protective moat – and also more modern examples, the defeat of the Japanese invasion (1931-45) and China's revolutionary conflicts (1924-1949). The Great Wall and the victory over Japanese invasion are major symbols of Chinese cultural identity against outside threats. China's revolutionary conflicts are specifically understood as a "People's War", a blended social and military striving for Communist Society - a metaphor still used for purely social striving.

4) [...] 我国抗击疫情的工作从初期的"支援武汉、支援湖北"，上升为全国范围内打响的一场**人民**战**争**。

   '[...] our country's fight against the epidemic has risen from the initial "support Wuhan and Hubei" to a **people's war** launched across the country.'

   (Chinese; People.cn, 2020)

5) 坚决防控疫情，真情服务群众，组织动员广大市民和社会各界投身疫情防控**人民**战，齐心协力、众志成城，努力用最短时间实现社会面清零目标。

   'We must resolutely prevent and control the epidemic, serve the people sincerely, organize and mobilize the general public and all sectors of society to join the **people's war** against the epidemic, work together and unite as one, and strive to achieve the goal of zero-COVID among society in the shortest time possible.'

   (Chinese; Hebei Daily, 2022)

People's War pandemic-blend images show medical workers, soldiers and citizens fighting against the virus (some in traditional martial arts garb, contrasting with superhero suits and medieval armor in the American data). Chinese cultural traditions enter the blend too, e.g. medical workers as ritual spirit door-guards (Figure 3), or depiction of the COVID virus as a traditional Chinese demon (Figure 4).

Figure 3

Chinese political cartoon depicting medical workers as door-guards (Global Times, 2020)

Figure 4

Chinese political cartoon depicting COVID as a demon (People.cn, 2020)

Military history is a history of geopolitical identity. These different War inputs reflect that, and thus offer different blended construals of the COVID pandemic. All three discourses seek cohesive successful effort against COVID, so internally divisive and/or unsuccessful wars are not evoked in our data (no VietNam War). But beyond that, a "People's War" against COVID not only understands the pandemic as military conflict, but also as a victorious socially-cohesive effort specifically towards ideal Communism. A "Vimy Ridge" metaphor understands the pandemic as resisted by a unified and internationally heroic Canadian society. Iwo Jima and D-Day metaphors specifically frame the US fight against COVID not only as the united effort of a US population, but as a powerful world force for good. How we understand (the positive aspects of) our military history will not only determine the choice of salient War input examples, but also determine other aspects of the blended reasoning.

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4E Blending in Problem Solving, Collaborative Reasoning, and Teaching

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Keywords

conceptual blending, material anchors, 4E cognition, distributed cognition

Abstract

Since Fauconnier and Turner published their report on “Conceptual projection and middle spaces” thirty years ago, a shift has occurred in cognitive science from viewing cognition strictly as internal information processing to debating the roles of the body and the material and social environment in cognitive processes and whether these are causal (external to cognition proper) or constitutive (integral parts of cognition). These broader perspectives have been unified under the umbrella of 4E COGNITION (Newen et al. 2018; Sprevak 2019). Cognition is variously claimed to be:

- EMBODIED, in that mental structures arise from bodily experience (Johnson 1987) and that bodily sensation and action may be part of cognitive processing;
- EMBEDDED, in that cognitive processes may depend on the environment for their functioning;
- ENACTED, in that cognition may be realized in how an organism interacts with its environment; and
- EXTENDED, in that external representations and tools may be part of the cognitive process.

Critics of these views focus on what marks a process as cognitive, on the difference between causal coupling and constitution, and on overextension or ‘cognitive bloat’.

One way to examine the 4E nature of cognition is to consider the role of MATERIAL ANCHORS FOR CONCEPTUAL BLENDS in problem-solving (Hutchins 2005, Fauconnier & Turner 2002). From the perspective of distributed cognition (Hutchins 2001), cognitive problems are solved through the functional coordination of representational structures, some of which may be external to the body. Systems that function equivalently—that

solve the same problems—can differ in their conceptual blends and material anchors. Examples from everyday cognition include:

- ways of determining quantity: counting by sequential touching, pointing, or looking; by shifting objects from one location to another; or by using finger proxies;
- ways of determining order of service: standing in line (queueing), noting who is already present, linking to the prior arrival, taking a token, or competing for attention;
- ways of determining presence/absence: calling attendance, scanning a seating chart, using a sign-in sheet, providing tags to be picked up, collecting a signed work, asking others who are present, or using facial recognition technology.

To examine 4E blends, I consider equivalent functional systems in terms of their material and conceptual elements, how they are coordinated to solve the cognitive problem, and how conceptual distinctions are maintained and manipulated in these operations.

After establishing ways that functional systems with anchored blends may be embodied, embedded, enacted, and/or extended, I present some naturally occurring instances of anchored blends from microethnographic studies of problem solving (Williams 2013, 2019), collaborative reasoning (Williams 2022), and teaching (Williams & Harrison 2014, Williams 2019) to see whether and how they reflect the preliminary findings. Finally, I address questions of what makes these processes cognitive, whether they can be explained as causal coupling or whether elements outside the head are partly constitutive of the cognitive process, and of how we might protect against cognitive bloat.

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Future Conceptualisations in English Speech and Hand Gesture via Conceptual Blending

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Keywords
multimodality, conceptual blending, time conceptualisation in co-speech gesture

Abstract
Studies have reported that for English, a timeline is conceptualised gesturally along the sagittal and lateral axes, with hand gestures forward and to the right marking future, and backwards and leftwards gestures marking the past (see overviews in Núñez and Cooperrider 2013; Cooperrider et al. 2014). I challenge this traditional scholarship by arguing that the aforementioned oppositions are not absolute and any outward-directed gesture can potentially conceptualise future on a timeline.
I employ conceptual blending (Fauconnier and Turner 2002; Fauconnier 1997; Turner 2014) to analyse 47 20-second video units centred around *will,* which were selected from RT's show "SophieCo Visionaries" in English (2020) and which constitute future depictions in speech and gesture. Two coders annotated all data in ELAN for speech and co-speech gestural units marking the future.
Six categories of speech units which mark future contextually in the analysed video data were identified:

1) The verb *will*, including *will* with or without negation (e.g. *will*, *will never*), in a full form, or reduced (e.g. *'ll* or *won't*);
2) Conditional or 'when' clauses and counterfactuals, including clauses introduced by conjunctions *once*, *if*, *whether*, *would*, and *when* (e.g. *Would you looking back at this pandemic see something that will transform the humanity?* or *[…] yeah we will probably beat it at the end of a summer but come autumn and the temperatures drop we are going to be bracing the second wave*);
3) Modal verbs (e.g. in *you're saying it should change and it won't be growing steadily anymore*);
4) Time expressions, including future expression (e.g. *in the future*), and expressions and adverbs marking future in the context (e.g. *sooner rather than later, eventually, anymore*);
5) Verbs in the present tense with future references (e.g. *we are going to be bracing the second wave*);
6) Words with a semantic component of future (e.g. threat, futurist).

Speech units co-occurred with hand gestures, 134 of which were analysed. Gestures directed forward, to the right, to the left, downwards, upwards, and hands spread were viewed as potentially marking future (*cf.* Valenzuela et al. 2020). To verify whether these gestures mark the future, I performed comparative analysis of future and past depictions. To make analysis

manageable, I focused on *will* + infinitive for future speech markers, and verbs in the present perfect and past tenses. I compared future (47 snippets) and past depictions[i] (50 snippets) using manual annotations. I then scaled up the comparative analysis using automatic annotations (Wilson et al. 2024) of speech and hand gestures in 24 25-minute videos from the same RT show.

This allowed for new interpretation of time conceptualisation in hand gesture and shed some light on the understanding of hand gesture more broadly. I argue that the application of conceptual blending to the analysis of relatively longer multimodal (speech–gesture) discourse units reveals the role of hand gesture (temporal function: direction and orientation) which otherwise would not be visible.

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[i] Past depictions were selected through searchers in SophieCo corpus and NewsScape dataset http://newsscape.library.ucla.edu

Generative AI for Frame Blending

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Keywords

Frame Semantics, Large Language Models, Generative AI, Natural Language Processing, Human-AI Interaction

Abstract

Recent advances in Large Language Models (LLMs) have demonstrated their proficiency across a wide range of tasks. However, these models still lack established benchmarks for evaluating their ability to perform complex and creative processes, such as frame blending [1,2]. We propose frame blending as a foundational paradigm for developing explainable, expressive, and human-aligned generative systems. In this study, we evaluate the performance of LLMs, specifically the LLaMA series, in generating conceptual blends through fine-tuning and prompt engineering using FrameNet data [3]. The proposed framework integrates multiple components, including model integration, data library reference, prompt engineering, human-in-the-loop evaluation, and evaluation metrics, into a unified research pipeline. This system allows users to select specific frames for blending and to control the level of training exposure (e.g. zero-shot, one-shot, or few-shot learning). Then, the generated blending text is evaluated by human annotators using metrics such as clarity, relevance, and depth of understanding, enabling performance comparisons across multiple models. By establishing benchmarks for evaluating the ability of LLMs to perform complex tasks, this study advances the field of language modeling and enhances domain applications that require nuanced linguistic proficiency. Ultimately, this research aims to advance the development of domain-general LLMs by simulating the process of frame blending, enhancing model explainability, and facilitating large-scale experiments using FrameNet data [3].

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Saying the unsayable: Allegories as intersubjective mixed viewpoint discourse constructions in an early Daoist text

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Keywords
allegory, viewpoint blending, discourse construction, internal rhetoric, the *Zhuangzi*.

Abstract

Allegory says one thing, but means another. In this presentation, I present a case study of the use of allegories in the *Zhuangzi* (4th c. B.C.E.), the second foundational Daoist text. These allegories, altogether 192 instances and mostly in the dialogic form, embody the philosopher's use of two unique modes of discourse, namely, 'yuyan' [imputed words] and 'chongyan' [repeated words] either alone or in combination (Ye 1979/2004). Consider:

(1) Penumbra said to Shadow, "A little while ago you were walking and now you're standing still; a little while ago you were sitting and now you're standing up. Why this lack of independent action?" Shadow said, "Do I have to wait for something before I can be like this? Does what I wait for also have to wait for something before it can be like this? Am I waiting for the scales of a snake or the wings of a cicada? How do I know why it is so? How do I know why it isn't so?" (Watson 1968/2013: 17-18)

In (1), the personified characters Penumbra and Shadow are talking, exemplifying the philosopher's use of "imputed words" (Ye 1979/2004: 8). Since penumbras and shadows are inanimate entities and cannot talk, the dialogue between these two discourse characters is entirely made up and serves as a rhetorical device to express his actual thought that change is a law of nature. Instead of asking about the reason for the dependent action of the shadow the writer has observed in reality and answering it himself, he has two nonverbal entities talk to each other in a ventriloquial manner. This constitutes an instance of the split-self imagery (cf. Fauconnier 1985/1994; Lakoff 1996). More specifically, the philosopher conceptually splits himself into two or even

multipleselves, with each self fused with a discourse character in the allegory and taking turns in conversation so that the writer is engaged in talking to himself by assuming different roles. Consequently, Zhuangzi seems to be an enthusiastic practitioner of the so-called "internal rhetoric", which "occurs between one aspect of the self and another" and "has been there all along" in the history of Western rhetoric (Nienkamp 2001: x).

Drawing on Fauconnier and Turner's (2002) Conceptual Blending Theory, we analyze the multi-layered and multi-voiced allegories in the *Zhuangzi* as intersubjective mixed viewpoint discourse constructions (cf. Östman 2005), involving not just a blend of voice and vision but also the viewpoints of the philosopher, discourse characters and prospective readers. As a strategy of internal rhetoric, allegories in the *Zhuangzi* are used "to induce others [i.e., readers] to join in a communication interaction and engage in self-persuasion" (Combs 2005: 38). The successful interpretation of allegories lies in the alignment of the possibly different viewpoints through embodied and cognitive identification (cf. Gibbs & Okonski 2021). This study not only provides a novel interpretation of allegories (cf. Crisp 2005; Sinding 2002) but also sheds light on the cognitive underpinning of internal rhetoric.

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Creativity and extravagance through the empirical lens

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Keywords

Extravagance, creativity, productivity, E- and F-creativity.

Abstract

Creative and "extravagant" uses of language have drawn considerable attention in recent cognitive-linguistic work. Both theoretical approaches to delineating the concepts in question (Bergs 2019, Hoffmann 2018, 2024, forthc.) and empirical attempts at making them operationalizable using quantitative methods (e.g., Petré 2017, De Wit et al. 2020, Ungerer & Hartmann 2020, Baumann & Mühlenbernd 2022, Kempf & Hartmann 2022, Neels et al. 2023, Hartmann & Ungerer 2024, Morin forthc.) are currently flourishing. Following Sampson (2016), Bergs (2019) has influentially distinguished "F(ixed)-creativity", i.e., the rule-bound extension of a pattern, from "E(extending)-creativity", i.e., innovative uses of language that go beyond the current language system in some way. The concept of extravagance (Haspelmath 1999) in turn offers an explanation for why language users are E-creative in the first place: In order to be socially successful, they follow the maxim "talk in such a way that you are noticed" (Keller 1994). Constructions that have been discussed as examples of "extravagant" language use include reduplication patterns like fixer-upper (Lensch 2022) and shm-reduplication (Brexit, shmexit, Hartmann & Ungerer forthc.) or "snowclones" like [X BE the new Y], as in ICLC17 is the new ICLC16 (Hartmann & Ungerer 2024).

Despite this surge in research on linguistic creativity, many important questions remain. First, even though various authors have tried to offer operationalizable definitions, it is not entirely clear what exactly the concepts of (E-)creativity and extravagance encompass and how they relate to similar concepts such as expressivity (Gutzmann 2019), evaluativeness (e.g., Grandi & Körtvélyessy 2015, Battefeld et al. 2018), and salience (e.g., Schmid 2007, Schmid & Günther 2016, Boswijk & Colern 2020).

Second, attempts to empirically operationalize such concepts are often in danger of circularity, as they tend to rely on the presence of other, similarly "extravagant" patterns in the vicinity of the target construction (e.g., the co-presence of emphatic markers, Petré 2017; other "extravagant" expressions in the context, Kempf & Hartmann 2022) or on crowdsourced but ultimately intuitive judgments (Ungerer & Hartmann 2020). Third, it remains to be discussed how notions like E- and F-creativity as well as extravagance relate to the concept of productivity (e.g., Barðdal 2008, Goldberg 2019).

This theme session aims to address these open questions by asking how we can assess creativity, extravagance, and related notions with the help of empirical case studies, and how such empirical studies can in turn inform our theoretical understanding of these concepts. Featuring a geographically diverse group of speakers and a broad range of topics and object languages, our workshop brings together theoretical, corpus-based and experimental accounts of what sets "E-creative" uses of language apart from merely "F-creative" ones.

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Extravagant *use-conditional* meanings expressed by morphological diminutives in Brazilian Portuguese

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Keywords

expressivity, pragmatics, morphology, semantics, diminutivization

Abstract

This project explores the "extravagant" use of morphological diminutives in Brazilian Portuguese, particularly the morphological suffix *-inho/-inha*, as a form of linguistic creativity (Haspelmath 2002). By applying the frameworks of *F(ixed)-creativity* and *E(xtending)-creativity* (Bergs 2019), I argue that these forms serve as vehicles for expressive meaning that enhance discourse. This research highlights the interplay between semantics and pragmatics, demonstrating how diminutives convey meanings beyond the word level. By examining conditions under which these forms convey implied meanings—drawing on Gutzmann's (2013) concept of use-conditional items—I contribute to discussions of linguistic creativity, revealing how diminutives reflect *E(xtending)-creativity* in language.

Linguistic innovation is not the standard for what makes something linguistically *E-creative* (Bergs 2019)—simply, it is not sufficient. Intensification has been studied as a way to be creative with language and to innovatively convey expressive meanings—content which is non-propositional. The concept of extravagance (Haspelmath 1999), or the need to "talk in such a way that you are noticed," offers an explanation for why speakers boost and maximize the meaning of words (Tagliamonte 2008), providing insight into *E-creativity* itself.

We know that saturation of truth-conditions is necessary for semantic meaning to be conveyed. Since expressive meaning is conveyed by the diminutive morpheme, and

considering the use-conditional dimension (Gutzmann 2013), the same type of saturation must hold with use-conditions. To illustrate, consider the following example:

(1a) Eu moro em uma *casinha* na cidade.
(1b) I live in a house that is physically small in the city.
(1c) I live in a cozy/charming house in the city.

The reading in (1b) conveys the semantic meaning of the form, contrasted with the implied meaning in (1c). For instance, if an interlocutor responds, "That's not true!", this utterance denies the propositional content but does not affect the expressive meaning conveyed by the diminutive. This double meaning suggests two distinct meanings conveyed by the same form.

If we understand *casinha* to convey expressive meaning, then it is use-conditional when it conveys non-truth-conditional meaning. The diminutive morpheme *-inho/-inha* seems to satisfy the *+2d* and *+f* features outlined in Gutzmann (2013). Since the diminutive morpheme conveys both types of meanings, the predictability of the expressive meaning depends on the morpheme being a *functional mixed use-conditional item* (UCI).

To empirically ground this theoretical exploration, I conducted a corpus-based study using SketchEngine's ptTenTen23 web corpus, focusing on the Brazilian Portuguese (.Br) subcorpus. I developed customized search queries to extract diminutive forms with the suffixes *-inho/-inha* across different word classes (nouns, verbs, adjectives, adverbs), while carefully excluding non-diminutive tokens such as *vizinho*, *linha*, and other common words ending in these suffixes.

From an initial pool of over 600 tokens, after manual filtering to remove proper names and non-diminutive forms, I analyzed 300 unique tokens.

Coding followed the criteria proposed by Gutzmann (2013) for use-conditional items, showing that the diminutive morpheme exhibits the *+2d* and *+f* features, while lacking *r-s* features, supporting its classification as a functional mixed use-conditional item.

This quantitative and qualitative evidence demonstrates how the diminutive's conveys expressive, non-propositional meaning, and thereby supports its characterization as a vehicle for *E(xtending)-creativity* in Brazilian Portuguese.

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Productivity and creativity in diachrony: a study of Spanish aspectual periphrastic constructions

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Keywords

construction grammar, language change, linguistic creativity, productivity, Spanish verbal periphrases.

Abstract

This talk examines the role of creativity and productivity in the diachronic development of aspectual periphrastic constructions in Spanish. While verbal periphrases are a feature of many Romance languages, Spanish displays an unusually high degree of productivity in this domain (Aronoff 1976; Barðdal 2008; Bybee 2010; amongst others). These periphrases are multi-word verb constructions consisting of an auxiliary verb combined with a non-finite verb, optionally linked by a preposition or conjunction. Different mechanisms, interacting in complex ways, can be identified as explanatory factors for the large and growing family of verbal periphrases. Creativity has indeed been defined as a driving force of innovation and thus also of productivity and extensibility of periphrastic constructions, in particular regarding the auxiliary verb slot, and of the periphrastic constructional network overall (cf. Hoffmann 2019, in press). Our central research question is: How do different types of creativity shape the historical expansion and productivity of Spanish aspectual verbal periphrases? We focus on inchoative (1) and interruptive (2) meanings and assess whether new constructions emerge primarily through patterned, analogical expansion (F-creativity) or through more innovative, structurally or semantically marked forms (E-creativity), following Sampson (2016) and Bergs (2019).

1. *Me pongo a estudiar* ('I start studying/I begin to study'); *Se mete a trabajar* ('S/he starts to work'); *Rompe a reír* ('S/he starts (lit. breaks) to laugh')
2. *Por fin dejó de llover* ('At last, it stopped raining'); *¡Deja/Para de moverte, por favor!* ('Stop moving, please!')

We present diachronic corpus-based case studies based on data from the *Corpus Diacrónico del Español* (13th–21st century). A detailed analysis of the paradigm and its historical evolution reveals a dynamic and complex relationship between entrenched periphrastic forms and their creative extensions over time. Quantitative data, including various productivity metrics, show that most new members of a periphrastic construction arise through Fixed (F-) creativity, hence extensions through semantic analogy within a field, and that a smaller subset exhibits lower degrees of conventionalization (Sampson 2016; Bergs 2019). However, since linguistic creativity operates on a gradient (Zawada

2006), we also explore the threshold at which such extensions depart from entrenchment and move toward more unpredictable or expressive usage.

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Creativity & productivity in a dynamic link-based network perspective

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Keywords

creativity, productivity, argument structure constructions, usage-based linguistics, corpus linguistics.

Abstract

Well-known approaches to creativity (Sampson 2016) commonly distinguish between F-creativity (rule-compliant use) and E-creativity (rule-breaking use). Within Construction Grammar, while the gradient nature of creativity is generally acknowledged (e.g., Bergs 2018; Herbst 2018; Uhrig 2018), the dichotomy is nevertheless frequently part of the discussion, especially of course at their border. In part it stems from a focus on constructions ('nodes') at the relative expense of their connections ('links'). This often leads to the 'fat node' problem within the constructicon – where do we model constructional knowledge that is highly probabilistic in nature (Hilpert & Flach 2023)?

In this talk, we approach creativity and productivity from the link-based perspective in Usage-Based Construction Grammar (Diessel 2019; Schmid 2020). We assume that productivity pertains to a unit's inventory of links, while creativity pertains to the creation and maintenance of links, and that a construction's productivity is contingent on the creativity of the elements that occur in its open slots.

These assumptions are showcased using the *into*-causative (*He talked me into going, They scared us into working harder*). The construction is productive because it hosts a large inventory of verbal slot-fillers (*talk*, *scare*). Conversely, these slot-fillers themselves are 'creative' because they can establish and maintain links with a construction that is not their primary host. This property is not linear: the slot-fillers' ability to occur in unusual constructional environments reflects their general 'creative potential' to form and maintain (new) links within the network.

To this end, we created 'creativity profiles' for 342 verb types that occur in the *into*-causative in the *Corpus of Contemporary American English* (COCA) pertaining to their transitivity and general syntactic flexibility, measured from their uses outside the *into*-causative. Using a LASSO regression, we predicted the verbs' collostructional association with the *into*-causative from multiple predictors of their creativity profiles. Overall, we find weak, but consistent correlations between verbs' association with the *into*-causative and (i) their semantic and syntactic compatibility with the construction, and, crucially, (ii) their *general* flexibility and ability to establish and maintain links. That said, predictors that pertained to verbal properties (e.g., transitivity, 'centrality of use within the constructicon') were stronger predictors than general lemma properties. The results illustrate the advantages of link-based approaches to the constructicon that bypass a lot of the issues with node-centric perspectives.

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The Extravagance of the Argentinian Spanish Conditional Progressive

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Keywords

language change, grammaticalization, progressive, conditional, Spanish.

Abstract

Linguistic creativity often drives change by pushing the boundaries of the existing language system. This study examines the innovative use of the Conditional + Progressive construction in Argentinian Spanish as a case of "extravagant" language (Haspelmath 1999). Combining the Conditional marker (V-*ría*) with the Progressive construction (*estar* 'to be'+ V-*ndo*), speakers achieve a novel meaning, both evidential and ironic, distinct from conventional uses of these markers. This phenomenon exemplifies "E-creativity" (Bergs 2019), where speakers extend linguistic resources to generate socially salient and contextually marked utterances.

The Conditional marker in Spanish traditionally encodes epistemic modality, often expressing hypothetical or *irrealis* meanings. It is commonly found in the apodosis of conditional sentences or to indicate "future in the past" readings. Separately, the Progressive construction conveys aspectual meaning, emphasizing the ongoing nature of an event and its internal temporal structure. Crucially, in Argentinian Spanish, the co-occurrence of these markers produces a reading that blends evidentiality and irony, where speakers simultaneously foreground the potentiality of the Conditional and the immediacy of the Progressive. For example, in a sentence like "*Juan estaría llegando tarde*" (lit: 'Juan would be arriving late'), the combination goes beyond its literal interpretation, signaling that the speaker assumes the truth of the proposition to be self-evident in the context, so that the use of this construction draws additional attention to their utterance. The resulting meaning is layered: it expresses both the linguistically-encoded meaning, but also a sense of irony, often tied to shared knowledge between interlocutors.

To investigate this phenomenon, we examine examples from Twitter and the esTenTen23 corpus (Kilgariff & Renau 2013), focusing on contexts where the evidential/ironic reading was identified by both authors. We argue that the extravagance of this construction arises from the inherent tension between its formal components: the Conditional suggests hypotheticality or uncertainty, whereas the Progressive focuses on the truth of the event at the reference interval. This interplay creates a marked expression where speakers exploit this contrast to heighten the salience of their statement, reinforcing a shared pragmatic understanding. In line with Keller's (1994) maxim of extravagance –"talk in such a way that you are noticed"– this construction illustrates how creative linguistic behavior can promote innovation and meaning change.

We also explore the mechanisms behind this innovation and its implications for grammaticalization processes. The construction's evidential/ironic reading suggests a pathway toward greater subjectivity, aligning with well-documented trajectories of grammaticalization (Traugott 1982, Bybee et al. 1994). Speakers initially use the construction innovatively to fulfill pragmatic goals, but repeated use entrenches it, paving the way for systematic semantic shifts. Our findings illustrate how extravagance operates as a catalyst for change, blending expressivity with constructional innovation. This case study contributes to broader discussions on linguistic creativity, extravagance, and their roles in grammaticalization, highlighting the dynamic interplay between speaker agency and systemic change. The Conditional + Progressive construction in Argentinian Spanish thus offers compelling evidence of how "extravagant" language use can spur innovation, enriching our understanding of the processes underpinning meaning change.

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Non-extravagent Extending Creativity

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Keywords

change, extravagance, relative clauses

Abstract

In this talk, I explore the role of expressivity and communicative extravagance in extending creativity: not all examples of extending creativity are extravagant. For example, the development of headed relative clauses built around interrogative markers as in (1) is a kind of extending creativity, but it relies on changes below the level of consciousness. Proto-Indo-European probably didn't have subordinate finite clauses (Clackson 2007); in early Indo-European, the creation of finite, subordinate relative clauses is a kind of E-creativity (Bergs 2019).

(1) The man [*whom* we saw] was called Ortcutt.

Such relative clauses are found in Romance, Slavic and other languages (Haspelmath 2001). Their emergence is a diachronic problem: they were not found in Old Church Slavonic, Old Persian, or Ancient Greek, but they have developed in daughter languages (Auderset 2020). They developed from ambiguous conditional/correlative clauses like the Russian proverb in (2) (Belyaev & Haug 2020).

(2)

[Kto	ne	rabotaet]	[tot	ne	est]
Who	not	works	that-one	not	eats

'If you don't work you won't eat'
'Whoever doesn't work won't eat'

Haudry (1973) offers a pathway to relative clauses. In English, Gisborne & Truswell (2017) say that the processes of change involve:

• extraposition of the protasis;
• reanalysis of the protasis as a modifier of a noun within the apodosis, resulting in new syntactic structures and new categories of function words; and
• reanalysis of the *wh*-word so that it is in an anaphoric or resumptive relation with a noun phrase in the apodosis.

The reanalysis of the *wh*-word is also semantic. In the conditional structure it expresses a choice function. In the relative clause, however, it simply identifies the referent of the noun modified by the relative clause, Belyaev & Haug (2020) explain the pathway. The sequence of changes is repeated in the Indo-European languages and is responsible for introducing finite subordination into them. However, the

headed relative clauses express backgrounded old information as in (3); they are not 'extravagent' (Haspelmath 1999).

(3) A: Who won the Dissertation Prize?
B: It was Ortcutt who won the Dissertation Prize. *OR:*
B: I think Jane said that the person who won the Dissertation Prize was Ortcutt.

Conditional protases, however, are topics: they are never backgrounded, and examples like (2) have a special intonational contour.

The changes involve the conditional/correlative ambiguity and vagueness: abstract function words like *which* are harder to learn than content words like *dog*. The theory of linguistic change has to accommodate examples that extend the grammatical repertoire, in this case probably introducing finite subordination into the Indo European languages (see Dékány, Gugán & Tánczos 2020) but in a way which is does not fit the broader type of E-creative changes. Are speakers 'creative' when they innovate change? In this talk, I argue that they are, and that creative linguistic innovation need to be conscious or extravagant, in line with Dietrich's (2024) theory of seamless change: speakers and hearers set out to resolve communicative challenges using the toolkit available to them, which can result in innovations in the toolkit, with the strategies enriching and extending the linguistic system. However, this unconscious process takes place in a communicative environment that reflects the highly social, adaptive and mutually attentive behaviours of our species. Language change doesn't only require speakers to be extravagant: in cases like this one, it requires speakers and hearers to be cooperative and highly mutually engaged.

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Unraveling creativity. A constructionist approach

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Keywords

linguistic creativity, Construction Grammar, F-creativity / E-creativity continuum, corpus-based analysis, analogical extension.

Abstract

Recent studies on creativity within Construction Grammar have largely examined the continuum proposed by Sampson (2016: 19) between F-creativity—drawing from a fixed but extensive set of examples—and E-creativity, which expands the range of possible outputs, with a particular emphasis on the latter (see Bergs 2018, 2019; Hoffmann 2019, 2022; Ivorra-Ordines 2024, in press; Ivorra-Ordines & López Meirama 2024; Mellado Blanco & Ivorra-Ordines in press; Norde & Trousdale 2024; among others). The contrast between these perspectives stems from dissatisfaction with a restrictive view of linguistic creativity. Constructionist approaches adopt a Chomskyan perspective, emphasizing that speakers can generate an infinite variety of sentences to convey limitless thoughts and respond to ever-changing situations (Chomsky 2003; see Barðdal 2008 on 'productivity as regularity'). In this vein, Goldberg argues that language is not a predetermined set of sentences but rather an open system where constructions can freely combine unless conflicts arise (Goldberg 2006: 22; see also Goldberg 2019: Chapter 3, or Hoffmann, 2019).

The ability to combine constructions effectively is essential for speakers to produce creative expressions by making "original use of the established possibilities of the language" (Leech, 1969: 24). However, verbal creativity is not confined to this productive use alone. Speakers can also transcend existing constructional patterns, generating "new communicative possibilities that are not already present in the language" (Leech, 1969: 24). Adopting a corpus-based approach (Sketch Engine), my presentation aims at disentangling the F-creativity–E-creativity continuum by means of the following manifestations of linguistic creativity:

- Extravagance and hyperbole. Speakers often extend expressions for emphasis or comedic effect, violating economy principles to maximize impact. Examples include lengthened expressions (*un hambre que me voy a comer el teclado y el ratón de postre*; esTenTen18, 4340736468). What role does salience play in this context? (see Günther et al. 2016).
- Analogical extensions and semantic clusters. Established idioms can be modified through analogy, generating new variants that fit specific communicative contexts, such as *vete a freír cebollas/tusas/maíz* from the idiom with variants *vete a freír*

espárragos/monas/churros (Ivorra Ordines & López Meirama 2024). But how do speakers can go beyond coverage (see Goldberg 2019)? How can we integrate context?

- Emergence of semi-schematic patterns. Frequent modifications of lexically filled constructions can function as a real change of change and a trigger for the emergence of partly filled constructions (Mellado 2024). How repeated usage of certain instances shift conventionality? What is the role of genre in the emergence of semi-schematic constructions? (Schmid 2020).

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Extravagance on a creativity scale

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Keywords

language change, extravagance, creativity, discourse, word formation.

Abstract

There has in recent years been a renewed interest in the issue of creativity as a factor in word formation, exemplified by Sampson (2016) and Bergs (2019) and most recently by Hoffmann (2024), from a construction grammar perspective. Also extending the question into a more cognitive domain is Körtvélyessy et al (2022). A new member of the conceptual pantheon is *extravagance*, most notably through the work of Eitelmann et al. (2022), to cover morphological phenomena and patterns which are explicitly 'constraint-violating' or 'attention-seeking', such as the extension of the *-ish* suffix to give forms such as *feelgoodish* or *bedroomslipperish*, and others exemplified below.

Like any such newcomer, this notion needs some additional theoretical scrutiny such as that set out in Koliopoulou & Walker (2024). This paper used empirical data on double suffixation patterns in English phrasal verbs (*lookable uppable*; *adder upper*; *askee outee*) to propose to subsume extravagance as a form of creativity. The guiding principle of this proposal was to set out a 'dynamic creativity scale' which sees ALL morphological innovation, from conventional suffixal productivity to arguably ill-formed, and yet not infrequently attested forms, as not being different in nature, but in degree only. The scale, which runs from F-creativity to X-creativity and beyond, furthermore captures not just the categorial indeterminacy between productivity, creativity and extravagance, but also the diachrony and social factors involved in the entrenchment of so-called creative or extravagant forms.

On the basis of further data from natural discourse (largely obtained from electronically mediated communication sources), the scalar view will be subjected to further scrutiny. That is, the data thus far examined has focused on derivations of phrasal verbs in English. This paper will look at various other suffixal patterns, both inflectional and derivative, to highlight the importance of a continuum analysis for explanations of language change. We show that such a scalar analysis has both synchronic and diachronic implementations. Synchronically, a pattern such as double-ER suffixation in English (*fixer upper*, *helper outer*) might be argued to be in some sense 'less creative' (i.e. is to be positioned closer to productivity than X-creativity on the creativity scale) than double -ED suffixation (*fucked upped*). Diachronically, this same scalar analysis is also reflective of language change dynamics more generally. Second, and of course related, there is an interesting way in which types of discourse interplay with this creativity scale. Extravagance goes hand in hand with a rather informal, interpersonal discourse environment. For instance, word formation phenomena going beyond the

aforementioned suffixation patterns, such as nominal compounds with final integrated prepositions (*he's the maker-fun-of*), or internal argument structure (*she's the spider getter rid of-er*), are more likely to occur in an informal discursive context. As such, it might be argued that another way to get at what extravagance means is to approach it from a discursive perspective. In short, this paper aims to put the notions of creativity and extravagance under the lens of discursiveness and language change, to query the boundaries of what is and what is not a word formation process.

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Creating novel ideophones in Brazilian Portuguese

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Keywords

iconicity, ideophones, sound symbolism, linguistic innovations, creativity.

Abstract

Recently, there has been a considerable increase in the research of iconicity in Linguistics and Cognitive Sciences, showing that this characteristic is also a fundamental part of our ability, as human beings, not only to communicate but also to create, develop and use language (cf. Perniss et al. 2010, Flaksman 2017 & Dingemanse 2019). In the spoken modality, which is the focus of this investigation, the "intrinsic link language users perceive between word sound and properties of referents" (Imai et al. 2025:137), known as sound symbolism, is a representative example of iconicity in language use, where some of these similarities can be more or less transparent ("imagistic iconicity") while others are more abstract and relational ("diagrammatic iconicity") (cf. Dingemanse et al. 2015, Pleyer et al. 2017). Sound symbolism can be conveyed in imitative sensory words already lexicalized, such as in onomatopoeias and ideophones (e.g., English *bang*, Japanese *nikoniko,* 'smiling', see Akita 2021), but it can also be expressed in linguistic innovations, e.g. vocalisations and newly created, spontaneous, thus not yet conventionalised signs (cf. Winter et al. 2023:3). Considering the concept of Extravagance, built on Keller (1994), "talk in such a way that you are noticed" (Haspelmath 1999, 1055), and its motivation, "sometimes [the speakers] also want their utterance to be imaginative and vivid" (Haspelmath 1999, p. 1057), this work, related to an on-going doctoral project, aims to investigate the emergence of new ideophones (cf. Nuckolls 1996, Dingemanse 2019), expressive and depictive sound symbolic words "capable of portraying any sensory experience" (Ćwiek 2022: 95), in Brazilian Portuguese (BP).

This is a descriptive corpus-based investigation which uses a compilation of multimodal naturally occurring talk previously recorded by Museu da Pessoa, in which

people from all around Brazil narrate personal stories to the Museum. In a selection of 118 videos, ranging from one minute to four hours, 114 tokens of novel creative expressions related to the concept of ideophones were found. The data was compiled, transcribed and analysed using ELAN (Wittenburg et al. 2006) and Praat (Boersma, Weenink 2024), and it defies previous assumptions that considered Portuguese as a language that lacks ideophones (Araújo 2020).

This study will show some examples of linguistic Extravagance through the creation of novel sound symbolic words in BP, and how it relates to the proposal of "E(extending)-creativity" (Bergs 2019), i.e. innovative uses of language that stretch the limits of the language system in some way. This approach encapsulates the idea, that goes back to Humboldt, of language use as an action, an endless and creative process, which enables us to deal with the infinite and boundless with a finite set of means; "there is no a priori limitation to what speakers can do with their language in the dynamic act of speaking" (Bergs 2019: 278). Being one of the few investigations about the phenomenon in BP, this study shall contribute to the field with innovative data for both creativity and iconicity studies.

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Off the beaten track without getting lost: exploring the creative potential of Italian idioms

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Keywords

language processing, idioms, Italian, creativity, figurative language.

Abstract

Idioms are a diverse class of multiword expressions (MWEs) that typically convey a figurative meaning distinct from their literal interpretation (Cacciari and Tabossi, 2014; Libben and Titone, 2008). Due to this semantic peculiarity, they rarely occur in linguistic contexts that reference their literal-compositional meaning.

However, there are contexts in which the literal aspect of an MWE is pivotal. These include literal-compositional contexts (e.g., (1), where *break the ice* refers to physically breaking ice) and creative-figurative contexts (e.g., (2), where the figurative meaning is enriched through a playful reference to ice-coldness as a metaphor for poor sociability). Langlotz (2006) describes creative contexts like (2) as instances of idiomatic wordplay, referring to them as "literal-scene manipulation" or "parasitic elaboration".

1) The **blizzard** had passed but the sky threatened more. We gingerly *broke the ice* in the **washing bowl**, washed, changed and joined the others in the small refectory below.

BNC

2) 'Quanti anni…' gli dissi tanto per *rompere il ghiaccio*. Proprio di **ghiaccio** si trattava… Era più **freddo** di un **iceberg**!
('How many years…' I told him just to break the ice. It was ice indeed… He was colder than an iceberg!)

CORIS

Building on prior research, certain idioms are considered more adaptable across contexts. In particular, these are inherently ambiguous MWEs prone to co-activating both literal and figurative meanings. Such idioms exhibit high decomposability, transparency, and literal plausibility (Beck and Weber, 2020; Vulchanova et al., 2019; Wagner, 2021). This study investigates precisely whether, in both literal-compositional ((1)) and creative-figurative ((2)) contexts, the inherent characteristics of idioms influence the ease with which their literal completions — i.e., contextual continuations that follow the idiom and explicitly reference its literal constituents — are integrated.

Sixteen Italian idioms were selected from the "Normed lexicon of English and Italian idioms" (Pagliai, 2023) based on the Potential Idiomatic Ambiguity (PIA) index. This index assigns each idiom a PIA score, calculated as the sum of its mean values for literal plausibility, decomposability, and transparency. The idioms were then evenly divided into two groups: high-PIA and low-PIA idioms. Eighty-four participants were recruited via Prolific to complete a fully online acceptability rating task, implemented using PennController for Internet-Based Experiments (PCIBEX, Zehr and Schwarz, 2018). Idioms appeared in dialogues between two fictitious speakers, A and B. A's line biased participants toward a literal or figurative interpretation. After clicking, B's reply with the MWE followed by its literal completion was revealed. Participants rated B's response on a Likert scale (1–7) based on A's context. The staggered presentation of A's and B's lines also enabled the recording of reading times.

Results indicate that literal completions of high-PIA idioms consistently received higher acceptability ratings and had shorter reading times than those of low-PIA idioms across both conditions. This effect was more pronounced in the literal-compositional context, likely due to the greater difficulty of figuratively reinterpreting the literal completion in the figurative-creative context. Nevertheless, the joint observation of rating and time differences based on idiom PIA in creative-figurative contexts is particularly encouraging, as this study represents, to the best of our knowledge, the first experimental investigation into the systematicity of idiomatic wordplay. The emerging trends suggest that idiomatic wordplay may not be as arbitrary as traditionally assumed (Bargmann et al., 2021; Fellbaum, 2019), opening new avenues for future research on its underlying cognitive and linguistic principles.

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Extravagance in the lab: How social biases influence the emergence of linguistic innovations

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Keywords

language evolution, linguistic innovation, artificial language learning experiment, social biases, extravagance.

Abstract

Languages are socially constructed entities, and as such, the ways in which they evolve over time are subject to various social pressures. The role of one such factor – extravagance, defined as speakers' desire to talk in such a way that they are noticed (Haspelmath 1999) – has seen a surge of research interest in recent years (e.g., Petré 2017; De Wit et al. 2020; Ungerer & Hartmann 2020; Eitelmann & Haumann [eds.] 2022; Neels et al. 2023; Koliopoulou & Walker 2024). According to the extravagance view, speakers aim to stand out from their peers by creating novel linguistic forms and meanings, which may then be adopted by others due to the competing social pressure towards conformity. However, as a concept that refers to language users' intentions, extravagance has proved difficult to operationalize, especially since most studies to date have been corpus-based (but see Baumann & Mühlenbernd 2022 for a computational modeling approach).

We present the first experimental study of the role of extravagance as a driver of linguistic innovation, using an artificial language-learning approach (e.g., Fedzechkina et al. 2023). In our pre-registered experiment, 100 participants (as determined by a power analysis with G*Power; Faul et al. 2007) will be instructed, in a game-like setting, to learn words of an alien language, while pursuing either of two social goals: (i) in the "extravagance bias" condition, participants' goal is to be recognized as special by the aliens; (ii) in the "conformity bias" condition, their goal is to be recognized as one of their own by the aliens. Participants are trained on an artificial miniature language consisting

of four adjectives, each of which will be presented in a "non-extravagant" and an "extravagant" form. "Extravagant" forms contain diacritics that are absent from English orthography (e.g., ranu vs. rąnũ). During training, participants will see the eight written forms paired with pictures, followed by a comprehension (i.e., picture-selection) task. During testing, participants will be presented with pictures and asked to type the alien word (using a virtual keyboard that includes diacritics). The test phase will include both the familiar (trained) pictures and four novel (untrained) pictures, for which the participants are asked to freely invent words.

We predict that participants in the "extravagance bias" condition will produce more extravagant forms (as measured by the number of diacritics) and match the training items less faithfully (as measured by Levenshtein distance; Levenshtein 1966) than participants in the "conformity bias" condition. This would suggest that the social pressure to stand out from one's peers gives rise to increased linguistic innovation. We will also investigate differences between familiar and novel items, for example whether participants produce more extravagant forms for novel items than for trained ones. Our findings will provide the first experimental evidence about how social pressures towards extravagance and conformity shape linguistic innovations at the lexical level.

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Discussion: Creativity and extravagance through the empirical lens

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Keywords

Extravagance, creativity, productivity, E- and F-creativity.

Abstract

This discussion session concludes the theme session on "Extravagance and creativity through the empirical lens" and gives participants the opportunity to discuss the key questions of the session in the light of the different contributions that shed light on the topic from a variety of viewpoints (e.g. typological, corpus-based, experimental...). In addition, it offers the possibility to discuss future avenues of research on creativity, extravagance, and related topics.

Introduction to the theme session on “Stance-taking and gesture”

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Keywords

gesture studies, stancetaking, multimodality.

Abstract

The effectiveness of communication depends to a large degree on how successfully speakers coordinate their positions in the ongoing talk, share their experiences, and build a single intersubjective space (Buhler 1990; Harris 1996; Langacker 2008; Tomasello 2008; Wittgenstein 1953; Zlatev & Racine 1999).

The ways in which interlocutors verbally take positions and show their stance(s) towards the ideas being discussed has been described in some detail in relation to linguistic phenomena—mainly pronouns, discourse markers and some syntactic constructions (Benveniste 1957; Biber &; Finegan 1989; DuBois 2007; Jaffe et al. 2009; Verhagen 2007, 2008; Zlatev et al. 2008).

However, the coordination of points of view in dialogue from a multimodal (verbal-gestural) perspective is still novel in many respects (Grishina 2017; Iriskhanova et al. 2021; Kendon 2004; Nikolaeva 2018; see Andries et al. 2023 for a systematic literature review).

By formulating and exchanging subjective viewpoints, communicators engage in stance-taking. This involves indicating:

- the degree of certainty concerning entities, events, and their properties (epistemic positioning);
- the importance and prominence of information (positioning in relation to relevance); attitudes, including emotional attitudes, toward referents (evaluative positioning) (Biber & Finegan 1989);
- and explicit reference to the interlocutors’ viewpoints, including (dis)agreement, viewpoint blending, and perspective taking

(intersubjective positioning) (DuBois 2007; Verhagen 2007). The theme session will thus consider stance-taking in a broad sense.

Special attention will be given to the role of what have come to be known as 'recurrent gestures' in a given culture (e.g. Bressem &; Müller 2014). The limited literature we have on recurrent gestures suggests that they are the default gestures that speakers of a given language/culture often resort to in everyday conversation and interaction when expressing their attitudes and stances.

The session will consider both how a given stance can have different embodied manifestations, and in turn, how particular gestures often relate to more than one stance. The schematic nature of the forms and relatively underspecified functions of speakers' gestures allows them to pair with different verbal expressions—sometimes to nuance a verbal expression of stance, and sometimes to take the lead and serve as the more salient expression of stance. We see that stance-taking does not entail a simple one-to-one pairing of verbal and gestural expressions, but involves a complex, multi-layered system of possibilities which play out in various ways, depending on the speakers' affect, knowledge (shared or not), intentions, and contextual factors.

Recurrent gestures and prosodic cues as epistemic markers in Brazilian Portuguese

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Keywords

multimodal epistemic marking, gesture studies, prosody

Abstract

In this talk, we propose analyzing some prosodic-gestural features that operate as illocutionary epistemic markers (Roseano et al. 2014) in the propositional content of utterances produced in different interactional contexts in Brazilian Portuguese. More specifically, we aim to demonstrate how different degrees of certitude are pragmatically marked through recurrent gestures (Ladewig 2014, 2024) combined with prosodic cues, which aim at validating but also putting into question the interactants' viewpoints and beliefs. Moreover, in interactional contexts in which epistemic stances are not always linguistically marked, gestural-prosodic cues could work as overt epistemic markers, communicating an epistemic stance in an effective way. The corpus selected for the analysis is from 10 pairs of Brazilian Portuguese speakers talking about the future of Artificial Intelligence (AI). Although the EDU seems to be a good point of reference on marking the communicative units, since in BP there is a strong role of prosody in the utterance's illocutionary force and perlocutionary effects that could change the intentionality of a communicative sequence.

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Recurrent gestures in light of verbal stance markers: The case of 'Offering' gestures

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Keywords

multimodality, stance, viewpoint, gesture, construction.

Abstract

Research on palm-up open-hand (PUOH) gestures has shown that they relate to stance-taking in different languages in various ways (Cooperrider et al., 2018; Kendon, 2004; Müller, 2004). The present study details this further via specification of the gesture analysis and systematization of the analysis of stance.

The label PUOH is deceptive; it masks variation in the movement structure and location in which PUOHs are produced. We solve this by considering recurrency in terms of action schemas. Of the 43 recurrent action schemas found in the larger project that this is part of, the PUOH and its variants (e.g. partial turn-out of a cupped hand) fell into three schemas: Offering—an open or opening (turning outward) hand moving towards the interlocutor; Side-Offering—a hand moving as if to present something in the peripheral space to one's side; Spreading—symmetrical movement of one's two hands outward.

A code book for verbal expressions of stance (building on Biber & Finegan, 1989; Chindamo et al., 2012; Du Bois, 2007) was supplemented by literature on the topic specific for the language studied (Russian). Expressions were coded per elementary discourse unit/EDU (adapted from Korotaev et al., 2020) and were operationalized into four types: epistemicity, evaluation, relevance, and intersubjectivity—each having several sub-categories (34 in total). Multiple stance codes were possible per EDU.

The data consisted of 10 conversations (average length 16 minutes) between pairs of native speakers of Russian discussing questions concerning artificial intelligence. Verbal and gestural analyses were performed by separate teams using separate ELAN files. Correlations were counted according to temporal overlap between EDUs and gesture phrases. According to testing using Spearman's correlation:

- Offering gestures are the only one of these three types with a unique verbal stance correlation, having been used significantly more ($p<.01$) than other action schemas with the stance sub-category highlighting relevance/importance (e.g., Russian *na samom dele* 'in fact').
- Offering and Spreading share a significant correlation ($p<.01$) with intersubjectivity in terms of blending of viewpoints (e.g., *vse znajut, čto...* 'everybody knows, that...') and ($p<.05$) with the evaluation of intensity as being medium (e.g., *dovol'no* 'rather').

- Each of Offering, Side-Offering, and Spreading individually were used more ($p<.05$) with intersubjectivity in the form of opposition of points of view (e.g., *ili … ili* 'either … or'; *ne* [V], *no* [V] 'not [verb], but [verb]') than all the other action schemas taken together.
- The three relevant action schemas (Offering, Side-Offering, and Spreading) as a group were used significantly more ($p<.05$) than other action schemas with intersubjectivity in terms of blending of viewpoints and opposition of viewpoints.

The findings indicate a gradation of the specificity versus generality of the association between how the types of verbal stance-taking and co-verbal behavior correlate with each other. For example, Side-Offering gestures were multifunctional, showing no significant unique correlation with one type of verbal stance marker. This research contributes to the discussion of the multimodality of constructions (see Bergs & Zima, 2017), supporting the argument (Cienki, 2017) that constructional multimodality should be viewed along a continuum of likelihood of multimodal expression.

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Recurrent gestures and stance-taking in contexts of negation

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Keywords

gestures, Brazilian Portuguese, counterfactuality, stancetaking

Abstract

Speakers can use negation to commit to different beliefs or stances about a situation. Moreover, it is known that stance can be expressed by facial expressions and manual gestures (Cienki, 2024). In this study, we explore the role of recurrent gestures of negation in stance-taking, especially in revealing a negative epistemic stance conveyed in the speaker's speech. Using a dataset of Brazilian Portuguese videos, we analyzed the data relying on discussions about recurrent gestures and gestures of negation, and the notions of counterfactuality and epistemic stances, explored through the perspective of Mental Space Theory and Blending Theory.

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Joint Attention and Stance: How Feedback Facilitates Joint Attention and Vice Versa

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Keywords
multimodality, joint attention, affective stance, feedback, eye-tracking.

Abstract

Background - A foundational aspect of social interaction is the phenomenon of joint attention, or a shared focus between two or more individuals on a particular subject, object or event (Tomasello & Carpenter 2007, cf. Brinck, Zlatev & Andrén 2006 on 'attentional intersubjectivity'). Previous research has looked into (a) the multimodal, sequential-interactional organization of joint attention, framing it as an 'embodied choreography' (Tulbert & Goodwin 2011) and (b) the linguistic as well as multimodal representation of joint attention in terms of form-meaning pairings (Diessel 2006, Turner 2017). Next to joint attentional processes, another integral part of language in (inter)action is stance-taking, or acts through which subjects "simultaneously evaluate objects, position subjects (themselves and others), and align with other subjects" (Du Bois 2007: 163). Similar to joint attention, previous research on stance-taking has emphasized its highly multimodal nature, showing how interactants employ both acoustic and embodied resources for stance-acts (cf. Andries et al. 2023).

Data & method - In this study, we explore the interface of joint attention and multimodal stance-taking through a mixed-methods analysis of authentic museum interactions. Concretely, we have collected a large dataset of real-life interactions by visitor pairs (n=30, 1000 minutes). In addition to video-recordings from a follower perspective, all participants wore mobile eye-tracking glasses, which provide us with fine-grained information on their gaze behavior. Methodologically, we include both micro-oriented interaction analyses and quantitative tests to analyze recurrent multimodal patterns (e.g. combinations of gaze cueings and pointing gestures).

Focus phenomenon - One particular phenomenon in which joint attention and multimodal stance-taking are strongly intertwined, is feedback and multimodal response in interaction, which may signal various sorts of evaluation. When interactants produce feedback, this may lead to stance alignment or disalignment (Iwasaki 2023). And to do so, the interactants need to be engaged with the relevant object of evaluation. Therefore, joint attention can be foregrounded as a prerequisite for stance-taking, which may initiate a chain reaction of stance-acts and joint attentional processes. As such, joint attention simultaneously functions as a requirement for and an effect of feedback. In this study, we look into this reflexive relationship in two ways. On the one hand, we examine

how evaluative stance-acts can be perceived as a result of joint attention. By analyzing how participants in real-life interactions monitor each other's gaze behavior, we show how interactants use moments of joint attention as a 'window of opportunity' for successful feedback (cf. Bavelas, Coates & Johnson 2002, Zima 2020). On the other hand, we analyze how feedback also facilitates further joint attentional processes. For example, the relevant object of evaluation may change because certain feedback elicits a broader/narrower focus. During a museum visit, a response to an evaluation of a painting may for instance zoom in on one element and thus cue a more specific focus. In conclusion, by focusing on both of these perspectives in real-life interactions, this study fully dives into the intricate relationship between joint attention and evaluative stance-acts.

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Projecting Viewpoint: Material and immaterial discourse anchors

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Keywords

viewpoint, gesture, multimodality, discourse, blending.

Abstract

Speakers give discourse meaning to surrounding Real Space and entities in Real Space via gesture. Such meaning-establishing mechanisms have been called: discourse loci (e.g., pointing to a particular area when referring to a particular topic; McNeill et al. 1993), surrogates (acting on or towards a Real-Space entity or area as "proxy" for a discourse referent; Liddell 1998), and discourse space structuring (the ways that space is structured by the speaker-addressee interaction - e.g. putting a hand up to "stop" addressee's discourse (Wehling 2017, Sweetser & Sizemore 2008). We attempt a synthesis of the meaningfulness of gesture space (McNeill 1992) within Real Space as simultaneously motivated by the inherently viewpointed bodily spaces of participants, and the development of those spaces in interaction. We call this process discourse anchoring and argue that this unified approach can efficiently account for how epistemic and affective stance is expressed through gesture.

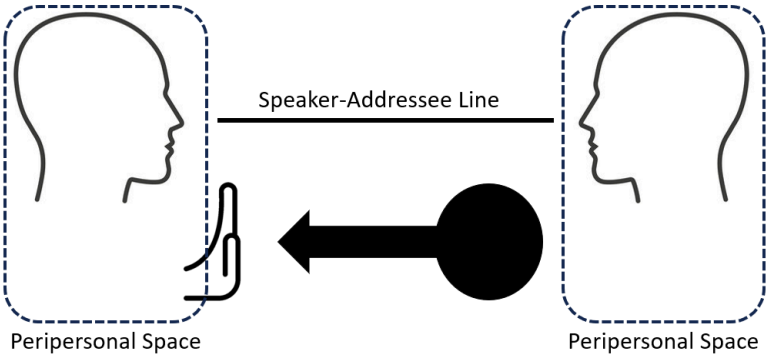
To illustrate the approach we intend, consider the Palm-Out Open Hand discourse gesture, paraphrasable as "don't interrupt". Using an action-schematic approach (Müller 2017), we can analyze this gesture as a metaphoric "blocking" action, where the hand moves as if to stop an incoming object from entering the gesturer's peripersonal space. The negative stance associated with this gesture, however, can only be fully appreciated by considering the force dynamics of the as-if action within the Real Space. Force dynamically, the palm-out orientation, directed toward an addressee, situates the addressee as the implied "sender" of the "unwanted object" (Figure 1). Furthermore, the "unwanted object" remains present and "observable" within shared Real Space, as it is "stopped" rather than "removed". This final point enables the

"unwanted object" to be addressed at some later point in conversation, becoming a meaningful metaphoric discursive "object" in shared Real Space. The affective stance that is conveyed here is deeply embedded in embodied experience, as even children express rejection via pushing away movements (first with real objects, then via gesture) from an early age (Beaupoil-Hourdel et al. 2016).

Similarly, it is useful to notice that gestural loci can be stable over discourse stretches, and that pointing can include metonymic reference: mention of a person's name can be accompanied by a gesture towards their recent (or habitual) seat. We feel that there are more general statements to be made about such gestures. Loci are part of the same system with surrogates and discourse gestures. Consider a speaker who "picks up" a discourse topic (as an imagined object in their personal discourse space) and moves it to the side, out of core shared space - is the discourse topic to be seen as a locus? Perhaps, but when treated as an "object", it is also a surrogate to be interacted with. Furthermore, the "Personal Gesture Space" out of which it's moved derives from the meaningfulness of object-manipulation body-central peripersonal space (Sweetser 2023). All of this information is needed for multimodal stance-taking: as the Speaker "sets aside", "stops", or points to the topic, stance is taken via basic physical operations motivated by object-interaction.

Figure 1

Force dynamic representation of a Palm-Out Open Hand discourse gesture



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The quote-unquote "quoting gesture" on American late-night television talk shows

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Keywords

multimodality, stance, constructions, gesture, pragmatics.

Abstract

This paper considers the multimodal expression of footing and affective stance (Du Bois 2007) during reported speech, i.e. utterance content that the speaker wishes to attribute to someone other than themselves. In particular, I look at the variable form and function of the 'Quote-Unquote construction' (Q-UQ construction), in which an ensemble of lexical, prosodic, and gestural strategies are employed. Though a significant body of work has considered the multimodal performance of reported speech (e.g. Blackwell et al. 2015), including the use of the lexical phrase "quote (unquote)" (Lampert 2013) and air-quotes (i.e. the "quoting gesture"; Cirillo 2019; Shor & Marmorstein 2022), the relationship between formal and functional variation in the use of multiple strategies is not yet well-understood.

All data comes from the UCLA Television News Archive, in collaboration with the Red Hen Lab (Joo et al. 2017). Search terms "quote" and "unquote" were used in order to collect data (n=78) from three television talk show hosts, Stephen Colbert (n=15), Trevor Noah (n=19), James Corden (n=34), and their guests (n=10).

I consider each quote's attribution, authenticity, and length. In terms of attribution, I categorize quotes as either 'attributed' or 'generic'. Attributed quotes are those that the speaker claims can be linked to an actual speech event, whereas generic quotes are those that are not attributed to a specific speech event but rather to people, or a type of person, in general. To analyze the communicative function of these variants, I use Goffman's (1979) conception of 'footing'. Attributed quotes serve to separate the

animator (i.e. the show's host) from the author, conveying that the show host is not, in fact, the origin of the utterance. Generic quotes, on the other hand, are used to emphasize a separation between animator and principal, conveying that the host does not hold the beliefs that a speaker of such an utterance would hold.

Quantitative results support the presence of systematic functional and individual variation in the quoting gesture (QG) during the performance of the Q-UQ construction. Generic quotes are accompanied by QGs (11/14, 79%) more than attributed quotes (11/64, 18%). This difference is significant ($\chi 2=21.4$, $p<.001$). Trevor Noah uses more QGs (10/19, 53%) than either Colbert (2/15, 13%) or Corden (0/34, 0%). This difference is significant ($\chi 2=22.2$, $p<.001$), but can be partially explained by a higher rate of generic quotes by Noah (5/19, 26.3%) than the other two hosts (2/49, 4%). Close qualitative analyses of particular examples are then used to discuss formal trade-offs in the Q-UQ construction variants. For example, despite using the lexical "quote (unquote)" marker most frequently, Corden almost never employs QGs. Instead, he recurrently performs a forward lean and head tilt, which is unobserved in other speakers, constituting a seeming idiosyncratic variant of the Q-UQ construction.

This work contributes to our understanding of stance-taking in multimodal communication by considering the Q-UQ construction as an ensemble of communicative strategies that are independently employable, signaling both functional variation and idiosyncratic communicative style.

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A contrastive analysis of Brazilian Portuguese and English spatial deixis

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Keywords
multimodality, spatial deixis, viewpoint, stance-taking, metaphor.

Abstract
In the field of studies on viewpoint phenomena, there seems to be a consensus among researchers that viewpoint is, basically, spatial (Parrill, 2012:97). From the notion that the meaning of a gesture is grounded on the existence of an ego-centered bodily self space (Sweetser, 2023), the analysis of gestural viewpoint involved in the use of linguistic spatial deixis appears to be an interesting window on how speakers conceptualize the space around them in relation to their own body/ego, whether literally or metaphorically. Thus, this work proposes a contrastive analysis of the spatial deictics 'aí' (near to addressee), 'ali' (near to both speaker and addressee), and 'lá' (distant from both) in Brazilian Portuguese (BP), and their English counterpart, 'there', based on multimodal data collected from The International Distributed Little Red Hen Laboratory (http://redhenlab.org).

The main hypotheses are: (1) different positions in gesture space are found when pointing gestures are related to literal uses of 'aí', 'ali', and 'lá' in BP; (2) pointing gestures with literal uses of 'there' also present distinct positions when corresponding to each BP deictic; (3) different positioning is also found in metaphorical uses of spatial deixis. In analyzing literal uses, we focus on the four dimensions of gesture space proposed by Fricke (2005, 2007). Regarding metaphorical uses (Cienki & Müller, 2008), the direction of the gesture is the primary focus. More specifically, the occurrence of different gestural axes (sagittal and transversal) for conceptualizing time as space in both languages are compared, based on the Linguistic Annotation System for Gestures (Bressem et al., 2013) and the Metaphor Identification Guidelines for Gesture (Cienki, 2017).

Results are consistent with hypotheses (1) and (2). 'Aí' shows a prevalence of pointing gestures at a middle distance from the body, while in the uses of 'ali' and 'lá' pointing gestures at a far distance from the body are prevailing. In uses of 'there', co-speech gestures occur at both middle and far distances from the speaker's body, mostly depending on the correspondence to the three-way spatial distinction in BP. Concerning the third hypothesis, uses of spatial deixis related to temporal metaphors present different gestural axes. The analysis shows the occurrence of gestures along both the sagittal axis and the transversal axis in BP and English.

The results suggest the influence of the speaker's stance on choosing one axis over the other: on the sagittal axis, the viewpoint established is at the ego's 'here and now'; in

this sense, the speaker's gesture conceptualizes the future as being in front and the past behind the ego, the deictic center. Conversely, along the transversal axis, gestural data seems to indicate a time-based mapping, in which the conceptualizer's stance is 'outside' the events described. In these occurrences, the events are in relation to one another: earlier events are on the left space of the body and later events on the right, not necessarily including the 'now' where the ego is situated, as previously noted by Moore (2000, 2011) and Núñez & Sweetser (2006).

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Gesture sequences: How politicians embody affective stance

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Keywords

stancetaking, multimodality, gesture, affectivity.

Abstract

Typically, in linguistics, expressing stance is associated with modal verbs or some attributive expression. However, as Du Bois (2007) pointed out already a while ago, the expression of stance should rather be considered an activity rather than a phenomenon of lexical semantics and textlinguistics (Biber & Finegan 1989). But his insight did not foster a systematic inclusion of gesture, speech, and body movement in the study of stancetaking. Some of the few exceptions come from anthropology and conversation analysis (Ochs & Schieffelin 1989; Goodwin et al. 2012), gesture studies (Bressem & Müller 2017; Ladewig 2024), including shrugs and head tilts (Debras and Cienki 2012). More recently, and in a plea to integrate conversation analytic and interactional perspectives on stance with the usage-based approach of cognitive linguistics, Feyaerts, Brône, and Oben (2017) lay out the significance of multimodal aspects of stancetaking specifically with regard to alignment. Dancygier (2012) introduces the notion of 'stance-stacking' to indicate that expressions of stance (as constructions) often do not come alone, but often build clusters. Dancygier's work highlights the semantic complexity of stance which becomes further complexified by the interplay of several modalities and by considering stance as an interactional activity, rather than as a process of an individual speaker.

The research presented in this talk connects with these more recent attempts to approach the complexity of stancetaking. It stems from a large research project on multimodal stancetaking and affectivity in parliamentary debates (Müller et al. 2024). It will zoom in on the finding that during moments of high affective engagement, we often observe sequences of gestures—either repetitions of one gestural form, variation of

gestural forms, or variation and repetition of certain forms, like the Ring gesture, pointing, or palm-up-open hands. (Ladewig 2024; Müller 2014, 2017]. These observations suggest that the expression of affective stance is an integrated embodied process. The talk will contribute to a more fine-grained understanding of the complexity of affective stancetaking – its multimodal character, its temporality and the complexity of gestural expression.

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"Isn't all of it just contrast?": Applying cognitive linguistics and concept-based language instruction to teach English cohesive devices of contrast

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Keywords

applied cognitive linguistics, applied linguistics and pedagogy, English for Academic Purposes, cohesive devices, concept-based language instruction

Abstract

This paper reports on a mixed-methods project testing an innovative pedagogical approach to teaching English cohesive devices of contrast in the English for Academic Purposes (EAP) context. Also referred to by academic writing books as linking words, signaling phrases, or sentence connectors (Caplan, 2012; Swales & Feak, 2012), they are typically presented to learners classified by their general meaning: e.g. *however*, *on the other hand*, and *unlike* are all grouped as markers of contrast. Despite seemingly clear classification boundaries, the specific semantic profiles and syntactic properties associated with different cohesive devices within the same group often remain challenging for EAP learners. Mainstream teaching methodologies do not offer explicit explanation to learners for how to differentiate precisely between seemingly synonymous cohesive devices and to avoid erroneous interchangeable use thereof. Also, prior studies applying cognitive linguistics principles to pedagogy have addressed other constructions presenting a challenge to learners (e.g. modals (Tyler, 2012), prepositions (Wong et al., 2018), among others), but none so far have tackled the confusing synonymy of cohesive devices. This exploratory study aims to bridge this gap.

For this pilot study (N=34), key concepts from cognitive linguistics (CL) – *profile, base* (Taylor, 2002) and *construal* (Langacker, 2008) as well as select elements of concept-based language instruction (CBLI), such as explicit focus on communicative practice (Lantolf & Poehner, 2014) were utilized to help learners gain a deeper understanding of how a number of specific English contrastive cohesive devices (*however*, *nevertheless*, *although*, *on the other hand*) work. Fifteen (15) learners received the CL/CBLI treatment emphasizing unique construal of cohesive devices for corresponding contexts that included CL-informed visual aids and verbalization activities to help promote the internalization process. On the other hand, nineteen (19) learners received the traditional explanation informed by standard academic writing textbooks. Assessment was done using extended cloze test questions; each assessment item provided contextual information about the target cohesive device. The pre-post-test gains were higher for the cognitive group but not statistically significant, as measured by a t-test. Also, naturalistic academic writing data was collected from both groups post-treatment; students from the CL/CBLI group exhibited a greater range of correctly used target cohesive devices than students of the traditional group. Lastly, qualitative analysis of data obtained from an oral interview with a group of five CL-CBLI students indicated that this instruction helped learners differentiate between seemingly synonymous contrastive cohesive devices with different profiles more successfully. While the sample size and absence of statistically significant findings remain considerable limitations of this exploratory study, the early results are promising and suggest that further research with a larger population sample and a control group would be helpful in order to establish a more exact degree of CL's range of applicability to teaching of cohesive devices in the EAP context. In conclusion of the presentation, specific pedagogical implications and configurations of possible future research studies are discussed.

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Rethinking the teaching of Korean honorifics through the lens of Cognitive Linguistics and Concept-Based Language Instruction

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Keywords

Applied linguistics and pedagogy, Concept-based Language Instruction, Image schemas, Conceptual development

Abstract

Cognitive Linguistics (CL) has substantial potential to contribute to language pedagogy (De Knop et al., 2010; Liu & Tsai, 2021). While CL offers a robust meaning-focused linguistic theory, one weakness is that it lacks a "sound theory of developmental education" (Lantolf & Poehner, 2014, p. 72). Integrating CL with Sociocultural Theory (SCT), a theory of human mental development, has transformative potential for advancing language pedagogy, offering innovative ways to bridge the gap between theoretical insights and practical applications (see Masuda & Arnett, 2015; Lantolf & Poehner, 2014). As both perspectives share the view that concept-forming is essential for language and communication, the theoretical synergy between the approaches is exemplified in Concept-Based Language Instruction (C-BLI). C-BLI is a pedagogical approach grounded in praxis and designed to promote learners' conceptual development through structured mediational learning environments (Gal'perin, 1992) and the internalization of scientific concepts.

This presentation demonstrates how CL insights can be integrated with C-BLI to teach Korean honorifics. Korean's complex honorific system is well-known to pose significant challenges for learners (Brown, 2013; Byon, 2000). With this, our aim is twofold: (1) to discuss the pedagogical shortcomings in the presentation of Korean honorifics in current Korean as a Foreign Language (KFL) textbook; and (2) to showcase C-BLI as an effective alternative to teaching Korean honorifics.

To address our first aim, we conducted a systematic content analysis of the portrayal of honorifics in two KFL textbook series widely used in the U.S. This analysis revealed that these textbook series portrayed Korean honorifics as discrete, simplified grammatical points and general rules-of-thumb to be memorized. These isolated grammatical points, scattered throughout the two-year textbook curriculum, were primarily reinforced through repetitive mechanical drills. Here, we highlight significant gaps in content design, underscoring the need for more systematic, holistic, and contextually relevant instructional materials.

To address our second aim, we implemented a 15-week C-BLI pedagogical intervention in an elementary KFL class at a U.S. college. After presenting the design details of our C-BLI intervention, we discuss the overall developmental outcomes of students' (n=7) participation and their unfolding development of three interrelated

subconcepts - power, distance, and formality. In creating our teaching-and-learning materials (i.e., SCOBAs), we drew heavily upon CL insights, such as image schemas (Clausner & Croft, 1999; Langacker, 1987) and conceptual metaphor (Lakoff & Johnson, 1980) in relation to conceptual knowledge of honorifics. Our qualitative data analysis demonstrated notable gains in conceptual understanding and sociopragmatic awareness. Students transitioned from fragmented, rules-of-thumb-based knowledge to a more systematic and holistic understanding of honorifics as they became more consciously aware of and in control of grammatical features in their communicative performance.

This presentation points to the crucial importance of both high-quality materials design and intentional and explicit instruction. We advocate for rethinking the portrayal and meaningful engagement of Korean honorifics in KFL textbooks through the combined lens of CL and C-BLI. This presentation concludes with offering practical recommendations with cognitive insights for designing high-quality instructional materials and implementing intentional pedagogical strategies to improve language learning outcomes.

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Cultivating Awareness of Sound Symbolism through Manga for Learning Japanese Vocabulary

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Keywords

Applied linguistics and pedagogy, sound symbolism, mimetics, L2 Japanese learners, synesthetic metaphor

Abstract

Japanese has numerous sound-symbolic words (SSWs) (Hamano 1998), which is also called "mimetics", that depict auditory, emotional, visual, and tactile sensations, unlike English onomatopoeia, which primarily imitates sounds. Notably, such SSWs often utilize synesthetic metaphor (Ikegami 1975) or cross-modal metaphor (Winter 2019), where a given sensory expression's meaning (e.g., auditory) extends to other sensory domains (e.g., visual, emotional).

We argue that cultivating awarness of both language-specific and cross-linguistically shared aspects of sound symbolism is key for learning these words. Given the genre-specific use of SSWs (Schourup 1993), Gyogi and Iwasaki (2019; 2023) and Iwasaki (2020) have explored instructional approahces utilizing commercials, receipes, and narratives. Manga, which often captivates those who learn and use Japanese as a second language (L2) globally, is another genre where SSWs are frequently used and essential (Hinata 1986). In manga, these words vividly express characters' emotions and their manner of action. To explore the potential of instructional activities utilizing manga for the purpose of familiarizing students with sound symbolism, we developed reading activities using manga, *Horimiya*, which maintains the original Japanese SSWs and show them along with their English translation equivalents. Many of the words are used to depict characters' emotions as well as manner of their actions.

Sixteen third-semester U.S. college L2 Japanese students participated in two activities designed to cultivate awareness of sound symbolism in SSWs. These activities include manga panels with target words, including novel words created by the manga writer (e.g., *zuooN*) [N indicates moraic nasals]. Students are encouraged to decipher the meaning of these words, such as those containing voicing contrasts (e.g., *kataN* vs. *gataN*) (see Figure 1). The activities aimed to help students recognize associations between sound and meaning, such as voiced consonants (/g/, /d/, /b/) for largeness, roughness, and unpleasantness and voiceless sounds (/p/, /t/, /k/) for smallness, smoothness and pleasantness, for example. Following Hamano's proposal that CV (Consonant-Vowel)-type root SSWs are more iconic and hence closely resemble their referents, we primarily introduced CV-root words (e.g., *zaQ*) [Q indicates geminate consonants] before CVCV-root words (e.g. *bikuQ*). Students selected semantic descriptors (e.g., smooth, rough, abrupt) for each word and considered the sense of geminate consonants like swiftness and abruptness in mimetics (e.g., *suQku*, *supaQ*).

When asked about the activities upon immediately after the completion, eleven students responded positively about the activities, with six expressing strong interests in learning SSWs. Five of these students were interviewed six months after completing the activities. Their responses revealed the activities' long-term impact in recognizing the role of SSWs in conveying emotions and manner of actions. They associated voiced sounds with loudness, hardness, and heaviness, geminate sounds with abruptness, and fricative sounds with gentler action. One participant said: "I never thought about them before doing these activities in class, but afterward you're looking at them [SSWs] they're useful."

Another said “[Using such words is] a good way to kind of represent characters’ emotion without a dialogue.” These findings underscore the pedagogical value of activities that encourage attention to sound symbolism in the Japanese words.

Figure 1 Example panels used in manga reading activity 1

Hori stood up with little noise
HERO © Daisuke Hagiwara / Yen Press
Horimiya vol. 1, p 13

Being upset, Hori made a loud noise while standing up
HERO © Daisuke Hagiwara / Yen Press
Horimiya vol.1, p 32

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Teaching the Japanese Causative by Incorporating Insights from Corpus Studies and Concept-based Language Instruction

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Keywords
Applied linguistics and pedagogy, causative construction in Japanese, corpus studies, concept-based language instruction

Abstract
This study explores approaches to teaching the Japanese causative construction (JCC) by integrating insights from corpus studies (Dolgova & Tyler 2019) and explicit instruction grounded in sociocultural theory (Lantolf 2024) to enhance learning outcomes. Unlike Enlgish, which differentiates between "letting" and "making" causatives, JCC encodes both within a unified form. Morphologically, L2 learners must learn how to inflect various verb stems with the suffix *(s)aseru*. Syntactically, they must mark the causer and the causee with appropriate particles. Semantically, learners whose L1 distinguish between "let" and "make" face the additional challenge of discerning their intended meaning in Japanaese, as this choice directly influences particle selection. Ohter difficulties include the relatively infrequent use of JCC and the frequent omission of the causee when it is contextually recoverable in conversation.

Current instruction of JCC follows a grammatical syllabus that assigns equal weight to the "let" and "make" meanings. Yet, recent corpus research shows a higher frequency of causative-benefactive "let" usage—including constructions expressing gratitude, apology, and criticism—than "make" usages in conversation (Takahashi & Shirakawa 2006; Maeda 2011; Iwata 2012; Wong 2021). These findings underscore the need for new approaches prioritizing contextually relevant meanings. For instance, introducing the "let" causative early in instruction can better support learners in discourse contexts like making requests, which are often tied to benefactive uses. Concept-based language instruction (C-BLI) offers a robust framework for addressing these challenges. By using schematic diagrams to represent key semantic concepts (Langacker 2008) or SCOBAs (Schemas for a Complete Orienting Basis of Action, Gal'perin 1992) tailored to L2 learners, C-BLI equips them with conceptual tools to understand and internalize complext structures like JCC (see Figure 1).

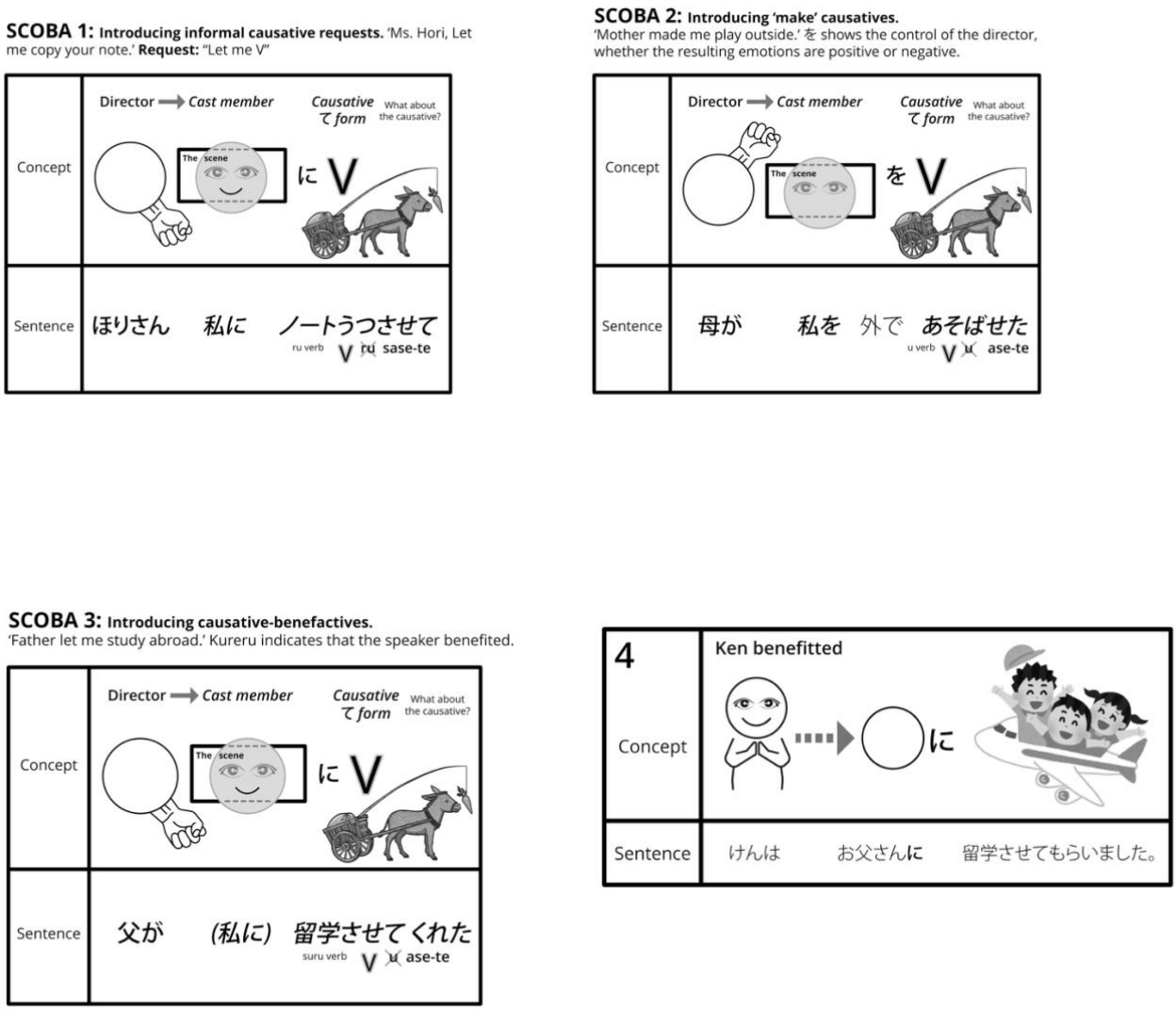
The present study, part of Masuda et. al. (2025), involved 11 fifth-semester US college Japanese L2 students who learned JCC for the first time. Their understanding was assessed at two points: immediately after instruction (post-test) and 6.5 weeks later (delayed post-test), using three tasks: (a) explaining the concepts through written "languaging" (Swain 2006); (b) a controlled sentence-writing task; and (c) a story-writing task. The results of their written languaging showed that students retained their conceptual understanding of JCC over the 6.5-week period. In the sentence-writing task, more than half of the student consistently applied their knowledge, accurately selecting the appropriate causative forms, particles, and levels of politeness even at the delayed post-test stage. In the story-writing task, although only four students (36%) maintained or improved their Target-Like Use (TLU; Pica 1983) scores at the

delayed-test stage, qualitative analysis indicated that their conceptual understanding of causative-benefactives remained intact.

These findings underscore the efficacy of C-BLI in teaching JCC when L2 learners engaged with SCOBAs and languaging. This approach not only facilitates the understanding of causative nuances but also lays a foundation for related structures such as causative passives and honorific causative-benefactives (Masuda et al. 2025; Masuda et al. 2026). By aligning instruction with authentic corpus findings and leveraging conceptual tools, this study presents a practical and effective method for teaching a complex grammatical structure in Japanese.

Figure 1

SCOBAs for causative requests, force causative (positive & negative) and, causative-benefactive (with *kureru*) (Masuda et. al., 2025: pp.228) and causative-benefactive (with *morau*, p.231)



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Cognitive Insights, Pedagogical Shifts: Rethinking Language Teaching

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Keywords

Applied linguistics and pedagogy, concept-based language instruction (C-BLI), embodied conceptual meaning, Schemas for a Complete Orienting Basis of Action (SCOBAs), *languaging*

Abstract

In Cognitive Linguistics (CL), language is understood as being fundamentally grounded in human cognition and reflecting processses of conceptualization. Recently, CL has greatly influenced second language (L2) pedagogy, particularly in teaching difficult-to-acquire forms and constructions, including polysemous items, discourse marker as well s pragmatics (Tyler, 2012; Masuda ed., 2018; Wu, Huang, & Polley, 2024: Llopis-García, 2024). Despite empirical evidnece, applied CL pedagogy has been critiqued for its tendency to focus more on CL descriptions and to rely heavily on basic teacher-fronted explicit instruction, often without closely aligning with mainstream pedagogical approaches in applied linguistics and second language acquisition (SLA).

The current theme session aims to strengthen the theoretical connection between CL and pedagogical approahces. The session features six empirical classroom-based studies focusing on English, Chinese, Korean, and Japanese as L2s, demonstrating how CL insights have been successfully incorporated into instruction. Topics include English and Chinese modal verbs, Japanese causative constructions and mimetic words, Korean honorifics, and English cohesive devices of contrast in an English for Academic Purposes context. These studies showcase how CL constructs can enchance current pedagogy and provide high-quality evidnece of their pedagogical impact.

This session highlights the compatibility between CL and Sociocultural Theory (Lantofl & Poehner, 2016; Poehner & Lantolf, 2024), esepcially in the use of Concept-based Language Instruction (C-BLI) developed by Gal'perin (1992). C-BLI promotes mediated language learning through internalization with the visualization and verbalization of conceptual knowledge (Lantolf & Poehner, 2016), while CL as a theory of language emphasizes embodied conceptual meaning (Talmy, 1998) and typically materializes its analysis of meanening through visual symbols like schematic diagrams (Langacker, 2008). Key constructs of C-BLI, such as Schemas for a Complete Orienting Basis of Action (SCOBAs) and *languaging* (Swain, 2016), are used as essential cognitive tools for promoting learners' internalization of target linguistic items. By integrating cognitive insights into the classroom, each study provides empirical evidence of L2 learners' cognitive and linguistic develoopment in acquiring complex grammatical, semantic, and pragmatic features through the symbolic mediation of CL-based instructional materials. The studies present the close relationship between cognitive processes and language learning.

The significance of this theme session lies in its potential to inform innovative L2 teaching prctices, opening new avenues for bridging CL with mainstream SLA theories and methodologies. It also motivates future research by calling for further empirical studies to explore the long-term effects of inegrating CL into diverse L2 contexts and leaner populations.

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A Cognitive Linguistics Approach to L2 Acquisition of Chinese Modal Verbs

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Keywords

applied linguistics and pedagogy, modal verb, polysemy, L2 Chinese, principled polysemy model

Abstract

Modal verbs such as *can*, *may*, or *will* play a crucial role in expressing abilities, desires, permissions, obligations, possibilities, etc. The polysemous and overlapping semantics of modal verbs are hard to grasp for second language (L2) users (Mifka-Profozic et al. 2024; Tyler 2008, 2012). However, the traditional approach to teaching modal verbs to L2 users, which treats the multiple meanings associated with one modal verb in isolation across different lessons (e.g., *Integrated Chinese* by Liu et al. 2017), falls short due to overreliance on corresponding English translations to convey the meanings and lack of systematic grammatical explanations (Wu et al. 2024).

Drawing from the cognitive linguistics (CL) analysis of English modal verbs in Sweetser (1990) and Tyler (2008, 2012), as well as the principled polysemy model by Tyler and Evans (2001, 2003), we developed a CL-based lesson to teach six Chinese modal verbs, i.e., 要 *yào*, 想 *xiǎng*, 会 *huì*, 能 *néng*, 可以 *kěyǐ*, 可能 *kěnéng*, and empirically tested its effectiveness. The CL-based approach (i) offers a systematic and motivated explanation for the multiple meanings associated with each modal verb; (ii) highlights semantic differences via schematic diagrams to differentiate between modal verbs that share similar meanings; (iii) strengthens the form-meaning connection by utilizing the unique features of Chinese characters (e.g., the pictographic forms and the meanings inferred) when applicable, and (iv) makes these linguistic analyses accessible to both teachers and learners.

Sixty-three L2 Chinese learners from intermediate and advanced Chinese language classes at an American university participated in the study. They completed a pretest composed of 20 multiple-choice questions on modal verbs, watched a CL-based instruction video or a traditional instruction video, and then took the same test on modal verbs as the posttest. They also took a Chinese elicited imitation task (Wu & Ortega 2013) to assess their L2 Chinese proficiency. The two instruction videos were equivalent in length and format, with the CL-based instruction explaining the multiple senses of each modal verb through motivated schematic diagrams and the traditional instruction through rule explanations adopted in the *Integrated Chinese* textbook.

A repeated measures ANCOVA analysis was conducted to compare the two types of instruction (IV: CL-based vs. traditional instruction; DV: modal verb test scores) while controlling for the effect of L2 proficiency as a covariate. It was found that while both groups scored higher in their posttest, the CL-based instruction group demonstrated a statistically significant and more prominent improvement between the pretest and posttest than the traditional instruction group.

The results suggest that the CL-based approach leverages learners' analytical abilities and enables them to recognize the connections between the root sense and extended senses of each modal verb as well as the distinctions among different modal verbs. The pedagogical research discussed here not only demonstrates how CL theories can be effectively incorporated into actual classrooms but also lends support for the benefits of applying CL to the L2 classroom setting.

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Compatibility between cognitive linguistics and concept-based language instruction: An empirical validation

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Keywords

applied linguistics and pedagogy, concept-based language instruction, English grammar, classroom instruction, languaging.

Abstract

Cognitive Linguistics (CL) has been strongly advocated for its compatibility with Sociocultural Theory and its pedagogical invention, i.e., concept-based language instruction (C-BLI) (Lantolf, 2006). Both CL and C-BLI highlights the central role of meaning in linguistic analysis and language learning. CL often employs symbols like schematic diagrams to represent semantic concepts (Langacker, 2008), while C-BLI uses Schemas of a Complete Orienting Basis of Action (SCOBAs), frequently presented as schematic diagrams or flowcharts, to help learners interact with and internalize semantic concepts (White et al., 2021). Recent studies have begun integrating CL and C-BLI in classroom instruction for grammar and vocabulary (see White & Masuda, 2023 for a review). However, these studies have predominantly relied on small-scale qualitative analyses of microgenesis and have yet to provide robust experimental evidence validating the compatibility between CL and C-BLI.

The present study addressed this gap by conducting a quasi-experiment with three intact classes of Chinese-L1 learners of English (approximately B1 proficiency on the CEFR scale) enrolled in an undergraduate College English program at a public university in China. Two experimental classes were taught English modal verbs (e.g., *must, should, may, will*) using C-BLI principles and procedures (Negueruela, 2003). The key distinction between the two was that one class (C-BLI-CL, n = 29) received CL-based semantic explanations centred on the concept of force dynamics (Tyler, 2012), while the other class (C-BLI-nonCL, n = 32) received explanations based on a non-CL functional grammar approach to modality (Palmer, 1990, 2001). A control group (nonC-BLI, n = 15) received traditional definition-based explanations of modals. To evaluate the intervention, pretest, posttest, and delayed posttest (conducted three weeks later) measured written languaging quality (Swain, 2006) and modal verb accuracy in a cloze test. Data analysis employed *R* software (version 4.0.3) (R Core Team, 2020), utilising the lme4 package (Bates et al., 2022) for constructing linear mixed-effects models.

Results indicated that both C-BLI groups showed significant improvements in languaging quality and modal verb accuracy following instruction, unlike the control group, which showed no meaningful learning outcomes. Importantly, the C-BLI-CL group significantly outperformed the C-BLI-nonCL group in overall languaging accuracy from pretest to posttest and exhibited greater systematicity in their languaging (Negueruela, 2003) at the delayed posttest. Furthermore, the C-BLI-CL group successfully retained accuracy gains in the cloze from posttest to delayed posttest, whereas the C-BLI-nonCL group experienced a significant decline in accuracy at the delayed posttest.

The current study is among the few C-BLI investigations to gather a large learner sample from authentic language classrooms while adopting rigorous and advanced inferential statistical analysis. The findings provide robust quantitative evidence supporting the effectiveness of applying C-BLI in undergraduate settings. Crucially, the results confirm the compatibility of C-BLI pedagogy with materials based on CL concepts. The CL-integrated materials fostered a more

systematic metalinguistic awareness of the target grammatical structure and improved the retention of accurate usage.

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Intersubjectivity: commitment, accountability, and argumentation in action coordination and in linguistic systems

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Keywords

pragmatics and cognition, language evolution, cognitive semiotics, discourse analysis, intersubjectivity

Abstract

As indicated in the introduction to the theme session, definitions of "intersubjectivity" vary. Without reviewing details of previous attempts clarification or unification (Brems et al. 2014, and references cited in the theme session introduction), the aim of the present paper is to outline a comprehensive account linking the following approaches:

1) Intersubjectivity as commitment sharing (Geurts 2019): Communicating a proposition p adds the sender's commitment to act on p in a specific way to the common ground.
2) Intersubjectivity as activity + accountability (Enfield & Sidnell 2022): Participating in a cooperative activity makes one accountable for one's contributions – it creates the possibility of evaluation, judgement (praise or blame) by others.
3) Intersubjectivity as argumentativity (Verhagen 2005, 2015): By producing an utterance, a speaker invites interlocutors to make a relevant inference, providing a reason for producing an utterance or another (non-verbal) action.

The common foundation of these conceptions is the notion of action coordination. Humans have evolved to be a highly cooperative species, with individuals having to collaborate regularly with other members of their socio-cultural group. Such cooperation requires coordination of the component actions, hence communication (Tomasello 2008), and each of the three approaches mentioned corresponds to a supporting mechanism:

- a public commitment reduces the set of possible future actions of a participant, increasing their predictability: future behavior is expected to be consistent with the commitment; this assists coordination, also by allowing other participants to commit to complementary actions;
- exposing and criticizing behavior inconsistent with a commitment offers an opportunity to correct it, and thus to avert threats to the execution of a joint project;
- presenting an argument supports the execution of a joint project directly when it suggests an action, and indirectly when provided in response to criticism or doubt (invoking accountability); in this way, it especially allows prior planning, and exploration of pros and cons of multiple routes of execution.

Clearly, language is particularly well suited to support commitment sharing and accountability; argumentation even presupposes language, as reasoning about relations between situations requires a tool for representing them (Mercier & Sperber 2017: 154).

Understood in this way, the three conceptions do not constitute competing characterizations of intersubjectivity, but different dimensions of the same complex phenomenon. This insight supports a plausible account of the evolution of language (linking it to the evolution of cooperation and normativity in socio-cultural groups), and provides a useful framework for linguistic analysis: Certain speech acts and language items may pick out one rather than another dimension as their primary 'target'. Apologies, for example, serve to acknowledge accountability, but they also create further commitments. In lexicon and grammar, some items specify aspects or strength of commitment (Krifka 2019), while others function as operators on argumentative strength or orientation (Verhagen 2005) – in each case with possible consequences in other dimensions. Moreover, there are cross-linguistic differences in the dimensions that certain elements primarily operate on conventionally (Van Duin & Verhagen 2018). In complete accounts of human communication, the three of them are necessarily linked.

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Fictive Interlocutors in Contemporary American Talk Shows

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Keywords

fictive interaction, interlocutors, talk show, multimodal database, intersubjectivity.

Abstract

It should be uncontroversial that language is intimately related to intersubjectivity, conversation being the most common form of communication (Clark 1996). This is crucial since sequential turn-taking is where utterances become intelligible and coherent to us, both as children acquiring a language (cf. E.V. Clark 2003) and as linguistically competent adults (cf. H.H. Clark 1992; Goodwin 1995). What remains largely unexplored is in what ways the structure of interaction shapes language use. In this talk we discuss a pervasive discursive phenomenon that mimics the viewpoint shift of ordinary conversation. This concerns cases in which at some point in the ongoing discourse the individual(s) talked about as the discourse topic are temporarily presented as either having the narrative role of the speaker or of the listener. We refer to such discourse topics turned non-actual interlocutors as fictive interlocutors, either fulfilling the role of 'fictive addresser' (e.g. "They$_i$ walk like, 'Look at me$_i$, I$_i$'m the coolest guy!'") or of 'fictive addressee' (e.g. "She$_j$ is absurd. I mean, how could you$_j$ do this to me?"). Fictive interlocutors may be wittingly employed as a communicative strategy or unconsciously used as the conversation unfolds. We analyze this discourse device as a type of fictive interaction, which constitutes the use of the Conversational Frame to structure thought, discourse, and grammar (Pascual 2002, 2006b, 2014; Pascual & Sandler eds. 2016). The umbrella phenomenon of fictive interlocutors has previously been treated independently as the literary tactic of apostrophe and as non-quotative direct speech, respectively. However, it has barely been treated as two sides of the same coin and its distribution in discourse has never been systematically investigated.

This research is based on a self-compiled multimodal database consisting of episodes from five American talk shows (i.e. *The Daily Show*, *Dr. Phil*, *The Tonight Show*

Starring Jimmy Fallon, *The Drew Barrymore Show*, *The View*). These comprise various types of data involving different topics and genres (i.e. comments on current affairs vs. personal narratives), different interactional structures (i.e. monologue vs. dialogue or multi-party conversation), as well as a different gender distribution among the hosts and guests. Using a combination of quantitative and qualitative methods, we aim to explore the communicative contexts in which fictive interlocutors tend to occur in spoken exchanges, as well as their most common forms and functions. The distribution of the use of fictive interlocutors will be revealed through a statistical analysis, followed by an in-depth qualitative analysis of their forms and functions in a few special cases. The factor(s) that may motivate the use of fictive addresser and addressees will be discussed at the end. By systematically exploring the use of fictive interlocutors in spoken discourse, we hope to further enhance our understanding of fictive interaction, which emerges from and mimics our life-long experience with factual inter-subjective conversation. We thereby hope to throw light into how the basic mode of communication, i.e. situated interaction, becomes a key structuring discourse pattern.

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Intersubjective meanings of person deixis in Brazilian Portuguese: the case of generic 1st and 2nd person pronouns

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Keywords

pragmatics and cognition; deixis; personal pronoun; intersubjectivity; empathy

Abstract

Modern linguistics pragmatics emphasizes that ordinary language use is not restricted to descriptive statements of the world for sharing information, but also involves doing things in the social world through speech acts (Austin, 1962; Searle, 1969, 1995). More recently, work on intersubjectivity has indicated that the relation between two or more conceptualizers is based on mutually shared attention. Therefore, linguistic elements, such as deicitcs, may evoke this mutual knowledge of the speech event to indicate objects for joint attention. Besides that, it has been suggested that argumentativity constitutes a common content of linguistic meaning, not only a special case of it (Ducrot, 1996, Verhagen, 2015, 2021). Finally, recent research has also drawn attention to empathy which relates to the alignment between speaker and hearer (Geeraerts, 2021).

In order to investigate the relation between intersubjectivity, argumentativity and empathy, the present work focuses on person deixis in Brazilian Portuguese. Based on usage data retrieved from Corpus Discurso & Gramática (https://deg.uff.br/corpus-dg), the analysis focuses on first person eu (I) and second person você (you) personal pronouns. Previous work on deixis has already shown that although these pronouns prototypically indicate speaker and hearer, respectively, deictic categories in general are graded, also involving less prototypical meanings (Marmaridou, 2000). Taking this gradation into account, I will focus here on generic 1st person eu (I) and generic 2nd person você (you), which involve conceptual blending (Fauconnier & Turner, 2002), as exemplified below:

(1) Se eu quero proteger meu filho, é melhor ele se vacinar antes que entre em contato com o vírus.
"If I want to protect my child, it is better to get him vaccinated before he comes into contact with the virus."

(2) Se você não resolver o problema da dívida interna (...), como você pode dar educação a um povo?
"If you don't solve the problem of internal debt (⋯), how can you provide education to a people?"

The analysis shows that both deictics, in examples (1) and (2), blend speaker, addressee and others, referring to a generic group of individuals. Moreover, both generic deictics indicate intersubjectivity and argumentativity, in as much as they are indirect attempts to influence the behavior and mental states of the addressee(s). They differ, however, with respect to empathy due to the element profiled in meaning construction. Generic 1st person eu(I) explicitly refers to the speaker, but implicitly refers to the addressee and other non-ground participants, while generic 2nd person você(you) explicitly refers to the addressee, and implicitly refers to the speaker and other non-ground participants. For example, by saying "if I want to protect my child, it is better for him to get vaccinated…", the speaker is indirectly advising the addressee (and anyone else) that to get one's child vaccinated is a form of protection. Therefore, generic 1st person eu can be defined as an empathy manifester associated to directive speech acts (in this case, advice). On the other hand, by conditionally asking a question ("if you don't solve the problem of internal debt, how can you provide education to a people?"), the speaker is indirectly assuming that the addressee(s) (and anyone else) wouldn't have an appropriate answer to the question posed and, therefore, they would have to agree that it is necessary to solve the problem of internal debt. In this case, generic 2nd person você can be defined as an empathy attractor, since the speaker intends to attract the addressee (and anyone else)'s empathy towards his/her argument.

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Marking the interactional achievement of intersubjectivity: The case of whole-hand pointing at the addressee in Hebrew face-to-face interaction

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Keywords

pointing, intersubjectivity, recurrent gestures, interactional linguistics, Hebrew.

Abstract

Focusing on practices accomplished by an addressee-directed gesture, this study reveals an embodied means used by Hebrew speakers to display the interactional achievement of intersubjectivity—a shared understanding between social actors (e.g., Raymond 2019). The study demonstrates that movement toward the addressee, using an open-hand morphology, can be used non-referentially—alongside its role in referencing the second person. When the verbal content of the utterance does not include any reference to the second person, the relationship between the person pointed at—the addressee—and what is said is not straightforward. Instead, the addressee is indexed for interactional purposes beyond mere reference (cf. Inbar 2025). This whole-hand pointing directed at the addressee was identified in contexts of agreement, confirmation, appreciation, and instances where speakers revisited previously discussed topics. Using methodologies of interactional linguistics, multimodal conversation analysis, and cognitive semiotics, the study elaborates on these contexts, uncovering potential motivations for the deployment of the gesture. The data were drawn from the *Haifa Multimodal Corpus of Spoken Hebrew* (Maschler et al. 2024), which consists of video recordings of naturally occurring casual conversations among friends and family members.

The examination of the instances included identifying and analyzing the multimodal gestalts of which the gesture is a part, as well as exploring the gesture's formation. The study reveals that, in all occurrences, the non-referential whole-hand pointing gesture was associated with pursuing affiliation and displaying a shared perspective on some referent, knowledge-state, or stance. Moreover, numerous occurrences of the gesture associated with agreement and confirmation were coordinated with nodding, which various studies have linked to affiliation (e.g., Stivers 2008; Gudmundsen & Svennevig 2020). In some cases, the gesture accompanied verbal expressions such as *bidiyuk*, meaning 'exactly.' These responsive confirmation tokens are equivalent to expressions in other languages that have been claimed to mark the conclusion of the understanding process and are also defined as markers of intersubjectivity (Oloff 2017; Betz & Deppermann 2018). Furthermore, in various studies, the open-hand morphology has been associated with conveying a shared perspective

(e.g., Cooperrider et al. 2018; Müller 2004). Thus, the study suggests that the whole-hand pointing gesture—being associated with social actions fostering affiliation and co-produced with other verbal and gestural means aimed at promoting shared understanding and mutual recognition—serves to indicate the interactional achievement of intersubjectivity with the pointed-at participant concerning the issue in question. As such, the study underscores the importance of both verbal and gestural elements in establishing intersubjectivity in interaction.

The following example is taken from a conversation in which Dotan tells Alex a story about his wife's uncle. In the excerpt, Dotan introduces into the discourse the uncle's mother, who is sick (lines 1–3):

```
Ex. (1)
1     Dotan:      ve--
                  and--
2                 'ima shelo,
                  mother his
                  his mother,
3                 [ha-xola,
                   DEF-sick.SGF
                   sick,
4     Alex:       [be-ukraina?
                   in-Ukraine
                   in Ukraine?
5     Dotan:      #&be-ukraina,&#
                  in-Ukraine
                  in Ukraine,
                   &nods------->&
                  #whole-hand pointing at Alex#
```

Alex responds with a request for confirmation concerning the mother's residence, Ukraine (line 4), using rising intonation to seek a response from Dotan (Ben-Moshe & Maschler 2024). Dotan confirms this by repeating the phrase (line 5), coordinating it with a nod and the whole-hand pointing gesture directed at Alex. This gesture indicates Dotan's attunement to Alex's input, fostering a sense of mutual recognition and involvement in the discourse.

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Monologual questions and intersubjectivity: The cases of Thai and Korean

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Keywords
intersubjectivity, discourse marker, Thai, Korean

Abstract
Background and Aims: Despite much discussion, the notion of intersubjectivity still lacks consensus on its definition. The variability of its definition notwithstanding, if it is simply defined as the speaker's attention to the addressee's social and cognitive face (cf. Traugott & Dasher, 2002), intersubjectivity is pervasive in language use, particularly in discourse markers (DMs).

This paper examines a set of DMs in Thai and Korean with comparable source constructions, i.e., full-fledged interrogative sentences, which, however, lack interactivity marking, by virtue of being monologual questions. For instance, Arai na? [what PARTICLE] 'what is (it)?' in Thai is a monologual question which is not followed by the interactional politeness particle kha(p), even when its use is warranted by involving a socially superior addressee. Similarly, (Ku) mwe-nya? [(that) what-Q] 'what is (it)?' in Korean is a monologual question, involving a specializing monologual question marker *-nya* (cf. 'audience-blind forms', Rhee & Koo, 2017). By virtue of being monologual questions, they carry no illocutionary force of interrogation on the addressee. Interestingly, however, they are strategically deployed for diverse interactional, intersubjective purposes, and thus present rich implications of intersubjectivity inquiry.

Studies on these markers are underrepresented; they have not received any serious attention in Thai and have been addressed only in passing in discussion of a group of DMs (Rhee, 2016, 2023). Furthermore, despite the great similarity in form and function, the DMs have not been examined comparing the states of affairs in the two languages. This paper intends to fill this research gap.

Theoretical Frameworks and Methodology: The theoretical frameworks for this study is grammaticalization theory (Heine et al. 1991; Hopper & Traugott 2003[1993]) and, in particular, the works by Heine et al. (2021) and Traugott (2022) are referenced for grammaticalization of discourse markers and those by Traugott and Dasher (2002), Ghesquière et al. (2014) for intersubjectivity/intersubjectification. The data have been collected from contemporary corpora, i.e., the Thai National Corpus (33.4 million words) and the Thai Drama Corpus (94 episodes; 163,000 words) for Thai, and the Drama and Movie Corpus (24 million words) for Korean. Using a concordance program, the target forms are retrieved and hand-screened for inclusion in the inventory of target forms. These forms were classified by function and further compared between the two languages.

Results and Analysis: The data search renders a large amount of hit records for *Arai na?* in Thai and *(Ku) mwe-nya*? in Korean. Their functions are pause-filling and marking uncertainty, both fulfilling cognitive needs, as well as signaling hesitance, negative emotion, surprise, and invitation to a common ground, all highly intersubjective stance functions. Despite substantial commonalities in form and function, Thai and Korean exhibit some notable functional differences, as well. We argue that the motivation for innovating these DMs from monologual questions is to engage the addressee (question) and simultaneously disengage the addressee (monolog), thereby forging more dynamic interaction through disguised 'fictive' interaction markers (a question but not an impositive question), a discourse strategy commonly found in grammaticalization, especially in Korean.

Examples

(1) Thai *arai-na?* (pause-filling)

sǎw	*aathít*	*thîi*	*phàan*	*maa*	*chán*	*duu*	*nǎŋ*	…	*àray-ná*
Saturday	Sunday	that	pass	COMP	1SG	watch	movie	…	DM

ɔ̌ɔ!	*The Glory*	*nǎŋ*	*kawlǐi*
Oh!	[title]	movie	Korean

'Over the weekend, I watched... DM (= what is it?)... 'The Glory', the K-drama.' (TNC)

(2) Korean *ku mwenya?* (uncertainty)

eti	*ka-se*	*pwulssanghan*	*salam*	*tow-acwu-ko*	*ku mwenya*
somewhere	go-and	poor	person	help-BEN-and	DM

pongsahwaltong-i-nka	*mwe-nka*	*kuke*	*ha-y*
volunteer.service-be-Q	what-Q	that.thing	do-END

'[if you want to help someone] go instead somewhere and help the poor people and do DM (= what is it?) volunteer services or something like that.' (2010, Drama *Swusanghan Samhyengcey* Episode #33)

(abbreviations: BEN: benefactive; COMP: complementizer; DM: discourse marker; END: sentence-ender; Q: question; SG: singular)

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Ya ves (que) 'You see (that). Evidentials, Epistemics and Miratives. Intersubjective paths.

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evidentials, epistemics, miratives, perception verbs.

An important source of evidentiality stems from visual perception, associated with mental processes of recognizing and evaluating what is true and credible (Delbecque, 2009; Vázquez Rozas, 2010; Estellés & Albelda, 2020; Maldonado, 2018). In the constructionalization of *ya ves (que)*, the perceptual basis of the verb has been noticeably diluted yet preserving its deictic profile, imposing *joint attention* (Diessel, 2006), as in (1):

1) debe tener una especie de cimentación// pero hay unos elementos que por su propio peso/ ¿*VES QUE* la pirámide se reparte?
'It must have some kind of foundation // but there are some elements that, due to their own weight/ DO YOU SEE that the pyramid is distributed?

Most of its pragmatic values extend to non-perceptual phenomena, appealing to "shared knowledge" as in (2):

2) A: <risas/>/ el otro día me metí a un grupo de facebook de numismática primo// **ya ves que** dicen que los de cinco centavos valen mucho dinero ahora
'A: <laughs/>/ the other day I joined a Facebook group about numismatics, cousin// you see they say that five cent coins are worth a lot of money now

We explore further extensions involving a series of bleaching processes where shared information is gradually diminished as: 1) *evidentials* reporting alien facts presented as familiar; 2) *mitigators* involving information that is partially shared and yet is presented as basic common ground; 3) *miratives* underscoring information that the hearer should

know and is presented as granted and, 4) *continuity markers* which may not need to involve any shared information, yet the common ground profile prevails. Based on spontaneous oral data from the ameresco-mexico-city-corpus (Maldonado, 2022), we demonstrate that the construction's deictic schema keeps an intersubjective speaker-hearer's common ground, preserving the communicative speaker-hearer link even in a highly schematic manner.

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Intersubjectification and (meta)normativization

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Keywords

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Abstract

Different typologies – and, correspondingly, different diachronic paths – have been suggested to account for the function and historical development of intersubjective constructions (broadly defined here as extrapropositional pragmatic markers; see for instance Tantucci 2021). In this talk, I will argue that one relevant parameter to analyze these constructions is their function with respect to social norms. In particular, I will show that, while some intersubjective constructions implicitly evoke social norms (which are assumed to be part of the interlocutor's common ground), others are employed to explicitly reinforce a particular norm. I will refer to these two types of pragmatic markers as normative and metanormative constructions, respectively. Non-intersubjective (i.e., non-procedural) constructions, on the other hand, do not inherently make reference to social norms, and will therefore be referred to as non-normative.

Based on this three-way distinction, I put forward a particular hypothesis regarding the diachronic development of intersubjective constructions. This hypothesis states that (i) normative constructions arise out of non-normative constructions and (ii) metanormative constructions arise out of either non-normative or normative constructions. In other words, I posit the following unidirectional path of diachronic change: non-normative > normative > metanormative.

Evidence for this path will be drawn from a number of studies. In particular, I will present in some detail my own account of the emergence of Brazilian Portuguese "vê se" 'see if' constructions. This study involved a qualitative analysis of 426 "see if" strings from the historical section of the Portuguese Corpus (Davies, 2006-) and a quantitative analysis of 319 "see if" strings from the Dialogical Portuguese Corpus, which was built for this particular research. The results showed that (i) a regular completive construction started being used in the 16th century to perform two innovative functions, namely polite request and rhetoric command; and (ii) those uses eventually gave rise, in the 20th century, to two novel idiomatic constructions: the Preemptive Reprimmand Construction and the Corroboration-seeking Construction (named after their communicative function). More importantly, the two novel constructions have a metanormative meaning, in that both are used to reinforce a particular social norm.

Further evidence for this diachronic path will be drawn from studies on the development of Italian politeness markers (Fedriani 2019), Spanish "sabes?" 'you know' (Sierra and Engels 2017), and the English "You don't want X" construction (Tantucci 2021). It will be shown that, in all these cases, (i) a new construction has emerged in which a given social norm is put "onstage" (Langacker 1987), and (ii) the historical source of this novel construction is either a non-normative or a normative construction.

It will be argued that looking at intersubjective constructions through the lens of their relation to social norms offers two interrelated gains: on the one hand, it sheds new light into their communicative functions; on the other hand, it allows for cross-disciplinary connections between the study of pragmatic markers and independent evidence of human inclination to normativity (Roughley and Bayertz 2019) and accountability (Enfield and Sidnell 2022).

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(Un)mediated and personal/social intersubjectivity

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Keywords

pragmatics and cognition, embodiment, culture, construal operations, intersubjectivity.

Abstract

Intersubjectivity has been interpreted in various ways across different sciences and frameworks, leading to conflicting definitions and typologies. In linguistics, intersubjectivity is generally understood as a linguistic mechanism for coding speaker-hearer relations and for monitoring the interaction between them. There is, however, a more fundamental, constitutive and semantically oriented sense of linguistic intersubjectivity which Zlatev *et al.* (2008: 1) define as "the sharing of experiential content (e.g. feelings, perceptions, thoughts, meanings) among a plurality of subjects". Typologies of intersubjectivity concern either developmental sequences (primary, secondary, tertiary) or intentionalities (emotion, perception, action). One of the main results from the phenomenological (e.g., Zahavi 2003, Gallagher 2017), developmental (e.g., Trevarthen 1980, Tomasello 2008) and linguistic (e.g., Verhagen 2005, Zlatev 2008, Enfield & Sidnell 2022) approaches to intersubjectivity is that intersubjectivity is multifaceted and multi-leveled.

Setting off to explore the multi-level nature of intersubjectivity, the aim of the present paper is to distinguish between different types of intersubjectivity, based on two fundamental distinctions. One distinction opposes immediate, bodily interaction and mediated, symbolic interaction. The other distinction differentiates personal interaction, i.e., between individuals and social interaction, i.e., between groups. This leads to a cross-classification of 'individual vs. group' with 'immediate vs. mediated' forms of intersubjectivity, including combinations of immediate (e.g., through gaze and gesture) and mediated (e.g., through language) intersubjectivity. Three types of intertwined intersubjectivity can therefore be distinguished: (i) as shared embodiment between individuals or groups, (ii) shared culture between individuals, and (iii) shared culture and ideology between groups.

Linguistic evidence comes from the fields of emotions and politics, including a special focus on the role of construal operations (particularly conceptual metaphor) in intersubjectivity. Two corpus-based and multifactorial profile-based case studies on emotions and politics in the two main national varieties of European and Brazilian Portuguese are presented. The first examines the cultural (metaphorical) conceptualization and variation of a set of emotions in the two national varieties of Portuguese (Soares da Silva 2021). The cultural differences in the metaphorical conceptualization of these emotions in the two varieties, highlighting different patterns of affective regulation, intensity and somatization, provide empirical evidence for both

the immediate and mediated intersubjectivity of emotional embodiment. The same case study shows that cultural metaphors (shared culture) influence the immediate intersubjectivity of emotional embodiment (shared embodiment). A second case study explores intersubjectivity in far-right populist politics in Brazil (Peterssen & Soares da Silva 2024). Polarizing metaphors and other construal operations such as image schemas, profiling and metonymy were shown to play a key role in the populist polarizing far-right Twitter narratives of ex-president Jair Bolsonaro. The construal-based polarization of Brazilian far-right populism (shared ideology) is grounded in the Brazilian popular culture, especially the relevance of conservative morality, the strong rise of evangelical churches, and the close connection between religion and politics (shared culture). Polarizing cognitive-discourse construal tools are also used in Bolsonaro's X (Twitter) narratives to provoke intense emotions, especially anger and fear concerning the outgroup and love and passion regarding the ingroup (shared embodiment).

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Investigating counter-expectation constructions: from information structure to Cognitive Grammar

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Keywords

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Abstract

Lambrecht (1994) suggests that presupposed information can be divided into three categories: knowledge presuppositions, topicality presuppositions, and awareness presuppositions. Despite being relevant for information structure analysis, this distinction does not seem sufficient to adequately describe a set of intersubjective counter-expectation constructions, such as those identified in Brazilian Portuguese:

(1) Eu bem vi João no shopping hoje.
lit. I well saw John at the mall today.
“Believe it or not, I saw John at the mall today.”
(2) Pior que a minha mãe me proibiu de usar o celular.
lit. Worst that my mom has forbidden me to use my cell phone.
“The thing is that my mom has forbidden me to use my cell phone.”
(3) João arrumou uma namorada mesmo.
“John really got himself a girlfriend.”

In these examples, some grammatical form-meaning pairs (Goldberg, 2006) are highlighted: the “bem” construction, the "pior que X" construction, and the "mesmo" construction, which share a common pragmatic function. These constructions indicate that the speaker believes the proposition about to be uttered may surprise the listener, as do counter-expectation constructions investigated in other languages, such as Thai (Tawilapakul, 2013) or Japanese (Saiwada, 2022). Speakers of (1-3) seem to presuppose, respectively, that the listener did not expect that the speaker would meet John that day,

that the speaker's mother had prohibited them from using the cell phone, and that John had found a girlfriend.

These propositions are implicitly evoked by the constructions, as speakers do not explicitly convey their content as assertions. They are also tied to the state of mind the speakers assume the listeners have. Hence, they are presuppositions. However, in (1-3), speakers do not presume that their listeners recognize an element of discourse as the topic or that they have active information in their mind. That is, these constructions are definitely not topic or consciousness presupposition triggers. Additionally, it is not assumed that the listener possesses specific knowledge. In (1-3), speakers do not convey that the interlocutors didn't know, respectively, about the meeting, the prohibition or the dating. Rather, the speaker is making a calculation about the listener's mental state regarding what is expected to have occurred. Therefore, we are dealing with a type of presupposition related to expectation, that is, to inferred, not actual knowledge.

In light of this, the aim of this study is to propose the existence of a category named inferred knowledge presupposition, based on the analysis of intersubjective constructions such as the ones in (1-3). Such analysis is based on a qualitative-interpretative approach to data taken from the Corpus of Portuguese and from the social network X, and also invented sentences. Here we distinguish inferred knowledge from actual knowledge drawing on Langacker's Epistemic Model (1991, p. 277). Specifically, we argue that this information structure difference lies in the opposition between known reality and projected reality, which is relevant for us to adequately describe different types of presupposition constructions. In doing so, we propose a refinement of Lambrecht's typology while demonstrating that Langacker's model can be useful for analyzing phenomena distinct from its original scope.

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Introduction: On Columbia School linguistics and the ethnopragmatic approach

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Keywords

Columbia School, ethnopragmatics, discourse, cognition, communication.

Abstract

In this introductory talk, the theme session organizers will offer a theoretical and methodological outline of the Columbia School (CS) framework (Diver 1995, 2012; Huffman 2001, 2006; Stern 2019), as well as highlight key points of contact and divergence between core CS tenets and the related approach of ethnopragmatics (García 1995; Martínez 2004, 2009; Martínez y Speranza 2009).

CS is a functionally-oriented school of linguistics that was initiated by William Diver, Erica García and their students in the 1960s. It is based on two fundamental understandings:

- that language is an instance of human behavior, so it can be "expected to share characteristics that are found in other aspects of human activity and cognition" (Stern 2019: 3);
- that language is an instrument inherently designed for communication, so "it must be the case that its fundamental structural components be signals and meanings; that is, that language share in the characteristic that is common to all instruments of communication" (Diver 2012: 47).

Originally born as a reaction to the empirical failure of formalist approaches, the aim of CS is to discover how language is structured based on facts of actual usage. It adopts an inductive, corpus-driven approach with the objective of explaining what features of the linguistic system lead speakers/writers to deploy language in the ways they do.

Closely connected to CS, García's later innovation, ethnopragmatics, emerged from an interest to "explain the cognitive processes that guide speakers in the solution of their communicative needs" (Martínez, 2009: 261, our translation). This approach thus goes beyond establishing the identity of linguistic signals, seeking to uncover the cognitive profilings that guide their variable use in different contexts, with a special interest in "cultural aspects as motivators of communicative needs" (Martínez 2004: 1, our translation).

The following distinctive features are common to CS and ethnopragmatics:

- an "aposterioristic" (Huffman 2006: 44) approach to linguistic analysis: no categories are assumed, but rather hypotheses are proposed and tested based on empirical data;
- an understanding that linguistic structure is not autonomous, but invariably motivated by the communicative needs and the physical, cognitive, and cultural traits of human beings;
- an instrumental view of meaning: it is recognized that language is not compositional; rather, linguistic inputs serve as mere hints from which messages can be contextually inferred;
- a reliance on naturally occurring discourse as a basis for linguistic analysis;
- a qualitative-quantitative methodology: close textual analysis is combined with testing of predictions regarding "co-occurrence favorings" (Sabar 2018: 95, 132) of the item(s) under study in specific contexts.

The papers in this theme session will illustrate the current vitality of CS, and its potential to shed light on different aspects of human language and cognition. These works offer valuable contributions to a variety of fields including grammar, lexical semantics, phonology, (ethno)pragmatics, variation, dialectal studies, language contact, translation, discourse analysis, and endangered languages.

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Grammatical system of *czas przyszły złożony* in Polish: preliminary considerations

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Keywords

Polish, future tense, corpus-driven analysis, bottom-up approaches

Abstract

Polish *czas przyszły złożony* (compound future tense) is one of the two existing future tenses in this language, incorporating an alternation between two possible signals: an *-ł-* one (*będę googlowałem* 'I (masculine) will be googling', and a *-ć-* one (*będę googlować* 'I will be googling'). The existing body of work treats this variation as either unexplained (Moser, 1998), or completely random (Błaszczak et al., 2016). This talk proposes an alternative view, treating *czas przyszły złożony* as a grammatical system of two signals that represent two different and distinct meanings, following W. Diver's approach to linguistic analysis (Diver, 2012) and E. Garcìa's approach to linguistic variation (García & Otheguy, 1983).

The talk provides a short overview of the research on the topic of *czas przyszły złożony* variation, showing that overall it does not get the required attention, with the first scholars of the Slavic future tense resorting to general statements of inability to explain it (Křížková, 1960), and the current researchers preferring to postulate more vague statements, such as the notion of masculine gender generally causing *-ć-*-form to appear, except for the official contexts (Grzegorzczykowa et al., 1998). Such theses do not account for all the possible variation, concentrating only on the masculine/non-masculine contrast for singular entities (not accounting, for instance, for plural entities at all) (Andersen, 2006). Corpus analysis shows their shortcomings (masculine entities may collocate with *-ć-*-forms in the formal contexts, and *-ł-*-forms in the informal contexts), thus stressing the need in the alternative hypothesis.

The talk presents the study of *czas przyszły złożony* on the basis of Polish translation of G. Perec's *Les Choses. Une histoire des années soixante* (2014). The epilogue of this text is written in future tense, providing a set of 30 contexts. The talk delves into the structure of the analysed text, showing a system of *czas przyszły złożony* meanings as a means for the translator to deliver a coherent set of messages. However, these contexts are not enough, as they come from a single text, which is not even originally Polish. To amend for that, the talk uses material from Polish National Corpus (NKJP) ad spoken corpus of modern Polish (Spokes), contrasting the examples form the text and showing that they indeed give insight into the grammatical opposition of *czas przyszły złożony* that spans across different genres of the modern standard Polish. Formulated hypothesis, namely, process – goal distinction, visualised in the example (1), undergoes evaluation on the independent subset of data from Polish National Corpus.

Czas przyszły złożony { *-ł-* **PROCESS** / *-ć-* **GOAL** (1)

The end of talk summarises the previous research and the provided analysis. It also outlines the prospects of the study, especially the utilisation of the other texts of the modern Polish literature that use *czas przyszły złożony* variation, and thus may support the hypothesis, or reject it.

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A Sign-Oriented Contrastive Analysis of Tense Usage in Russian and Hebrew Source and Translated Texts: A Parallel Corpus Study of "*Kolymskiye rasskazy*" by Varlam Šalamov and "*Sumchi*" by Amos Oz

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Keywords

translation and cognition, tense, invariant meanings, Columbia School, Russian/Hebrew and Hebrew/Russian translation.

Abstract

The primary focus of our study involves a comparative analysis of verb tense meanings in Russian and Modern Hebrew. Despite belonging to different language families, both languages possess the past, present, and future tenses of the indicative mood in their inventory. This similarity in grammatical forms may suggest a corresponding similarity in their meanings. These forms often reflect real-time relationships objectively. The present tense often denotes actions taking place at the moment of speech. The past tense denotes actions or facts relating to the past, and the future tense denotes actions in the future. Nevertheless, systematic discrepancies between verb tense meanings and the context of their use are observed in both languages when the past tense is not used for past actions, states, or events (hereafter *occurrences*), the present tense is not used for occurrences in the present, and the future tense is not used for future occurrences. As a result, these meanings are reconsidered as figurative uses of the tenses. To address these discrepancies, we propose formulating general (invariant) meanings for each tense, which will underlie all its uses, including figurative ones. Based on the Columbia School sign-oriented linguistic framework (see Diver 1981, 1995; García 1975; Tobin 1990, 1995), our comparative analysis will focus on verb tense uses in two texts: "*Kolyma Tales*" by Varlam Šalamov (2013) and "*Sumchi*" by Amos Oz (1978), and their literary translations into Hebrew (2005) and Russian (2015),

respectively. These texts constitute our parallel corpus. On the one hand, we postulate a common semantic content for the systems of Russian and Hebrew tenses, correlating with the *ego, hic et nunc* (moment of speech) of the speaker (writer). This explains the similarity between the original texts and their translations regarding tense form usage, as evidenced by numerous examples. On the other hand, observed differences in the verb tense uses can be attributed to regular or standardized combinations of invariant meanings to convey particular messages, commonly referred to as communicative strategies in Columbia School theory. The corpus study reveals an interesting feature: the more communicative strategies a verb tense has in the source language, the more frequently it appears in translation into the target language. We test this hypothesis by applying a z-test to determine whether differences in verb tense usage between the source and target texts are statistically significant. These findings demonstrate how postulated invariant meanings of typologically distinct languages – Russian and Hebrew – shape tense selection in translation, offering new insights into cross-linguistic cognitive processes underlying language-specific realizations.

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Preparados, listos… ¡*ya*!
The distribution of a linguistic sign:
a semiotic-semantic analysis of Spanish *ya*

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Keywords

Columbia Linguistic School, distribution, monosemy, *ya*, variation.

Abstract

This research presentation focuses on accounting for the distribution of the linguistic Spanish unit *ya* in current Argentine political discourse by positing a monosemic[1] analysis of its deep meaning (Ruhl 2002; Reid 2004). The need for this research stems from the fact that linguists have not elucidated the deep meaning of *ya* yet because they have focused on the description of inferences that arise from the messages in which the form appears. The RAE (Royal Spanish Academy 2023) and authors such as Alonso & Henríquez Ureña ([1938]1984); Gili-Gaya (1943) and Menghi, Pescetto & Spinelli (1984) state that *ya* is a time adverb which can be used in the present, in the past and in the future (or in PAST and NON-PAST following William Diver (1975) as cited in Alan Huffman (2001) and Alan Huffman & Joseph Davis (2012). Examples from RAE include:

Ya "1. adv. In a past time or occasion. *Ya hemos hablado de esto más de una vez. / We have already talked about this more than once*.

2. adv. 2. (emphatic) Immediately, right now. Also used in an emphatic sense. *Aumento de salarios, ya. / Salary increases, now.*

3. adv. In the present, relating to the past. *Era muy rico, pero ya es pobre / He was very rich, but he is now poor*.

4. adv. In a future time or occasion. *Ya nos veremos. Ya se hará eso. I will see you around. | That will eventually be done*."

However, it is clearly seen from these examples that the linguistic sign (-*ya*-) does not convey temporality; rather, temporality is inferred from the context. In addition,

some of the above mentioned authors state that *ya* is also a colloquial interjection "used to denote that something is remembered or suddenly understood", but there is no example (RAE 2023) and a concessive conjunctive phrase (*ya* que):

"1. Once, although, since. *Ya que tu desgracia no tiene remedio, llévala con paciencia. / Since your misfortune has no remedy, bear it with patience*.

2. Because, since. *Ya que lo sabes, dímelo / Since you know it, tell me*."

Others (Ocampo & Ocampo 2000; Bosque 2009; Sandrini 2011) have gone further into the study of *ya*, but they have not got to its meaning either. I argue that these are also possible contextual interpretations of *ya*, rather than meanings of *ya*."

Below, I illustrate my line of analysis with an example of a minimal pair with the presence of the sign *ya* in variation with the absence of it, and with the same verb *exceder / exceed*. Both instances were uttered, by the same speaker, Martín Menem (President of the Chamber of Deputies of Argentina), at the Honorable Chamber of Deputies of the Argentine Nation, 12th Meeting, 1st Extraordinary Session of January 31, 2024:

(1) Presidente (Menem) - Diputada, le pido que vaya terminando. Ya se excedió sus 5 minutos.

(2) Presidente (Menem) - Señora diputada, X[2] se excedió en un 60 por ciento en el uso de la palabra. No me dará opción y tendré que apagarle el micrófono. Por última vez, le pido que concluya.

Translation:

(1) President (Menem) - Deputy, I ask you to finish. You have already exceeded[3] your 5 minutes.

(2) President (Menem) - Madam Deputy, you have X exceeded[4] your use of the word by 60 percent. You won't give me a choice and I'll have to turn off your microphone. For the last time, I ask you to conclude.

It seems that statements in which *ya* can be incorporated have need of a context with previous known information between the speaker and the other part, for instance, in example (1), the known information that enables the use of *ya* is the assigned speaking time. Therefore, in the case of a statement in which *ya* could be avoided but is included, it seems to recover the previous shared information, emphasizing it and, probably, the speaker's perspective. On the other hand, in example (2), the statement with the absence of *ya* requires the incorporation of more information about the event interpellated.

When a speaker decides to add a unit in a statement which can be said without it, the idea of intention is highlighted. Including the additional unit requires more effort, so the speaker will not include it unless it contributes an additional, necessary "hint from which fully developed messages are extrapolated" (Diver [1975] 2012:52).

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[1] For some monosemic analyses of different types of linguistic units see Diver [1987]2012; Martínez 2000; Mauder 2000; Ruhl 2002; Reid 2004, 2011; Stern 2006; Sabar 2018, 2019; Ruggles 2014; Mailhes 2016, 2021; Giménez 2016; Novotny 2022

[2] An X has been added to mark the absence of the form *ya*.

[3] In the Spanish original version, it is expressed in Simple Past.

[4] In the Spanish original version, it is expressed in Simple Past.

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CS as a framework for the study of indigenous languages: Examples from Mapudungun

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Keywords

indigenous languages, number, Mapudungun, discourse analysis, Columbia School.

Abstract

In the study of indigenous languages, reliance on traditional syntactic-semantic categories can often lead to misrepresentation. An advantageous alternative is to investigate linguistic features inductively based on actual usage, in line with the core tenets of Columbia School (CS) theory (Diver 1995). Several CS-oriented studies attest to the benefits of this approach (e.g. on Swahili, Contini-Morava 1976, 1987, 2002, 2012; on Kolyma Yukaghir, Ventayol-Boada 2024; on Central Tibetan, Lai 2024). In this presentation, I apply a CS approach to the study of Mapudungun, an indigenous language of Chile and Argentina, specifically as used in the narrations compiled in *Las últimas familias i costumbres araucanas* (Guevara 1913). I will center on the word *pu* and its interplay with the suffix *-ke* and the verbal inflection *-yngün*, arguing that, while the three forms have traditionally been associated with plurality, their distribution in the corpus is more accurately explained by the notions of unitedness (*pu*) and distributedness (*-ke* and *-yngün*).[1]

In Mapudungun, nouns[2] lack grammatical number (Hernández Sallés et al. 2006: 43-44; Raguileo Lincopil n.d.: 11; Salas 1992: 93; Smeets 2007: 61). For example, *wentru*

[1] For insights regarding the semantic contribution of *pu* and *-ke* that inspired this analysis, see Smeets (2007: 72, 111).

[2] While CS does not aprioristically accept part-of-speech classifications such as noun, verb or adjective, such labels are used here for ease of presentation only.

can potentially be interpreted as ‘man’ or ‘men.’ Nonetheless, plural interpretations are often linked to the use of specific linguistic forms, such as the word *pu* (e.g. *pu wentru* ≈ ‘the men’). Existing grammars generally define *pu* as a plurality marker for nouns (Augusta 1903: 15; Hernández Sallés et al. 2006: 44; Salas 1992: 94; cf. Smeets 2007: 61, 72). In addition, a homonymous *pu* is said to work as an interiority marker (Hernández Sallés et al. 2006: 63; Salas 1992: 94; Smeets 2007: 70). My analysis will show that these definitions do not account for the attested distribution of *pu* in the corpus. In contrast, diverse uses of *pu* are successfully explained by positing that the form invariably signals a meaning that can be described as UNITY OF COMPONENT PARTS AS A CLASS.

Accounting for the distribution of *pu* will include examining its combined use with two other forms that are also traditionally associated with plurality: the suffix *-ke*, generally described as an adjectival pluralizer (e.g. *fütrake wentru* ≈ ‘big men’; see Hernández Sallés et al. 2006: 51; Salas 1992: 96; cf. Augusta 1903: 18; Smeets 2007: 72, 111); and the verb ending *-yngün* (e.g. *wentru amuyngün* ≈ ‘men went’), generally described as the third-person plural inflection of the indicative mood (Augusta 1903: 25-28; Hernández Sallés et al. 2006: 77-80; Smeets 2007: 150-152; cf. Salas 1992: 109-118). To illustrate, the following pairs extracted from Guevara (1913) will be compared:

1) a. ñi **pu** kure
POSS ***pu*** wife

b. ñi **pu-ke** kure
POSS ***pu*-PL** wife

2) a. **pu** che ye-ke-fu-**i**
pu person take-HAB-DISTP-**IND3**

b. **pu** che ... kewa-me-ke-fu-**iŋun**
pu person ... fight-DIR-HAB-DISTP-**IND3PL**

Guided by the understanding that alternating uses such as these are not random, but rather motivated by communicative needs, I will show that, while *pu* signals UNITY OF COMPONENT PARTS AS A CLASS, *-ke* and *-yngün* point to the multiple parts making up the class.

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The contrast between *tú* and *vos* in the Spanish spoken in Montevideo, Uruguay

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Keywords

cognitive sociolinguistics, voseo, tuteo, Montevidean Spanish, CS sign-based framework

Abstract

Montevideo stands at a linguistic crossroads where both “voseo” and “tuteo” coexist, reflecting complex sociolinguistic dynamics. While “voseo” is generally dominant in the River Plate linguistic zone, its use in Montevideo is nuanced and varies across different contexts, coexisting with “tuteo”. This phenomenon makes Montevideo a unique setting for exploring the factors influencing the choice between *tú* and *vos*.

My work looks into the usage of the informal address system in Montevidean Spanish, focusing on “voseo” and “tuteo” as the two informal singular verbal forms prevalent in the city. Despite the well-documented alternation between these signals, the underlying rationale has remained insufficiently clarified. My argument centers on the hypothesis that *tú* and *vos* are two signals, each with nuances of interpretation and usage.

Drawing on the CS sign-based theoretical framework, the study examines the distribution and function of these linguistic forms in written texts. The CS sign-based framework offers a systematic approach to understanding how linguistic signs operate within specific social and cultural contexts, providing a valuable lens for analyzing linguistic variation.

To explore this variation, the study focuses on articles from three prominent media outlets: El País, El Observador, and Montevideo Portal. These sources were chosen for their representation of Spanish in Montevideo. By analyzing these texts, the paper identifies patterns in the use of *tú* and *vos* and examines how these forms are employed to convey meaning and establish social relationships.

Preliminary findings suggest that *tú* and *vos* are not merely interchangeable; instead, they carry distinct pragmatic and social connotations. Based on a preliminary analysis of this corpus, *tú* appears to enhance the speaker's consideration of the interlocutor, while *vos* diminishes it. This consideration encompasses such factors as affection, respect, and space between speakers. The use of tú is associated with expressions of affection, respect, and the creation of a certain interpersonal distance, which may reflect formality or politeness. Conversely, *vos* tends to diminish these interpersonal considerations, often signaling familiarity, intimacy, or solidarity.

The paper aims to deepen our understanding of the factors that shape linguistic choices.

Columbia School Phonology without the phoneme

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Keywords

phonology, language processing, aposteriorism, phoneme, gestural score

Abstract

In principle, Columbia School (CS) linguistics (Huffman & Davis 2012) does not start analysis with *a priori* categories. The point of departure is the observation of actual language data; the analysis informs how a linguistic form should be characterised, and this definition should account for all instances of the form. For instance, in the analysis of English, forms like *swim* and *rain* are not categorised as a noun or verb, because they can be used in many ways. It is morphology such as *the* and *to be* + *-ing* in their direct context that leads to 'entity' or 'occurrence' interpretations (Reid 1991). Nevertheless, in his phonological work, Diver (1979/2012) posits the phoneme ahead of the analysis, which is incoherent with his methodology (Davis 2006).

This is an urgent issue that gets at the foundation of CS phonological analysis. The proposed conference paper questions phonemes or phoneme-like segments as true cognitive units, and shows that the compositional view of the linguistic form "consisting of" units does not do justice to the way these forms are identified by language users, which seems to be an inferential, not a compositional process (King & Wedel 2020). Importantly, the inferential nature of language processing is argued to explain sound patterns observed in recent CS work (Van Soeren 2023).

This paper elaborates the advantages of gestural scores (as suggested in Articulatory Phonology; Browman & Goldstein 1992) in comparison to phonemic transcription. Articulatory gestures show a better fit with the actual *observation* of vocal movements (central to CS thinking), and linguistic forms can be defined in terms of the coordination of these gestures (from a language production perspective), or as an inference from the acoustic and visual effects of these gestures (from a [multimodal] language recognition perspective).

We will discuss case studies from CS and non-CS literature, as well as our own work, in which the use of the phoneme leads to the wrong conclusions, and gestural scores enable a better understanding of the studied phenomena. For example, to explain [nr] developing into [ndr] in the change from *venré* to *vendré* and *tenré* to *tendré* in Spanish, a phonemic approach would suggest /d/-insertion. While it is true that a plosive develops here, with the same place of articulation as the surrounding consonants, a

gestural analysis is more straightforward (Bybee 2001): the velar opening corresponding to the [n] is retimed such that the velum closes before the end of the alveolar closure of [n]. This results in a period of alveolar closure without nasality, or [d]. This explanation is stated in terms of articulatory events, and distinctive units (of any kind) are superfluous to it.

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Significant contribution and distribution of "para" in Spanish[1]

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Keywords

language as human behavior, prepositional meaning, spanish linguistics, cognitive conceptualization, Columbia School approach.

Abstract

Traditional grammars describe "PARA" as a preposition with multiple meanings, listing its functions related to purpose, movement, time, and relational aspects. This study challenges this polysemous approach by arguing for a stable, abstract meaning that interacts with context to shape interpretation. This communication aims to contribute to the understanding of the Spanish form "PARA" by explaining its systematic distribution in language use. Grounded in the theoretical principles of the Columbia School of Linguistics (CS) (Diver 1995; Huffman 2012; Davis, Gorup y Stern 2006; Stern et al. 2019), the study approaches "PARA" as a sign with a single, imprecise meaning, opposing perspectives that consider it polysemous or merely a relational connector. Specifically, the study proposes that "PARA" suggests a location in a determined and oriented area, a basic meaning that remains constant across different contexts and interacts with other elements of the utterance to shape interpretation.

To better understand "PARA" in relevant cases, the analysis contrasts it with "A" and "POR". In this comparison, "A" is suggested to indicate a determined and oriented point, while "POR" represents an undetermined and unoriented area, highlighting the distinct contribution of "PARA" within this system. The study draws on real language use by analyzing a corpus of travel reviews from TripAdvisor, focusing on tourist destinations in Argentina's Río Negro province. These comments provide a rich source of natural linguistic data concerning movement, time, and purpose. At this stage, the methodology focuses on a qualitative analysis, applying the CS approach to establish the basic meaning of "PARA" through a systematic examination of its occurrences. In dialogue

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with cognitive linguistics, this study draws on theories of conceptualization, emphasizing the embodied nature of spatial perception (Lakoff y Johnson, 1995; Evans y Tyler, 2003). By connecting language with cognition, it highlights how speakers encode space, time, and purpose through linguistic forms.

As a result, the research has demonstrated that there is no evidence to suggest more than one meaning for the form under investigation. Through a qualitative analysis of real-world data, we have shown how "PARA" functions to structure spatial, temporal, and event-related references. The study offers a refined explanation of the distribution of "PARA" and contributes to a renewed understanding of prepositional meaning in Spanish. Looking ahead, quantitative analysis will enable us to confirm or refute this hypothesis and provide a deeper explanation of its distribution.

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Do referential choices in Spanish-learning preschoolers align with Preferred Argument Structure patterns?

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Keywords

preferred argument structure, language acquisition, syntax, discourse, pragmatics.

Abstract

The acquisition of referring expressions, which allow speakers to identify and track entities in the world and in discourse, requires mastering both their grammatical encoding and the pragmatic inferences they evoke in listeners. These skills develop during childhood, allowing the production of cohesive and informationally appropriate discourse (Snow et al., 2001). This study explores how Spanish-learning children use referring expressions during storybook reading sessions with their caregivers. Specifically, it examines the grammatical encoding of referents in children's discourse and its relationship with information flow and syntax, focusing on whether children's referential choices align with the Preferred Argument Structure (PAS; Du Bois, 2003) patterns observed in adult speech and in some studies of children's speech. While PAS has been extensively studied in adult speech across various languages, its analysis in children's speech remains limited, with only a few studies (Allen & Schröder, 2003; Brown, 1998; Clancy, 1993; Huang, 2012). In Spanish, PAS has not been explored in preschool-aged children, though studies have examined older children, aged 8 years (Castillo Hernández et al., 2017) and between 9 and 17 years (Khorounjaia & Tolchinsky, 2004).

We analysed eight transcripts from the FernAguado corpus (Fernández-Vázquez & Aguado, 2022), available in CHILDES (MacWhinney, 2000), which registers the interactions of Spanish-speaking children aged 3 to 4 years during book-reading interactions with their caregivers. Each referent produced by the children was coded for

its syntactic role (S, O, A), grammatical form (e.g., noun phrase, pronoun, omission), and informational status (new or given). Data was analysed using R (R Core Team, 2025). Descriptive statistical measures of central tendency and dispersion, such as the mean and standard deviation of proportions across children, were used.

The findings partially align with PAS predictions. The main discrepancy lies in the behavior of S, which, contrary to PAS expectations, is frequently expressed as a non-lexical argument and tends to refer to given entities rather than new ones. Several explanations are proposed for this result, including the informational pressure of the task, the influence of adult speech, and animacy contrasts in child speech. Furthermore, differences and similarities with previous studies on PAS expression in child speech are identified. These differences are considered in light of factors such as discourse genre, the evaluated situation, children's age, and the degree of adult participation. Finally, longitudinal changes are observed, including an increasing use of lexical arguments, particularly in S and O roles, and a higher frequency of introducing new referents as S. Future steps, guided by the results obtained, include implementing a finer-grained coding of S role, expanding the sample, and examining caregiver speech to evaluate whether adults use strategies to reduce informational pressure.

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Agreement in Number and Its Discursive Realization: A Focus on Pronoun Duplication

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Keywords

cognitive grammar, agreement, number, pronoun duplication, coherence and cohesion

Abstract

The primary objective of this study is to explore the agreement in number between the indirect object and the pronoun that duplicates it, with a particular focus on the duplication of a plural noun phrase using the singular dative pronoun, as in (1) *No le vamos a crear problemas a los diplomáticos estadounidenses*. Our research is framed within the Prototype Cognitive Approach (Lakoff 1987, Langacker 1987, 1991, among others), which posits that grammar emerges from discourse and that linguistic signs are motivated either fully or partially by meaning and usage. This theoretical perspective allows us to re-evaluate number agreement strategies in language and to provide evidence for the influence of pragmatic and semantic factors on grammatical structures.

Previous studies (Barbeito 2017, 2019, 2022) have analyzed the issue of agreement (or its absence) between the clitic and the nominal element in sentence structures. In line with the research initiated in 2024, this study focuses on the discursive nature of the phenomenon, examining how syntactic agreement aligns with the communicative goals of the speaker and how its syntactic manifestations operate both within and beyond the clause to achieve coherence and cohesion in the text.

We are particularly interested in evaluating, within an authentic corpus, the linguistic context in which the absence of agreement between the singular dative pronoun and its plural nominal referent occurs. For this study, measurements were conducted using an authentic corpus of Spanish, composed of newspaper articles from the Argentine written press. The corpus consists of 236 examples of constructions with a duplicated indirect object using a dative pronoun. Statistical significance and data representativity were assessed through quantitative measurement, followed by

qualitative identification of relevant elements. The analysis focuses on cases of number disagreement between the singular dative pronoun (example 2) and its plural nominal referent, comparing them with instances of agreement (example 3):

2. *Una aerolínea rusa le baja el sueldo a las azafatas con sobrepeso*.

3. *Cuánto les pagarán a las autoridades de mesa en las próximas elecciones*.

Given the theoretical assumptions of our framework, we incorporate variation and language use as inherent aspects of linguistic analysis to approach the issue synchronically. Rather than considering the dative pronoun as redundant for textual reference, we argue for its role as a significant discourse marker. While it does not always directly indicate plurality, its function in advancing information flow and maintaining textual cohesion is crucial. In particular, we explore how competing discourse entities and the distance between the clitic and the corresponding noun phrase affect agreement patterns.

We analyze the lack of agreement as a phenomenon conditioned by the following linguistic factors: 1. the position of the coreferential group relative to the clitic with respect to the verb (preposed/postposed); 2. the presence of the nominal group in the same clause or in a different clause. That is, for each use of the dative pronoun (anaphoric or cataphoric), we analyzed whether the nominal coreferential construction to the pronoun was in the same clause ('close') or in a different clause ('distant'), without being immediately followed or when an element (coordinating or subordinating) established a clear syntactic boundary, regardless of the syntactic function of the group.

Our study suggests that when the anaphoric reference is distant, the use of the plural clitic *les* is favoured because morphological marking of plurality plays a key role in maintaining discourse coherence. Conversely, in cataphoric contexts, the clitic tends to function primarily as a grammatical marker rather than contributing equally to referential cohesion.

We adopt a perspective on language that moves beyond prescriptive norms, which dictate what is deemed correct or incorrect. Instead, we recognize that if speakers, in a non-idiosyncratic manner, sometimes establish number agreement and sometimes do not, this choice is meaningful.

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Secondary interjections: between intersubjectification and grammar

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Keywords

cognitive grammar, Río de la Plata Spanish, secondary interjections, prototype theory, intersubjectification.

Abstract

In this presentation, we reflect on how the speaker in Río de la Plata Spanish uses secondary interjections to include the addresse in the discourse. We study an interjection derived from noun, "¡ojo!" and other derived from verb, "¡andá!". The reason for the choice is given by the high degree of productivity that forms from nouns and verbs become interjections in Spanish.

To achieve our aim, we use prototype theory (Berlin & Kay 1969, Rosch 1983, Kleiber 1990, Evans & Green 2006), since with its proposal of categorization into prototypical and peripheral members, attributes to family resemblance and fuzzy boundaries, it allows us to observe passages between categories, especially for the objectives of the present study, between nouns and interjections and between verbs and interjections. Likewise, we use the notions of subjectivity and intersubjectification (Traugott & König 1991, Company Company 2004, Traugott 2022), since they enable us to determine the degree of interjectability of the analyzed forms, that is, they account for their semantic bleaching and their pragmatic gain and orientation towards the speaker, the former notion; towards the addresse, the last notion. We also use the notion of iconicity (Croft 1990, Ungerer & Schmid 1996), since it gives the possibility of identifying

correlations between syntactic-grammatical structures and the modal values of interjections.

We examine samples of the electronic corpora of the Real Academia Española both CREA (Corpus de Referencia del Español Actual) and CORPES XXI (Corpus del Español del Siglo XXI); it should be noted that the samples were selected based on the geographic filters offered by the two data bases: CREA, more generally by country, in our case, Argentina, and Corpes XXI, more specifically the River Plate region. Then we compare them with samples of a own corpus, which includes test answers from native speakers of Rioplatense Spanish, who are students of the Bachelor of Arts of the Facultad de Humanidades y Ciencias de la Educación of the Universidad Nacional de La Plata, Argentina (2012, 2024) and Internet data, specifically from the social networks Facebook, Instagram, X, TikTok and websites, correspond to a period between 2018 and 2024, since being discursive spaces with a high degree of density of interjective uses, they expand the spectrum of use of the interjective forms of the variety of Río de la Plata Spanish.

Some results: “¡ojo!” performs a verbal warning, anticipating what the addresse might be thinking, instead, “¡andá!”, it threatens the image of the addresse discursively, because it delegitimizes the addresse's proference. Iconically, “¡ojo!” focuses the addresse on a cognitive processes and “¡andá!” distances the speaker from the addresse. Both forms instances an exclamatory scheme, without a syntactic link, but forming part of a broader enunciative fragment. Regarding its categorization, the form “¡andá!” still registers uses as a verb and, in some samples, ambiguity is perceived to determine whether it is an interjective use or not.

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The role of the adjectival strategy in the distribution of textual information

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Keywords

adjectival strategy - information distribution- cataphor - discoursive effects - grammatical categories

Abstract

The adjectival strategy presents discursive functions that significantly influence the distribution of textual information, since it frequently summarizes information already given, while sometimes announcing new information. This work reviews this anaphoric or cataphoric character of the adjectival functioning, and identifies syntactic schemes that would be performed by the introduction in the clause of adjectival forms that perspective a high degree of presentation, which we call "projective". This capacity to summarize given information or to anticipate information and create suspense is a very protean discursive property, which had not been described in the category we studied.

We review contributions from authors who are interested in the text-grammar relationship and address the problem of information distribution. Especially, we are interested in the statements of the Prague School (Firbas, 1964) in relation to communicative dynamism (CD) and the discussion that arises from this model from a cognitive approach, taking into account textual advancement as a sequential process. Borzi (1998) discusses the Prague School regarding the concept of CD, and argues that “it is necessary to establish another correlation between this notion and the remaining categories responsible for describing the movement” (Borzi, 1998, p. 2). From this perspective, we review the anaphoric or cataphoric character of the adjectives that are recorded in our corpus, made up of fragments of novels and essays by Latin American authors of the 20th century. We identify syntactic schemes that would be performed by the introduction in the clause of an adjective that functions discursively with a high degree of presentability, which we call “projective.”

The adjectives that we conceptualize as “projective” operate in an unusual way with respect to the anaphoric functioning that is most regularly observed in the adjectives used in texts. When projecting, adjectives introduce a forward phoric movement, which is why we consider they can be described as “cataphoric”.

As we look for relationships between discourse and grammar, we observe which syntactic schemes develop the new information that will justify the interpretation of the projective adjective.

The adjectives that we have conceptualized as projective seem to be a special strategy that the speaker resorts to with the intention of provoking suspense in his statement. In our corpus, we register this strategy in both the novel and the essay.

This work aims to provide evidence on discursive behaviors of grammatical categories.

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The discoursive marker *por lo menos*: Focalizer or reformulator?

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Keywords

cognitive-prototypical approach, discourse markers, attenuation, reformulation, focalization.

Abstract

The present work aims at the pragmatic, semantic and syntactic analysis of the discourse marker *por lo menos* in the PRESEEA-Buenos Aires corpus. This proposal is based on the Cognitive-Prototypical Approach (Langacker, 1987; 1991; Lakoff, 1987; Hopper, 1988, among others), whose fundamental assumptions are the pragmatic-semantic motivation of syntax and the prototype theory to explain categorization. The order in the description (that is, starting from the pragmatic characterization of linguistic signs to arrive at their syntactic description) abides by the notion of Emergent Grammar (Hopper, 1988). The usage value of linguistic forms is therefore explained on the basis of their contexts of appearance, which are measured qualitatively and quantitatively.

As for the semantic characterization of *por lo menos*, it is hypothesized that it expresses diverse meanings distributed in a pragmatic-semantic continuum that ranges from the concrete value of minimum expected quantity to the pragmatic value of attenuation (Briz, 1995 & 2007), with an intermediate zone in which there are uses that combine the value of quantity with that of attenuation. The three values are related through the semantic attribute of imprecision. In this respect, the meaning of quantity indicates an indeterminate, imprecise quantity (“me voy de vacaciones *por lo menos* dos veces al año”, PRESEEA, E12: p. 9). Similarly, attenuation entails that the speaker is not precise in their speech (“tenía esa idea *por lo menos* sin saber nada”, PRESEEA, E2: p. 1).

Regarding the pragmatic-syntactic behaviour of *por lo menos*, the marker shows several functions that are in agreement with the context of use. When *por lo menos* has the meaning of minimum expected quantity, it usually functions as a focalizer, because it introduces new information that persists to the right in the discourse, and generally appears without a subsequent pause. Meanwhile, when *por lo menos* expresses attenuation, it usually functions as a reformulator (Gülich & Kotschi, 1983 & 1955; Kotschi, 2001), as it introduces known information that persists to the right, and appears between pauses, in the manner of an aside. To test these hypotheses, examples from PRESEEA-Buenos Aires oral data corpus and the CORdeBA spontaneous speech corpus will be analyzed.

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De corazón vs. *desde el corazón*: different ways of saying '*from the heart*'. Semantic and pragmatic contrast between the Spanish prepositions *de* and *desde*

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Keywords

language change, focal adjustments, image schema, subjectification, preposition.

Abstract

Somatisms referring to the heart evoke the seat of feelings (Mellado Blanco, 2023) as in the case of *from the heart* in English and *de corazón* in Spanish, which refer to the source of verbalizations or actions and usually mean 'sincerely' ("to say something *from the heart*" ≈ "decir algo *de corazón*"). This form-meaning pairing (Fillmore, Kay & O'Connor, 1988, among others) is highly grammaticalized (Hopper & Traugott, 2003 [1993]).

Nowadays, the emerging use of the Spanish preposition *desde* in similar contexts ("decir algo *desde el corazón*") introduces a particular nuance. This preposition marks a starting point or origin (as the preposition *de*) but it also expresses a sustained movement away from a limit that emphasizes the notion of extension. Traditionally, *desde* was considered appropriate only for spatial and temporal contexts (Trujillo, 1971; López, 1972; De Bruyne, 1999). But, in more recent times, it has experienced a broader range of uses and a shift toward meanings more related to the "notional domain" according to Pottier's (1962) terminology.

In an eloquent example of *emergent grammar* (Hopper, 1987), these usages begin to find a place in grammatical descriptions that include not only temporal or spatial uses but also notions such as point of view and cause (*NGLE*, 2009; Company Company & Sobrevilla Moreno, 2014), means and instrument (Company Company & Sobrevilla Moreno, 2014) and even the notion of manner (Hernández, 2024). In this particular case,

desde el corazón competes with *de corazón* generating alternative images (Langacker, 1987).

The aim of this study is to contrast the focal adjustments of this emerging construction with respect to the idiom *de corazón* in order to characterize its pragmatic-semantic behavior. The analysis of 600 utterances of the constructions [Verb + *de corazón*] and [Verb + *desde el corazón*] drawn from corpus Web/Dialects (Argentina) allows us to characterize two ways of constructing meaning: while *de corazón* behaves mainly like an adverb of manner and co-occurs in entrenched constructions meaning 'in an authentic way' with verbs such as *agradecer*, *disculparse*, *pedir*, *querer* ('thank', 'apologize', 'ask', 'want'), the emerging form *desde el corazón*, less grammaticalized, appears in a wider variety of contexts evoking a personal perspective and an internal positioning: *ver, pensar, escribir, criar hijos, vivir desde el corazón* ('see', 'think', 'write', 'raise children', 'live').

This semantic-pragmatic dimension is generated by the *image schema* (Johnson, 1987) associated with the preposition *desde*: whereas *de* points only toward a starting point, the *image schema* of PATH conveyed by *desde*, emphasizes the emotional path traversed by the speaker and depicts with greater acuity his/her positioning. In this approach, the preposition *desde* is conceived according to a *continuum* between more objective, external uses for spatio-temporal localization, and more subjective uses related to the speaker's interiority. This *subjectification* (Traugott & Dasher, 2002; Traugott, 2010) is based on a metaphorical extension: the use of *desde* alludes figuratively to an *emanation path* (Talmy, 2000). The internal structure of this new expression as well as its incipient pragmaticalization is also studied in this contribution.

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Learners' Choices in the Use of the Perfect Aspect: Grammatical Error or Different Perspectivization?

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Keywords

applied linguistics and pedagogy, EFL, perfect aspect

Abstract

This study examines how B-level English (CEFR) as a Foreign Language (EFL) learners, whose first language (L) is the Rioplatense variety of Spanish, use the perfect aspect in English. It investigates whether differences in their use of the perfect aspect are due to crosslinguistic influence (CLI) from Spanish or if they represent a different way of conceptualizing events. The analysis is grounded in cognitive linguistics, which emphasizes that grammar is meaningful and that language users construct meanings through grammar.

The study focuses on two main points: 1. CLI: whether differences in the use of the perfect aspect in English are influenced by learners' L; 2. Mistakes vs. perspectivization: whether these differences constitute impeding errors or represent a distinct perspective leading to other linguistic choices. The theoretical framework draws from cognitive linguistics, which views language as a reflection of human cognition and experience. Within CL, CLI refers to the influence of one language on the knowledge/use of another language. This study considers both linguistic transfer (impact on forms and structures) and conceptual transfer (influence on underlying mental concepts). It uses a mixed-methods approach, analyzing written tasks completed by two groups of university students, who were required to write an email including information that would likely elicit the use of the present perfect. Researchers analyzed if students used it

as expected or if they chose other forms. They also used a learner corpus, containing written assignments from previous students in the same course. Results showed that students often used the simple past or present simple instead of the present perfect, particularly when describing an action in the past with present relevance. The analysis suggests that this preference stems from CLI, as the Rioplatense variety of Spanish usually favors pretérito perfecto simple to express similar meanings; i.e., students transferred the way they would express the same idea in Spanish to their English writing.

Despite not using the expected present perfect, students were generally able to communicate the intended meaning, indicating that these differences often represent a different perspectivization rather than a grammatical error that impedes communication. Nevertheless, their choices sometimes resulted in some loss of the experience/result meanings. The study highlights the importance of understanding the cognitive processes underlying language learning and suggests that EFL teachers must be aware of how L influences L learning. Moreover, they should also focus on teaching the meanings of grammatical forms rather than just their structures. The research also calls for a reevaluation of assessment practices, where the focus should be on whether students can convey a message effectively rather than just using expected forms.

A key result of the study is that assessment of learners' production should consider whether their choices impede communication or represent a different way of conceptualizing an event. In conclusion, this research demonstrates how CLI affects the use of the perfect aspect among Spanish-speaking EFL learners and emphasizes that differences in language use should not always be viewed as errors but rather as alternative ways of construing an event.

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A counterfactual construction in Argentine Spanish with no "counterfactual ingredients": the role of metonymy

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Keywords

construction grammar, counterfactuality, mental spaces, conceptual integration, metonymy

Abstract

From the perspective of Construction Grammar, this study examines a construction that expresses counterfactuality in Argentine Spanish. Counterfactuality has been defined as what is "literally, contrary to the facts" (Roese & Olson, 1995: 1), what "directly [contradicts] a reality that is known and cannot be changed" (Dancygier & Sweetser, 2005: 76) or as the meaning expressed through constructions that trigger a "reversed-polarity" interpretation (Verstraete & Luk, 2021). In addition, Fauconnier & Turner (1998) state that counterfactuality involves the conceptual integration of at least two mental spaces, which leads to a counterfactual conceptual blend that enables the generation of inferences about and evaluation of the events that are talked about. The bibliography on counterfactuality (e.g. Dancygier & Sweetser, 2005; Van linden & Verstraete, 2008) reveals that the constructions that typically express this meaning tend to exhibit several co-occurring grammatical features. Some of these typical "counterfactual ingredients" (Iatridou, 2000; Jing-Schmidt, 2017) are subordinators that indicate condition (e.g. Eng. if or Sp. *si*) and morphological marks of tense, mood or aspect. The focus of this presentation is a counterfactual construction with no "counterfactual ingredients" which was identified in a corpus of interactional texts collected from TV sports talk shows. It consists of two juxtaposed clauses, both of which exhibit the use of the present tense of the indicative mood. In addition, in the first clause the first-person singular pronoun *yo* is explicit as in the following utterance by someone

who is not Scaloni, the coach of the Argentine football team: *Yo soy Scaloni, hago lo mismo* (I am Scaloni, I do the same). The goal of the presentation is thus to provide an answer to the following question: How is it possible to access a counterfactual interpretation through a construction with no "counterfactual ingredients"? This construction holistically expresses a meaning that does not derive compositionally from each of the morphosyntactic elements that constitute it. I will argue that, given the discrepancy between the meanings typically associated with the morphosyntactic features of this construction (present tense of the indicative in two juxtaposed clauses) and the counterfactual meaning expressed by the construction as a whole, the cognitive mechanism that makes the meaning of counterfactuality accessible is metonymy. The analysis of this construction reveals that part of our grammatical knowledge is not compositional and that metonymy is involved in the interpretation of the meaning of grammatical constructions.

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Impersonality strategies in Spanish: a nominal perspective

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Keywords

cognitive grammar, impersonality constructions, agent, focalization, spanish.

Abstract

In Spanish, impersonality encompasses different strategies such as active constructions in the third-person plural (*hasta que crecí me trataban de vos*), constructions with an indefinite explicit subject *uno* (*a tu edad uno se la banca perfecto*), constructions with *se* (*era muy común que se robase ahí*), defective verbs (*no se inunda cuando llueve*), among others (Llorente Maldonado, 1982; Cuadrado, 1994; RAE, 2009).

However, traditional classifications do not distinguish between absent, indeterminate, generic, or implied agents, often treating these categories as interchangeable. Impersonal constructions are typically justified with general explanations—the agent is irrelevant, unknown, or omitted—without exploring the conceptual differences behind these motivations. Likewise, Spanish grammars classify impersonal constructions based on heterogeneous criteria: impersonal constructions with *se* are analyzed in terms of their syntactic properties (presence of a pronoun and absence of agreement), defective verbs are classified based on semantic-syntactic aspects (climatic verbs without agreement), and third-person plural constructions are examined from a morphosyntactic perspective (presence of a verbal inflection without agreement with an expressed subject). This diversity in perspectives fragments the analysis, preventing a conceptual integration that would allow for a better understanding of the interrelations between these strategies.

From the Prototypical Cognitive Approach (Lakoff, 1987; Langacker, 2000), we propose that these strategies can be organized within a coherent continuum based on a semantic-pragmatic framework. According to Langacker (2000) and Borzi (2012), in the primary conceptualization of the world, objects exist and are reflected in nouns as a grammatical category. Then, through verbs, clauses express the interaction (or absence

of interaction) between these objects, which, in turn, defines semantic roles. We propose that impersonal constructions form a continuum, with the noun as an organizing criterion. The constructions considered include: (a) those with a defective verb (*llueve*), (b) constructions with a non-defective verb (*hace frío*), (c) reflexive *se* strategies (*aquí se trabaja*), (d) third-person plural (*me llamaron*), (e) the pronoun *uno*, (f) second-person singular, (g) generic *we*, and (h) active sentences with an indeterminate explicit subject (la gente, nadie, etc.).

Framed within this approach, we conceive grammar as emerging from use (Hopper, 1988), with speakers' choices responding to specific discursive contexts. This observational study uses the PRESEEA Buenos Aires Corpus as a dataset, enabling an empirical analysis based on real speech examples. We work with discrete variables, operationalized through parameters such as the number and type of participants in the event, the sentence modality (enunciative, dubitative, exhortative), the inclusion of the speaker and/or interlocutor as part of the generic agent, and the characteristics of the agent (implied, generalized, etc.). Through a qualitative and quantitative analysis of these variables, we aim not only for a more integrated and in-depth understanding of impersonality in Spanish but also to examine how speakers negotiate the relationships between syntax, semantics, and pragmatics in discourse.

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Communicative acts and their strategic construals in scientific lectures on sustainability. The case of *judging*

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Keywords

communicative acts, cooperation patterns, judging, construal, baseline and elaboration.

Abstract

In a scientific lecture, two components can be distinguished: an argumentative and a didactic one. If the balance between these components is not achieved, it is difficult for the speaker to teach, delight and move, rhetorical purposes of this kind of discourse (*cf.* Author, 2005 and 2021). At lectures on sustainability, specialists devote special attention to explaining procedures of research and intervention, and to judging their advantages and disadvantages, to move the audience (*cf.* Reddy, 2008) and promote beneficial practices. The aim of this paper is to analyze, in textual sequences extracted from a corpus of lectures on sustainability, the linguistic realization of the "communicative act" (Weber, 1991; hereafter, CA) of *judging* and of other acts with which the act of *judging* contracts cooperative relations, such as *comparing, justifying* and *recommending*, seeking to integrate the functional and cognitive dimensions in the analysis. The following is an example of the type of sequences that will be studied, followed by a brief explanation:

"[…] si nos fijamos solamente en la calidad del agua resultante luego del filtrado a través de estos humedales/ el mejor sustrato es la arena/ porque justamente hay una/ el menor tamaño de partículas/ por ejemplo/ permite remover de una manera mucho más eficiente los sólidos en suspensión/ y todos los contaminantes que están de alguna manera asociados a esos sólidos […]". (Basílico, G. "Humedales de tratamiento de aguas residuales").

"[...] if we only look at the quality of the water resulting from filtration through these wetlands [1]/ the best substrate is sand [2]/ because precisely there is a/ the smallest particle size/ for example/ allows for much more efficient removal of suspended solids/ and all contaminants that are somehow associated with those solids [3] [...]".

The structure of this sequence could be described as follows: [1] statement of the point of view; [2] CA of judging; [3] CAs of justifying and judging/comparing. In the process of assembling this sequence, it is interesting to note that, in the initial part of the CA of justifying, we find the adverb *justamente* which introduces a new focus in the focus chain (*cf.* Langacker, 1999), a focus that activates a cognitive domain (the size of the particles) within which the next focus can be found (the degree of solids and contaminants removal efficiency).

The corpus consists of the transcription of five lectures, available on the website of the National University of San Martín (Argentina). In addition to the focus chain concept, other categories from Cognitive Grammar are used, such as "semantic structure" (emerging from the "structure building through discourse"), "window of attention" and "baseline and elaboration" (Langacker, 2014 and 2016; Author, 2024). Among the results of the qualitative and quantitative analysis, the leading role of different kinds of peripheral adverbs (focus and modifying adverbs) and of adverbial constructions in the process of construal of the evaluative sequences is highlighted. By means of these strategic grammatical resources, not only the scientific value of the evaluative judgements is emphasized, but also their persuasive value.

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How Chunking Has Led to Misalignment and Readjustment in Navajo

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Keywords

chunking, compositionality , reanalysis, constructionalization, idiomatization.

Abstract

The principles of compositionality, as a methodological device or framework, have been increasingly challenged by cognitive and usage-based linguists. This opposition has not arisen in isolation but is supported by data that researchers continue to verify and reinforce. This talk extends this line of inquiry to Navajo, an Apachean language spoken in the American Southwest. I explore how chunking has contributed not only to idiomaticity and grammaticalization processes but also to morphophonological readjustment, apparent grammatical misalignments, and constructional fluctuation.

I examine these effects and changes in certain morphological and lexical patterns of what I term Navajo holoxemes, a neologism, along with idiomatic constructions. Holoxemes encode the fundamental morphosyntactic and predicational information. In order for a construction to be admissible, there must be a general featural concord in terms of person, number, animacy, and other inflectional values. Particular holoxemes violate this core principle. Out of constructional contexts, these irregular forms are unacceptable on their own. The holoxemes in (1) and (2a) demonstrate the difference between a regular comitative construction and an ostensible misaligned type.

(1) *bił naashnish*
bił naash-nish
3OBL.COMIT MOD.ASP.1SBJ-work.ASP
'I work with her/him/them'

(2) a. *bił ndaashnish*
bił ndaash-nish
3OBL.COMIT MOD.PL.ASP.1SBJ-work.ASP
'I work with them (individually)'

b. **ndaashnish*
ndaash-nish
MOD.PL.ASP.1SBJ-work.ASP
'Multiple singular first persons work'

When the form in (2a) is phrasally unaccompanied, i.e. (2b), there is a conflict between the plural maker and the first-person cross-index (cf. Haspelmath 2018), invoking a semantic conundrum. Interestingly, the Navajo lexicon comprises of similar

constructions, suggesting a broader pattern of structural adaptation. This study seeks to identify the cognitive and linguistic mechanisms underlying these phenomena.

Building on usage-based approaches, I propose that these misalignments stem from chunking and entrenchment—processes where frequently co-occurring forms become reanalyzed as fixed units, driving morphosyntactic reorganization (Bybee 2006, 2010; Goldberg 2006). While chunking enhances processing efficiency and grammaticalization, it also disrupts paradigmatic regularity, leading to realignment, where lexical patterns adjust to holistic forms at the cost of compositionality and analyzability. Moreover, the observed constructionalization suggest that Navajo's complex morphology has undergone gradual diachronic change, leading to reification and idiomatization in synchronic usage (cf. Bybee & Moder 2017). Once reified, Navajo holoxemes foster reanalysis and other kinds of collocations, forming unanalyzable wholes at the phrasal level.

Rather than treating these misalignments as anomalies, I argue they are emergent properties of a system shaped by cognitive and communicative pressures. This study contributes to understanding constructional change and grammatical reanalysis in Apachean languages, emphasizing a dynamic, usage-based perspective over rigid compositional models (cf. Langacker 1987, 2008).

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Frankensteining the word: Compositionality and nonconventional innovation

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Keywords

compositionality, innovation, chunking, token frequency, type frequency.

Abstract

Are spoken and signed language users aware of components of complex linguistic structures they use? Bybee and Moder (2017) suggest that because complex linguistic "chunks" are analyzed as wholes, the parts that make up compositional sequences are not generally at the level of cognitive awareness. Yet Bybee and Moder do agree that there must be some flexibility in terms of processing the parts of complexes, and Sweetser (1999) suggests that this has to do with semantic compositionality. In a usage-based look at compositionality in multimodal discourse in both spoken and signed languages, Pleyer et al. (2024), while agreeing that compositionality is fundamental to languages, suggest that idiomaticity also plays a significant role in the usage and meaning of constructions.

Both spoken language and signed language users are able to manipulate parts of complex structures in innovative ways, suggesting that they do have some access to compositionality. This paper examines cases where compositionality is manipulated as discourse innovation often in nonconventional (Enfield 2009, 2013) ways.

It is common in English to turn nouns into verbs, and once the case, verb morphology is available to speakers. Here we focus on progressive forms of verbs ending in *-ing*, and claim that the level of access to the word's compositionality depends on several factors. Forms with the least access to compositionality tend to have higher token frequency (*patterning*, *transitioning*, *trending*) and are apt to be processed as chunks, words less frequent are intermediate (*actioning*, *workshopping*) and may occur in certain niches (*friending*, *workshopping*, *verbing*). As each such verb becomes more frequent, its token frequency contributes to type frequency, and as type frequency increases, a network (Bybee 1985) forms of virtually any noun (>verb) + *-ing*. Each resulting progressive form would at an early stage be an innovation, with new innovations at first not forming a processing chunk, as its use for a given speaker is not yet frequent enough, a current example being *Frankensteining* (to patch together), with their status as actual words considered somewhat unconventional. Examples are collected from social media (Facebook, Reddit, etc.).

Nonconventional innovation also occurs in American Sign Language (ASL) with gradient access to compositionality in terms of processing. Lexical signs have specific handshapes, movement patterns, and locations on the body or in space. Innovations may occur if, for example, an alternate location is chosen, when the new location adds a meaning or inference not apparent in the original sign. Therefore MISUNDERSTAND, canonically located at the forehead, can be articulated on the nose to mean an

unexpected unpleasant taste (Canadian prairies dialect), which is a fairly conventionalized pun. MEETING, canonically located in the space in front of the signer, can be articulated at the forehead to mean a particularly cerebral meeting discussion, again a pun, but still considered a nonconventional form, less likely to be processed as a chunk. Examples are collected from a corpus of ASL, and YouTube.

Here we claim, therefore, that in both spoken and signed languages compositionality is gradient, depends on token and type frequency, and innovation status.

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Emergent decomposition of gestures: The case of gesture families

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Keywords

Conventionalized Gestures, Compositionality, Stabilization and Sedimentation, Hybrid Gestures, Recurrent and Emblematic Gestures

Abstract

This talk offers insights into observations on fully and partially conventionalized gestures. It brings to the attention of cognitive linguists Kendon's and Poggi's work on Italian gestures which led Kendon to propose the idea of gesture families as groupings sharing a kinesic core and a semantic theme, but differ in movement patterns (Kendon 2004: 227). The example case of such a systematic form-meaning variation was a stereotypical Italian gesture: the Finger Bunch (Poggi 1983). Poggi uncovered two distinct uses of the Finger Bunch, "asking a true question" and "asking a pseudo-question" which show a kinesic difference: when asking a true question, "the up down movements are small in amplitude, and only the forearm is extended toward the addressee" (Kendon 1992: 100), when asking an ironic question "the up-down movements are slower, there are more of them, they have greater amplitude, and they tend to be made with the whole arm, not just from the elbow" (Kendon 1992: 100). I suggest that what we observe here are emergent forms of de-composing a holistic movement gestalt including semanticization of elements of form and initial stages of an emergent kinesic-semantic network.

Kendon describes three families of Italian gestures: the precision grip (Ring and Bunch hand shapes) and two families of the Open Hand (OHP, OHS, palms down or up) (Kendon 2004). My own work, revealed that also German speakers dispose of a repertoire of conventionalized gestures and at least some of them group into families (Bressem & [Author] 2014a, b). In our comparative analyses it became apparent that some gestures were hybrids of form and meaning (e.g., recurrent gestures) while others

were fully conventionalized (e.g., emblematic gestures) (Ladewig 2024; [Author] 2014, 2017, 2018). My comparative micro-analysis of Precision-Grip or Ring gestures revealed two kinds of stabilization: (1) a complete stabilization of kinesic form and meaning and (2) a de-composition into stabilized and variable aspects of form and meaning. When the Ring is fully stabilized it expresses perfection and excellence. It functions like a lexical unit or a phrasal construction. When, the Ring is partially stabilized, it expresses the preciseness of an argument. Here only the as-if action of grasping a tiny object with index and thumb is stabilized, all other kinesic parameters are variable and adapt to the moment-by-moment affordances of speaking ([Author] 2014). This is an example of de-composition. The two are members of a family because they share the hand-shape (as-if grasping a tiny object) and a core semantic theme: an idea of precision and they are siblings within this family because they vary in other kinesic parameters. In my talk, I will illustrate this with further examples.

In conclusion, I propose that gesture families are kinesic-semantic networks which evolve through emergent processes of de-composition, selective stabilization and semanticization. This points to compositionality as emergent and embodied facet of languaging. There is one caveat to this proposal: its focus on hand-gestures. Clearly issues of simultaneous and linear co-articulation must be taken into consideration in future studies.

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Does Usage-based Construction Grammar make Compositionality Obsolete?

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Keywords

compositionality, construction grammar, signed languages, multimodal constructions

Abstract

The principle of compositionality, that the meaning of complex expressions is determined by individual components and the rules governing their combination (Partee 2004), has long occupied a central role in formal syntax and semantics. However, many of the basic tenets of Cognitive Linguistics seem at odds with a strict notion of compositionality, owed in part to the focus of early constructional approaches on the treatment of idiomatic and multi-word expressions which are not the sum of their individual units (Fillmore, Kay & O'Conner 1988; Israel 1996). Moreover, usage-based approaches take meaning to be emergent, constructions to be more than the sum of their compositional parts (Goldberg 1996), and novel expressions to be understood by way of analogy rather than atomic composition of units by way of rules (Bybee 2001). This paper looks at data from both signed languages and spoken languages which represent different challenges for traditional compositional analysis, including context dependence, ambiguity, and idiomaticity.

Signed languages offer a unique perspective on compositionality, as their grammar and meaning-making processes are deeply rooted in visual-spatial affordances. While compositionality traditionally assumes analyzability and systematic combination, signed languages demonstrate that meaning frequently emerges through constructions that resist strict decomposition. So-called 'classifier constructions,' in signed languages, exhibit high degrees of iconicity and context-dependence. Classifier construction interpretation is dynamically shaped by the use of space, movement, and context. These constructions challenge conventional notions of compositionality by

showing that meaning is not merely a function of discrete morphemes but is co-constructed through use in context.

Next, we examine evidence from multi-channel constructions in signed languages (ASL, LSQ), which include manual, facial, and bodily movements in a single utterance and co-speech gesture in spoken language (German). Like speech-co-speech gesture constructions, multi-channel constructions exhibit simultaneous manual and non-manual components. This parallel challenges a strict dichotomy between compositional and non-compositional meaning, as language in both modalities relies on emergent, not easily separable meaning making mechanisms.

Lastly, we discuss the recent work on idiomatic language and multi-word expressions in signed and spoken languages which show gradience in their form and function. More frequent constructions show semantic changes which are not applicable across all examples of the same "compositional unit" in other constructions. Such divergence may result in two possible readings of the same construction or a difference in meaning of the "same unit" across different constructions.

As this talk anchors the special session on compositionality in cognitive perspective, it brings together evidence from several sources to call for a reanalysis of compositionality. This session shows that signed languages (American Sign Language and Quebec Sign Language) and spoken languages (German, Navajo, and Dene Suline) force us to reinterpret compositionality as a gradient and context-dependent phenomena. We offer compelling evidence that meaning arises from usage-based patterns and multimodal affordances, rather than rigid compositional rules. We suggest such evidence begs us to refine theoretical models to better reflect the emergent, embodied, and multimodal nature of language.

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Compositionality or contextualized collocation? The linguistic hothouse vs. the real world in form-meaning mapping in language

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Keywords

collocation, holophrasis, oralcy, (non)compositionality, Athapaskan(Dene).

Abstract

An objectivist, structuralist, and "textualist" bias perseverates in linguistics despite nearly 40 years of cognitive linguistic (CL) research that questions the primacy of constructed and decontextualized sentences––the linguistic hothouse alluded to in the title. For far too long, textbook examples of such stilted but well-formed clause structures, stripped of any situational stance-taking or subjectivity, have served as the target and source of grammatical theorizing (e.g. *John gave the book to Mary*). By contrast, CL approaches, taking a usage-based and constructionalist posture, champion corpus linguistic methodologies and multimodal data, both of which lead to a view of language that, simply put, cannot "un-situate" an expression from its context of use, idiomatic conventional patterns, nor from the body and mind that expresses it (e.g., Langacker's famous *My cat is crawling with fleas* (1991: 347) or the classic line said to a companion in a car park, *I'm over there*). This talk finds commonalities in the polysynthetic Athapaskan language, Dene Sųłiné (ISO 639-3: chp), and spoken English in terms of the highly compressed and idiomatic nature of everyday language use. When we add signed languages to the mix, it is reasonable to conclude that polysynthetic languages and spoken varieties of seemingly analytic languages like English or Spanish share an essential ingredient––face-to-face interaction, especially amongst familiars, that fosters a certain degree of chunking (non-analyzability), figurativity, and idiomaticity (non-compositionality)––the real world semi-analytical and semi-compositional situation faced regularly by speakers and signers.

Polysynthetic languages are overwhelmingly oral. Oral languages are typically associated with small speaker groups describable as local and inward-oriented (Grace 1997, Crowley 2000). The recent corpus revolution in linguistics has caused a renewed focus on spoken varieties of languages, even languages with thick and deep written records. Corpus analyses come with a concomitant realization that languages may be less productive and compositional than we thought, with speakers opting to rely on a smallish set of lexically frozen and semantically opaque, although pragmatically rich, collocations (Altenberg 1998, Sweetser 1999, Bybee & Moder 2017). This talk argues that collocations from spoken varieties of English can be characterized similarly to polysynthetic languages: as holophrastic, highly compressed, and idiomatic. At the same time, the compressed structures we associate with polysynthetic languages are rarely considered as artifacts of their speakers' socio-cultural contexts, contexts which revolve around subjective, face-to-face conversation (cf. Wray & Grace 2007).

To take two simple examples, the forms in (1) are both transcriptions of spoken expressions in Dene Sųłiné and English, respectively. The analysis in (1a) is regarded as an insightful deconstruction of a highly compressed and fused verbal word wherein four abstract inflectional morphemes are shoehorned into a single pre-stem syllable. On the other hand, the analysis of the English utterance in (1b) is pure invention. The point is, under conditions of familiarity and oralcy, even English starts to seem highly synthetic. The central concern is how we regard the analysis in (1a) versus (1b). If we take the latter to be analytical overkill, while the former to be insightful morphosyntactic analysis, then we are being hypocritical. In both cases, we are effectively starting with a spoken utterance and applying what we've deduced from detailed comparison and contrast with other extant forms. If we treat them equivalently, then we might need to admit that spoken (or signed) forms of language share a great deal of bundling and opacity that brings assumptions about full compositionality and analyzability into question.

Examples

(1) a. hu̧lzé
< he-ghwa-n-l-zé
incept-opt-2sgS-voice-hunt/go
'you will start to hunt'
(Li 1946: 414)

b. /aĩŋənəgo/ (< I'm gonna go)
aĩ-ŋən-ə-go
1sg-fut-complz-go
'I will go'
(Rice 2017: 207)

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Mouth actions in Quebec Sign Language: Compositional units or context-dependent gestures?

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Keywords

Mouth actions, signed language, multimodality, compositionality, context-dependent.

Abstract

Enactment in signed languages allows signers to depict others' actions through their own body (Cormier et al., 2015), letting interlocutors experience the reported event as observers (Clark & Gerrig, 1990). Gestural elements in enactments mirror human bodily experiences, making them relatable and often iconic (Cassell & McNeill, 1991; Taub, 2001). In Quebec Sign Language (LSQ), complete enactment—where the signers use their entire body—is less common than partial enactment, which integrates gestural elements alongside signed narration (Saunders, 2016). While certain articulator forms that highlights perspective shifts to signal enactment, LSQ lacks conventionalized forms for (re)enacting actions, which are highly iconic and may involve various articulators (e.g., head, body, arms, hands, eye gaze, eyebrows, mouth).

The study of different functional use of mouth actions—namely enacting, morphological, and pragmatic mouth actions (Crasborn et al., 2008; Dubuisson et al., 1999)—highlights signers' abilities to integrate multiple layers of information simultaneously, as observed in LSQ (Saunders, 2024). Specific articulators can be partitioned to fulfill different functions: for instance, hands and arms convey signed narration from the signer's perspective, while other articulators maintain enactment through body partitioning (Dudis, 2004).

The study of mouth actions in LSQ further reveals that these actions may be produced from either the perspective of an actant within an enactment or the signer as a narrator. In the latter case, morphological mouth actions add adverbial information to the signed narration, while pragmatic mouth actions indicate the signer's stance towards the content, integrating both enactment and narration. Additionally, certain mouth actions are identified as wholly morphological (puffed/sucked cheeks, tongue out, pout), wholly pragmatic (opened mouth, raised upper lip), or bifunctional, serving both functions (mouth shrug, pursed lips, stretched lips, expiration). This raises questions about their conventionality, as even single semantic unit can be expressed through various mouth actions. For example, intensity as an adverbial feature can be conveyed through the following mouth actions in LSQ: expiration, mouth shrug, pout, puffed/sucked cheeks, pursed lips, and stretched lips.

Beyond their gradient nature, mouth actions frequently co-occur with other articulators and signed narration. Their meaning is inferred through contextual information provided by both signed narration and gestural elements in enactment. A

preliminary test with LSQ signers examined whether a given mouth action could be transferred to a different context. The preliminary results reveal that the meaning was not always preserved, supporting the notion that meaning emerges within larger linguistic constructions (Goldberg, 2015). This finding also underscores how the interpretation of mouth actions is shaped by the context, including the "assumptions, motivations, [and] attitudes" of the utterer and their audience at the time of the utterance (Wierzbicka, 2006, p. 700).

It is proposed that that mouth actions exhibit composite-like properties, wherein different forms can be employed through body and facial partitioning. However, their usage remains noncompositional, as meaning depends on how they integrate with other multimodal articulators to co-construct meaning in LSQ, which may be adjusted to accommodate a specific mouth action in a given context.

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'Jɔɔgye Kumpala, Maame Container': A Cognitive Linguistic Study of Metaphors Used by Auntie Naa on *Ɔyerepa Afutuo*, Ɔyerepa Radio/TV, Kumasi, Ghana

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Keywords

cognitive linguistics, conceptual metaphor, cultural grounding, Akan.

Abstract

This is a study of metaphors used by Auntie Naa to introduce her programme and to connect with her audience. Our aim was to identify the metaphors she uses to introduce her programme, examine the cultural grounding of the metaphors and explore the purposes for which those metaphors are used. Auntie Naa, Eunice Naa Amerley Nortey is the host of the famous *Ɔyerepa Afutuo*, a show on Ɔyerepa FM and TV, a local-based media house located within the Kumasi metropolis of Ghana. The program discusses social and family issues and seeks to settle various forms of disputes among individuals and families. There is also a segment on the program dedicated to callers' interaction. *Ɔyerepa Afutuo* is a Twi program. Lakoff and Johnson's (1980) Conceptual Metaphor Theory (CMT) served as the framework for the study.

Thirty (30) transcriptions of Auntie Naa's introductory remarks on her *Ɔyerepa Afutuo* were analysed. The analysis revealed a small set of primary metaphors - LIFE IS A JOURNEY, AUTHORITY IS UP, HIGH STATUS IS UP/LOW STATUS IS DOWN and IDEAS ARE FOOD, which provided the structures for the complex and image metaphors we identified. The metaphors resonate with the culture, beliefs and values of Auntie Naa. Among others, the analysis revealed that she uses the metaphors to build trust in her audience and for positive self-presentation. For example, in extract (1), we inferred the metaphor ƆYEREPA AFUTUO IS A CONTAINER OF INFORMATION OR KNOWLEDGE. Here, the source domain is a container while the target domain is Auntie Naa, and the entire

program or the FM station. From (1) below, we learn that Auntie Naa frames herself as a repository of knowledge, one full of knowledge or information.

(1)	Maame	container.	Yɛn	nko ara	na	yɛn	container
	woman/mother	container.	1PL SUBJ	only	FM	POSS	container

no	mu	nnoɔma	yɛ	ahodoɔ	ahodoɔ	ahodoɔ
DEF	inside	things	do	different	different	different

'Woman/Mother container. We are the only ones who have our container filled with/full of different items.'

The richness of the metaphor extends beyond its core structure. The term *Maame Container* infuses the image with cultural significance. "Maame" translates to "woman" or "mother". It carries the weight of respect and wisdom – qualities often associated with mothers, elders, or women of stature in the Akan culture. Using "maame" instead of just "container", Auntie Naa elevates the image beyond a mundane box; she transforms it into a container imbued with the wisdom and respect inherent in the concept of a woman or a mother. It is not just any container; it is one overseen by a wise and a respected figure. This linguistic choice instills the 'container' (the host and the program) with a sense of authority and trustworthiness, assuring the audience that the knowledge it holds is valuable and reliable. This word choice also positions Auntie Naa herself within the metaphor. She becomes more than just a show host; she embodies the "maame", a source of knowledge and wisdom guiding the audience. Associating herself with this concept, Auntie Naa builds trust and credibility with her listeners, who are more likely to be receptive to the knowledge shared on the show, as it comes from a respected and trustworthy source. This metaphorical framing assures listeners that the knowledge held within the "container" is not only plentiful but also reliable and valuable.

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"Jogar Algo Pela Janela": a Construction Grammar Approach to Emotional Expression.

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Keywords

Construction Grammar, emotion, metaphor, embodied cognition, syntax and semantics

Abstract

The relationship between language and emotion has been widely studied in Cognitive Linguistics, particularly regarding how emotions are linguistically expressed at different levels of analysis. This study explores the explanatory potential of Construction Grammar (FILLMORE et al., 1988; GOLDBERG, 1995) for phenomena related to the linguistic expression of human emotional experience. Specifically, we investigate how a meaning-related phenomenon concerning the expression of feelings (which involve a qualitative awareness of emotions) at the syntactic level can be analyzed through Construction Grammar, in dialogue with studies on the inseparable relationships between emotions, cognition, and language (SCHERER, 2005; DAMÁSIO, 1994; CAVALCANTE & MILITÃO, 2016).

We focus on the construction "*jogar (algo) pela janela*" (to throw something out the window), a semi-idiomatic expression in Portuguese that results “from the importation of a conceptual schema wielded in a judicative illocution (i.e., censure)” (SALOMÃO, 2002). This expression is metaphorically used to indicate the rejection or disregard of something perceived as worthless, as in “*Ao negar a importância da vacinação, aquele médico jogou seu diploma pela janela*” (“By denying the importance of vaccination, that doctor threw his diploma out the window”). Our hypothesis is that expressive constructions such as this one can be understood, within Construction Grammar, as form-meaning pairings that encode schematized emotional aspects of embodied experience.

To support our analysis, we draw on data from the *Corpus do Português* (DAVIES, 2016-), particularly from the News On the Web (NOW) database, which compiles journalistic texts. This choice allows us to challenge the notion that journalistic discourse is devoid of emotional expression or value judgment. Our findings indicate a paradigmatic alternation between the verbs jogar (*to throw*), atirar (*to hurl*), and deitar (*to toss*), all activating the same underlying conceptual schema. We argue that the construction "jogar (algo) pela janela" inherits its syntactic structure from the caused-motion construction X CAUSES Y TO MOVE Z (GOLDBERG, 1995) and is metaphorically reinterpreted to mean discarding something perceived as worthless. This metaphorical extension is rooted in embodied experience, as the physical act of throwing something out the window implies disregard and lack of consequence, essential aspects of the conceptualization of contempt.

To explain the cognitive structuring of this construction, we apply Conceptual Integration Theory (FAUCONNIER & TURNER, 2002). We propose that it emerges from the blending of two input spaces: (1) a physical movement schema, where an agent X discards an object Y out the window, and (2) a conceptual contempt schema, where X disregards Y. The integration of these domains creates a blended space where the physical act of discarding becomes a metaphor for contempt and judgment.

The exploratory findings of this study reveal the strong explanatory potential of Construction Grammar for analyzing emotional expression at the syntactic level. By doing so, we foster greater familiarity with a topic that is central to Cognitive Linguistics, advancing a hypothesis on the expressive functionality of a syntactic construction deeply entrenched in the Portuguese language. Thus, we pave the way for future research in this area.

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Talking and Thinking about Causality in Spanish and Basque: A verbal and non-verbal categorisation study

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Keywords

causality, semantic typology, Spanish, Basque, intentionality, agency.

Abstract

Causality is a basic semantic concept that describes the relationship that occurs between two events: the cause, initiator of the action, and the effect, the affected of the change of state (Comrie 1985). Previous studies on Basque and Spanish have shown that both languages offer similar linguistic strategies to encode caused-motion events on the basis of intentionality, i.e., the degree of participation of the agent (Ariño-Bizarro 2024, 2025; Ariño-Bizarro & Ibarretxe-Antuñano 2020; Filipović 2013; Ibarretxe-Antuñano 2012). However, little has been said about the possible correlation between these linguistic resources and the way these speakers categorise causality. This paper investigates this relation between the way speakers talk about causality and the way they think about it (Tierry 2016; Yoshinari et al. 2010).

Based on these studies, this talk addresses this research question: Do Spanish and Basque speakers categorise causality in the same way? Data were collected using Causality Across Languages project's videoclip stimuli (CAL, Suny-Buffalo), a set of 58 live action videos of interactions among humans, natural forces and inanimate objects. Thirty-two native European Spanish speakers (Aragón) and twenty two native Basque speakers (Western, Ondarroa) participated in two tasks: (i) a non-verbal categorisation task where participants have to attribute different degrees of responsibility to the actions performed in the clips, and (ii) a verbal description task, where participants responded to the question "what happened?".

Results show that Spanish and Basque share similar linguistic structures to explicitly encode the semantic opposition between Intentionality vs. Unintentionality

(e.g. Sp. *se le cayó* [CL.3SG.ACC CL.3SG.DAT fall.3SG.P] / Bq. *erori zitzaion* [fall AUX.3SG.DAT.3SG.ABS] vs Sp. *Lo tiró* [CL.ACC THROW.3SG.P] / Bq. *bota zuen* [throw AUX.3SG.ERG.3SG.ABS]). However, the way speakers conceptualise and categorise causal events is significantly different (U = 78, p = 0.01, r = 0.68). Our study shows that, when assigning the degree of responsibility in causal events, Spanish speakers arrange causal events on the basis of the agent's intentionality and Basque speakers, on the agent's involvement. These categorisation differences correlate with their verbal encoding. Both languages partly coincide in the linguistic resources to explicitly distinguish accidentality and intentionality. However, they differ in ergative vs. nominative subject case assignment marking. Following studies on the processing of noun morphology in Basque and Spanish (Zawiszewski & Laka 2020; Zawiszewski et al. 2011), this difference might be one possible explanation for these results.

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Metonymy triggers and degree of metonymy activation

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Keywords

metonymy, metonymy triggers, frames, active / dormant metonymy, purely inferential metonymy

Abstract

The presentation first clarifies the notion of *metonymy trigger* (a contextual factor facilitating the operation of conceptual metonymies) and classifies the various types of triggers at work in a selected set of the metonymies gathered in the University of Córdoba Metonymy Database, a detailed online research tool developed by a group of researchers led by the author. One of the fields in its analytical entry model is precisely metonymic triggers (Hernández Gomariz 2018). They can be co-textual factors, typically the lexicogrammatical co-text, or other types of contextual factors, especially cognitive factors such as frames or the situational context. Another important distinction is the cline distinguishing *active* from *inactive ("dormant")* metonymies (Barcelona 2024), the former guiding the online activation of a constructional or purely pragmatic meaning, the latter only potentially guiding that meaning. The first step in the analysis has been the selection of 50 database entries: 25 with metonymies motivating constructional meaning (13 conventional lexical meaning / 12 syntactic constructional meaning); and 25 with metonymies guiding *mainly* non-constructional meaning (13 indirect speech acts / 12 (other implicatures). The second step has been the development of a data collection model to classify the various types of triggers registered in the database entries. The third step has been the analysis of the data in terms of the "triggering

power" (TP) of the triggers present in each entry (High [H]; Low [L]; Determinant [D], Not Determinant [Not D]) and the active (act) / dormant (dm) character of the metonymy involved. The fourth step was the examination of the results of steps 2 and 3 to identify patterns in terms of trigger combination and triggering power. This step yielded a number of patterns for each of the four types of metonymy-motivated / guided meaning, which cannot be summed up in this short abstract, but (oversimplifying very much) the general picture that emerges is as follows: When metonymy operates over constructions, the lexicogrammatical context triggers a metonymic interpretation qualified by the frames activated by the lexicogrammatical co-text and / or by other contextual triggers, as in the phrase *book industry*, where the head *industry* triggers the metonymic reading of *book* as activating processes or actions related to books (publishing, editing, selling, etc.), and the relevant frames are the BOOK frame, the PUBLISHING frame, etc. When it is a "purely inferential" metonymy (Barcelona 2024), like the metonymy / ies guiding the recognition of an indirect speech act, the main triggers are normally cognitive, like the frame-like "speech act scenarios" (Panther 2022) and the wider co-text. *It's too cold here*, said by someone looking at a wide-open window next to someone else, would normally be interpreted as a request to close that window. The inventory of the specific triggers prompting metonymic operations and their relative weight in those operations is a valuable contribution to the understanding of metonymy.

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Entrenchment and individual differences in language usage

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Keywords

entrenchment, individual differences, production/comprehension.

Abstract

Entrenchment is a well-known concept in Cognitive Linguistics. Speaking somewhat metaphorically, we say that highly frequent words or constructions are more entrenched and are more easily accessed in production and comprehension. The cognitive mechanism underlying entrenchment is open to debate, but it is clear that repeated exposure to linguistic structures in usage events strengthens memory representations (Divjak & Caldwell-Harris 2015). In this presentation, I explore the consequences for our understanding of entrenchment when we take into account divergence in the individual's patterns of language production (output) versus comprehension (input).

While we know that there are disparities between the language that we produce and the language that we hear, I argue, based on corpus data, that variation in the language produced by individuals is greater than generally assumed. This is important because the wider the variation, then, all things being equal, the greater the distinction between the language of production and language of comprehension, which means that we cannot hold a one-dimensional view of entrenchment.

It is, of course, difficult to fully capture individual usage. I assume though that similar processes occur in each genre making up an individual's linguistic repertoire. Here, I use corpus data of the speech of individuals derived from White House press conferences. I show that (i) individual usage patterns appear to be stable over a period of at least a year or two; (ii) individual patterns are maintained despite differences from general usage within a discourse community; (iii) inter-speaker variation is typically greater than intra-speaker variation based on samples taken over different time periods; (iv) individual variation is based on core aspects of language and not simply on peripheral idiosyncrasies. For part of the empirical data, I examine various lexical patterns and also the English way-construction.

Having established the existence of strong individual differences, we see that for each individual there is a considerable difference between the language produced versus the language comprehended. Consequently, a processing-neutral notion of entrenchment within a cognitive model of grammar is insufficient. We will explore the idea that we need to consider models that allow the pathways of production, and their entrenchment, to be somewhat separate from the pathways associated with comprehension.

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Performance on Verbal Fluency Tests Conducted in Virtual versus In-Person Settings Among Lactating Postpartum Women in Córdoba, Argentina

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Keywords

neuropsychology, language tests, telemedicine, information technology, postpartum.

Abstract

Introduction: New technologies enable patient care by overcoming barriers like disease-related isolation or mobility issues. They offer benefits such as cost reduction, intervention continuity, and focused care. Virtual environments have proven to be a promising medium, but lack essential in-person experiences, such as physical interaction and subtle non-verbal cues (e.g., eye contact, gestures). Evidence on their effectiveness remains limited (Alonso et al., 2021; Mbunge et al., 2022). Postpartum women, due to hormonal, physical and cognitive changes and breastfeeding, are particularly vulnerable and require frequent follow-ups, where virtual tools can play a key role (Sheikh et al., 2024). This study aims to compare verbal fluency test (VFT) performance in in-person versus virtual settings among lactating postpartum women in Córdoba, Argentina.

Methods: A cross-sectional study was conducted in 2023 and 2024. The sample included 40 participants assessed in a virtual setting and 40 in an in-person setting. Participants were categorized by age (<35 and ≥35 years) and education level (<12 and ≥12 years of formal education, incomplete or complete, respectively). They reported postpartum days and parity and completed two VFTs: one semantic (animals) and one phonological (words starting with the letter "P"). The number of correct words and errors (i.e., repetitions or intrusions) were recorded. Total scores were analyzed based on the evaluation setting, considering sociodemographic variables, using multiple regression analysis in Stata18.

Results: The sample included 85% of participants aged <35 years, 70% with completed secondary education, and 60% multiparous, with a mean postpartum duration of 145.93 days (119.13). In the semantic VFT, the mean number of correct responses in the virtual setting was 20 (5.47), and the mean errors were 1.5 (1.15). In the in-person setting, the mean correct responses were 13.85 (5.09), and the mean errors was 1.56 (1.2). For the phonological VFT, the mean number of correct responses in the virtual setting was 14.28 (3.94), and the mean errors was 0.73 (1.2). In the in-person setting, the mean correct responses was 8.63 (4.57), and the mean errors was 0.63 (0.95) (Table 1 - see PDF). The women assessed in-person demonstrated fewer correct responses compared to the virtual group on both the semantic ($\beta = -0.53$; $p > 0.001$; effect size = 0.31) and phonological ($\beta = -0.49$; $p > 0.001$; effect size = 0.34) VFTs, after adjusting for confounding variables. However, there were no significant differences in the number of errors between the two groups.

Conclusion: The findings suggest that virtual settings can lead to improved performance in VFT among lactating postpartum women, with higher correct response rates compared to in-person evaluations. This highlights the importance of the setting for interpreting results. While the evidence is promising, further research is needed to expand on these findings, optimize virtual care strategies, and better understand the clinical implications for neuropsychology.

Table 1

Sociodemographic Characteristics and Performance in Verbal Fluency Tasks According to Testing Environment

	Virtual	In-person	Total
Age			
<35 years	75% (30)	95% (38)	85% (68)
≥35 years	25% (10)	5% (2)	15% (12)
Educational level			
Incompleted Formal Studies	0% (0)	60% (24)	60% (24)
Completed Formal Studies	100% (40)	40% (16)	70% (56)
Parity			
Multiparous	50% (20)	70% (28)	60% (48)
Primiparous	50% (20)	30% (12)	40% (32)
Postpartum days	186.58 (109.7)	105.28 (115.4)	145.93 (119.1)
Correct responses in semantic VFT	20 (5.5)	13.85 (5.1)	16.93 (6.1)
Incorrect responses in semantic VFT	1.5 (1.2)	1.52 (1.2)	1.51 (1.5)
Correct responses in phonological VFT	14.28 (3.9)	8.62 (4.6)	11.45 (5.1)
Incorrect responses in phonological VFT	0.73 (1.2)	0.62 (1)	0.68 (1.1)

Note. VFT = Verbal fluency test.

Table 2

Results of the Multivariate Logistic Regression Analysis on Verbal Fluency Task Performance by Testing Environment

	Semantic VFT		Phonological VFT	
	Corrects	Errors	Corrects	Errors
Setting	β = -0.53 p < 0.001 η2 = 0.17 (0.04-0.32)	β = -0.05 p = 0.775	β = -0.49 p = 0.001 η2 = 0.15 (0.03-0.3)	β = -0.09 p = 0.587
Age	β = 0.18 p = 0.082	β = 0.16 p = 0.194	β = 0.17 p = 0.103	β = -0.05 p = 0.654
Educational level	β = -0.14 p = 0.295	β = -0.1 p = 0.513	β = 0.02 p = 0.850	β = 0.05 p = 0.752
Parity	β = -0.15 p = 0.165	β = -0.01 p = 0.965	β = -0.09 p = 0.377	β = -0.04 p = 0.740
Postpartum days	β = -0.05 p = 0.638	β = -0.11 p = 0.382	β = -0.03 p = 0.743	β = -0.19 p = 0.129

Note. β = standardized coefficient; η2 = eta-squared coefficient for effect size. Refference categories as opposite predictors: Virtual setting, ≥35 years, formal education incomplete, primiparity. Postpartum days as continuous variables.

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Using local eye-tracking parameters and multifractality measures to investigate the effect of plain language on reading processing: a pilot study

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Keywords
reading comprehension, plain language, eye-tracking, multifractality.

Abstract

LRecent evidence suggests that plain language interventions may improve reading outcomes and experiences in the scientific and medical literature (Vollenweider et al, 2018). While many studies have addressed simplifying legal, administrative, or medical language in Spanish (Bartolomé et al.,2024), few attempts have examined the impact of plain language on reading processes. A recent study by Fernandez-Silva & Núñez-Cortés (2024) found that plain terminology led to better reading comprehension of Spanish legal texts, without affecting reading speed. Eye-tracking devices allow for the recording of eye movements, providing a window to examine reading processes in real-time, and enabling the analysis of linguistic, cognitive, and contextual variables impacting reading. Word fixation times are a reliable predictor of comprehension, while fixations and regressions reflect the strategies applied by successful comprehenders (Hyona and Kaakinen, 2019). Furthermore, eye movements are consistently modulated by the complexity and coherence of texts (Torres et al., 2021). Frondén & Kaakinen (2023) analyzed legal text reading and found effects of plain language on several fixation measures, particularly among disabled readers,

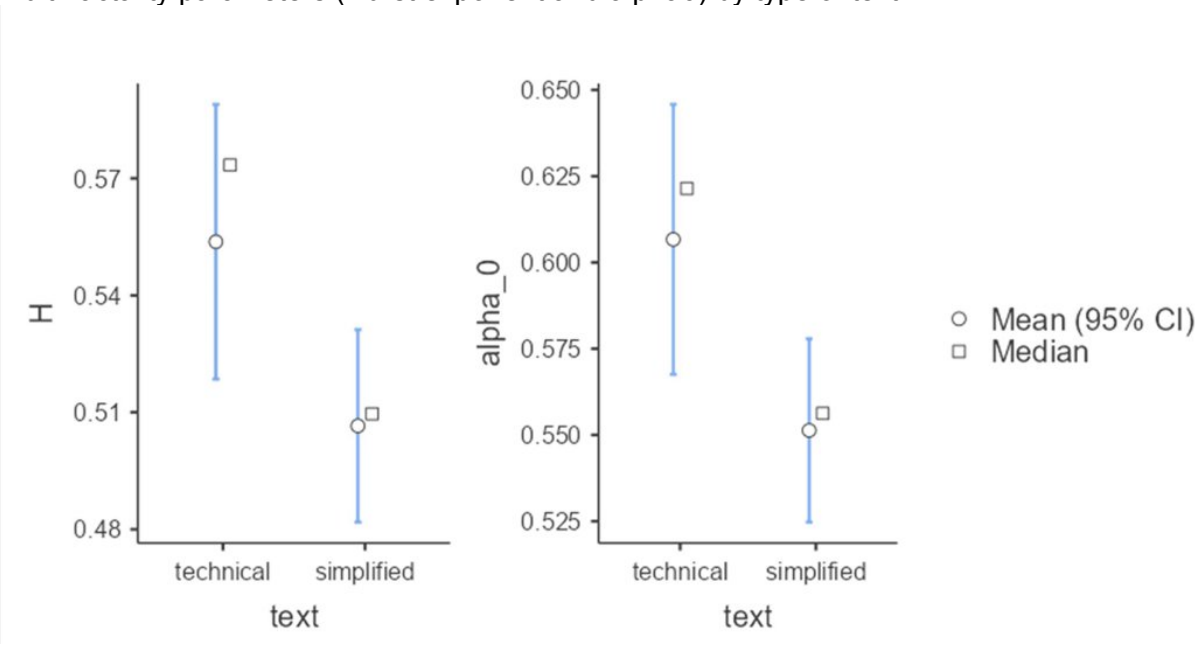
The main objective of the present study was to compare reading comprehension, speed and eye-tracking parameters while reading a technical (original) version of legal text, and a simplified one. In addition, we calculated multifractality measures, to further explore the complexity of eye-movement patterns. It has been shown that multifractal properties of eye-trackings are predictors of reading comprehension (Wallot et al., 2014) and offer further insight into reading cognitive processes (Meo et al., 2024).

The study sample consisted of 31 adult participants (ages: 19-63, M = 35 ± 17, 23 women). Participants were linguistics graduate or postgraduate students (n = 19), faculty professors (n =8), and non-faculty personnel (n = 4). They were assigned to read one of two versions of an administrative text: the original (length = 411 words) written in legal language (n = 17) or a simplified plain language version (length = 441 words) (n = 14). The text syntax was simplified following CLARA-MeD guidelines (Bartolomé-Rodríguez et al., 2024). Participants read the text on a computer screen and their eye movements were registered with a portable eye-tracking device. After reading, they answered seven literal comprehension questions, with the text still available for reading. In addition to fixation and saccade parameters, multifractality measures (Hurst exponent – H – and Holder exponent – alpha0 –) were calculated from the whole time series using Multifractal Detrended Fluctuation Analysis (Meo et al., 2024).

Non-parametric tests indicated that multifractality parameters were higher for specialized text (H: U = 15, p = .013; alpha0: U = 14, p = .010) (see Figure 1). In specialized texts, comprehension improved with the number of fixations (rho = .508, p = .037), while in simplified text, it decreased with saccade length (rho = -.557, p = .038). Reading times were faster as saccade length increased, in both texts (rho = -.566, p = .001), and slower as % of regressions increased (rho = .450, p = .011).

Multifractality analysis captured differences in the complexity of reading patterns for specialized text, suggesting a more linear information extraction at word and text levels, which might indicate greater effort and difficulty. Comprehension was better in those subjects who made a more careful first reading, as reflected by the number of fixations. In simplified text, superficial reading (indicated by longer saccades) hindered comprehension. Our findings suggest differences in the reading process (cognitive effort), but not in the outcomes (comprehension and speed) between original and simplified texts.

Figure 1
Multifractality parameters (Hurst exponent and alpha0) by type of text



Note. Scores represent multifractality parameters of eye-tracking time-series, for each version of the text.

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Do depictive and descriptive forms in Norwegian Sign Language differ in morphosyntactic integration?

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Keywords

iconicity, depiction, signed language, morphosyntax, corpus linguistics.

Abstract

This study investigates how variation in semiotic expressiveness patterns with morphosyntactic integration in Norwegian Sign Language (NTS), contributing to understanding properties of depiction across modalities.

Linguistic signs may be substantively iconic, that is, depict or mimic the actual properties of referents (see also sound symbolism, contrast with diagrammatic iconicity) (Haiman 1980, Ohala 1994, Perniss et al. 2010). Ideophones — a class of marked words that depict sensory imagery (Dingemanse 2012, Haiman 2018) — found in some spoken languages do just this. The Siwu ideophone "*gblogblogblo*", directly shows the sound of bubbling to refer to bubbling. In signed languages, depiction is pervasive, given the affordances of the hands and face for direct visual representation (Wilcox 2004), and the same concept can be represented descriptively and depictively. The NTS sign SØVE ("sleep"), can be used descriptively, and can be modified to depict an actual instance of sleeping as SØVE draws on the actual positioning of the hands when sleeping (Ferrara & Halvorsen 2017) (Figure 1).

Greater expressivity, i.e. more demonstrative depiction, correlates with lower morphosyntactic integration in Japanese ideophones and is reported in other languages (Dingemanse & Akita 2017, hereafter D&A). Ideophones that are more intonationally and phonationally foregrounded and show more expressive morphology are likely to appear more to the left of the following hierarchy: quotative > collocate > predicate. Given this finding, relevant questions are: What is the modality-generalisability of D&A's claim? Does this pattern hold for systems with greater potential for depiction? Do the same

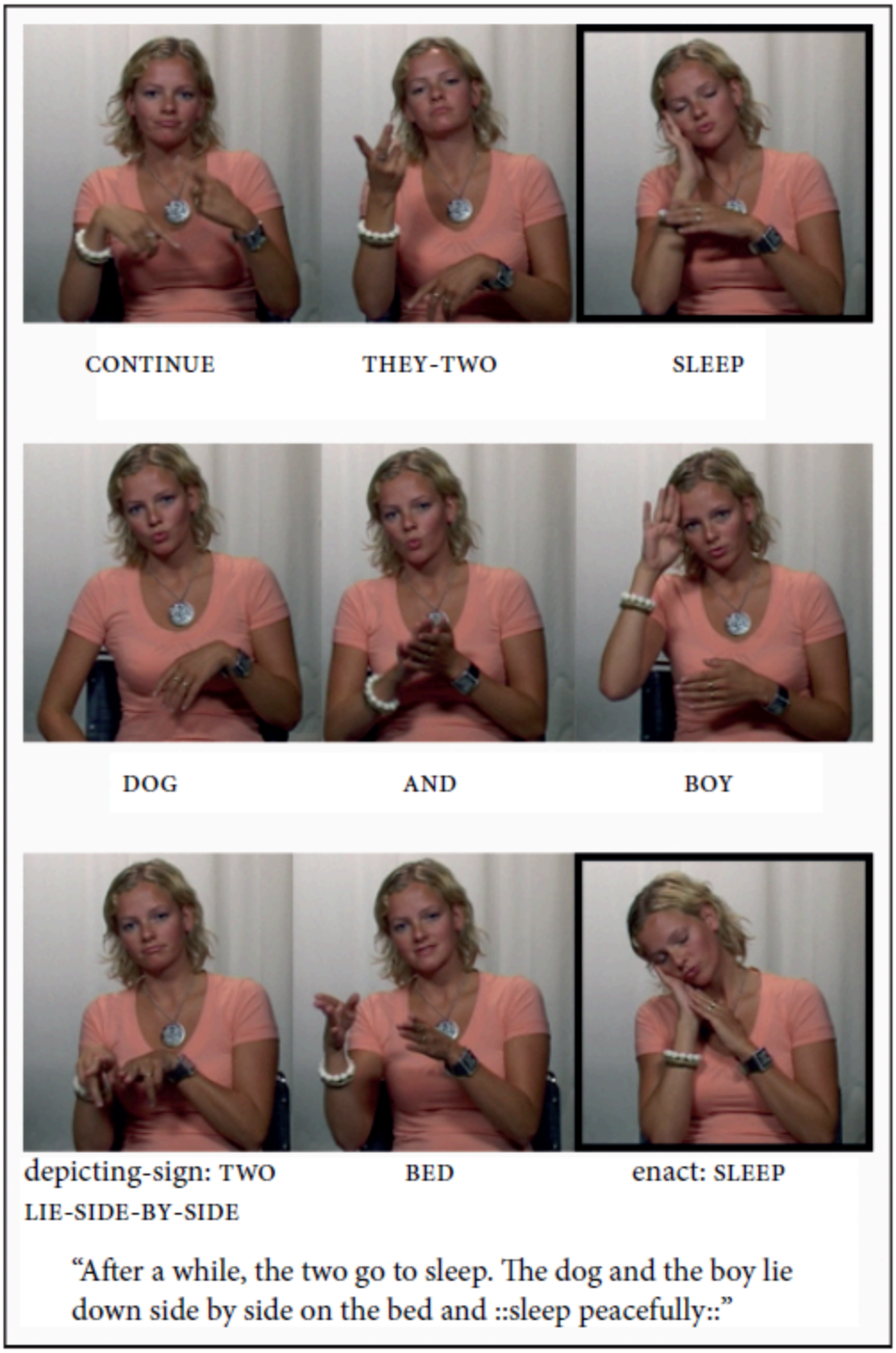
concepts with descriptive uses have different morphosyntactic properties than their depictive uses? We take on these questions using data from the Norwegian Sign Language corpus (Ferrara in preparation).

We identified 10 pairs of the most frequent concepts that are used both descriptively and depictively. The descriptive forms are primarily identified by their resemblance to citation forms as specified in the lexical database (Norwegian Signbank), and secondarily by Norwegian mouthing — mouth patterns matching Norwegian words (Vogt-Svendsen 1981, Ferrara in preparation). We identified depictive forms as an iconic departure from the descriptive form. We coded concept terms as quotative, collocational, or predicative, and operationalised phonational foregrounding as sign duration, where longer duration = greater expressivity. Intonational foregrounding and expressive morphology were not operationalised as there is little foundation to do so in the literature.

We expect the same pattern as D&A — that within depictive-descriptive pairs, depictive usages will appear more frequently as quotatives than collocates and predicates. Our findings will assess the modality-generalisability of D&A's claim and contribute to comparing depictive strategies across modalities.

Figure 1.

Descriptive use of SØVE (glossed SLEEP) and depictive use (glossed enact:SLEEP) (Ferrara & Halvorsen 2017, p. 385).



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Are Translation Equivalents Actually Equivalents or Overlaps? A Cognitive Linguistic Analysis of Spatial Prepositions

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Keywords

Spatial Prepositions; Cross-Linguistic Semantics; Semantic Attributes; Translation Equivalence

Abstract

In order to facilitate language learning and translation, prepositions, like other words, are often presented in translation pairs as if they were equivalent (e.g., *f* (MA) = *in* (ENG), *teht* (MA) = *under* (ENG)). However, research on the semantics of spatial terms (e.g., Bowerman & Choi 2001; Feist & Zhang 2019) suggests that translation equivalents are in fact quite disparate in their meanings. This study examines spatial prepositions in two languages in order to gain a deeper understanding of translation equivalence and degree of semantic overlap.

We conducted a picture-based elicitation task in which 25 Moroccan Arabic (MA) and 27 English (ENG) native speakers described 118 spatial scenes in their respective languages. The prepositions they used were first analyzed using Behavioral Profiles (BP; Gries 2010), which cluster prepositions based on co-occurrence patterns to reflect their degree of similarity. Each preposition was treated as a vector, capturing its frequency across images, and hierarchical cluster analysis was applied. However, BP results were inconclusive, as clusters primarily reflected frequency biases rather than conceptual distinctions.

To address this limitation, we conducted a semantic attribute analysis to systematically compare conceptual features underlying prepositional usage. Native speakers of each language rated all 118 pictures using 11 predefined semantic attributes: verticality, higher entity, contact, 3D inclusion, 2D inclusion, bigger entity, control by ground, animacy, functional relation, support by, and alienability. This allowed us to quantify each preposition's core spatial meaning beyond raw frequency

patterns. We then identified the most representative pictures for each preposition—those eliciting the term most consistently across speakers—and analyzed their aggregated semantic attributes to uncover the core conceptual structure of each preposition.

Findings reveal that translation equivalents often show partial overlap rather than full equivalence. While some pairs (*teht* and *under*) closely match in meaning, many others do not. For instance, *f* in MA is strongly associated with contact, a bigger ground, ground support, ground control, and alienability; whereas *in* in ENG is strongly associated with 2D inclusion, contact, and alienability. These incomplete overlaps highlight the related but distinct ways that languages categorize spatial meaning.

This divergence is further reflected in speaker agreement rates. MA prepositions consistently exhibited high speaker agreement, whereas ENG prepositions showed greater variability, suggesting multiple competing prepositions for similar spatial relations in ENG more so than in MA. These findings reinforce the idea that spatial language is structured differently across linguistic systems, potentially leading to differences in how speakers conceptualize and categorize spatial relationships.

These findings have important implications for translation, second-language acquisition, and cognitive linguistic theory. They help to pinpoint hidden conceptual mismatches that plague language learners and translators while, more broadly, underscoring the culturally and cognitively motivated differences in how languages encode spatial relations, and further challenging the notion that spatial categories are universally shared across linguistic systems.

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The Pragmatics of Posta in Argentine Spanish

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Keywords

Epistemic Modality, Scalar Implicature, Discourse Markers, Pramatic Analysis, Argentine Spanish

Abstract

This paper explores the epistemic and pragmatic functions of the expression *posta* in Argentine Spanish, with a focus on its use as a marker of epistemic commitment, intensification, and authenticity. Commonly used in informal registers and especially prevalent among younger speakers, *posta* has received limited scholarly attention. To address this gap, the present study builds on a small body of prior work (Rojas 2012), offering a comprehensive analysis grounded in cognitive-functional linguistics and a neo-Gricean pragmatic framework.

The primary objective of this study is to answer the question: What do speakers mean without saying when they use *posta*? Building on theoretical frameworks about modality systems (Palmer, 2001) and Traugott's (1989, 1995) theory of semantic-pragmatic change on the development of stance expressions, I first establish that *posta* operates as a conventional epistemic marker that encodes a strong degree of speaker commitment toward the truth of a proposition. This is followed by an analysis that draws on Gricean and neo-Gricean theories of implicature (Grice, 1975; Horn 1984, 2004) where I explore pragmatic tests such as non-cancellability to argue that *posta* conveys a conventional implicature of speaker epistemicity which cannot be negated without resulting in pragmatic infelicity.

Moreover, I argue that, beyond its core epistemic function, *posta* is also sensitive to context and it operates on a pragmatic scale (Horn, 1984) offering nuances of authenticity and intensification that would not be possible to understand from its conventionalized lexical meaning only. In terms of epistemic commitment, I propose that *posta* occupies the highest point of speaker certainty, above expressions like *de verdad* and *en serio,* holding scope over entire utterances (e.g., *me alegro posta*, *me parece muy hermoso posta*) and intensifying their meaning. In terms of authenticity, I argue that *posta* functions adjectivally or adverbially to evaluate something as genuine or real (e.g., *una conversación posta*, un *jugador posta*), also placing it as endpoint marking on the scale. These uses help demonstrate how posta is an expression that is sensitive to contextual cues.

Data for this project is drawn from various sources, involving a combination of corpus data (from AMERESCO and esTenTen23) and examples drawn from social media platforms to help show the ways in which *posta* operates as an epistemic marker as well as a discourse-anchoring device that validates a speaker's stance in interaction. Later, I use examples from these same sources to explain how *posta* needs to be interpreted by

placing it in the highest point of an epistemic commitment and authenticity scale in order to understand relationships of entailment and implicature when compared to lower-bounding expressions in that scale.

By analyzing these scalar contrasts and their context-sensitive implications, this study contributes to understanding how lexical items with conventionalized meanings remain sensitive to pragmatic interpretation. Ultimately, I propose that *posta* operates as an epistemic discourse marker that also functions to convey intensified interpretations of utterances, offering insight into how Argentine Spanish speakers use informal language to express authenticity, speaker commitment, and evaluative stance in everyday interaction.

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Interaction between metaphorical shifts in verbs' meaning and their valency patterns

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Keywords
cognitive grammar, metaphor and metonymy, verb valency patterns, verbs of speaking.

Abstract
This corpus-based and qualitative study examines the valency patterns of Croatian verbs that encode verbal activity and belong to the semantic field of verbs of speaking (VoS) through metaphorical and metonymic extensions, using a cognitive linguistics framework, i.e. conceptual metaphor theory (Dancygier & Sweetser 2014; Lakoff 1993; Gibbs 1994; etc.) and the theory of primary metaphors (Grady 1997; Lakoff & Johnson 1999). The analysis focuses on examples such as the metaphoric use of animal sounds (e.g., blejati 'to bleat') and verbs associated with physiological processes (e.g., srati 'to shit,' pljuvati 'to spit'), which often convey negative or stereotypical attitudes towards speakers or messages, or even extreme disdain. This paper contributes to the understanding of cross-domain figurative extensions of verb meanings and their valency adaptations. A representative dataset of 438 example sentences containing 152 verbs with figurative extensions targeting the domain of speaking was meticulously compiled from Croatian corpora. This dataset enabled a manual annotation and analysis of the transfer and adaptation of valency patterns across domains. The study addresses key questions: 1. What source domains are used for VoS as targets, and what might speakers aim to achieve by employing figurative uses of verbs from other domains instead of prototypical verbs of speaking? 2. Do verbs retain the valency patterns of the source domain or adopt those of the target domain? 3. When intransitive verbs are used transitively, is passivization possible, and what implications arise for object status? The findings indicate that with a metaphorical shift in meaning, verbs also often adopt new valency patterns from the target domain. Specifically, they acquire transitive forms and valency patterns characteristic of verbs of speaking. For example, verbs that primarily belong to the class of verbs of sounds made by animals are usually monovalent in their source domain (1), but when used as VoS, they can be bivalent or trivalent (2).

(1) *Jata galebova letjela su i kričala od zore do mraka.*
'Flocks of seagulls flew and screeched from dawn to dusk.'

(2) *...da im žene ne bi kričale da im se dadne malo veći honorar.*
'...so that the women wouldn't screech to him for a slightly higher fee to be given to them.'

The opposite situation is when a verb introduces a new valency pattern from the source domain to the target domain, e.g., the prepositional phrase po 'on' + locative, which was not attested with any other VoS (cf. (3) and (4)).

(3) ...je njena mačka srala po travi i onda to zakopavala.
'...her cat shat=took a shit on the grass and then buried it.'

(4) ...kada ćeš početi malo kakiti po komunjarama?
'...when will you finally start shitting on communists?'

Our examples of valency pattern change as a result of metaphorical meaning shift demonstrate that verbs can appear with arguments not explicitly subcategorized by the verb itself.

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Acquisition of motion event expression and deictic motion verbs by Czech advanced learners of Spanish

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Keywords

motion events, deictic motion verbs, second language acquisition, boundary crossing, Thinking-for-Speaking.

Abstract

One of the challenges faced by second language (L2) learners is to acquire the target language's way of motion event construal. I will present two studies that (1) examine the overall expression of motion events by a group of advanced Czech learners of Spanish as a foreign language and compare it to Spanish native speakers and (2) test whether the learner group have acquired the deictic motion verbs patterns of their target language. Whereas Spanish is classified as a verb-framed language within Talmy's (1985, 1991, 2000) typology of motion encoding, Czech is a satellite-framed language.

The first study asked to what extent learners acquire the L2's Thinking-for-Speaking (TFS) patterns (Slobin 1996), given the differences in terms of Talmy's typology between the languages. To this end, written narratives of frog stories (Mayer 1969) were analyzed (n = 14). The results showed that while learners of Spanish L2 preferred using Manner + Path verbs (*caer*, 'to fall'), as defined by Zlatev and Yangklang (2004), native speakers more commonly employed Path verbs both with (*salir corriendo*, 'to exit running') or without a manner element (*salir*, 'to exit'). This finding can be interpreted in light of Talmy's typology: verb-framed languages such as Spanish tend to encode the Path in the main verb and the Manner in a separate element, if expressed. In contrast, Czech, as a satellite-framed language, encodes the Manner in the (root of the) main verb. This can explain the greater use of the Manner + Path verbs by the learners found in this study. The structure Path verb and manner element (e.g. *salir corriendo*) does not exist in Czech and probably this is why the learners did not use it at all in Spanish.

The second study asked whether advanced Czech learners of Spanish could acquire the TFS patterns with respect to deictic motion verbs. Motion verbs are not always semantically equivalent across languages (Gathercole 1977; Ibarretxe-Antuñano et al. 2014) and that is why cross-language interference is likely. To assess the correctness of Spanish deictic verb use, Czech learners of Spanish (n = 40) and native speakers (n = 13) completed a grammaticality judgement task and a cloze task. As expected, native speakers performed better than learners on both tasks, particularly on uses where Spanish and Czech differed. The grammaticality judgment tended to be more difficult than the cloze task for the learners. Importantly, the learner's performance tended to approximate the native speakers with increasing Spanish language proficiency, suggesting the gradual acquisition of the target-language TFS patterns.

The findings from these two studies highlight that achieving native-like proficiency in motion event expression and deictic motion verb use remains a significant challenge even for advanced L2 learners. The results emphasize the need for further research into effective pedagogical strategies for teaching motion verbs to adult learners.

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Interactive and Salient Functions of Question Sequences in Digital Monologic Discourse

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Keywords

corpus linguistics, discourse analysis, question sequences, salience, interaction

Abstract

Question sequences can be defined as a series of two or more subsequent interrogatives (Cardo and Celle 2024). They are observable in both dialogic and monologic discourse. In conversational settings, question sequences can be understood as question and non-answer pairs, with the subsequent question serving a repair function or clarification request (Ginzburg et al. 2022). In monologic discourse, however, the purpose of sequential questions is less clear because they are not linked to a change in speaker turn.

When questions are used in discourse settings which could be considered monologic, such as digital discourse genres including TED talks (Rossette-Crake 2019, 2022), and news introductions, there is limited possibility that the questions are really information-seeking, due to the notion that the epistemic stance remains with the speaker (Celle 2009). Therefore, questions are used non-canonically and produce various effects on the addressee. This current study seeks to understand the function of question sequences in discourse settings where direct participation from the addressee is severely limited.

Through the analysis of TED Talks (Celle et al., forthcoming), and digital news introductions (Davies 2008), this study examines French and English question sequences and their relationship to previous and subsequent discourse. This paper tests the hypothesis, introduced by Cardo and Celle (2024), that question sequences are used for

interactive and salient purposes and should be considered single discourse units which serve a distinct function (Egbert et al. 2021). Let us briefly consider the following two question sequences, studied in Celle et al., (forthcoming), which can be classified as interactive and salient, respectively:

(1) Interactive QS:
- Who can actually do this?
- Anybody try to do this?
- Yeah?
- It's fantastic, isn't it?
- Right?
- Do you want to see it again?
- No time.

(2) Salient QS:
- Now why is this important?
- Why is this useful?
- Or, what does it tell us?

Example (1) reflects the speaker's use of a series of questions to evoke an explicit response from the audience. At the same time, the speaker never allows for the audience to take control of the conversation. Rather, the speaker uses sequential questions to simultaneously acknowledge a response from the audience and maintain control of the discourse. This use of question sequences is notably different from the repair and clarification functions which are observed in dialogue.

Example (2) reflects the speaker's use of questions to organize the discourse and inform the audience of the purpose of their speech. In asking why something is important, why something is useful, and what it tells us, the speaker signals to the audience that the object of the questions is integral to the purpose of the discourse. As with (1), this function of question sequences differs from that in dialogue.

Most of the quantitative data in this study is based on a corpus of 18 French and 18 English TED talks. The talks are all given by speakers in their first language. The transcripts of these TED talks were manually checked and annotated in order to isolate interrogatives. Sequential interrogatives were then identified and annotated for their syntactic features and their discursive relationships. In an effort to expand the corpus to include different kinds of digital discourse, digital news clips, as seen in the spoken COCA 2019 (Davies 2008) will comprise the second half of the corpus. In the spoken COCA, questions are often used at the end of introductions and are innately less interactive than questions in TED talks. This study is a first attempt to try and compare the use of question sequences in these two different digital discourses, and the comparative results are preliminary.

The analytic treatment of question sequences as unique discourse units is integral to the understanding of how question sequences are used pragmatically in monologic discourse. Therefore, this study builds upon previous research related to how interrogatives are used by speakers in discourse settings where direct interaction with the addressee is limited. Through an analysis of monologic TED talks and podcasts, we will test the hypothesis that question sequences can be used for interactive and salient purposes and are an example of the evolution of non-canonical interrogatives in single-speaker discourse.

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“Gripped with virus fear”: The case of COVID-19 news reports in English news reports in South Korea

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Keywords

emotions, COVID-19, transitivity, metaphor, news discourse.

Abstract

From a cognitive-linguistic perspective, emotion can be defined as “a complex internally represented knowledge system having a primarily evaluative function within the human organism” (Schwarz-Friesel, 2015: 161). For example, the expression “I love that” can be descriptive (emotion talk) or expressive (emotional talk) (Bednarek, 2008). In this way, the emotions that people feel and linguistically express are intertwined, and the expression of emotions can fulfill pragmatic functions (Alba-Juez & Mackenzie, 2019). In the context of media discourse, it has been argued that emotional appeals constitute one of the top manipulation strategies that suppresses the critical ability of rational perception of information, thereby allowing for the implantation of ideas, desires, and anxieties, as well as inducing behaviors (Cap, 2017; Alba-Juez & Mackenzie, 2019; Altheide, 2002). Interestingly, examining the word “fear” in some major American news media, Altheide and Michalowski (1999) find that the expression “fear” doubled up in the headlines, and that the object of fear has shifted over the years, from violence, and drugs to reports about children. It is argued that this use of fear overly creates a belief that danger and risk pervade our everyday lives.

Because previous studies focused on identifying the objects of fear (the *what*), and were carried out in Western contexts, this study investigates *how* fear is represented in media coverage of the COVID-19 pandemic in a lesser-studied context, namely, South Korea. The county was one of the first countries to experience the outbreak outside China. This project takes a critical stance to deconstruct the way news reporters represent the feelings of fear in COVID-19 articles. For instance, the virus is said to “fuel,” “spark,” or “spawn” fears. It is not only the emergence of new variants that “stoke

concerns," but also the seasonal rise of infected patients that is said to "deepen worries" in such reports.

Drawing from a corpus of COVID-19 articles from 2020 to 2024 from *The Korea Herald*, a quality English-language newspaper in South Korea, the study focuses on lexico-grammatical expressions of fear and relevant emotions (e.g., "concern," "worry," and "scare"). In combination with Appraisal Theory (Martin & White, 2005), three central grammatical systems of Halliday's Functional Grammar—transitivity, nominalization, and grammatical metaphor—are utilized for examining fear representation.

The findings reveal that news reporters use fear and related emotions to evaluate the virus situation. The abstract, personal emotions of fear are construed as powerful "actors," whereas the sensors who experience these feelings are mystified in the texts. This study will argue that the persistent reports of "fear" in COVID-19 articles frame the virus as a security issue and threat, thereby creating and amplifying negative perceptions of the pandemic. This discourse of fear and emotional rhetoric may lead to disengagement and opposition to health policies (Saab, 2023).

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Metonymy in the delexicalization of numeral classifiers in Mandarin Chinese

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Keywords

numeral classifiers, delexicalization, metonymic chaining, triggering, facilitation.

Abstract

Despite metonymy's established significance in linguistic research, its implications for the diachronic development of Mandarin numeral classifiers (here termed *classifierization*) have yet to be investigated—a gap this study addresses. This study draws on two complementary sources: *The Eight Hundred Words in Modern Chinese* (Lǚ 1980: 630–636) and Erbaugh's (1984: 405) set of 22 core classifiers. Our analysis follows a four-step methodological approach. We first exclude two types of classifiers: general classifiers (*gè* and *zhī*), due to their grammatical status, and those operating through PART FOR WHOLE metonymy (termed "partonomy" by Seto 1999: 93), as this second type represents metonymy in its strict sense (e.g., *tóu* 'head' in *yī-tóu-yáng* 'a goat'). Second, the remaining classifiers are ranked according to their collocation frequency with nouns, based on Lǚ's (1980) documentation. Third, by comparing the ten highest-frequency classifiers with Erbaugh's (1986) core classifiers, we identify four frequently-used core classifiers (two noun-derived and two verb-derived) that exhibit minimal contrasts. Finally, we analyze these four core classifiers across four key lexical dimensions to establish a reference frame for examining the classifierization process, drawing on *Explaining Graphs and Analyzing Characters* (Xu 1981, written in 121 CE and annotated by Duan Yucai) and *A Comprehensive Dictionary of Chinese Classifiers* (Liu 2013). The four core classifiers exhibiting minimal contrasts are the noun-derived pair *tiáo* (条) and *gēn* (根), and the verb-derived pair *zhāng* (张) and *bǎ* (把).

Building on Barcelona's (2025) framework, specifically his typologies of metonymies and of links and patterns in metonymic chaining, our study yields three key

findings. First, classifierization is more accurately described as a process of delexicalization (not grammaticalization), marked by resemanticization ('redistributing') and recategorialization ('reconfiguring'). Second, central to the classifierization process is metonymic chaining, which operates differentially for noun- and verb-derived classifiers. Noun-derived classifiers center on dereferentialization (OBJECT FOR SALIENT PROPERTY OF THE OBJECT), elevating otherwise secondary qualities to primary prominence and often yielding a salient property matrix. In contrast, verb-derived classifiers are anchored in atemporalization (ACTION FOR RESULT), reconfiguring the processual nature of verbs into a non-processual profile. Third, due to the shared non-processual nature of nouns and classifiers, the metonymic chaining underlying verb-derived classifiers tends to be longer and more varied, with sub-chains linked by both triggering and facilitation.

This study introduces a systematic metonymic framework to analyze the diachronic development of Mandarin numeral classifiers, applying it to four high-frequency core classifiers for in-depth examination. The metonymic perspective offers a way to resolve key theoretical inconsistencies and the resulting inaccuracies in predication, such as the rigidity-flexibility contrast between classifiers like *gēn* and *tiáo*. Also, the findings show that numeral classifiers (e.g., *zhāng*) apply even to objects without internal structures (e.g., papers), challenging Croft's (1994) internal-structure hypothesis. The four core classifiers analyzed here are paradigmatic and therefore the analysis can likely be generalized to other classifiers.

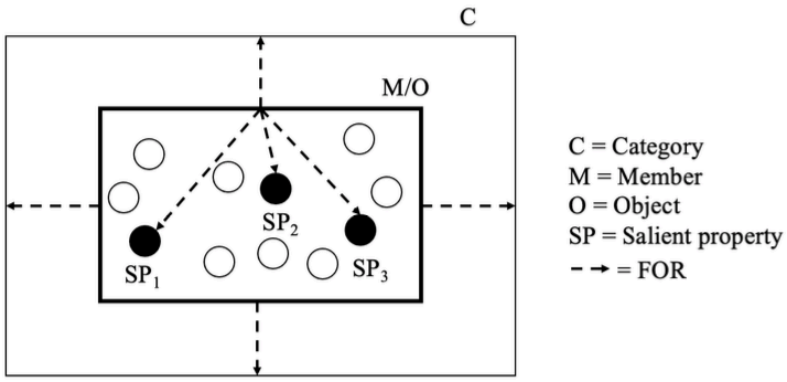
Table 1

Lexical dimensions of the four frequently-used core classifiers

Classifier	Source	Character Classification[2]	Meaning	Examples of Associated Nouns
tiáo (条)	noun	木 (radical; tree)–semantic 攸 (*yōu*)–phonetic	twig	cucumber, snake, rope, road, river, street, carrying pole, dog, bench
gēn (根)	noun	木 (radical; tree)–semantic 艮 (*gèn*)–phonetic	tree root	grass, hair, scallion, rope, carrying pole, bamboo, bamboo shoot, stick, chopstick
bǎ (把)	verb	扌 (radical; hand)–semantic 巴 (*bā*)–phonetic	to hold	key, lock, umbrella, comb, ruler, knife, sword, spoon, chair, handgun
zhāng (张)	verb	弓 (radical; bow)–semantic 长 (*cháng*)–phonetic	to stretch a bowstring	table, mouth, bed, stool, fishing net, map, bow, plow, mat, sofa, paper

Figure 1

The metonymic chaining underlying noun-derived classifiers



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Metaphorical framing of wars in Joe Biden's speeches: The cases of Russo-Ukrainian and Israel-Hamas wars

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Keywords

PERSON metaphor, scenario, framing, Russo-Ukrainian war, Israel-Hamas war.

Abstract

As evidenced by cognitive linguists (Lakoff & Johnson, 1980/2003; Gibbs, 2017; Kövecses, 2021), metaphors provide a coherent system for structuring human experience. Simultaneously, they serve as an argumentative mechanism aimed at framing socio-political issues (Musolff, 2016; Semino et al., 2018; Reuchamps et al., 2018; Bogetic, 2019; Brugman et al., 2019; Author, 2024). The persuasive impact of figurative frames is frequently studied within the Critical Discourse Studies (CDS) framework, which focuses on real-world situations and establishes systematic patterns in metaphorical language use (Chilton, 2004; Charteris-Black, 2014; Hart, 2014; Musolff, 2016; Burgers et al., 2016). This paper sets out to analyse how U.S. President Joe Biden metaphorically frames the initial stages of two military conflicts: the Russo-Ukrainian and Hamas-Israel wars. Considering their distinct historical and cultural contexts, it is hypothesised that different metaphorical frames were adopted to construct each conflict.

The methodological framework combines Cognitive Linguistics (CL) and CDS, integrating the viewpoint (Sweetser, 2012), Critical Metaphor Analysis (CMA) (Charteris-Black, 2014), and metaphorical framing through scenarios (Hart, 2014; Musolff, 2016). The paper focuses only on President Biden's initial reactions to both wars, thus the corpus is rather small, encompassing the periods from February 2022 to December 2023 for the Russo-Ukrainian war and from October 2023 to February 2024 for the Hamas-Israel war. Two sub-corpora, consisting of 20,562 and 20,096 words respectively, were constructed from speeches in www.whitehouse.gov and www.rev.com websites. The analysis procedure embraced the following steps suggested by CMA (Charteris-Black 2014): (1) *Contextual analysis* of historical, cultural, and social facts; (2) *Metaphor identification* based on basic principles of MIPVU (Steen et al. 2010); (3) *Metaphor interpretation* or establishing links between metaphor and thought. CL considers metaphors as a manifestation of cognitive processes, thus the links between the target and source domains were established and analysed employing the theory of scenarios (Musolff 2016), encompassing participants, storylines, outcomes and ethical evaluations. (4)

Explaining metaphor or investigating metaphorical scenarios from a framing perspective: identification of prevailing attitudes in conceptualising the wars.

The study focuses only on the source domain of PERSON, which exhibits personified or metonymically presented country-related aspects. While both sub-corpora share the overarching scenario *Active agent provides help to the beneficiary*, whereas the US stands for the active agent and Ukraine or Israel stands for the beneficiary, significant modifications emerge within each sub-corpus. In the Hamas-Israel sub-corpus, Israel is portrayed as strong and capable of countering Hamas, with the U.S.-Israel relationship framed as one of equal cooperation. Conversely, the Ukraine-Russian sub-corpus reflects rather an unequal relationship, with the US having more power than Ukraine. Other scenario variations include Ukraine's dual role as both beneficiary and active agent, countering Russia as a patient. In some cases, the scenario shifts entirely, with the U.S. (active agent) directly affecting Russia (patient), bypassing Ukraine as either a beneficiary or active agent. These scenario transformations in Biden's speeches highlight nuanced attitudes toward the two conflicts, revealing the rhetorical strategies employed to frame the U.S.'s role and its relationships with Ukraine and Israel.

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If only there was a presentation dedicated to irony on insubordinate constructions with [SE AO MENOS]…

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Keywords
construction grammar, insubordinate constructions, irony, desire.

Abstract
Insubordinate constructions (ICs), while common in both spoken and written language, are often marginalized in grammars and frequently regarded as atypical examples of subordinate clauses. According to Evans (2007), insubordination refers to a diachronic process in which a subordinate clause, despite exhibiting features of subordination, functions independently, without the support of a main clause. For example, the clause "if only I had money..." is an IC.

However, Evans' (2007) definition does not fully account for all the functions and uses of ICs. Consequently, several scholars have argued that insubordinate conditional constructions (ICCs) serve functions distinct from their subordinate counterparts. This distinction is evident in constructions such as [SE AO MENOS] in Brazilian Portuguese, where the conditional meaning diminishes, and the semantics of desire becomes more pronounced.

In the literature on Brazilian Portuguese (Comarim & Hirata-Vale, 2023) and other languages (e.g., Grosz, 2012; D'Hertefelt, 2018), scholars generally agree that these insubordinate constructions are often employed to express wishes that do not align with reality. Instead, they depict a preferable scenario that both the speaker and listener recognize as unattainable. However, numerous examples from social media demonstrate a different usage, where speakers employ these constructions to express wishes that, in reality, have already been fulfilled. Moreover, in such instances, the construction is used ironically or sarcastically, as in:

> (1) Ora, ora, ora, ora, ora... Se ao menos alguém tivesse avisado, puxa vida (CORPUS DE TWEETS)
> Well, well, well, well, well... If only someone had warned me, gosh!

In the example above, irony is evident, as the expression does not reflect a genuine wish for something that did not occur but rather serves another rhetorical purpose. To explore this phenomenon, this study analyzes a corpus of 1,263 tweets collected during the second semester of 2021. Grounded in the theoretical framework of Cognitive Construction Grammar (Goldberg, 1995; 2006) and drawing on research into the expression of irony in tweets (Freitas et al., 2014), the study seeks to distinguish the ironic

uses of the [SE AO MENOS] IC from its more conventional interpretations in various languages, including Portuguese. Traditionally, this construction has been understood as expressing a wish for situations that contradict reality.

The findings reveal a diverse range of morphosyntactic patterns, lexical choices, and Twitter-specific features—such as the use of images, emojis, and other platform tools—that contribute to framing the expressed desire as ironic. This presentation aims to synthesize these findings, providing a detailed account of how the ironic layer emerges within this construction, known for its counterfactual semantics. It also identifies the cues that enable the differentiation between ironic and conventional uses of the construction.

This analysis represents a subset of a larger research project (Comarim, in preparation), which aims to catalog all subtypes of desires expressed through this construction in Brazilian Portuguese. (FAPESP: 24/08629-0 | 23/08945-6)

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Binomial Possessive Constructions in the Academic Writing of Brazilian Students in English

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Keywords

Construction Grammar, binomial possessives, linguistic contact, Corpus Linguistics.

Abstract

Possession - herein understood as the cognitive skill of reference point and evoking a vast array of meaning nuances - is a complex conceptual relation. Different languages have, at their disposal, distinct grammatical constructions to express it (Langacker 2009, Heine 1997). There are, for instance, possessive pronouns, have-clauses, and binomial constructions (Heine 1997; Stefanowitsch 2020; Taylor 1989). The present study focuses on the use of binomial possessive constructions in a specific linguistic-contact context: native speakers of Brazilian Portuguese (Br-Pt/L1) who also speak English as an additional language (EAL). This interface is a rich environment to illustrate how speakers' L1 interferes in their EAL linguistic choices. Here is why: (i) English has two binomial possessive constructions in competition: {[NP possessor] 's [N possessed]} and {[NP possessed] of [N possessor]}, as in, respectively, “the city's museum” and “the museums of the city” (Stefanowitsch 2020). In turn, Brazilian Portuguese has only one binomial construction, namely {[NP possessed] de [N possessor]}, as in o livro do João (‘John’s book’). This Br-Pt/L1 construction is formally analogous to {[NP possessed] of [N possessor]} and expresses quite the same possessive meaning relations encompassed by the two binomials in English (Lisboa Jr 2019).

In light of that, our aim in this study is to describe, in the linguistic interface presented herein, EAL speakers' alternation of English possessive binomial constructions and compare it to their use by native speakers of English, having in mind the alternation criteria sorted out by Stefanowitsch (2020): possessor's animacy, size, and givenness. To achieve this goal, we first established methodologically applicable definitions for these criteria and, then, compiled academic texts, written in EAL by Br-Pt/L1 native speakers who are students of English at the Federal University of Rio de Janeiro (UFRJ). Next, we identified all instances of these alternating constructions. With this annotated dataset, we first performed a distributional analysis (Stefanowitsch,2020), examining the relationship between expected and observed frequencies. Then, we conducted a probabilistic analysis, namely a binomial logistic regression, to determine the statistical likelihood of these criteria functioning as actual regulators of the alternation.

Our findings indicate that EAL distributional patterns exhibit empirical convergence with native speakers' tendencies across all criteria, though to varying extents, with statistical significance being observed only in the case of size. To better interpret these results, we problematize how the limited size of our dataset (134 occurences) may influence the statistical (non)significance of all three criteria. Additionally, we analyzed and interpreted probabilistic outcomes in correlation with raw, expected and observed frequencies, within the framework of the Usage-Based Constructionist approach (Diessel 2019; Goldberg 2003, 2019), more specifically Diasystemic Construction Grammar (DCxG), which postulates that when different linguistic systems come into contact, they become part of a unified network of interconnected symbolic units, known as the multilingual constructicon (Freitas Jr et al. 2021; Höder 2012; Höder, Prentice & Tingsell 2020).

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Community grammars, speaker grammars: Partial productivity in Spanish verbal morphology

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Keywords

productivity, individual differences, Spanish past tense, incomplete acquisition, experiemnt.

Abstract

Native speakers reliably supply inflectional endings where required in production. They are also able to inflect unfamiliar words from quite a young age, as demonstrated by numerous nonce word inflection experiments conducted with preschool children. These observations have led to the assumption that regular inflections apply "across the board" (cf. Marcus et al. 1995) and that speakers are fully productive with them. In this paper I argue that this is often not the case. Focusing on Spanish verbal inflections, I examine data from three earlier studies which examined adult native speakers' productivity using a nonce word inflection task: Schnitzer 1996, Brovetto 2002 and Dabrowska et al. 2023.

The average accuracy rates in all three studies were very low: 66% in Brovetto's study, 52% in Schnitzer's, 50% in Dabrowska et al.'s typical adults and 25% in semi-literate adults. Importantly, when speakers were asked to inflect familiar verbs, the proportion of target responses was much higher (98% in Brovetto's study). Furthermore, a qualitative analysis of the data collected by Dabrowska et al. indicates that that the participants understood what was required of them but often simply did not know what the inflected form should be. This is evident from the fact that they often hesitated, "sounded out" several different responses, or explicitly commented that they did not

know how to produce the form required by the linguistic context. Further evidence to this effect can be gleaned from participants' errors. Most non-target responses involved substitutions of a legal form for the target (e.g. the use of the present tense or preterite form in a context calling for the past imperfect) or the use of an ending belonging to the incorrect conjugation (most often, a first conjugation ending with a second conjugation verb). However, participants also produced forms which suggests that they struggled to apply the productive patterns of the language correctly. These included segmentation errors, where the correct ending was added to the infinitive rather than the stem and responses which appear to be blends of two different forms (for example e.g. *tarreaba* instead of *tarría* for the 3rd person imperfective form of the nonce verb *tarrer*, where the first conjugation ending was added after a second conjugation thematic vowel -e-).

These findings challenge the assumption that adult native speakers are fully productive with regular inflectional endings, and raise an interesting question, namely, how is it that they are apparently able to supply the correct form in ordinary language use. I argue that this is partly because many regular forms are simply retrieved from memory. In addition, speakers also use a variety of avoidance strategies such as substituting a higher frequency synonym or using a different past tense form (e.g. the imperfect or perfect for the preterite).

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Multimodal communication and the expression of emotion

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Keywords

multimodality, emotion, simile, metonymy, online discourse.

Abstract

This paper argues for the need to re-focus linguists' engagement with the various aspects of multimodality to include the expression and construction of emotion concepts (Barrett 2017, Wiltschko 2024). Recent studies of online discourse confirm the trend whereby emotional and expressive aspects of communication take priority over factual accuracy ('don't bring facts to a feelings fight', McLoughlin et al. 2024). We argue that the rise of emotional expressivity in online discourse has been facilitated by increased reliance on multimodal forms.

Recent work on a large database of internet memes has argued, from a construction grammar angle, that images in internet memes have become structural components, while making language forms adjust to an emerging multimodal 'grammar of memes' (Dancygier & Vandelanotte 2017, in press). The approach has also uncovered the need for a unified approach to what we can call Multimodality 1 (the semiotic approach focusing on the interplay of separate modes such as 'text' and 'image') and Multimodality 2 (the 'embodied interaction' approach studying gesture, gaze, and other embodied factors at play in face-to-face interaction). These two research areas have been treated via different methodologies and frameworks (e.g. Kress & van Leeuwen 2001, Feyaerts et al. 2017), but a close look at contemporary online genres supports a re-consideration of that approach. Against this background, in this paper we expand our data set to include other social media forms (such as emojis, tweets, TikTok etc.) as well as examples from advertising and online awareness-raising campaigns (e.g. around climate change). The images these forms make use of can themselves contain bodies in (inter)action (human or animal faces, body postures, frozen images of action or interaction, etc.). Even in the limited and stilted displays of embodiment such images

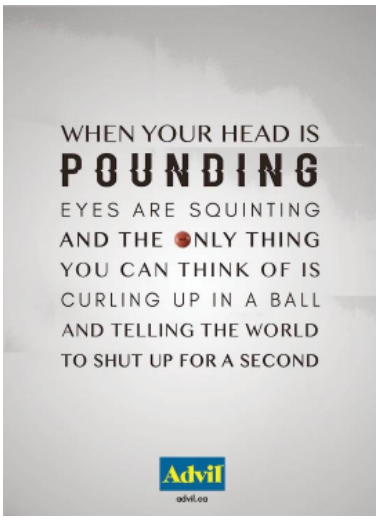
depict, as interpreters we pick up the embodied cues of gaze, posture, and facial features expressive of emotional stance and experience. For example, Figures 1 and 2 show two meme types in which the image completes the linguistic structure, and in which the depicted meme character (Nicole Kidman, or a monkey) are not actually involved in the textually described situation, but represent the meme maker's emotional mood. Figure 3 shows a painkiller ad influenced by *when*-memes, with reduced but very effective visual elements (the typography, the pill, and especially the Advil logo, visually completing the *when*-clause, similar to Figure 2).

Our study of multimodal artefacts such as these suggests that linguistic construals of situations in them are reduced in extent (for reasons of space), but highly focused. They adjust to the presence of images, which prompt for strong appeal to embodied, emotional responses. Our results reveal the following key factors in this dynamic. First, we note the significantly increased reliance on what we have termed 'simulated interaction' (Dancygier & Vandelanotte 2025), as an additional channel increasing or directing emotional expressivity. Second, we demonstrate increased prominence of two figurative meanings: similative (Lou 2017, Dancygier 2022) and metonymic. We will provide an overview of the most common ways in which these tropes participate in the increased emotional expressivity.

Figure 1

Figure 2

Figure 3



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Conceptual creativity: the poetic modes of Elizabeth Bishop's water metaphors

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Keywords

metaphor, cognitive poetics, poetic modes, literary metaphor, imagery

Abstract

Since the landmark publication of Lakoff and Johnson's *Metaphors We Live By* (1980), the "paradigm shift" (Fludernik 2011: 5) within linguistic studies has cemented cognitive metaphor theory as the foundation for understanding comparative figurative language. While contemporary conceptual metaphor theory (CMT) has developed, modified, and added to Lakoff and Johnson's original ideas, the critical work on literary metaphor (that is, metaphor in literary discourse) has remained largely unchanged since Lakoff and Turner outlined four 'poetic modes' for literary metaphor in 1989. These modes – extension, elaboration, questioning, composing – were meant to address the perceived "unique" status of literary metaphors (Caracciolo 2017: 209), without compromising the universality of CMT. As early as 1994, Steen's discussion of the four modes notes both the potential complexity of the poetic metaphor, and the inadequacy of Lakoff and Turner's typology, yet concludes that "these questions are too intricate to disentangle here" (39). While other critics have, in the last decades, largely agreed with Steen's assessment, they have either chosen to retain the original four modes as the standard frame for discussing poetic metaphor (Kövecses 2002 & 2010, Semino 2008, Caracciolo 2017), or have sought out other approaches, notably Fauconnier & Turner's conceptual blending theory (2002; for examples see Crisp 2002, Fludernik 2011, and Dancygier 2017). One significant contribution can be noted in that both Caracciolo (2017) and Fludernik (2011) follow Steen in foregrounding contextualisation as a significant aspect of understanding

poetic metaphor, to the extent that Fludernik considers it an addition to the list of four – without, however, specifying further what this would functionally constitute (6).

As part of an ongoing PhD project, this aims to suggest a more nuanced understanding of literary metaphor through a close reading of selected poetry by Elizabeth Bishop, and by investigating the use of 'questioning' and 'composing' as modes that require further specification. By this, I mean to suggest new functional categories for each mode, such as 'doubling' as a particular and distinct aspect of 'composing'. The study will make use of an adapted version of the MIPVU developed by Steen et. al. (2010), with modifications following Coll-Florit & Climens (2019) as well as original methodological steps to account for the 'contextualisation' that metaphors in literary texts require. My analysis will focus on Bishop's use of water metaphors (that is, conceptual metaphors where water in any form comprises either the source or target domain) in order to highlight the creative complexity of poetic metaphor that more nuanced definitions of 'questioning' and 'composing' can make visible. As such, the paper seeks to contribute to the understanding and refinement of one of the fundamental functional typologies of conceptual metaphor theory.

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Disappearances can be perceptive – what human language reveals about perception and its relation to conceptualization

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Keywords

perception, perceptual conceptualism, nonconceptualism, inference, infinitive.

Abstract

It is generally agreed among philosophers that perception represents the world to be in a certain way. Nevertheless, there is disagreement among them about whether or not perceptual content is itself conceptual in nature. Perceptual conceptualism is the view that such content is in fact wholly conceptual. Proponents of this view, such as McDowell (1996) and Brewer (1999), claim that a subject cannot be in a contentful perceptual state without possessing concepts that fully characterize the content of his experience. The main motivation behind conceptualism is the justificatory role that perception plays in forming beliefs: if perceptual content provides rational grounds for forming a belief about the perceived world, the argument is that it must be conceptual just like the belief it is a reason for. Nonconceptualism, on the other hand, holds that the informational states which a subject acquires through perception are non-conceptualized (Evans 1982). Talking about a perception necessarily involves the intervention of conceptualization, however, as it expresses a mental judgment about the perception as an event taking place or having taken place in the world. The question arises then as to how much such talk reflects the world and how much it reflects the conceptual realm. This paper will attempt to address certain aspects of this question on the basis of linguistic evidence from constructions containing the verb see followed by a direct object and a bare or *to*-infinitive in English. The distinction between these two constructions has been argued by Egan (2011) and Bolinger (1974) to correspond to that between pure sensory perception (bare infinitive) and pure conceptual inference (*to*-infinitive). Noël (2004) has argued on the other hand that in some cases the to-infinitive construction is used when pure sense-perception is involved. The present

study will provide some vindication for both approaches, and will demonstrate that certain uses of the *to*-infinitive construction combine aspects of both percept and concept.

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Following Path and Manner beyond lexicalization patterns

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Keywords
motion and space, Manner, Path, audio description, language typology.

Abstract
Since the introduction of Talmy's (1985, 2000) lexicalization patterns, extensive research has established that languages differ in their typical patterns for describing motion events, particularly with regard to the kinds of verbs used in motion descriptions. However, motion information, like other spatial information (Sinha & Kuteva 1995), is typically distributed across a description, rather than being concentrated in the verb (Feist 2010). Thus, a more complete understanding of the typology of motion language requires consideration of the patterns of encoding conceptual elements across a motion description. Expanding the object of study in this way allows us to ask not only whether individual conceptual elements are included in a description, but also in what detail they are included, and in what combinations.

The current study takes up this issue through an examination of descriptions of translational motion events in the audio descriptions (ADs) of the first four movies in the Harry Potter series, in two typologically different languages, English and Spanish. ADs are descriptions of the visuals of a movie inserted between dialog and other sounds in order to make the movies accessible to blind and visually impaired patrons (Snyder 2014). For this reason, ADs represent a rich source for motion descriptions. In addition, because these ADs were created from the visuals, they provide a parallel data set of descriptions of the same set of experienced motion events across our two languages.

We focused our attention in the current study on the encoding of Path of motion and Manner of motion, asking (1) how much information is included in each language about each of these conceptual elements, and (2) which patterns are common, and which are dispreferred, for the distribution of information across a motion description. We first identified all descriptions of translational motion events in each audio description, after which we coded each description to indicate which lexical item(s) encoded information about Path, and which encoded information about Manner.

Our findings revealed that English-speaking audio describers included almost twice as much information about Manner than did Spanish-speaking audio describers, while the amount of Path information was comparable across the two languages. Furthermore, in addition to replicating existent findings about verb type preferences in English and Spanish, our findings revealed that both languages tend to include Path information outside of the verb, with the result that the most frequent encoding pattern in English is a Manner verb with a Path satellite, while the most frequent encoding pattern in Spanish is a Path verb with a Path satellite.

By expanding the object of study from verb types to motion descriptions, the current study brings together work on lexicalization patterns (e.g., Talmy 1985, 2000) with work on cross-linguistic differences in the salience of individual conceptual elements (cf., Slobin's [2004] cline of Manner salience and Ibarretxe-Antuñano's [2009] cline of Path salience) with an aim to better understand the language of motion description in all its richness.

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Slow Horses move across languages: Exploring cross-linguistic motion descriptions in a corpus of audio descriptions

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Keywords
Motion and space, Path, Manner, multi-modality, conceptualization.

Abstract
The conceptual domain of motion has inspired considerable interest in Cognitive Linguistics research. First, Talmy's (1985, 2000) observations regarding differences in lexicalization patterns demonstrated that the conceptual elements of a motion event can be separated from the lexical resources used to encode them. Building on this, Slobin (2004) raised the possibility that conceptual elements may not be equally salient across languages. He proposed that, beyond Talmy's (1985, 2000) typology, languages fall along a cline of Manner salience, with speakers of some languages, such as English and Russian, frequently including Manner information, while speakers of other languages, such as Spanish and Portuguese, do so only rarely. In contrast, Path, as a core element of a motion event (Talmy, 2000), tends to be included in motion descriptions across languages. Despite this tendency, Ibarretxe-Antuñano (2009) argued that languages fall along a cline of Path salience reflecting differences in the richness of Path descriptions rather than their frequency, with some languages, like English, inviting the encoding of more detailed Paths than those described in others, like Spanish.

Although these cross-linguistic differences in descriptions of motion have been observed in data representing imagined motion events (i.e., in novels and translations, Cifuentes-Férez, 2006, 2013; Özçalışkan & Slobin, 2003; and in narrations of the Frog Story, Berman & Slobin, 1994; Ibarretxe-Antuñano, 2009; Strömqvist & Verhoeven, 2003), few studies have considered descriptions of motion events that were presented audio-visually. Asking how speakers of different languages describe observed events shifts the focus from the language used to the events themselves, opening new questions about what counts as a motion event and about which components of motion events are privileged as most salient in particular languages.

Audio Description (AD), a supplementary audio track added to an audiovisual work to describe the on-screen visuals (Snyder, 2014), provides a novel form of linguistic data in which the describer saw, rather than imagined, the events described. We aim to address the following three research questions by exploring this multi-modal source of data:

1) What kinds of events (self-contained motion, body part motion, translational motion, non-motion) do audio describers choose to describe in Russian, English, Brazilian Portuguese, and Spanish?

2) Do speakers of these four languages pay equal narrative attention to internally and externally caused motion?

3) How do these four languages distribute information about the semantic components of Path and Manner?

To address these questions, we analyzed the audio-described versions of the first episode of the Apple TV series *Slow Horses* in Russian, English, Brazilian Portuguese, and Spanish. By analyzing motion expressions in these typologically distinct languages, the study aims to uncover differences and similarities in how motion is conceptualized and verbalized in audio descriptions. The findings contribute to a broader understanding of linguistic typology and cognitive representations of motion, shedding light on the interaction between lexicalization patterns and event structure across different language systems. As audio dubbing and audio description continues to become widespread in popular commercial series, we also consider the benefits and drawbacks of this new multi-modal data source for linguistic research.

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Cognitive-functional analysis of [só que X_{Adv}]: perspectivization in Brazilian Portuguese

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Keywords

só que X, constructional irony, perspectivization.

Abstract

"Galvão Bueno in 40 moments, just like us **#sqn**" (Author 1 2017: 76, author's 1 emphasis).

Here, a statement is made about the "normal" life of one of the most popular sports commentators in Brazil, which is then ironically negated through *só que não* ("#sqn"). The irony of *só que não* shifts the listener's perspective, moving from equality to difference by means of ironic negation. As noted by Author 1 (2017) and Gervásio (2016), this construction marks the speaker's viewpoint, which the listener is meant to understand.

In this way, this paper examines irony as a marker of viewpoint through the use of [só que X_{Adv}] in written Brazilian Portuguese. We focus on microconstructions like *só que não*, *só que nunca*, and *só que sim*, for example, with irony at their core. Using Cognitive Linguistics, specifically Construction Grammar, we explore how the reader/listener decodes the irony and experiences a shift in perspective triggered by the writer/speaker.

Building on Lehmann & Bergs (2021), we argue that the schema [só que X_{Adv}] is not just a construction, but a constructional irony. Its high frequency, strong tendency to be interpreted as ironic, and idiosyncratic features, as pointed out by Author 1 (2017), show that "there are syntactic forms conventionally associated with ironic meaning" (Lehmann & Bergs 2021: 335).

According to Traugott and Trousdale (2013), [só que X_{Adv}] involves a loss of *compositionality*, as the individual parts no longer correspond to the overall meaning.

For example, with *só que não*, there is no direct correspondence between the meaning of the elements and the meaning of the whole. Thus, the pragmatic function of the construction as ironic negation arises from its contextual use, not from a combination of parts.

Concerning *productivity*, it is directly proportional to *schematicity*. The more abstract and generalized a schema is (in this case, *só + que + adverb*), the broader its applicability, enabling the systematic formation of constructions and fostering linguistic innovation. Bybee (2003) argues that *type frequency* refers to the number of constructions generated by the [só que X_{Adv}] pattern: initially *só que não*, *só que nunca*, and *só que sim*, though new forms emerged during data collection. *Token frequency* refers to the total number of occurrences of each construction in the pattern.

Simultaneously, *schematicity* increases, as seen in the broader schema formed by constructions like *só que nunca* and *só que sim*. These constructions are used in various contexts, from informal to formal, as shown by Author 1 (2017): “Almost half of the occurrences are found in genres like columns, opinion articles, and editorials” (Author 1 2017: 111).

Thus, meeting the principles of compositionality, productivity, and schematicity, this represents a highly integrated form-function pairing (Goldberg 2006), where the semantic-syntactic structure links textual portions through irony, establishing [só que X_{Adv}] as a construction.

The Theory of Viewpoint (Tobin & Israel 2012) is particularly suited for this analysis because, unlike other theories of irony, it complements the Theory of Conceptual Blending (Fauconnier & Turner 2002) and offers a richer understanding of how meaning is constructed and interpreted. The analysis highlights the perspectival shift brought about by the irony encoded in the schema, which involves a movement from a lower semantic level to a higher pragmatic one. From this elevated interpretive position, the addressee, distanced from the immediate focus, reevaluates initial expectations and reconstructs the ironic meaning, intended by the speaker from the outset of the interaction.

Therefore, we rely on the Web/Dialect and Now corpora from the Corpus do Português (Davies 2016), from which we retrieved the microconstructions *só que não*, *só que nunca*, and *só que sim* (as expected), along with newly discovered forms like *só que*

talvez não, *só que infelizmente não*, *só que também não*, *só que não mesmo*, *só que nada*, and *só que jamais*, with different intensities of denial.

Ultimately, we hope to contribute to functionalist studies of written Brazilian Portuguese variation, advancing our understanding of irony as a linguistic strategy rooted in everyday interactions and essential for forming a viewpoint.

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Tracking discourse prototypes for "East" and "West" over the 30 years in the Czech media

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Keywords

discourse analysis, prototype, association, corpus linguistics, Czech.

Abstract

Frames, image schemas and conceptual metaphors explored in cognitive linguistics (Lakoff, 1987; Lakoff & Johnson, 1980; Langacker, 1987, 1991, 1999/2010) have been extended and shown to be applicable not only to model smaller linguistic units, but also discourse (Hart 2010). The objective of this study is to model discourse prototypes that involve two concepts -- East and West – in the Czech mainstream media: to show how the discourse prototype transforms while maintaining certain properties over time.

We attempt to find prototypes of texts where concepts of East and West occur in the Czech mainstream media from 1991 to 2022. We extract words that regularly co-occur with at least one of the seed words (*Východ* 'East,' *východní* 'eastern,' *Západ* 'West,' and *západní* 'western'). Salient co-occurring words ("associated words") are likely to point to the prototype of the text where the seed word is found. This approach is different from commonly used collocation analysis (Baker 2010, Gabrielatos et al 2012, McEnery et al 2019), which looks at immediate context only and informs us of word usage rather than of the property of an entire text or discourse. In contrast, salient associated words may occur anywhere within the text, regardless of the distance from the seed words. They are identified by quantitative methods using probability of co-occurrence (Market Basket Analysis) and similarity/correlation of frequency trends in time (Companions) (Cvrček and Fidler 2024).

The data shows how discourse prototypes involving East and West change over time: the Czech Republic's position vis-à-vis the East, West or Central Europe is pivotal to articles from the period immediately after the collapse of the Soviet bloc (1991-1995)

which mark the effort to redefine Czech Republic's position after regaining freedom. East and West are later more directly associated with Russia and the US (1996-2010). From 2014 onwards East and West are concepts used primarily to describe Russian aggression in Ukraine. The results reflect the actual events to a certain extent: e.g. the Czech Republic's joining NATO (1999) and the EU (2004). However, the data also informs us that the image of USSR, no longer existing, looms over in the media even in 2010s to 2022, with associated words such as SSSR 'USSR' and sovětský 'Soviet'; economic concern is also a constant part of the discourse involving East and West nearly all throughout the 20-year period. It is also noteworthy that the EU is not a salient building block of the discourse prototype in discourse involving East-West even during the Czech Republic's accession to the EU.

This study proposes how discourse prototypes could be accessed with corpus data. It also shows how corpus data provides some unexpected findings that may not be intuitively evident.

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Measuring chunking effects in the emergence of a focus particle in Portuguese

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Keywords

grammaticalization, chunking, compositionality, analizability, scalar particle.

Abstract

This paper investigates, in Portuguese diachrony, the historical development of the periphrastic form ‘ainda mais’ - a periphrasis that combines the adverb ‘ainda’ (still) and the degree word ‘mais’ (more) - into a focus particle, exemplified in (1).

(1) Não podia estender mais aquela espera, **ainda mais** se o tumor estivesse se manifestando. (19:Fic:Br:Carvalho:Bebados)
(I could not wait any longer, *'especially'* if the tumor was manifesting itself.)

In (1), ‘ainda mais’ is a fixed, unanalyzable and non-compositional construction (Bybee, 2010), functioning in a similar way to the English adverb 'especially'. Its meaning is not fully predictable on the basis of the meaning of the separate components, and the morphosyntactic boundaries and relations between the two original words are no longer recoverable. Besides, ‘ainda mais’ functions as a focus particle (König, 1991; Dik 1997), i.e., as an additive particle, triggering “the presupposition that there is an alternative value under consideration that satisfies the open sentence in the scope of the particle” (König, 1991: 53). Another feature associated to it is scalarity: ‘ainda mais’ figures as an absolute scalar particle (Schwenter, 2000), entailing a pragmatic scale that ranks alternatives to satisfy the focus value under consideration and situating the focus information at the endpoint of this scale.

The diachronic investigation covers a period from 13th to 21st century in Portuguese history. It is concerned with designing the pathways that give rise to the focus particle, and mainly understanding the effects of chunking in its formation (Bybee,

2010). Selecting data taken from Corpus do Português, in its Genre/Historical version (Davies & Ferreira, 2006), and based on a set of parameters that map functional and formal properties of the constructions here considered, this paper distinguishes, besides the focus particle (the unanalyzable/non-compositional combination), five different compositional and analyzable combinations between 'ainda' (still) and 'mais' (more), arguing that the emergence of the focus particle represents a case of grammatical constructionalization (Traugott; Trousdale, 2013).

The central discussion in the diachronic investigation is whether it is possible to methodologically measure chunking effects in the change from compositional/analyzable combinations to a fused/fixed unit. The following methodological questions are then addressed here: (a) how can the five different compositional/analyzable combinations between 'ainda' (still) and 'mais' (more) be properly described?; (b) is there any mechanism or parameter that allow defining precisely different degrees of chunking among these compositional/analyzable combinations?; (c) is it possible to order these compositional/analyzable combinations in a cline of (more/less) degrees of chunking?

In order to answer these questions, this paper uses scope relations, as defined in Functional Discourse Grammar model (Hengeveld & Mackenzie, 2008), as a methodological device in measuring degrees of chunking among the compositional combinations. The main result shows that mapping scope relations in terms of interpersonal or representational layers is a good mechanism in representing the gradual loss of compositionality involved in the grammatical constructionalization of compositional combinations into a non-compositional and fixed unit, and this kind of result can implement the ways in measuring chunking effects within the emergence of (new) grammatical constructions.

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Variation and change in lexical diversity: Does synchronic change mirror diachronic leveling?

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Keywords

dialectology, language variation and change, lexical semantics, Dutch.

Abstract

Why do we have several synonyms for 'winking' (*to wink*, *to blink*, *to bat an eye* etc.) but only one for 'nodding' (*to nod*), according to the OED? This paper focuses on this type of variation in lexical diversity, i.e. variability in the amount of lexical variation a concept shows. As a case study, we investigate the lexicon of the Limburgish dialects, spoken in Belgium and the Netherlands.

In earlier work, Franco et al. (2019) showed that in historical data (roughly 1960-1980) from the Limburgish dialect area, variation in lexical diversity is influenced by characteristics of the concepts being expressed, such as familiarity and semantic field. More specifically, they showed that concepts that are less familiar for dialect users show a higher amount of lexical diversity than more familiar concepts. For example, a concept with low familiarity such as 'to wink' has 36 variants across the Limburgish dialects, whereas for a highly familiar concept like 'knee', only 1 lexical item occurs. Moreover, Pickl (2013) also found differences between semantic fields, in the sense that concepts from semantic fields related to "local" life, such as household items, show more variation than concepts that are universal and socially relevant on a supralocal level, such as salutations.

The aim of this paper is to shift from a synchronic to a diachronic perspective. More specifically, we analyze whether these concept characteristics also affect the amount of diachronic leveling, or the speed of dialect loss, in the Limburgish dialects. The hypothesis is that concept characteristics that were shown to decrease synchronic lexical diversity, also cause a larger degree of diachronic lexical leveling. In particular, we

hypothesize that more lexical leveling will occur for more familiar concepts and for concepts from universal semantic fields.

We investigate this hypothesis by relying on data from a large-scale digital survey that ran in August 2024. Participants to the survey were native speakers of a Limburgish dialect. The survey was designed to be completely parallel to the historical data analyzed in Franco et al. (2019). We specifically collected lexical variants in use for twenty-four concepts from four semantic fields. We investigate two culturally variable semantic fields (clothing and household items) and two universal semantic fields (animals and body parts). We analyze the data using linear regression.

Preliminary results show a consistent effect for lack of familiarity, with more levelling for more familiar concepts, as expected. However, the results for semantic field are not significant. This indicates that the same degree of lexical levelling is found across semantic domains. Moreover, the results seem to be complicated by the fact that many respondents are less proficient in the dialect nowadays than in the historical data. As a result, they often resort to standard language variants. Further analyses may indicate whether age differences between participants to the survey can shed more light on these results.

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On snacks and sounds: The *kiki/bouba* effect is mediated by experiential properties

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Keywords
applied linguistics, sound symbolism, iconicity, Dutch, food culture.

Abstract

In the cognitive sciences, it is commonly accepted that iconicity plays a role in sound-shape mappings (see e.g. Schmidtke, Conrad & Jacobs 2014; Dingemanse et al. 2015 for overviews). However, in most studies, participants are asked to choose between nonce words as names for objects that also do not exist in reality (a recent exception, offering the same criticism, is Sidhu et al. 2021). In this paper, we use a more contextualized approach, exposing participants in our experiment to shapes that are particularly salient in their local culture. In particular, we conduct an online experiment on names for fried snacks. We investigate sound-shape and sound-taste mappings by speakers of Dutch in Belgium and the Netherlands, cultures where the French fry and the *frituur*, a streetfood-type barack that sells fries and a variety of fried snacks, play a pivotal role in local culture and identity (Lingle 2016: 45, 105).

Two alternative images of five fried snacks were created, one with only rounded corners and another one with sharp corners (see Figure 1). The items were pretested to examine their recognition as round or sharp. Additionally, we created five pairs of fictitious snack names. For each pair, we came up with a name containing only 'sharp' vowels and consonants, (e.g. *Kizi*) and another one containing only 'round' vowels and consonants (e.g. *Moeboe*). Each name is followed by a frequent suffix appropriate for fried snacks (e.g. *Moeboe-lus*, *Tezzi-punt*). The names were in congruence with the phonotactics of Dutch (Styles & Gawne 2017).

We distributed our experiment digitally. 849 participants completed the entire experiment. After a trial round, in the first part of the survey, each participant was shown one of the fictitious snacks in a random order until each participant saw each snack. They needed to select an appropriate name from two options, one with sharp sounds and one with round sounds. In the second part, they were asked to select an appropriate name for either a spicy or creamy snack. Finally, we collected demographic information.

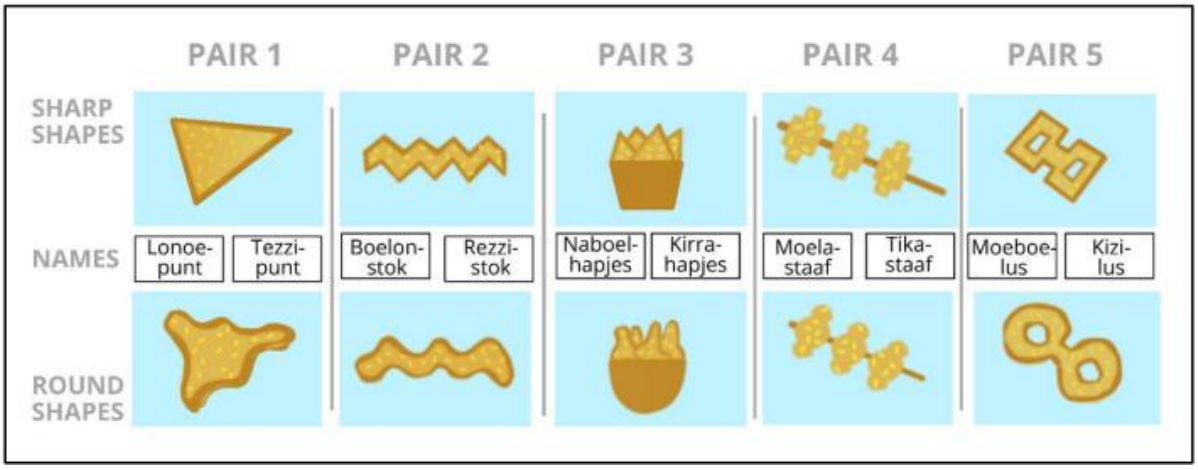
Our results indicate that across the board, participants select sharp names for pointy fried snacks. However, surprisingly, the effect for the rounded fried snacks is not as expected: in this condition, participants also select names with sharp vowels and consonants more frequently, although the effect is less outspoken. Furthermore, we confirmed a taste-shape effect, with spicy snacks overwhelmingly named with words

having sharp sounds and creamy snacks associated with names consisting of round vowels and consonants.

We interpret these findings to mean that the *kiki/bouba* effect persists in our data. However, the results for the rounded snacks indicate that it is mediated by an effect of context: we hypothesize that the rounded snacks are linked to words with round sounds less often because of the nature of fried snacks, which participants are aware of. Participants know that these types of snacks are typically very concrete and perhaps never really rounded objects in reality and they rely on this experience to select an appropriate name.

Figure 1

Overview of shape and name stimuli



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Ad hoc meaning within the framework of multimodal communication: A developmental study of adaptors and gestures

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Keywords

multimodality, ad hoc meaning, adaptors, gestures, cognitive development

Abstract

The ad hoc CC&Mc theory developed by Daniel Casasanto and his colleagues (Casasanto and Lupyan, 2015) can be regarded as one of the foundational frameworks of "postclassical" lexical semantics (Glebkin, 2024). Studies in multimodal communication (Esposito, 2009; Adolphs and Carter, 2013; Müller et al., 2013; Kibrik and Molchanova, 2013; Vigliocco et al., 2014; Cienki, 2016; Esfandiari-Baiat et al., 2020; Talmy, 2020; and Ladewig, 2024 among others) have demonstrated a correlation with ad hoc CC&Mc theory perspective, providing compelling evidence that information exchanged and interpreted during such communication (the "meaning" of the message) is distributed across various communication channels (modalities), with prosody and gestures being as significant as verbal content. That said, these studies do not specifically address the concept of ad hoc meaning, which has yet to be thoroughly elaborated.

Different types of ad hoc meaning can be distinguished. During the process of communication, the communicator intentionally endeavors to convey information to the addressee through various perceptual channels; however, the addressee may interpret this message differently. Consequently, the meaning of the message may vary for the participants involved in the communication. Furthermore, the communicator may unintentionally convey information that remains unrecognized by the addressee but can be identified by an external observer (and by the communicator themselves when reviewing, for instance, a video recording of the interaction or recalling specific details). In light of this, it seems pertinent to differentiate between three types of meaning, referring to the meaning intentionally conveyed by the communicator as C-meaning, the meaning perceived by the addressee as A-meaning, and the "objective"

meaning reconstructed through a subsequent comprehensive analysis of the message as O-meaning.

The distinction between C-meaning and O-meaning is crucial for differentiating between adaptors (which possess O-meaning but not C-meaning) and gestures (which possess both C-meaning and O-meaning). In the referenced study (Glebkin et al., 2025), 89 participants (comprising 36 preschoolers, 29 primary school students, and 24 high school students) retold "The Pear Film" by Wallace Chafe. During their retellings, the adaptors and gestures they produced were recorded and subsequently analyzed. The experiment revealed a predominance of adaptors in the retellings of preschoolers and primary school students, while gestures were more dominant in the retellings of high school students. Of particular interest is the observed shift from strong adaptors to slight adaptors in the retellings of primary school students, which correlates with the discussion of private speech conducted by Lev Vygotsky and Jean Piaget (Vygotsky, 2012; Piaget, 1962). These findings indicate significant changes in the structure of different types of ad hoc meaning from the perspective of cognitive development.

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Differences in linguistic competence among L1 speakers: A series of experimental studies

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Keywords

linguistic competence, semantics, assessment, L1 speaker, gender differences

Abstract

This study builds upon a series of investigations examining the differences in linguistic competence among L1 speakers, specifically focusing on "doubtful" sentences—those that include “doubtful” ($^{?}$X, $^{??}$X) constructions (Glebkin and Kuznecova, 2022; Glebkin et al., 2024). The findings of the previous research can be summarized as follows:

- The linguistic competences of L1 speakers do not align, a phenomenon observed in both non-experts and experts.
- Even the linguistic competence of a particular L1 speaker is not constant; it can change markedly over a short period.
- There appear to be no overarching trends (such as education, age, gender, etc.) influencing the discrepancies in assessments of "doubtful" sentences among L1 speakers. Instead, these assessments likely result from the interplay of linguistic and extralinguistic factors.

For specific types of sentences, significant differences were noted in assessments depending on whether the sentences were listened to or read, as well as based on the positioning of the "doubtful" collocation at the beginning or end of the sentence.

The design of experiments presented in this report aligns with that of previous studies: participants were instructed to rate various "doubtful" sentences on the scale from 1 (incorrect sentence) to 5 (correct sentence) as quickly as possible, relying on their linguistic intuition. This series of experiments explored the gender-related aspects of assessments of "doubtful" sentences. The idea of experiments is based on the finding from prior research (Glebkin and Kuznecova, 2022), which identified a statistically significant difference in the assessment of the sentence *On priletel vechernim rejsom, i ego vstretil gor'kij shum goroda* 'He arrived on an evening flight and was greeted by the bitter noise of the city' between male and female participants. Notably, this sentence contains a distinct gender marking of an impersonal nature (*on* 'he').

Drawing on research in cognitive psychology (Just, 2008; Radvansky et al., 2011; Tamplin et al., 2013; and Martin, 2016, among others), which demonstrates that individuals generate a cognitive representation of the events depicted when reading (or listening to) a text, – thereby triggering neural networks that are also activated when they physically participate in those events (e.g., reading a sentence about a person running stimulates the kinetic circuits associated with running), – the authors hypothesized that male participants unconsciously identify themselves as active participants in the narrative, resulting in a more positive evaluation of the sentence. In contrast, female participants are posited to adopt a more detached perspective.

The new series of experiments has tested this hypothesis. A total of 378 participants (high school students, comprising 162 males and 216 females) were asked to assess a collection of "doubtful" sentences, four of which included an impersonal gender marker. The results have provided moderate evidence for the hypothesis, but with a significant elaboration: the effect has been found to be valid only for sentences with neutral or positive emotional connotations. Conversely, for sentences exhibiting negative emotional connotations, the effect is reversed; the negative experience associated with the situation influences the assessment, leading to a more critical evaluation from the "participant" compared to that of the "observer."

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Cognitive typology in linguistic diversity issues: a bibliometric review using PRISMA protocol and VOSviewer

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Keywords

cognitive typology, linguistic diversity, PRISMA protocol, VOSviewer.

Abstract

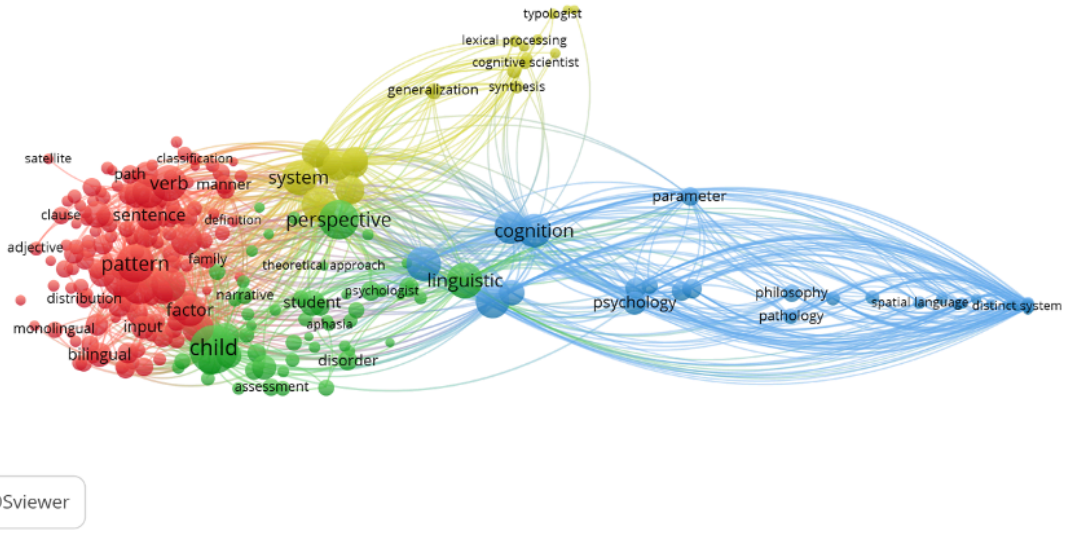
Over the past decade, cognitive linguistics has increasingly focused on studying the interrelation of typological, cultural and cognitive approaches to language, resulting in the appearance of a new research paradigm called postrelativism. Postrelativism builds upon B.L Whorf's ideas reconsidering them through the lens of embodiment, linguistic and cultural diversity, and the sociocultural experience of speakers, while also seeking to determine the role of language in cognitive architecture. From a typological perspective, cognitive linguistics – since W. Croft (2016) calls for integrating an evolutionary framework into the field – witnessed several trends linking linguistic diversity to cognitive research (Blasi et al 2022). These include cognitive typologies of conceptual systems of time and space (Levinson 2003), and motion and targeting systems (Talmy 2000a, 2000b; Slobin 2004).

This paper conducts a bibliometric review of the field «*cognitive typology in linguistic diversity*» in Dimensions database to outline the present state of research. The study examines publications from 2000 to 2025 that address the topic. Following the PRISMA protocol, the search yielded 1,422 documents, which were then analyzed using performance analysis (assessing research contributions) and science mapping (revealing relationships between research constituents).

The findings reveal a positive trend in studies on cognition, typology, linguistics, and diversity, with a peak of 103 publications in 2022 and a citations count, reaching 4,854 citations in 2024 (see the link for full data). A co-occurrence analysis in VOSviewer visualized 242 keywords (appearing at least 15 times) grouped into four clusters (Fig. 1).

1. Cluster 1 (red): focuses on different languages and their linguistic features.
2. Cluster 2 (green): represents the language ability across human groups (children, adults, etc.)
3. Cluster 3 (blue): addresses psychological and cognitive issues.
4. Cluster 4 (yellow): combines typological and cognitive issues.

Figure 1 Clusters of research field co-occurrence words



The absence of cognitive typology items in the dataset highlights a research gap requiring further investigation. The concept of diversity (including typological diversity) appears in the last two clusters, highlighting the critical intersection between these research areas – one that holds importance but has not yet received the attention it deserves. All this should be considered an opportunity for future studies to bridge theoretical frameworks (e.g., postrelativism, Whorfianism) with empirical typological and cognitive analyses.

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Exploring formal and functional elements in English lexical blends through cognitive modelling: A cognitive-functional approach

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Keywords

functional-cognitive, lexical blend, cognitive modelling, Construction Morphology, inheritance hierarchy.

Abstract

This presentation addresses lexical blends (i.e. the combination of two (or more) segments of words into one lexical item) (e.g. “mancession” < “man” + “recession”) in present-day English from a usage-based constructionist view of language (Goldberg 2006, 2024) grounded in a cognitive-functional approach (Butler and Gonzálvez-García 2014). It has long been argued that general cognitive mechanisms play a crucial role in lexical blends (Kemmer 2003; Gries 2012; Beliaeva 2014). However, the specific (cognitive) mechanisms behind this word-formation process, as in other word-formation processes (e.g. clipping, compounding), are not yet sufficiently known (Bauer 2012; Balteiro and Bauer 2019). An important step to fill this gap is recent work by Peña (2022a, b), which aims at a comprehensive account of the principles motivating the correlation between conceptual and formal integration in blends. Specifically, Peña demonstrates the usefulness of the notion of cognitive operation (Ruiz de Mendoza 2020) to account for the relationship between the source words of blends and explain semantic shifts in blends from the source words as a result of metonymic expansion (generalization) (e.g. “selfie” ‘a self-portrait photograph typically shared on the media’ -> “wefie” ‘photographic group portrait’) or metonymic reduction (specification) (e.g. “-splain” ‘explain’ -> “mansplain” ‘explain (something) to someone, typically a woman, in a condescending or patronizing way’) .

In this context, this presentation has two main objectives:

(1) To provide through the lens of cognitive operations a finer-grained typology of the formal and functional elements in lexical blends and show the feasibility of modelling frequent serial blends into families of constructions, as in the blends in which one of the elements conveys an agent (e.g. “kidfluencer”, “mansplain”) or the topic under discussion (e.g. “sportssplain”, “dietsplain”) (Peña, 2022a: 289-290). More specifically, drawing on a non-monotonic inheritance system with overrides (Goldberg 2006), we discuss the viability of further modeling the relations among elements in blends at varying levels of genericity/specificity in the ConstructionNet (Goldberg, 2024: 221), while

accommodating cases of potential contextual enrichment, polysemy, and ambiguity (Azimdokht, Rafiei and Audring 2022; Kjellander 2022).

(2) To explore empirically (through corpus-based analysis) the potential semantico-pragmatic differences between blends and their source words across different text-types, registers and contexts. In line with Hilpert, Correia Saavedra and Rains (2023: 21) and Goldberg (2024: 221), a broad construal of meaning/function is invoked here, taking into account information structure, discourse functions, interpersonal meaning, rhetorical influence, register, and speaker's attitude. This contributes to validate/refine the inventory of functions of blends proposed in Balteiro (2018: 4), while shedding light on their correspondence with morphosyntactic realizations. The results provide compelling support for the Principle of No Synonymy (Goldberg, 1995: 67), according to which differences in form spell out differences in meaning.

Our data has been extracted from the SplinterCorpus, with 200 blends compiled from previous studies (see Peña 2022a, b), 179 blends listed in Kjellander (2022) and 100 new blends from the sections of new words of online dictionaries like Cambridge.

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Discourse Connectives as Constructions: Developments in Conceptual Domains and Properties as Linguistic Units

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Keywords

language processing, construction grammar, discourse connectives, conceptual domains.

Abstract

This study presents a cognitive linguistic analysis of discourse connectives conceived as constructions. It has been pointed out that the same expression is employed across three different conceptual domains—namely, the content domain, the epistemic domain, and the speech‐act domain (Sweetser 1990). Discourse connectives, previously referred to as discourse markers, include elements such as causal connectives (e.g., *so*, *therefore*), adversative connectives (e.g., *but*, *instead*), and elaborative connectives (e.g., *in fact*). These can be considered constructions, operating beyond the sentence level. Using the discourse connective *instead* as a case in point, this study analyzes samples from corpora to examine how it constitutes semantic/pragmatic structures within these conceptual domains while also considering the properties that characterize discourse connectives as linguistic units.

It has been discussed that the semantic structure of linguistic expressions is constructed within one or more of the three conceptual domains. Sweetser (1990) illustrated the use of the modal verb *may* across these three domains with the following examples as in (1).

(1) a. Content domain: John *may* go.
b. Epistemic domain: John *may* be there.
c. Speech-act domain: *May* I ask you where you're going?

However, as pointed out by Hasebe (2021), these domains are not completely separate but rather overlap with each other. More precisely, all domains are always present, with varying degrees of prominence depending on the domain. The use of the same expression across the three conceptual domains is also observed at the discourse level beyond sentences. (2) illustrates the use of the discourse connective *instead* in slightly different ways, extracted from the TED Corpus (Hasebe 2015).

(2) a. Content domain: Getting a college education is a 20-year investment. When you're growing up poor, you're not accustomed to thinking that far ahead. *Instead*, you're thinking about where you're going to get your next meal and how your family is going to pay rent that month [TCSE 2775].
b. Epistemic domain: But we shouldn't expect this to happen automatically. Spending money helping others doesn't necessarily promote happiness. *Instead*, it matters how we do it. And if we want people to give more, we need to subvert the way we think about charitable giving. [TCSE 39981].
c. Speech-act domain: Now, I can't promise you're going to end up with house plants. But the point of this story is that online dating doesn't have to suck. Don't treat it like a game, and don't treat it like a resume review. *Instead*, use it to source and qualify leads and then get offline as quickly as possible with the zero date. [TCSE 20083].

The central meanings of *instead* in each conceptual domain can be described as follows in (3):

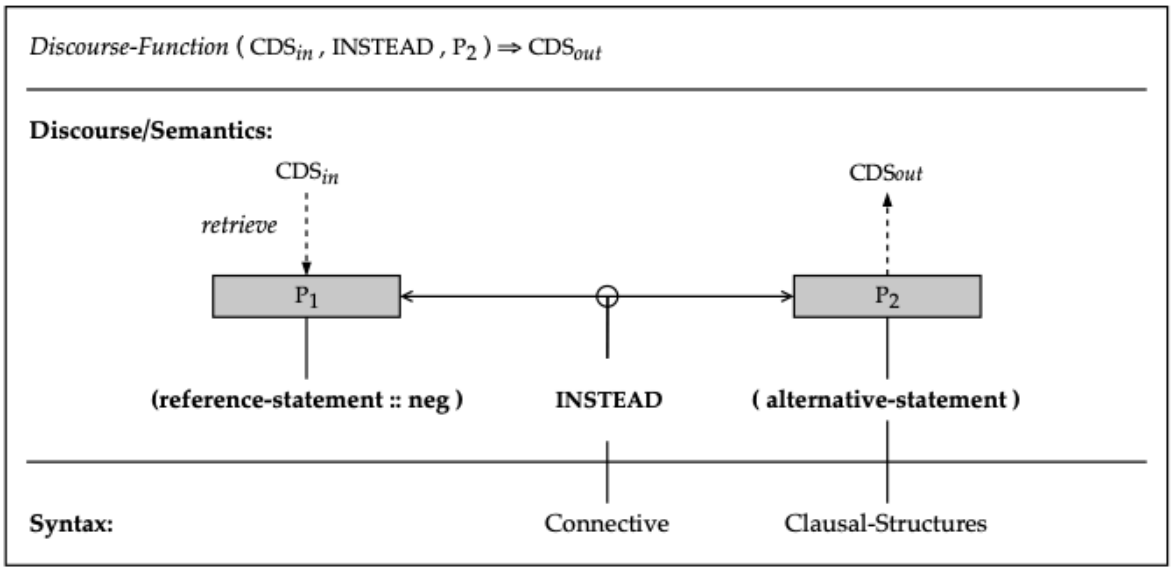
(3) a. Content domain: It is P2 that occurs/happens, not P1
b. Epistemic domain: P2 is considered to be the case, while P1 is not
c. Speech-act domain: I conduct a speech act of P2, not P1

P1 refers to the preceding content, and P2, introduced by *instead*, signifies content that contradicts P1. However, when dealing with discourse elements beyond sentences, it is not always easy to define the form of P2 as a clear pattern. In practice, what can be specified about P1 is that it is mentioned in the preceding utterance before the discourse

connective *instead*, and for the hearer to properly understand P2, they must actively "retrieve" the necessary parts from the shared contextual knowledge. From this perspective, the form and meaning of *instead* as a discourse construction can be schematized as shown in Figure 1.

Figure 1

Constructional structure of *instead*



Following Goldberg (1995), constructions are viewed as functions while the shared contextual knowledge is set as the current discourse space (CDS) (Langacker 2008). From this view, the discourse connective *instead* is defined as a function that takes CDS and P1 as inputs and outputs a new CDS with updates applied to the input CDS.

This formalization not only structurally demonstrates the function of discourse connectives but also allows for a broader understanding of constructions as linguistic units. Constructions at the sentence or smaller scale necessarily have a recursive nature, serving as elements that compose phrases, clauses, or sentences. Instances of expressions constructed by constructions can become components of other constructions. On the other hand, constructions at the discourse level require creating new contexts by taking the preceding context as input, rather than synthesizing components to form larger elements, showing an "idempotent" nature in mathematical terms.

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Expectation-building in constructions and the brain

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Keywords

Construction Grammar, expectation building, neurolinguistics, successor representations, neuroscience of language.

Abstract

This talk aims to illustrate how the CASA-constructionist-approach-to-syntactic analysis (Herbst /Hoffmann 2024; CASA|Con) can be applied to aspects of pre-planning and prediction of utterances, which are relevant in human language processing, brain science, and AI applications such as Large Language Models. The CASA-model combines the different types of constructions (sentence-type-cxns, argument-structure-cxns, tense and aspect cxns, etc.) making up a construct in the form of so-called construction grids, which are seen as the result of overlap and blending (Fauconnier/Turner 1996, 2002; Dąbrowska/Lieven 2005; Langacker 2008).

It will be argued here that in addition to work on transitional probabilities from one word to the next (Jurafsky 2003), employing a constructionist framework and identifying construction evoking elements – in parallel to frame evoking elements in FrameNet (Ziem 2008) – can provide an important cue for explaining of how such expectations come about. It will also be shown how German and English make use of the same and different construction evoking elements for corresponding constructions.

This analysis is supported by recent findings that suggest that linguistic constructions may be organized in the brain as multi-scale hierarchical cognitive maps, structured by successor representations, akin to spatial and conceptual navigation in the hippocampal-entorhinal system (Stoewer et al., 2022; Stoewer et al., 2023).

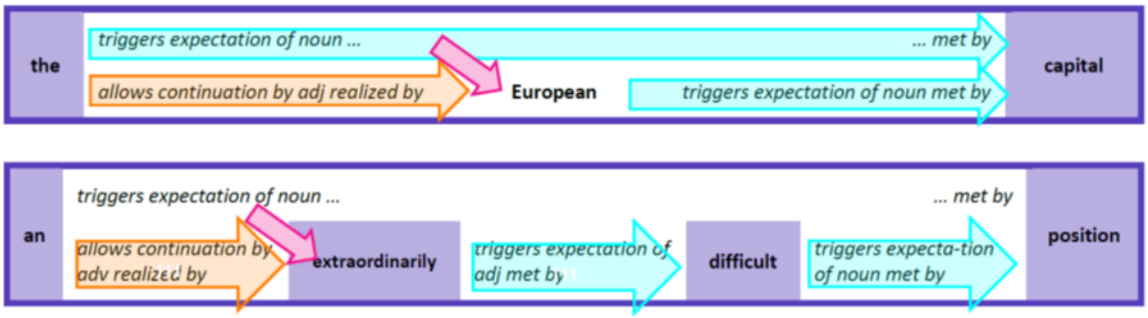
Neuroimaging evidence supports this view, indicating that structured linguistic knowledge is encoded in a predictive framework that mirrors the hierarchical planning mechanisms of cognitive maps (Goldstein et al., 2022).

The power of constructional knowledge in predicting how an utterance is being continued becomes apparent in the case of premodifier constructions, for example. The the or a, for instance, raise a very high expectation of a noun to follow (expect in cases such as the sooner the better). This expectation does not have to be met immediately with the next word, however, if you look at phrases such as the European capital or an extraordinarily difficult position. Nevertheless, it seems reasonable to assume that the expectation created by the or an will be maintained until the noun actually appears. This can be illustrated as depicted in Figure 1 (Herbst/Hoffmann 2024).

The talk will thus explore to what extent the constructionist assumption that speakers' constructicons contain units that are considerably larger than individual words can provide an explanation of how speakers' expectations about the continuation of an utterance come about in addition to, e.g., factors such as collocation, multi-word units, other frequency-related effects (Divjak 2019) and frame-based and general world knowledge and how the various constructions making up a construct can be imagined to create such expectations.

Figure 1

Illustration of constructional prediction in premodifier constructions



Note. When an utterance begins with a determiner such as the or a(n), it strongly activates the expectation of a following noun. This expectation persists even across intervening modifiers (e.g., the European capital, an extraordinarily difficult position), until the anticipated noun finally appears. The figure demonstrates how constructional knowledge supports incremental interpretation and sustained prediction in such cases, highlighting the role of grammatical constructions in shaping the flow of comprehension.

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Grammatical Beliefs on Aspectual Distinction in Spanish: The Role of Cognitive Instruction in Developing Language Awareness Among Native Teachers

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Keywords

Grammatical-beliefs, Aspectual-distinction, Cognitive-instruction, Concept-Based-Instruction, Teacher-Language-Awareness.

Abstract

This study investigates the evolution of grammatical beliefs concerning the aspectual distinction between the simple perfect and imperfect past tenses among 23 Spanish native speaker trainees, through explicit instruction informed by the pedagogical principles of operational Cognitive Grammar (Llopis-García et al., 2012; Llopis-García, 2024). The analysis examines how participants' verbalizations about these forms evolve through the roles of 'user,' 'analyst,' and 'teacher,' thereby contributing to a nuanced understanding of Teacher Language Awareness as it intersects with Cognitive Linguistics (Giessler, 2012;, Hernández-Abella, 2024). These roles facilitate the identification and categorization of explicit Declarative Metalinguistic Knowledge, manifested in participants' evolving grammatical beliefs (Negueruela-Azarola, 2011).

Data were collected through an open-ended questionnaire administered post-instruction and analyzed qualitatively, utilizing a categorization scheme that disaggregates the participants' verbalizations within the triad of roles. The findings reveal a conceptual transformation, from the implicit knowledge typical of a native speaker entering a teacher training program to the explicit, analytic awareness of an emerging 'analyst'—a shift that is internalized through pedagogical activities structured around the prototypical model, supported by visual aids from Alonso-Raya et al. (2021). Additionally, the study identifies potential pedagogical approaches for teaching the past tenses (indefinite/imperfect) from the perspective of the teacher.

Participant verbalizations indicate a substantial refinement of foundational grammatical beliefs, triggered by the conceptualization process fostered within a cognitive-based instructional framework aligned with Concept-Based Instruction principles. This evolution mirrors recent findings in foreign language contexts and opens an emerging avenue of exploration for Spanish as a first language, particularly within teacher training (García, 2019).

The study underscores the importance of continued research into the role of Cognitive Grammar in mediating the conceptualization and internalization of metalinguistic knowledge within teacher education. These findings suggest that cognitive frameworks, such as the one employed in this study, can significantly enhance teachers' language awareness and pedagogical practices.

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The Role of Swearwords in Forensic Linguistics and Police Interpreting

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Keywords

Insults, police interpreting, emotion-laden words, hate crime.

Abstract

This study highlights the critical importance of accurately interpreting swearwords during police interviews, especially when vulnerable victims are involved. Insults are considered emotion-laden words (Pavlenko 2008), because they trigger emotion from speakers and hearers. This is relevant as emotion and emotion-laden words are processed, and recalled differently from other words in the mental lexicon (Pavlenko 2008). The way an interpreter translates can significantly influence legal outcomes, as demonstrated in previous studies on police interpreting (Filipovic 2007, Filipovic and Hijazo-Gascon 2018). Interpreters must consider differences in perceived offensiveness across languages. This is especially relevant in hate crimes, where swearwords often serve as legal evidence (Hale et al. 2009; Gómez-Bedoya, 2022). Misjudging their impact can affect police decisions about pursuing legal action. Contextual variables affect their use by native speakers (Jay & Janschewitsch 2008), while gender plays a role in how offensive they are perceived, with women generally rating them as more offensive than men (Beers-Fägersten 2007).

The methodology of the study consists of different tasks. First, 36 interpreting students interpreted 30 insults in three police interview contexts (domestic violence, homophobic aggression and insults to a police officer) from English into Spanish and vice versa. Second, a survey was distributed among more than 200 native speakers (of British English and European Spanish) to rate the offensiveness of these lexical items. Third, the same survey was distributed among police officers in Spain to test whether different social and professional groups rate differently the offensiveness of the insult.

Findings reveal a gap in training, as interpreting students often altered the offensiveness of insults, either amplifying or reducing their severity. Survey results also show variations in how offensiveness is perceived based on gender and past experiences of discrimination. The results of native speakers who are not related to the police are compared with the perceptions of these items by police officers, to examine the differences in terms of offensiveness and therefore, whether there are consequences in what type of legal action is appropriate in each case.

In conclusion, this study underscores the need to include training on interpreting insults in legal contexts. Misinterpretations can lead to discrimination and misunderstanding, particularly concerning hate speech and crimes involving vulnerable victims. Studying the role of lexical items like swearwords is vital for understanding the severity of a crime and ensuring accurate legal responses.

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Motivation, Semantics, and Cognition in Maize Names in the Quechua-speaking Community of Puyca (Arequipa, Peru)

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Keywords

cognition, names of maize, motivation, metonymy, Puyca.

Abstract

In the Quechua-speaking community of Puyca, located in the province of Cotahuasi (Arequipa, Peru), maize represents one of the most significant and culturally embedded agricultural crops within the botanical landscape inhabited and cultivated by its users. As part of their close interaction with this essential resource, Quechua speakers have developed a rich nomenclature to distinguish, categorise, and transmit knowledge about the numerous maize varieties they cultivate. These names are not arbitrary; rather, they reflect an intricate conceptual system rooted in the speakers' experiential and ecological relationship with their environment. This study investigates the cognitive mechanisms involved in the naming processes that speakers employ to conceptualise and differentiate maize varieties, focusing particularly on the role of metonymy in the Andean context.

To access this linguistic and cognitive information, the study employed a structured elicitation methodology grounded in best practices in linguistic

fieldwork (Bowern, 2008; Bohnemeyer, 2015; Chelliah & Reuse, 2011). Through collaboration with native speakers, a corpus of 25 varietal names was collected and analysed, each exemplifying different semantic and conceptual strategies for encoding culturally relevant distinctions. The data reveal that speakers draw on a variety of cognitive domains—such as shape, colour, texture, growth cycle, and ritual significance—when assigning names to maize varieties.

The theoretical framework is situated within the paradigm of cognitive linguistics (Langacker, 1987; Lakoff, 1987; Johnson, 1987), which views linguistic expressions as reflections of embodied experience and culturally grounded knowledge. Within this approach, the concept of motivation is crucial: linguistic forms are not arbitrary but rather systematically linked to conceptual content. The analysis highlights the prevalence of metonymic patterns—particularly those based on salient perceptual or functional features of the maize (e.g., kernel size, cob shape, or processing utility)—as the primary cognitive mechanism guiding name formation (Barcelona, 2000; Littlemore, 2015; Panther et al., 2009). In certain cases, more elaborate naming strategies involve metonymic chains (Brdar-Szabó & Brdar, 2011), where one cognitive link leads to another, enabling the mapping of complex knowledge networks onto linguistic form.

This research contributes to our understanding of how indigenous naming practices encapsulate local ecological knowledge, cultural values, and cognitive strategies. It demonstrates how the linguistic categorisation of maize in Puyca functions as a cognitive tool that not only facilitates agricultural practice and social communication but also preserves and transmits Andean cosmological and epistemological frameworks. Ultimately, the study exemplifies how linguistic data from under-described languages can offer valuable insights into the intersection of language, culture, and cognition.

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Using AI to replicate human experimental results: four metaphorical motion studies

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Keywords

metaphor, motion and space, time, artificial intelligence, large language models

Abstract

The advent of artificial intelligence (AI) opens up new possibilities for automatic classification-based analyses of large datasets, surpassing the limitations of human-based approaches. The application of AI and large language models (LLMs) in research has proven highly effective in disciplines such as biology. These tools are particularly useful for detecting patterns in large datasets -a capability essential in linguistics. However, before generalizing AI-generated results and applying these tools to large-scale linguistic datasets, we must ensure their reliability and alignment with human analyses. In this paper, we present a comparative analysis between human experimental data and AI-generated results. We conducted four experiments with human participants.

1. Participants rated the emotional impact of 15 sentences containing temporal metaphors which included manner of motion verbs (e.g, “minutes dragged during his conference”). The results identified speed as the central manner feature that activates further emotional meanings related to the speaker’s subjective interpretation of time. Verbs indicative of faster motion were not only associated with subjective perceptions of quicker time passage: sentences with verbs implying a fast pace were also rated as more lively and entertaining, were associated with narratives perceived as more eventful and with a more streamlined progression of events, also inducing a higher sense of agency, of control over the events happening. Finally, verbs like “approach”, “edge” or

"inch", were associated with imminence, a sense of urgency and anticipation, carrying a sense of tension and forewarning.

2. Participants evaluated the valence of 15 manner-of-motion sentences, both in physical contexts (e.g., "the bird flew by") and metaphorical contexts (e.g., "the months flew by"). Our results showed that fast verbs increased their valence ratings in metaphorical settings (that is, they were perceived as more positive), while slow verbs were rated as more negative in a metaphorical setting.
3. Participants evaluated the valence of a number of temporal sentences containing manner of motion verbs by choosing between positive or negative loaded emojis; this study was meant to test the non-verbal aspects of emotional evaluation.
4. Participants selected verbs to fill blanks in emotionally loaded sentences, choosing between manner-of-motion verbs and path verbs. Results showed a clear congruence between the verbs chosen and the emotional content of the sentence, highlighting the cognitive inclination to emphasize the emotional aspects of a experience describing the passage of time using an appropriated manner of motion verb

We then replicated these four experiments using an LLM (ChatGPT version 4), finding a strong agreement between human and AI-generated results across the four studies. This suggests that LLMs can capture the nuanced distinctions identified by human participants in our experiments. Our findings highlight new methodological opportunities: instead of conducting studies with a limited number of stimuli and participants, AI-driven approaches similar to the present one could enable large-scale quantitative studies with thousand or even millions of datapoints, while maintaining high confidence in results reliability.

Skating ‘on Thin Ice’ and Landing ‘in the Soup’: A Diachronic Analysis of Constructional Changes in English Idioms

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Keywords

language change and grammaticalization, corpus linguistics, construction grammar, idiom, English.

Abstract

This study explores the diachronic changes of two English idiomatic phrases ‘on thin ice’ and ‘in the soup’, from literal to non-compositional metaphoric uses of “taking a risk” and “in trouble”, respectively, through a comprehensive corpus-based analysis, and illuminates the linguistic changes in idiomatic constructions as well as the motivations behind such changes.

The use of metaphors is by no means peripheral in language use (Lakoff and Johnson 1980: ix, 211). Fillmore, Kay and O’Connor (1988) argued that idioms constitute a large part of linguistic competence. Traugott and Trousdale (2013: 20) pointed out that non-compositional expressions are semantically and pragmatically marked. Gibbs (1990) posited that idioms are not simply dead metaphors, but their mappings from the source domains of literal senses of constituents to the conventionalized idiomatic meaning differentiate the conceptual metaphors they evoke. This complexity in the meaning of idioms could affect how the phrases in question are used in changing social contexts. By building on these theoretical notions, this study clarifies the mechanism of how idioms evolve from compositional forms to idiomatic expressions.

Using the Corpus of Historical American English (COHA), the study tracks linguistic changes from the 1820s to the 2010s across multiple genres and registers. The phrases ‘on thin ice’ (68 occurrences) and ‘in the soup’ (126 occurrences) have been chosen because they showed significant transitions in the frequency and usages within the chronicle frame of COHA (occurrences in COHA full-text data). Both expressions demonstrate a significant increase in metaphorical usage in the 20th century, although

they were used in their literal meaning in simile in the 19th century (Figures 1 and 2). The methodology, following Gries (2010), involved manually tagging corpus instances with metadata including decade, genre, meaning type (literal or metaphorical), collocating verb (lexical and tense/aspect), and subject type (animacy and grammatical person). The metadata are tallied and quantitatively analyzed.

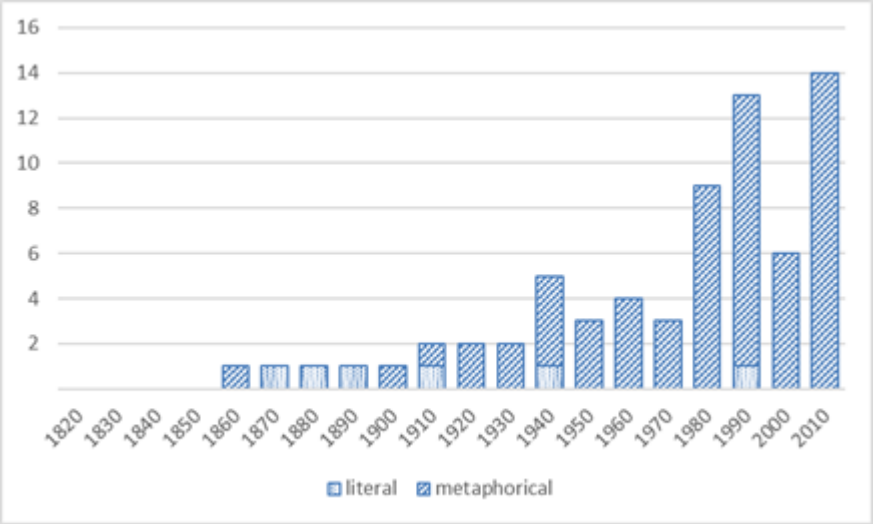

Figure 1 Frequency of 'on thin ice' by decade (COHA)

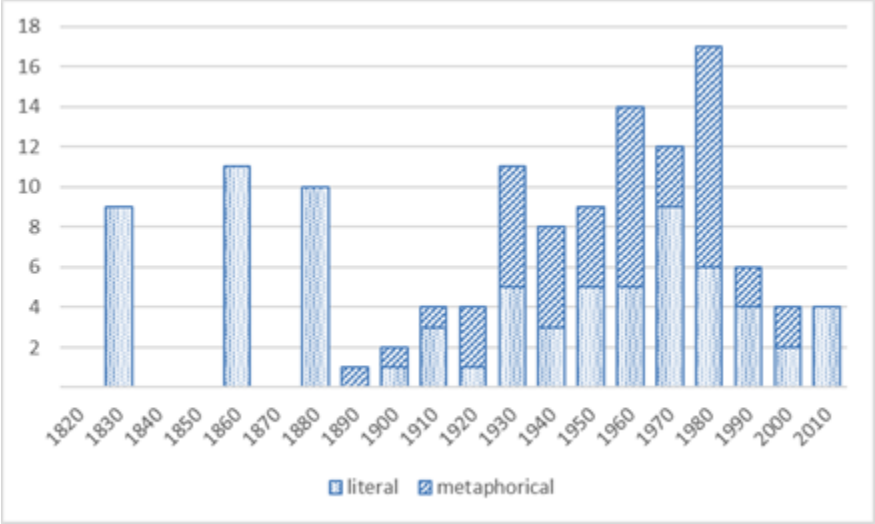

Figure 2 Frequency of 'in the soup' by decade (COHA)

Key findings in this empirical research include three significant patterns of linguistic transformation: (1) Shift from formal to casual registers (the registers verified based on genre, lexical items used such as slang, and morphological features such as contractions), (2) Variation in subject animacy and grammatical person, and (3)

Transition of collocating verbs from specific to more generalized verbs. The results of this paper suggest empirical examples of how social dynamics, such as industrialization, motorization, and financialization, might have driven linguistic change, as demonstrated by the increased usage of expressions denoting risks, such as losing a job or facing litigation. For instance, 'on thin ice' initially collocated primarily with specific surface motion verbs such as *skate* and *walk* by the mid-20th century but gradually expanded to appear with the more general verb *be* since the 1950s, coinciding with increased complexity in social relations in industrializing society. By mapping the nuanced trajectory of these phrases, the research provides deeper insights into the mechanisms of semantic change and metaphorical language evolution.

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Reduplication and Construction Grammar. A cross-linguistic analysis of reduplicative genitive superlative constructions

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Keywords

reduplication, genitive constructions, cross-linguistic analysis, Construction Grammar, Corpus Linguistics.

Abstract

Reduplicative genitive constructions (cf. (1)-(4)) represent a subset of reduplicative constructions classified as discontinuous reduplicative constructions (Mattiola & Masini 2022).

> It. Ma il professore Marino è un Siciliano... **Il paradosso dei paradossi** è che hanno inculcato al Popolo Siciliano il pregiudizio razziale su se stesso. (itTenTen20 178515826)
>
> En. Dominate the arena and prove your worth as a soldier on the battlefield. And prepare to be **the champion of champions** ... (enTenTen18 45670443)
>
> Fr. Le roi fainéant, **le crack des cracks**, le cheval du siècle... meilleur trotteur français de tous les temps, Ourasi est aussi le seul à avoir remporté quatre fois le Prix d'Amérique en 1986, 1987, 1988 et 1990.
>
> Sp. Yo quería ir a ver a Madonna, **la diva de las divas**, y no voy a ir porque no tengo enchufe. (esTenTen18, 4620496)

These are characterized as polyfunctional structures involving lexical duplication, in which other linguistic units are inserted between the reduplicant and the base (Velupillai 2012: 101). Traditional approaches relegated them to the margins of studies on reduplication, due to the fact that their syntactic configurations were not considered canonical examples of reduplication (Stolz 2018). However, recent research grounded in a constructionist framework has recognized their grammatical significance across diverse syntactic contexts, thereby extending the conventional understanding of reduplication to encompass phenomena beyond the word level (López Meirama & Mellado Blanco 2018; Masini & Di Donato 2023; Masini & Mattiola 2022; Sommerer 2022). In alignment with this view, the cross-linguistic study of discontinuous reduplicative constructions remains a developing area of inquiry, with emerging research demonstrating its potential to enhance the analysis of these patterns' linguistic properties (see Dobrovolsk'ij & Mellado Blanco 2021; Schafroth 2024).

In this context, the study examines reduplicative genitive superlative constructions in Italian ([DET N1sing di N1pl; example 1), English ([the N1sing of N2pl; example 2), Spanish (3), and French (4) through the methodological framework of Corpus Linguistics, utilizing the TenTen family from Sketch Engine (cf. Yoon & Gries 2016).

Grounded in the principles of Cognitive Construction Grammar (Goldberg 2019; Hoffmann 2022), the research aims to achieve the following objectives:

- Assessing Productivity: Evaluate the productivity of these constructions by examining "how many different items occur in the various slots of a construction" (Boas 2013: 247). This includes analyzing type frequencies, type-token ratios, and potential productivity to gauge lexical diversity and the propensity for innovation (cf. Baayen 2009).
- Semantic Classification: Categorize the slot fillers into semantic clusters to identify "pockets of productivity" (Cappelle 2014; cf. Ivorra Ordines forthcoming). Following Barðdal's (2008) framework, productivity will be assessed as a function of the inverse relationship between type frequency and semantic coherence.
- Syntagmatic Analysis: Investigate the syntagmatic profile of these constructions, encompassing their contextual usage, register, and macro-syntactic features. This analysis will contribute to a holistic understanding of the constructions both intra- and cross-linguistically (Goldberg 2006: 22).

Preliminary results suggest that constructions are highly productive cross-linguistically and that the reduplicative genitive superlative constructions share functional analogies to some extent across the four languages, despite idiosyncratic formal constraints.

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Differential use of prosodic cues for speech segmentation

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Keywords
language processing, language change and grammaticalization, prosodic cues, Urdu

Abstract

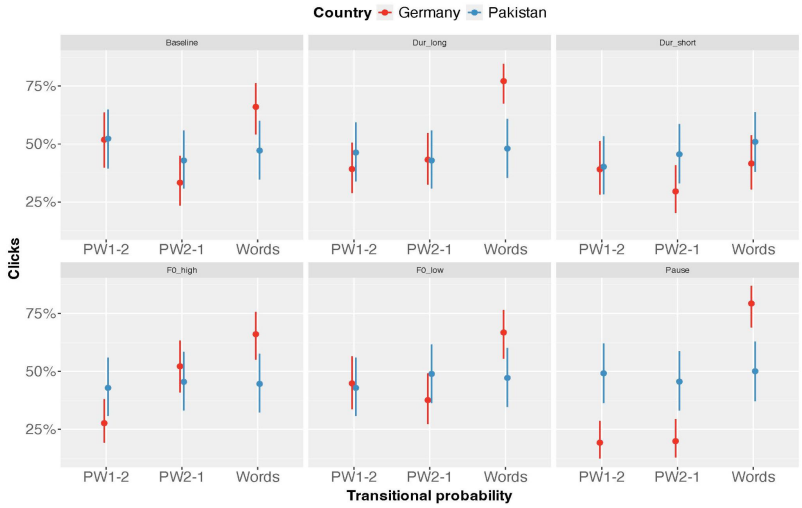
The use of prosodic cues to identify words in a continuous speech stream is variable and language dependent (Saffran et al., 1999, Matzinger et al., 2021). Using the artificial language learning paradigm, we investigate the role of prosodic cues (pauses, lengthened and shortened syllable duration, and high and low F0) in Urdu speakers' perception of pseudo-words. Urdu offers an interesting test case as it has a high functional load for F0 and duration at the lexical and post-lexical levels (Jabeen, 2022). Moreover, long word final duration and pauses are reported to be frequently used for word segmentation, while the use of F0 varies across languages (Fletcher, 2010). We aim to analyze the role of the widely used prosodic cues (pause, duration) and a language-dependent cue (F0). We also investigate if Urdu speakers living in Germany vs. Pakistan differ in this regard as Urdu speakers' use of prosodic cues has been shown to be affected by the country of residence (Jabeen and Braun, 2023).

Our stimuli consisted of six artificial languages, each consisting of four words with three CV syllables. The words were recorded by a female speaker and concatenated into a continuous speech stream. The sequence of syllables was controlled leading to the within-word transitional probability of 1 (henceforth statistical words) and the between-word probability of 0.33. In our experimental conditions, the final syllable of each statistical word was manipulated to have high or low F0, long or short duration, or to be followed by a pause. These were compared with the baseline (no acoustic manipulation). Eighty-one Urdu speakers (46 from Germany, 35 from Pakistan) listened to the speech streams and identified words from a list comprising statistical words with high within-word probability and part-words with low transitional probability.

Figure 1 shows a significant interaction between prosodic cues and the country of residence ($p<0.0001$): Urdu speakers in Pakistan did not use any acoustic cues to recognize statistical words as indicated by the low proportions of hits in Figure 1. In contrast, Urdu speakers in Germany used long final syllable duration ($p = 0.03$) and pauses ($p = 0.004$) to facilitate the perception of statistical words, as compared with the baseline. Short final syllable duration led to low segmentation performance ($p = 0.0001$) and F0 manipulation did not influence the perception of statistical words by Germany-based Urdu speakers. The results for the Germany-based Urdu speakers are similar to Mmatzinger et al.'s results for German native speakers, while our results for Pakistan-based Urdu speakers differ. This suggests that language exposure affects the use of

prosodic cues for speech segmentation and might hint at the need to re-evaluate word final lengthening as a cross-linguistic segmentation cue. In our presentation, we will also present data explaining the use of prosodic cues to perceive words with low transitional probability. In the future, we aim to investigate if Urdu speakers in Pakistan use distributional properties for word segmentation as shown by White et al. (2012) for English.

Figure 1
Predicted marginal effects for proportion of clicks on statistical words and part-words. Whiskers represent 95% confidence intervals.



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Non-Exhaustive List Construction, Evaluation, and the Unprepared Mind: The Case of the Japanese X *toka* Construction

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Keywords

cognitive semantics, list construction, stance, focus, (inter)subjectification

Abstract

The Japanese language has a series of non-exhaustive list constructions, one of which is X *toka*, meaning 'for example, X, etc.' The construction has been identified as having an attenuation function, expressing 'X or something like that'; a topic-managing function, expressing 'Like X, …'; and a highlighting function, expressing 'such a thing as X' (Taylor 2010). Compared to other functions, the highlighting function of the X *toka* construction remains underexamined and lacks a uniform analysis.

This study further analyzes the highlighting function of X *toka* through qualitative analysis of approximately twenty hours of spontaneous conversational data from various YouTube channels, drawing on theories of cognitive semantics. Analysis reveals that the highlighting function of *X toka* appears:

(I) When the speaker (S) evaluates X and forms an expectation of X based on that evaluation (Ex. 1);

(II) When S's expectation of X is not met, and he expresses his surprise (Ex. 2);

(III) When S's expectation of X is not met, and he expresses his surprise, and simultaneously, S warns the addressee (A) that his comment on X will also be surprising (Ex. 3);

(IV) When S expresses surprise about X while simultaneously warning A that his comment on X will contradict A's belief (Ex. 4); and

(V) When S introduces X to A unexpectedly (Ex. 5).

The study demonstrates that:

(1) X *toka* highlights S's evaluation of X, and this originates from the first of two functions of non-exhaustive list constructions: (i) to denominate salient examples of a category and (ii) to indicate others (Moravcsik 2017);

(2) When S expresses his surprise on X, X *toka* marks not only S's evaluation but also S's expectation based on his evaluation;

(3) When S warns or introduces something unexpected to A, X *toka* marks S's projection of A's evaluation and expectation, suggesting multiple layers of (inter)subjectivity being involved (Traugott 2003); and

(4) X *toka* also functions as a focus marker (Lambrecht 1994). In cases of S-oriented and A-oriented unexpectedness, X *toka* indicates that X is the least expected to be Y, yet X is, in fact, Y—contrary to S's or A's expectations.

This study not only enhances our understanding of the X *toka* construction family but also demonstrates how the seemingly unrelated concepts of non-exhaustive listing, evaluation, and focus are interconnected.

Examples

(1) S is talking about how his daughter used to do *yonaki* "crying overnight." S asks her if she remembers it.

tabun yonaki ***toka*** *oboete-nai de-sho?*

'Crying overnight **toka** (such an old incident), I don't think you remember it, do you?'

(2) S and his family are eating sushi. S's young daughter says she will try *uni* 'sea urchin.' S is surprised.

uni ***toka*** *iku n ya*!?

'Sea urchin **toka** (such an adult-tasting food), you are going to try it!?'

(3) S and his friends are looking for a vending machine that sells sushi. S finds the machine, and he sees it also sells *kaki* 'raw oysters.' S is surprised and tells it to his friends assuming that they will be surprised too.

kaki ***toka*** *aru*!

'Oyster **toka** (such a thing that needs to be carefully refrigerated) exists!'

(4) S is doing a DIY project, and S is surprised that his friend is filming his *ossan no kewashī kao* 'old man's rough face.' S expresses his opinion about this, which contradicts his friend's belief.

daremo ossan no kewashī kao ***toka*** *mi-tak-unai to omou ze.*

'An old man's rough face **toka** (such an unpleasant thing), I don't think anyone wants to see it.'

(5) S, a comedian, learns that a food stand is run by one of his fans, whom he calls *ata-oka* 'crazy people.' The stand has a special discount, *ata-oka waribiki* 'crazy-people discount,' for the comedian's fans. To support the food stand, S tells a passerby about the discount.

ata-oka waribiki ***toka*** *arun n da kedo...*

'There is a crazy-people discount **toka** (such an unusual thing), but…'

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Constructional Identification of Eventualities: A Usage-based Account

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Keywords

eventualities, corpus methods, collostructional analysis

Abstract

Introduction The identification of event-like entities, **eventualities**, has been presupposed in the discussion of **event structures** (cf. Croft, 2001). In formal semantics, syntactic tests using **perception report constructions** (PRCs) have proven useful for identifying predicates that express eventualities (Parsons, 1985, 1990; Maienborn, 2011). As shown in (1), Higginbotham (1983) demonstrates that perception verbs with infinitival complements are a means of expressing direct event perception.

(1) a. Anna saw Heidi cut the roses.
b. Anna saw Heidi cut the roses, but she didn't recognise that it was Heidi who cut the roses.
c. Anna saw that Heidi was cutting the roses (*but she didn't recognize that it was Heidi who cut the roses).

(Maienborn, 2011, 808)

While the linguistic diagnosis of eventualities has proven useful to some extent, actual instances of PRCs must be discussed to evaluate their usefulness. From a usage-based constructionist perspective (Hoffmann, 2022), the formal and semantic properties of constructions are assumed to emerge from actual uses. Observing PRCs quantitatively allows analysts to re-evaluate their relevance and limitations.

Methods We extracted 998 instances of PRCs from the TED Corpus using the TED Corpus Search Engine (TCSE) (Hasebe, 2015). Verbs occurring in PRCs were obtained in the form of [{*hear*, *see*, *watch*} Obj V_{inf}]. We then performed **collostructional analysis** (Gries, 2023) to observe the collocational preferences of verbs within these constructions. R and Coll.analysis 4.1 were used to perform the analysis (R Core Team, 2024; Gries, 2024).

Results & Discussion The results of the collostructional analysis are presented in Figure 1, where the x-axis represents logged co-occurrence frequency, and the y-axis represents log odds ratio. Additionally, we performed distinctive collexeme analysis to observe the collocational preferences between verbs representing auditory (i.e., *hear*) and visual (i.e., *see*, *watch*) modalities. Some of our findings can be summarised as follows:

- **Eventualities identified by different modalities**: Collocates of PRChear tend to refer to eventualities with (relatively) short temporal spans. For instance, the act denoted by say (hear in Figure 1) requires a relatively short temporal span compared to the act denoted by grow (see and watch in Figure 1). While syntactic frames with different perception verbs (i.e., [hear, see, watch Obj Vinf]) should equally serve as "good" identifiers of eventualities, perceptual modalities can influence the behaviour of collocates, which is expected in usage-based models (Langacker, 1999).
- **Idiomaticity and event identification**: Collocates of PRCs can be influenced by the "fixedness" or so-called idiomaticity of certain combinatorial patterns (e.g., hear X think). For instance, although the verb think does not represent a prototypical eventuality, it stands out in PRCs with hear, in contrast to see or watch (cf. Figure 2). This result suggests that the association strengths of collocates do not always correspond to "actual" eventualities.
- **Stative verbs in PRCs**: In event ontology (Murphy, 2010, Ch.9), the distinction between state verbs (e.g., live) and non-state verbs (e.g., tell) is considered crucial. If this assumption is correct, collocates of PRCs should not include stative verbs. However, actual uses show otherwise. This suggests that constructional identification of eventualities should account for flexible word usage.

Figure 1

Results of collexeme analysis (Freq ≥ 3)

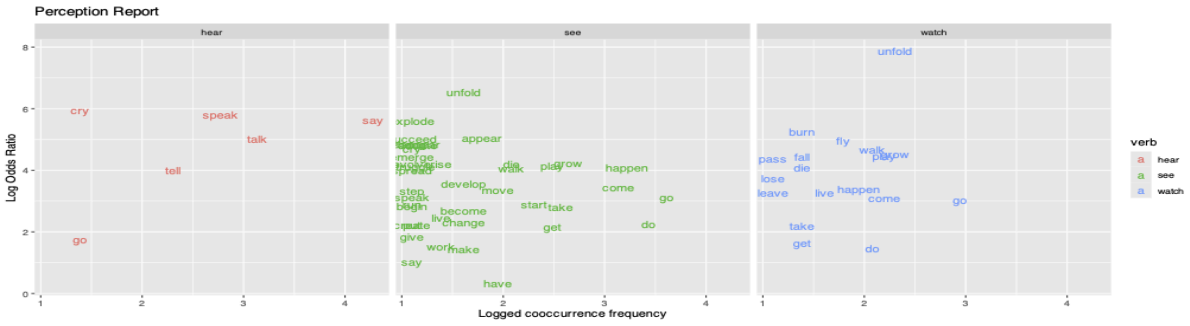
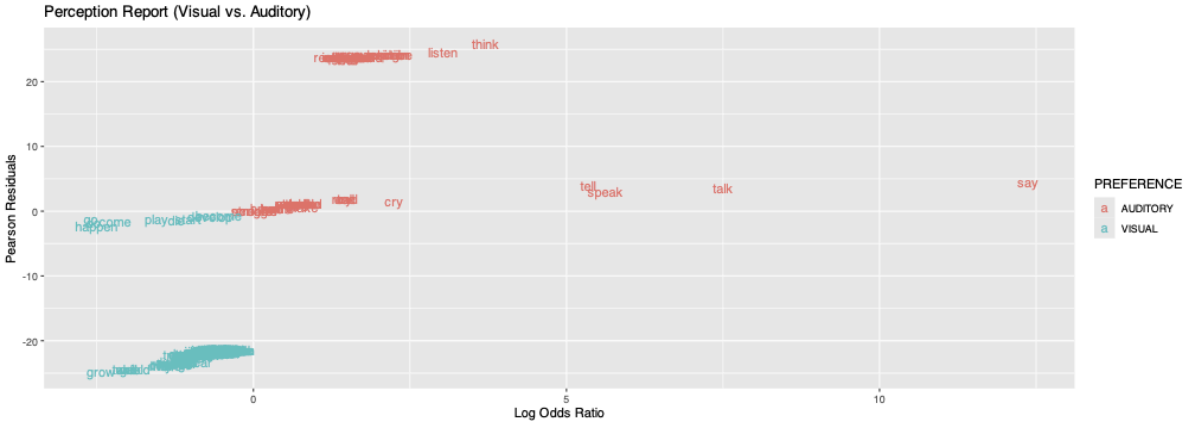


Figure 2

Results of distinctive collexeme analysis



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Cognitive Shifts in the Grammaticalization of 'wo' and 'ga'

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Keywords

Cognitive Linguistics, grammaticalization, case particles, historical linguistics, Japanese.

Abstract

This study investigates the cognitive shifts underlying the grammaticalization of the Japanese particles 'wo' and 'ga', focusing on their historical development and implications for argument structure. While 'wo' is traditionally considered an accusative case marker in Modern Japanese, historical texts such as *Man'yōshū* (compiled in the late 8th century) reveal that it functioned in multiple roles, including as an interjection, sentence-final particle, and conjunctive marker (Kawabata & Tanaka, 2025). Similarly, 'ga', which originally served as a possessive or attributive marker, gradually evolved into a nominative case particle, fundamentally altering the transitivity system in Japanese (Kawabata, 2020).

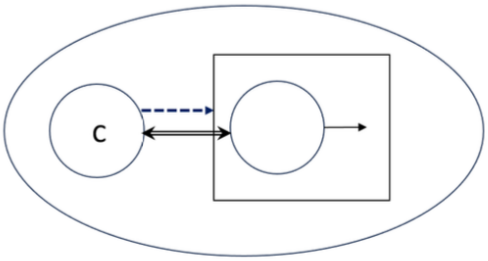
Man'yōshū is the oldest extant anthology of Japanese poetry, containing over 4,500 poems composed in the *chōka* (long verse) and *tanka* (short verse) forms. The language of *Man'yōshū*, known as Old Japanese, preserves grammatical structures and lexical items that later underwent significant changes, making it a crucial source for studying the historical development of Japanese grammar.

By analyzing corpus data from *Man'yōshū*, this study examines how 'wo' and 'ga' reflect distinct cognitive reconfigurations in the perception of agency, event structure, and subject-object relations. The transition of 'wo' from a discourse-oriented marker to a syntactic case particle aligns with a cognitive shift from the "Interactional Mode of Cognition (I-mode)" to the "Displaced Mode of Cognition (D-mode)" in linguistic processing (Nakamura, 2004). In Nakamura's (2004) framework, the "Interactional Mode of Cognition (I-mode)" refers to a cognitive state in which the subject and the object of cognition are not yet clearly differentiated (Figure 1). In this mode, the speaker is directly and emotionally involved with the object of perception; the subject-object boundary is fluid, and meaning is constructed through embodied interaction. I-mode is characterized by immediacy, empathy, and subjectivity, often manifesting in emotive or evaluative expressions. Conversely, the "Displaced Mode of Cognition (D-mode)" represents a more detached, analytical perspective, where the subject recognizes the object as external and separate. In this mode, language users conceptualize events and entities with a higher degree of abstraction, structuring them with grammatical devices such as case marking and fixed word order. D-mode allows for more propositional and referential use of language. This cognitive shift is further illustrated in Figures 1 through 4. The author argues that the cognitive interpretation of the Japanese particle 'wo' progressively shifts from Figure 1 to Figure 4, reflecting a transition from interactional to displaced modes of cognition.

Conversely, the emergence of 'ga' as a nominative marker facilitated the reanalysis of argument roles, reinforcing the subject-object distinction. These shifts illustrate a broader pattern of grammaticalization driven by cognitive constraints on language processing and conceptualization.

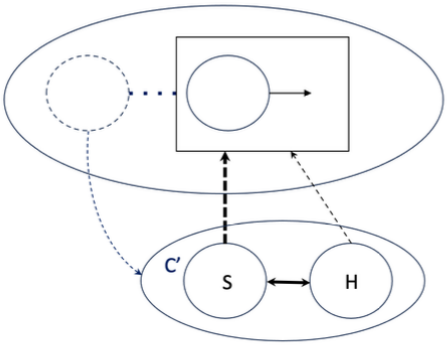
This study contributes to cognitive linguistic approaches to historical linguistics by demonstrating how grammaticalization is shaped by evolving conceptual frameworks. The findings suggest that case particles in Japanese are not merely syntactic markers but also cognitive tools that reflect shifts in how speakers categorize and structure events.

Figure 1



Outer ellipse: The domain of cognition
C: The subject of cognition and conceptualization
Rectangle: A cognitive image as construed through a cognitive process
Double-headed arrow: Direct interaction between the cognitive subject and the object
Dashed arrow: Cognitive process

Figure 2



C': The externally positioned subject of cognition and conceptualization
S/H: The speaker and hearer involved with the particle wo
Solid double-headed arrow: Interaction between the speaker and the hearer

Figure 3

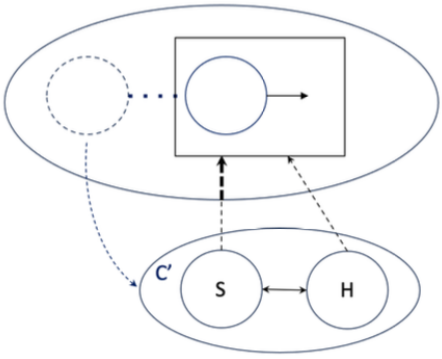
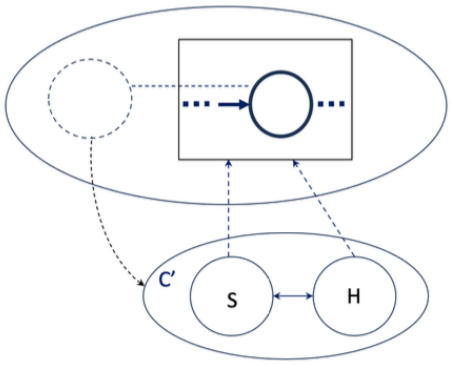


Figure 4



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Multimodality in Lexical Blending: Applying New Methodologies to Understand Blend Formation

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Keywords

Lexical blends, Conceptual Blending Theory,
Conceptual Integration, multimodality, morphology.

Abstract

Lexical blending has attracted growing interest in the last three decades, within several traditions including morphology (Dressler 2000, Ronneberger-Sibold 2012), psycholinguistics (Lehrer 1996, Silaški & Đurović 2013), and the framework of Conceptual Blending (Fauconnier & Turner 2002, Kemmer 2003). Researchers in various traditions have noticed generalizations based on the formal similarities between the source words in a blend, or between the source words and the entire blend (Kelly 1998, Cannon 2000, Gries 2004, 2006, 2012). For example, in *barndominium* 'condominium conversion of a barn' the two source words share a phonological segment (/n/) and the blend shares the prosodic structure of its source word *condominium*. Such similarities can be phonological, prosodic, or orthographic (Kubozono 1990, Kelly 1998, Gries 2004, 2006, 2012, Arndt-Lappe 2013); in signed language blends they can be visual (Lepic 2016).

Our research focuses on a so-far little noted pattern of formal similarities in lexical blends in written language, and one that can be especially well captured within Conceptual Blending Theory: the visual similarities between written characters in the source words.

Conceptual Blending Theory highlights an important cognitive capacity also stressed in other cognitive linguistic traditions: the human ability to seamlessly integrate different modalities of experience in meaning creation, for example the integration of linguistic and gestural (visual-motor) representations (Liddell 1998, Parrill 2012; see also

Langacker 1991, Bergen 2012, Talmy 2000, 2003 for their takes on the fundamental role of multimodal integration in human cognition). Our most general aim is to demonstrate empirically that lexical blending in writing shows multimodal effects, specifically the integration of visual information that is not specifically linguistic, but is based on perceptual similarities in letter shapes.

Kjellander & Kemmer (2023) was a first step toward that project. We argued that written lexical blends are visually motivated via similar shapes of the letters that they contain, and that such shape similarity could coincide with other typical formal characteristics of blends. Our claim was supported by blends from two databases we collected, arguments from schema-based theory (Langacker 1987, 1991), and on observations from other fields of research like research on reading (Zhan et al. 2022). Here we provide a further step toward establishing a solid empirical footing for our claim that general shape similarity is indeed a motivating factor in lexical blending.

Based on deeper observations from the blends in our two databases, one from Kjellander (2022) and the other the Rice Neologisms Database (neologisms.rice.edu), we find that indeed many of the blends in our collection display visual similarities between the source words of the blend that go beyond orthographic identity. Orthographic identity between parts of the source words appearing in the blend typically occurs in overlap blends; but in addition we observed many cases of visual similarity between parts of letters, that result from accidental similarity in letter shapes. For example in the blend *faceblock* 'block someone on Facebook' from *Facebook + block*) there is visual similarity between the corresponding letters *o* (second instance) and *c* in the source words *book* and *block* -- on top of the more global similarity between *book* and *block* that comes from orthographic, phonemic and prosodic identities. We offer here a method of quantifying shape similarities among letters based on a method proposed in Simpson et al. (2013) for determining character similarity in general (not in blends), and which is applicable in many languages using variants of the Roman alphabet. Their method, designed for other applications, established a metric based on language users' similarity assessments of pairs of letters on a scale from 1 (no visual similarity) to 7 (strong similarity). We applied their similarity results for letter pairs to the blends in our database. Simpson et al. found a median similarity score of 1.7 between all lowercase letters investigated. In comparison, the similarity score of *o* and *c* in the source words of *faceblock* is 5.23 according to their similarity measure, thus much greater similarity. We

found a large number of blends in our data that have such unexpectedly high similarity values in the characters found in the blend. We hypothesize that users of written language make use of such partial visual similarities as one of the mechanisms for creating blends, integrating these similarities with others based on linguistic rather than purely visual factors.

Most generally, we argue that visual similarity in letter shape should be added to the list of previously reported types of significant similarities in lexical blending. By adding the methodology for quantifying letter shape similarity, we are able to extend lexical blends research to include multimodality, and conversely, blends research provides another area in which multimodality is found to be significant in language and in human cognition.

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English Demonstrative Pronouns Referring to Proximal Entities: A Cognitive Linguistic Approach

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Keywords

(discourse) deixis, demonstratives, *this*, *that*, cognitive grammar, intersubjectivity.

Abstract

This study examines how English speakers refer to objects near the speaker (S) using *this* or *that* (e.g. "Wow. Guys. Look at *this/that!*") based on data from four YouTube videos featuring "magnet fishing." Additionally, the cognitive process underlying the use of *this* and *that* is analyzed through the framework of Langacker's (2008a) cognitive grammar and Machida's (2002) two intersubjectivity types.

Whereas the use of *this* for a proximal entity and *that* for a distal one by English speakers is widely accepted, *that* is occasionally used to refer to an object near S. According to Fillmore (1982: 46), when touching or presenting an object, the distance from S does not determine the use of *this* and *that*. This usage triggers the special function of *that* referring to a proximal entity, known as the "shifting point of view." For example, when S holds an object and asks, "Would you like *that* one?" S adopts the hearer's (H) perspective. Sawada (2013) further argues that S may use *that* to refer to a proximal object to attract H's attention. However, in our data, many instances show that S does not seem to draw additional attention from H, because the object is already within their shared field of vision. We investigate how English speakers enjoying magnet fishing use *this* and *that* when presenting their catch from water.

Data pertaining to *this* and *that* for this study were obtained from four YouTube videos related to magnet fishing (1-4: see Data Source). Two videos were created by American English (AmE) speakers (1-2) and two other by British English (BrE) speakers (3-4). From the first 10-12 min of the videos, 91 instances of *this* and 118 instances of *that* were obtained as varid tokens (127 from AmE speakers and 82 from BrE speakers). Among them, we focused on 117 instances, where S refers to the proximal object with *this* (50) and *that* (67). We observed that S tends to use *this* to attract H's additional attention to the object, primarily to its aspect, which was NOT previously shared by the participants (to achieve joint attention). Meanwhile, *that* was used to attract H's attention to the object as a whole with S's excitement, as shown in the following example:

(1) (...) but look at ***this*** thing you guys ... I almost thought ***that*** was an antenna off of a car or something. ***This*** is definitely a metal brace or bracket here. And then look

at the tip of ***this*** thing. What the heck do you think ***that*** one is? some kind of flag and like maybe the flag snapped off I have no clue. ***That*** is a funky one.

(Data Sourse1)

In (1), S introduces a new object with "this thing" and *this* and *that* thereafter refer to the same object. S refers to its part with *this* while the whole with *that* with excitement.

We argue that the different uses of these two pronouns reflect different cognitive processes. Specifically, the use of *this* and *that* for building shared experience (i.e., joint attentional control cycle (Langacker 2008b[2009])) relates to Machida's (2022) S-Intersubjectivity, in which S "simulates other's perspectives." We assume that this intersubjectivity is reflected in the explanations by Fillmore (1982) and Sawada (2013) mentioned above (i.e., a perspective shift occurs when S refers to a proximal entity with *that*) as well as in how Verhagen (2007) explains Janssen's (2002) example presented in (2) (i.e. the H's profile in construal relationship).

(2) a. Doctor: Is this where it hurts?
b. Patient: Yes, that is where it hurts. (Janssen 2002)

However, the process by which the aspect of distance between S and H is backgrounded in such usage has not been examined comprehensively. This study presents a hypothesis that the use of *that* referring to proximal entity and to show excitement, as observed in our data, corresponds to Machida's A-Intersubjectivity, in which S "assimilates his/her perspective with others." This implies that S forgets about the distance between S and H because they share the same perspective (cf. Honda's (2011) explanation on Lakoff's (1974) "emphatic" use of *that* as in "How's *that* throat (vs. *your* throat)?").

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Data source

1. "Unbelievable! Epic Magnet Fishing Haul: Biggest Jackpot EVER Found!!!" (https://www.youtube.com/watch?v=z4SZTt8peO4)
2. "I Sent My STRONGEST Magnet To The Bottom Of The Lake" (https://www.youtube.com/watch?v=eJXSqBNwAtw)
3. "Magnet Fishing Find Of A LIFETIME - UNREPEATABLE!!! (MUST SEE)" (https://www.youtube.com/watch?v=5ziF3Nc3L-s)
4. A Thames HOARD! They keep coming up! Mudlarking and Magnet Fishing special (https://www.youtube.com/watch?v=wrIldyHkYdE&t=6s)

Panchronic Analysis of *Have It That* Construction

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Keywords

have it that construction, cognitive grammar, constructionalization, complementation, evidentiality.

Abstract

This study provides a panchronic analysis of the *have it that* construction (HITC) in English, exploring its emergence, development, and evidential functions. In English, impersonal subject constructions—such as the impersonal passive (e.g., *it is said*) and the *they say that* construction—function as strategies of indirect evidentiality (Kono 2025). In matrix clauses involving impersonal subjects (excluding noun phrases (NPs) referring to specific individuals) and verbs of speech, the interaction of indefinite subjects with general speech verbs such as *say*, as well as passivization, backgrounds the process. This causes a shift in focus from speech events between specific individuals to cognitive processes, implying a plurality of unspecified entities.

Evidentiality involves interrelated factors, such as the (in)directness of evidence, generality (individual vs. cultural/conventional knowledge), and reliability (the speaker's epistemic stance). Impersonal subject constructions denoting hearsay tend to increase indirectness and generality, while decreasing reliability. This study explores how HITC contributes to the process of impersonalization and argues that HITC developed through the chunking of "have it" in quotative constructions, such as *(as) NP have it*, eventually leading to the conventionalization of complement-taking constructions.

Diachronic data reveal a range of finite complement-clause constructions with subject NPs exhibiting varying levels of abstractness. In earlier data (15th–17th centuries), quotative constructions are frequently found with nouns such as *text* or *proverb* and appear to be influenced by the sociocultural context of early Christianity, as suggested by Guardamagna's (2017) "broad conformity" interpretation of Latin *secundum* ("according to") NP. Quotative instances with indefinite subjects such as *some* and *others* occur frequently and can be seen as intermediate cases between personal and impersonal subjects. These instances are assumed to have contributed to the impersonalization of HITC. In present-day English, HITC has undergone post-constructionalization constructional changes, becoming a specialized construction for expressing hearsay evidentiality.

(1) a. ... the Text hath it, that Wrath is gone out from the Lord, ... (EEBO, 1626)
b. ... for as our English proverbe hath it, That there is no service like to the service of a King, ... (EEBO, 1647)

(2) a. Some will have it, that in times past the Country was better replenished

with people, and that afterwards it became desolate for three causes: ...
(EEBO, 1630)

b. Others, (as I have beene told) would have it that being informed that distinction was made in Rome, between such as were blamelesly innocent, and such as were Saints, ... (EEBO, 1641)

(3) a. Mr. Russell, rumour has it, is gathering together a sheaf of our younger poets' verses. (OED, 1922)

b. Long, long ago, legend has it, the demigod Maui became incensed with the sun. (COHA, 1979)

This study adopts a cognitive grammar framework, characterizing HITC as an epistemic-level setting-subject construction, in which the subject NP refers to reported or conventionalized knowledge. This analysis aligns HITC with a broader range of evidential constructions, including personal subject constructions conveying indirect evidence (e.g., *I have it on good authority that* ...) and other impersonal types (e.g., impersonal passives, *there*-constructions). While setting-subject constructions are typically associated with spatial or temporal references, this study argues that HITC instantiates an epistemic-level setting, building on the idea that an impersonal *it*-subject signals an abstract setting. Diachronic evidence suggests that the obsolete construction *It is had PP that*, found in the 15th–16th centuries, may be a historical source of HITC, predating its conventionalization.

Theoretically, this study (i) extends cognitive grammar to marginal syntactic phenomena, (ii) advances our understanding of evidentiality strategies in English, and (iii) provides insight into the historical development of the complementation construction network.

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Do humans “understand” ape gestures and sound-symbolic vocalizations? An experimental study

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Keywords

iconicity, sound symbolism, ape gestures, experimental paradigms.

Abstract

How far can we go when making inferences from linguistic experiments? By definition, controlled experiments do not represent reality in all its complexity, and thus it is important to be cautious when drawing conclusions. As one example, some recent experimental studies have made strong claims that humans can understand improvised or interspecies forms of communication – specifically, novel nonlinguistic vocalizations (Ćwiek et al., 2021) and gestures in non-human great apes (Graham and Hobaiter, 2023). Both studies are well-constructed, controlled guessing games, but we suspected their proposed conclusions could be too strong given the details of their experimental designs.

In our paper, we focus on the multiple-choice paradigm used in both studies, whereby participants were constrained to choose one answer from a small set of alternatives; that is, for each gesture or vocalisation they were offered a few potential interpretations (words or phrases) and asked to guess the one best reflecting its intended meaning. We expected that replacing the closed-ended, multiple-choice paradigm with an open-ended, free-text paradigm would lead to different results and thus different conclusions about human capacities to understand ape gestures or novel vocalizations.

To test our hypothesis, we replicated the studies by Ćwiek et al. and Graham & Hobaiter, but with the participants freely typing in their answer (i.e. interpretation of the meaning of an ape gesture or novel vocalisation) rather than selecting it from a set of

predefined choices. These answers were then coded by two independent raters on a four-point Likert scale from 0 (meaning is very different from the target concept) to 3 (identical to the target concept), showing moderate-to-high inter-rater agreement. All mismatches between coders were discussed in the team and resolved. The results show that participants performed qualitatively worse compared to the original studies, with a vast majority of responses being “0”, i.e. no resemblance whatsoever to the target concept. This was true for most stimuli, with only very few exceptions, in particular ‘sleep’, which stood out in being mostly guessed correctly. In addition, we analyzed the proximity of the participants’ responses using ConceptNet (Speer et al. 2017). We found that many responses are conceptually fairly close to the target concepts in many cases (such as the same semantic domain, as in ‘sleep’ vs ‘snore’), but hardly any response is fully congruent with the target concept. Overall, this led us to question the claim that naive humans "understand" novel nonlinguistic vocalisations or ape gestures.

Finally, while our study raises some questions regarding the generalisability of results from experiments with closed semantic spaces, we acknowledge that the ecological validity of our own approach is also limited: In actual communicative contexts, the space of possible interpretations is not closed, but neither is it fully open. That is – unlike in our experiment – viable interpretations are constrained by e.g. contextual cues. We will discuss what conclusions can be drawn from narrow and simplified experiments, and how they can be mapped onto a larger picture of the role that non-linguistic vocalisation and gestures may have played in the evolution of today’s languages.

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An interconnected perspective on linguistic structure, extralinguistic contexts, and cognition

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Keywords

pragmatics and cognition, variational discourse-pragmatics, multimodality, discourse-pragmatic features, discourse structure

Abstract

Discourse-pragmatic phenomena are still often regarded as peripheral to grammar or linguistic systems. This study takes a holistic view of language, which integrates linguistic structure — including discourse structure — with extralinguistic variables, particularly communicative situations, that significantly influence human linguistic behaviour. Drawing on distributed or extended cognition (Virtanen 2004, Clark 2008, Joseph 2023), I argue that cognitive processes of language can only be fully understood when we consider languages as dynamic systems that are sensitive to contextual factors.

The proposed language model expands Jackendoff's (2002, 2007) tripartite parallel architecture by incorporating a discourse structure level alongside the traditional levels of phonology, syntax, and semantics. This reconceptualisation positions discourse/text — not merely the clause — as a fundamental linguistic unit, building on previous work (see Biber et al. 2020 for an overview). Additionally, in line with Wiese (2023), the model incorporates extralinguistic factors such as communicative situations, which strongly influence the representation and use of grammatical patterns. Societal norms further shape the perception of appropriateness in specific contexts, revealing how power asymmetries and social hierarchies can impact language use (Agha 2006). For example, formal communicative settings enforce strict adherence to monolingual standard varieties, marginalizing multilingual or informal practices and restricting speakers' access to certain social domains.

Drawing on findings from corpus studies based on the RUEG corpus (Lüdeling et al. 2024), which are part of my PhD thesis (currently under review), I illustrate the model by presenting discourse-pragmatic features (e.g., affective and epistemic stance expressions, discourse structuring elements, borrowed discourse-pragmatic markers [DPMs]) across two extralinguistic variables: (1) communicative situations (formal/informal, spoken/written) and (2) language contact settings (monolingually and bilingually raised speakers with different majority languages [English/German] and varying heritage languages [German, Greek, Turkish, Russian]).

Key findings include:

1. Communicative situations influence linguistic behaviour, with, for instance, affective stance expressions predominantly occurring in informal contexts (written/spoken), reflecting societal norms that lead to the avoidance of expressing of (emotional) subjectivity in formal contexts.
2. Multilingual practices, such as the use of borrowed DPMs, are similarly suppressed in formal settings but may flourish in informal ones, pointing to the dominance of monolingual language ideologies.
3. Individual variation is pervasive regarding the use of DPMs; personality traits may help explain individual variation in the use of epistemic stance expressions in addition to demographic factors like age.

By emphasizing discourse structure as a core linguistic unit and integrating the impact of extralinguistic factors, this study provides a comprehensive framework for understanding language use. This approach moves beyond static, rule-based models to capture the dynamic interplay between linguistic systems and sociocultural contexts. In doing so, it underscores the centrality of discourse and pragmatic phenomena in cognitive linguistics, challenging the traditional boundaries of grammar and opening new avenues for exploring the interface between cognition, communication, and society.

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Cognitive Linguistic Insights into Gender and Culture: Shifting Gender Metaphors in Slovene Comics

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Keywords

Metaphor, Conceptual Metaphor Theory, Multimodality, Gender, Slovene culture.

Abstract

This study investigates how Slovene comics depict societal views on gender roles through multimodal metaphorical representations. While gender representation in comics has been studied, there is a notable lack of research applying conceptual metaphor theory to multimodal formats, particularly in underexplored languages such as Slovene. Addressing this gap, we analyze 16 volumes (1954–1972) of Zvitorepec (Wily Old Fox), a comic series by Miki Muster, Slovenia's most iconic cartoonist. This series captures a transformative period in Slovene culture and will soon commemorate Muster's legacy on a special edition 2025 Euro coin. Loved by older and newer Slovene generations, the popularity of his works demonstrates the reflection of Slovene cultural norms and societal views on women during the mid-20th century.

To analyze metaphorical representations of female and male characters, we draw on Lakoff and Johnson's Conceptual Metaphor Theory (1980), the Visual Metaphor Identification Procedure (VISMIP; Šorm & Steen 2018), and Forceville's Multimodal Metaphor Theory (2009). Using these frameworks, we propose the Universal and Culture-Specific Gender Metaphors (UCGM) model (Lasnik and Chiang, forthcoming), which examines metaphors from biological and social perspectives. Metaphors in the comics arise from verbal, pictorial, or combined cues, revealing distinct patterns in gender portrayal:

1. Biological Perspective: Male characters are predominantly depicted as predatory animals with unique traits (e.g., a cunning fox or a gluttonous wolf), embodying the metaphor MEN ARE PREDATORY ANIMALS. Conversely, women are often depicted as naked figures in illustrations or verbally described as small, weak creatures (e.g., geese), leading to metaphors such as WOMEN ARE SMALL PREY ANIMALS.
2. Social Perspective: Gender portrayals reflect prevailing cultural norms. Women are frequently assigned passive or objectified roles, exemplified by metaphors like WOMEN ARE UNWANTED PRODUCTS for older or full-figured women, and WOMEN ARE DESIRABLE PRODUCTS for younger, slimmer women. Women are often illustrated with "cute" human faces, while men are animalized, challenging the Great Chain of Being theory. This paradox challenges the traditional hierarchy: while active male animals dominate the plot, passive human women are reduced to objects.
3. Cultural Evolution: By the 1970s, societal changes within Slovene culture are reflected in the comics, with women adopting more active roles (Grm, 2016). This is symbolized by metaphors such as WOMEN ARE WARRIORS, aligning with broader historical shifts, including the 1967 UN Declaration on the Elimination of Discrimination.

Quantitative analysis reveals significant underrepresentation of women, who appear in only a small percentage of the analyzed images, often in objectified roles. Miki Muster's comics reflect the historical evolution of women's roles in the Slovene culture, particularly during the early 1970s. The metaphors used in his work mirror societal changes, offering a lens through which culture and society can be understood as deeply interconnected.

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The roles of the right and left hemispheres in gesture production

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Keywords

motion and space, hemispheric specialisation, gesture production, right hemisphere damage, left hemisphere damage

Abstract

The roles of the left and right hemispheres in co-speech gesture production are subject to controversial discussions. The co-occurrence of speech and gesture has induced neuropsychological research to primarily target the left hemisphere when investigating co-speech gesture production. However, lesion studies indicate a substantial role of the right hemisphere in gesture production. The present study systematically explores hemispheric contributions by investigating individuals with left and right hemisphere damage: How does damage to the right hemisphere (RHD) and left hemisphere (LHD) affect gesture production? Are hemispherically lateralized cognitive deficits, i.e. apraxia, visuo-spatial deficits / multimodal neglect, and aphasia, linked to the reduction of specific gesture types?

Individuals with LHD (n= 20; 14 global aphasia, 3 Wernicke, 2 Broca, 1 mixed; 16 hemiparesis; 11 apraxia), with RHD (n= 18; 15 visuo-spatial deficit and neglect; 16 hemiparesis) and neurotypical individuals (CON, n = 20) re-narrated 10 animated cartoons. The participants' video-taped gestures were analyzed by two independent certified raters (= .86) with NEUROGES, which classifies gestures independent from speech into eight types (emotion/attitude, emphasis, egocentric deictic, egocentric direction, pantomime, form presentation, spatial relation presentation, motion quality presentation, emblems). As a control variable, self-touch (subject-oriented actions) was coded.

The RHD group performed significantly less gestures/minute than the CON group and the LHD group, while there were no group differences for subject-oriented actions. The RHD group performed significantly less emotion/attitude, emphasis, form presentation, spatial relation presentation, and motion quality presentation than the CON group. In contrast, the LHD group performed sig. more egocentric deictic, form presentation and spatial relation presentation gestures and less emphasis gestures than the CON group. Visuo-spatial deficit / neglect correlated negatively with the frequency of egocentric deictics, and apraxia negatively with the frequency of pantomime gestures. There was no correlation with any measure of aphasia.

Right hemisphere damage but not left hemisphere damage specifically affected gesture production, while the production of subject-oriented actions, such as self-touch, remained preserved. The findings are in line with those in individuals with callosotomy as well as with the few lesion studies that directly compare RHD and LHD, which report a significant reduction of gesture production in RHD. Among the specific gesture types, pantomime gestures were outstanding, since their production was linked to praxis. Further, pointing from an egocentric perspective was related to visuo-spatial cognition/attention, lateralized to RH. In contrast, there was no evidence that the primary production of specific gesture types was grounded in language.

Emerging person marking in Finnish non-finite verbs

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Keywords

cognitive grammar, language change and grammaticalization, construction grammar, morphology, verb inflection.

Abstract

Person marking is typically thought of as a property of finite sentences, and finite verb forms in particular. In contrast, non-finite clauses and verb forms are typically thought of as either dependent of the main clause with regard to subject (or actor) marking, or as having an overt subject but no person marking proper. Thus, roughly, finite verb forms typically are, and non-finite verb forms typically are not, marked for person (provided, of course, that the language in question has person marking in the first place).

More generally, and in Cognitive Grammar terms, finite verbs typically are, and non-finite verbs typically are not, anchored with regard to the speech situation. This anchoring includes, notably, tense, aspect, modality, and person reference.

This dichotomy also applies to Finnish verb forms. In standard Finnish, finite verb forms obligatorily have a person affix (or passive morphology), whereas infinitives and participles never do. Similarly, finite verbs in Finnish are inflected for tense and mood, while non-finite verb forms are not.

However, this picture is somewhat confounded by the fact that a number of Finnish non-finite verb forms (essentially, all participles and some infinitives) can have a possessive suffix, morphologically identical to possessive suffixes found in nouns, and semantically corresponding to person marking in finite verbs. Participles also involve a present vs. past distinction and, together with some infinitive forms, also a morphological active vs. passive distinction.

The closer one looks at the Finnish non-finite paradigm, the more unclear the finite vs. non-finite distinction appears. This appears to problematize such dichotomies

as finite vs. non-finite, temporal vs. atemporal relation, anchored vs. unanchored, and autonomous vs. dependent.

I shall approach Finnish infinitive forms in light of varying dialect data and briefly investigate the areal distribution, and morphosyntactic and semantic contexts and functions, of possessive suffixes and passive morphology in the Finnish infinitive system. Based on this investigation, I shall discuss the findings in terms of the dichotomies listed above and, ultimately, the notion of finiteness in the context of cognitive grammar.

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"Casting a blank ballot": Selection of visual/verbal information during comprehension of metaphors in political cartoons

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Keywords

language comprehension, metaphorical mappings, political cartoons, visual information processing.

Abstract

According to Lakoff and Johnson (1980), metaphors are not limited to the level of language, but rooted in deep cognitive structures, shaping the way we think and perceive experiences. The Integrated Theory of Conceptual Metaphor (Lakoff; Johnson, 1999; Fauconnier; Turner, 2002; Feldman; Narayanan, 2004; Grady, 1997; among others) argues that conceptual metaphors are not arbitrarily chosen but emerge from recurring patterns in our physical and cultural experience.

This research therefore aims to describe the use of metaphors in political cartoons, emphasizing how this multimodal genre can facilitate or inhibit the understanding/conceptualization of metaphorical mappings, as a result of the integration of visuospatial and linguistic semioses contained in the text, its structural non-linear organization, and the semantic-cognitive processes they trigger. At the same time, we reflect on the similarities and differences in the processing of metaphorical linguistic expressions and their visual representations, from the point of view of the processing time of purely visual texts and mixed texts (verbal and visual), and the judgment of the adequacy of metaphorical descriptions and literal inferences associated with these texts.

The corpus of our research consists of 68 political cartoons, which circulated between 2018 and 2022, in the context of Brazil's presidential election campaigns. In addition to cataloging and analyzing the cartoons in terms of the mapped source and target domains, the semantic relationships and the conceptual integration between the domains, we conducted an experimental test to measure the processing and comprehension of the visual and mixed texts.

The experiment was carried out using an automatic facial reaction analyzer, which collected task response times, judgments of the adequacy of metaphorical descriptions and literal inferences to the political cartoons presented, as well as data on the participants' emotional reactions to the stimuli, the valence of emotions, gaze direction, attention and responsiveness. For this work, we only emphasized the processing time and the judgment of the descriptions/inferences. The experiment had a 2 x 2 design: two types of target charge (visual and verbal-visual only) and two types of comprehension text (metaphorical description and literal inference).

Eight stimuli anchored to the image of an electronic ballot box were taken from the corpus and manipulated to fit the experimental design, totaling 32 target cartoons, distributed in four lists administered to different participants. The task consisted of observing 08 target cartoons and 08 distractor cartoons (various non-political texts). After each cartoon, the participant judged the appropriateness of a metaphorical description, or a literal inference associated with that cartoon.

The preliminary results indicate that the processing of metaphors in exclusively visual cartoons maintains very similar characteristics (response time and judgment of appropriateness) to those of their verbal-visual counterparts, suggesting that the absence of linguistic clues had no significant effect on the comprehension of the visual text. Thus, the organization of metaphorical meaning in cartoons by means of visual semiosis seems to involve the same cognitive and metacognitive processes as linguistic comprehension, confirming the nature of metaphor as primarily conceptual..

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Towards a constructionist typology of argument focus in Brazilian Indigenous Languages

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Keywords

Information structure, Argument focus, Construction Grammar, Language typology, Indigenous languages

Abstract

Focus is an information structure category that has been instigating linguists for a long time. According to Lambrecht (1994, 2000, 2001), this category comprehends the semantic component differentiating presupposition and assertion in a pragmatically articulated proposition.

Considering this definition, it is possible to identify at least three types of focus structures in natural languages: 1) the type in which the focal element corresponds to the whole sentence, with no assumed presupposition; 2) the type in which the sentence predicate is in focus and an argument of the sentence tends to function as topic; and 3) the type in which only one argument in a sentence is focused, generally providing identification for a variable in an open presupposed proposition (Prince, 1986). Lambrecht (2000) states that types 1 and 3 are marked structures in natural languages, so 2 is the unmarked member of the focus category. This research concerns the third type, commonly characterized as an argument focus or a narrow focus structure (Lambrecht, 1994, Van Valin, La Polla, 1997; Van Valin, 1999, 2016).

The functional-cognitive tradition of research on focus (Jespersen, 1937; Lambrecht 1994, 2000, 2001, Miller 2006) argues that the function of argument focus may be encoded through clefts, word order constructions, and particle constructions in terms of linguistic form. Miller (2006), investigating languages of Europe, argues that languages recurring to cleft constructions to mark focus tend to exhibit a rigid syntax. In contrast, languages with a flexible word order tend to encode focus by means of word order itself.

This research concentrates on the Indigenous languages of Brazil, aiming at a) characterizing the formal strategies these languages exhibit to encode argument focus, b) testing the hypothesis correlating rigidity and flexibility of word order and the marking of argument focus, and c) providing a usage-based constructionist perspective (Goldberg, 1995, 2006, 2019, Croft, 2001, 2022) on the characterization of the focal configuration of these languages, contributing to a typology of argument focus constructions.

Therefore, a convenience sample of 24 Indigenous languages was created based on the methodology proposed by Rijkhoff et al. (1993). In addition, the descriptive materials of those languages (grammar, Ph.D dissertations, and research reports) were analyzed, considering aspects such as i) the use of intonation to mark focus; 2) rigidity vs. flexibility of word order and its function in pragmatic terms; 3) presence/absence of cleft or cleft-like constructions; 4) presence/absence of focus particles; 5) presence/absence of bound morphemes to mark focus; 6) descriptions of other strategies not predicted in the literature on focus.

The current research stage reveals that Brazil's Indigenous languages exhibit various strategies to mark focus, including word order, focus particles, bound morphemes, and, in some languages, cleft-like constructions. A correlation between word order and the presence or absence of clefts in those languages has not been observed yet. However, the scarce mention of constructions resembling clefts may indicate that this kind of construction is not as frequent in those languages as in European languages such as English, Spanish, or Portuguese.

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Bilingualism and Spatial Cognition in Taiwan: Lexical Specification across Frames of Reference

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Keywords

spatial frames of reference, bilingualism, Taiwanese Mandarin Chinese, Taiwanese Min Nan.

Abstract

This paper examines how bilingualism influences spatial cognition by analyzing the use of 'left/right' (LR) and 'back/front' (FB) spatial terms in relation to the coronal and sagittal axes among Taiwanese Mandarin Chinese (TMC)-Min Nan (TMN) bilinguals. Specifically, this study investigates (i) whether bilingual exposure to typologically distinct spatial reference systems influences frame selection, (ii) how bilinguals' spatial encoding compares to monolingual patterns, and (iii) whether bilinguals exhibit cognitive restructuring rather than simple transfer of spatial strategies. Despite their genealogical proximity, TMC and TMN exhibit distinct strategies for spatial reference. TMC resembles English by employing a symmetrical system with a relative preference, whereas TMN demonstrates part-region polysemy and favors a geocentric frame. Bilinguals exhibit a mixed pattern by displaying the relative increase in discourse and a geocentric preference in recall memory (Lin, 2017, 2022).

Using Semantic Typology (Bohnemeyer et al., 2015), a referential communication task incorporating dolls elicited spatial language use in interaction. The discourse experiment included 112 participants, comprising sequential and simultaneous bilinguals, as well as TMC and TMN monolinguals. Statistical analyses were conducted to examine the propositional occurrences of LR and FB terms across intrinsic and relative frames of reference. Estimated marginal means (EMMs) were computed using R to assess differences between conditions as seen in Figure 1 and 2.

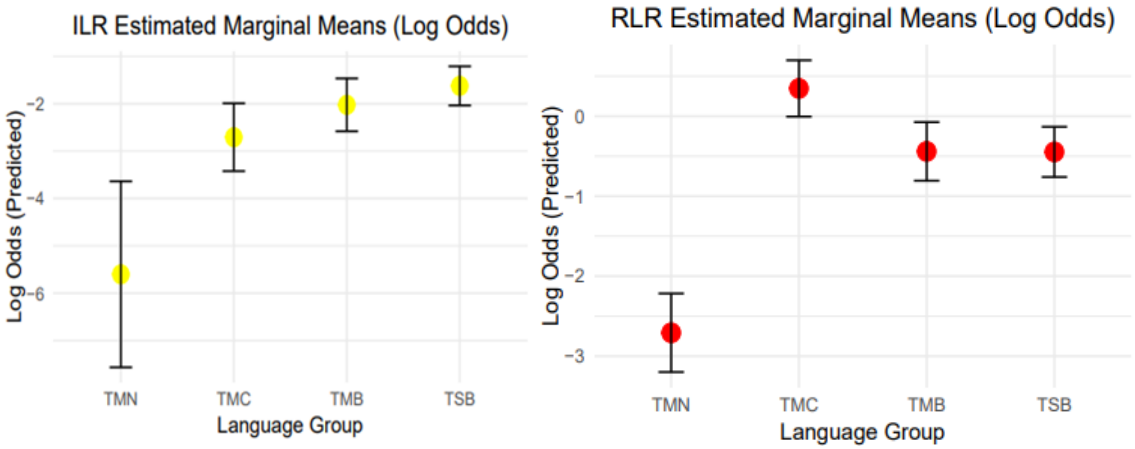
Findings and Implications:

1. Relative over intrinsic type across LR and FB terms: Relative frames were used more frequently than intrinsic frames for both LR and FB terms across all groups. This suggests that relative frames are cognitively more accessible. Additionally, the part-region conflation pattern in TMN may have contributed to the frequent selection of relative frames, as it suppresses the intrinsic selection.
2. Conceptual shift and cognitive restructuring in bilinguals for LR terms: In intrinsic LR encoding, bilinguals exhibited a conceptual shift toward the TMC monolingual pattern. In relative LR encoding, bilinguals displayed a restructuring pattern distinct from both monolingual groups, suggesting bilingual cognitive adaptation rather than simple transfer.
3. Conceptual shift in FB encoding toward the TMC pattern: In both intrinsic and relative FB encoding, bilinguals aligned more closely with TMC monolinguals than TMN monolinguals. This suggests that bilinguals might not be influenced by the part-region asymmetry of TMN but instead adopted the part-region symmetry of TMC, indicating structural properties of the dominant language shape bilingual spatial cognition.

This study contributes to linguistic relativity and bilingual lexical processing by showing that bilingual cognition involves conceptual restructuring rather than simple transfer (Pavlenko, 2009). Instead of blending TMN and TMC spatial systems, bilinguals shift toward the dominant TMC pattern, suggesting that language exposure frequency shapes conceptual categories. These findings suggest that bilingual exposure enhances cognitive flexibility, allowing shifts toward relative patterns, even in speakers of a geocentric language. These results support Pavlenko's model, where bilinguals reorganize spatial encoding dynamically, In addition, the findings suggests that bilingualism mitigates these constraints, enabling adaptive restructuring of spatial encoding. As for the future research, expanding the participant pool to include bilinguals with different language pairs, especially those combining languages with contrasting spatial systems, would test the generalizability of these findings and further refine models of bilingual lexical processing.

Figure 1

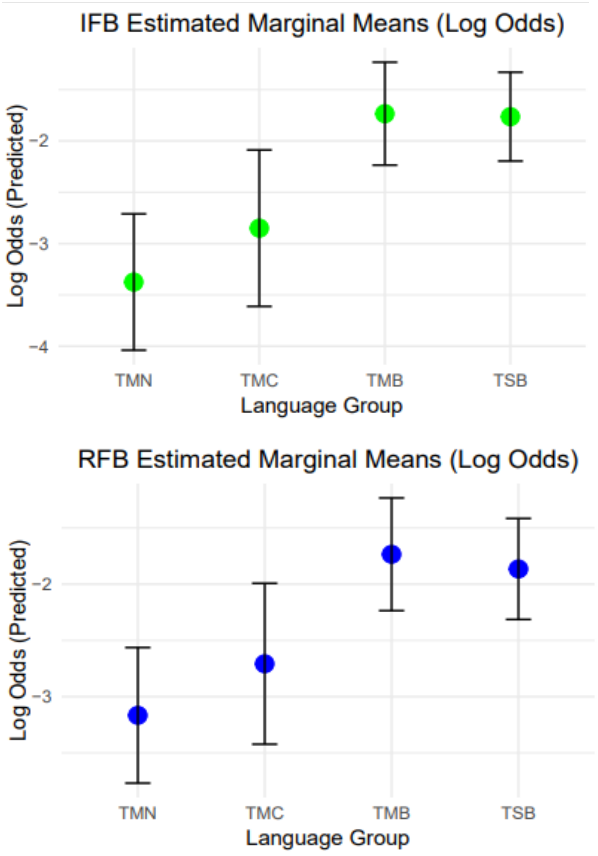
The group comparison in estimated marginal means (EMM) in log odds for the use of LR terms in the intrinsic (ILR) and relative frames (RLR)



Note. Abbreviations: TMN—Taiwanese Min Nan monolinguals, TMC—Taiwanese Mandarin Chinese monolinguals, TMB—sequential bilinguals, TSB—simultaneous bilinguals

Figure 2

The group comparison in estimated marginal means (EMM) in log odds for the use of FB terms in the intrinsic (IFB) and relative frames (RFB)



Note. Abbreviations: TMN—Taiwanese Min Nan monolinguals, TMC—Taiwanese Mandarin Chinese monolinguals, TMB—sequential bilinguals, TSB—simultaneous bilinguals

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A typology of ironist, target and interpreter roles in verbal irony: A cognitive-pragmatic account.

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Keywords

irony; integrated scenario-based account; ironist; interpreter; target

Abstract

The linguistic analysis of the structural elements of irony (i.e. the comunicative components involved in the production and interpretation of irony) is recent. Within Cognitive Linguistics, Lozano and Ruiz de Mendoza (2022) propose an integrated, scenario-based approach to irony, which, going a step further from previous, ironist-centered accounts (i.e. Grice, 1975; Clark & Gerrig, 1984) makes a preliminary distinction between solidary and non-solidary ironists, and naïve and non-naïve interpreters. Solidarity depends on the ironist's eagerness to provide the necessary cues for the interpreter to understand the ironic meaning, and naïvety on the interpreter's necessary knowledge to engage in the ironic act. This has a direct effect on the construction of the epistemic and the attested scenarios in irony, where the former refers to our expectations about the certainty of a state of affairs, and the latter, to the perceived reality. These ideas provide a fertile starting point for a more systemmatic explanation of the structural elements of the ironic event.

Drawing from an annotated corpus of 300 examples of irony containing a wide variety of examples from political speeches to sitcoms, the present study uses a qualitative approach to find usage patterns that result in a typology of ironist, target, and interpreter roles as well as a classification of the factors involved in successful ironic communication. Ironist types are studied from the point of view of the functions of irony (attacking, mocking, being playful, showing off, or persuading), and the impact of solidarity in the interpreter's identification of the epistemic and the attested scenarios. For example, in the humouristic utterance I can totally keep secrets; it's people I tell them to who can't, the epistemic scenario is provided in the first part of the utterance, and the attested scenario in the second part. The audience is expected to distance themselves from their expectation that the speaker is good at keeping secrets. By providing both the epistemic and the attested scenarios in the same utterance, the ironist is being solidary so that the humouristic function of the utterance is fulfilled. By contrast, if the utterance only read I can totally keep secrets, the interpreter would need to have specific knowledge necessary to interpret the irony as such; as a consequence, the potential for a felicitous interpretation would be lower. In turn, the interpreter's role is analyzed in terms of the ability involved in the detection of implicit and explicit scenarios and membership to a specific discourse community. Finally, the study provides a classification of target types (a person present in or absent from the communicative situation, a state of affairs

or an event that took place in a particular place or time, or an institution), taking into account their interaction with the ironist and interpreter.

All in all, the typology proposed in this study, which is based on an in-depth analysis of the structural elements of irony, endows the integrated approach to irony with greater explanatory adequacy.

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“Type-of” integration patterns in the non-compositional construal of lexical blends

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Keywords

cognitive operation, compound, hyperbole, lexical blend, metaphor, oxymoron, reframing

Abstract

Lexical blends, which result from the fusion of parts of words (Balteiro & Bauer, 2019), have drawn the attention of cognitive linguists, who have examined possible organizational principles behind them from qualitative (e.g., Kemmer, 2003) and quantitative (e.g., Gries, 2012) perspectives and have investigated their constructional behavior (Barrena, 2019). In a more recent, broader approach, Peña (2022) has studied lexical blends in terms of (combinations of) cognitive operations like contrast, resemblance, strengthening, expansion, and reduction; e.g., *bombogenesis* (bomb +cyclogenesis) (‘the process of rapid storm intensification’) exploits metaphorical resemblance (bombs and cyclones release massive amounts of energy) and hyperbolic strengthening (release rates in bombs are immensely shorter).

Peña’s account motivates the construction of lexical blends in terms of well-attested cognitive processes. However, it fails to identify and classify the non-fully compositional integration patterns resulting from these processes, a task that is necessary to better understand the meaning effects of many blends. To address this need, we have compiled an initial corpus of 100 blends taken from the neology section of the Cambridge online dictionary plus Internet sources, and then identified and studied non-compositional integration based on “type-of” relations in cognitive models. These relations result from specification operations and often underlie many compounds (e.g., *bookshelf* is a type of shelf) but in lexical blends they arise from more complex operational layouts, among them:

1. Oxymoron-based reframing: *mockumentary* (mock + documentary) involves an oxymoron identified after a contrast operation (a documentary is based on facts, not pretense). The lexical blend is interpretable by reframing documentary within the domain of satire, to make it incorporate non-factual satirical reports; a "mockumentary" is thus a type of documentary.

2. Irony-based reframing: *bitchen* (‘kitchen owned by a “bitch” who never cooks in it’). It is used ironically in an X post to creatively refer to a type of kitchen envisaged in terms of its owner but not its user. Irony involves a clash between what is expected and reality. The special nature of the “type-of” relationship between *bitchen* and *kitchen* arises from the contrast operation resulting in this ironic clash.

3. Complementary integration: *spork* (spoon + fork). Spoons and forks are mutually exclusive sister categories, which are here integrated on equal grounds into one single reality to be classified under *a common superordinate concept* (eating utensils).

4. Metaphorical reframing: *smombie* (smartphone + zombie) ('a person who walks down the street without looking up from the smartphone'). It requires domain expansion from smartphone to its user and a similarity metaphor from zombie-like to smartphone user behavior. The "type-of" relationship arises from the implicit *metaphorical target* (reframed in the context of pedestrians) not from a contributing element of the lexical blend.

When compared to non-blended endocentric compounds, these patterns point to specific saliency-creation factors as underlying the preference for lexical blends. Being a metaphoric source is one of them. Thus, *smombie* is preferred to *smartphone zombie*, if the emphasis is on zombie-like behavior, since the metaphorical source (*zombie*) has default salience. Other factors are hyperbolic strengthening and non-default contrasts.

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Assessing category belonging using experimental and computational approaches

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Keywords

Prototype and categorization, hypernymy, semantics, false memory, cultural variation.

Abstract

Debates about categories such as what constitutes a “sandwich” often devolve into specifying features to define an overarching category, such as a food's shape or contents (Malmquist, 2018). At best, these conversations end up being fun arguments held around water coolers or at dinner tables with friends. At worst, the debates become volatile and litigious, as in the 2006 case in which Panera Bread sued the White City Shopping Center for a contract violation (Eckelbecker & Kievra, 2006), or the more recent case where a judge in Fort Wayne, Indiana classified tacos as sandwiches for zoning purposes (Wimer, 2024). In the broader realm of semantic categorization, these cases beg the question of how and whether features may be used to define a category, how consensus is reached, and how subordinate members of a category (e.g., hoagie) relate not only to superordinate terms (e.g., sandwich), but other members of the category (e.g., taco) within these semantic categories. Using the sandwich space as a proving ground, the present work aims to shed more light on these relationships through the collection of feature norms, text analysis, and behavioral experiments.

Building on prototype theory (Rosch, 1973), previous work by the first author used participant ratings of how well various foods fit into the larger category <SANDWICH>. While this was an enlightening step into the realm of semantic categorization, it did not

allow for a deeper understanding of what criteria participants used to make these judgments (e.g. “has meat” or “is flat”). To address the question of what people consider when they assess category membership, we recruited 75 undergraduate students from the University at Buffalo to provide up to seven features of 45 various foods, in the tradition of McRae norms (McRae et al., 2005). These features were then normalized to address variation in capitalization and spelling. Normalized features were embedded using Sentence Transformers (all-MiniLM-L6-v2) and clustered using HDBSCAN into discrete features along with feature probabilities. For each food item and feature, we summed each probability across all participants, producing a feature vector that could be used to produce an item-to-item similarity space. Based on the similarity between pairs of feature vectors, we generated lists for use in a false memory task (Roediger & McDermott, 1995). The results of the false memory task are then used to further elucidate the semantic relationships at play in the sandwich space. Additionally, we note that for some foods that are more prototypical of certain regions, place becomes a salient factor in the decisions people make. This lends support to notions that culture is an important factor in cognitive research that should be included more widely, even in the pursuit of questions that seem, at face value, unrelated.

These techniques provide critical first steps toward demonstrating category belonging in situations that may require firmer definitions, such as within the legal realm. However, in semantic spaces more broadly, we argue that it is important to consider that one’s cultural or linguistic background may affect how categorical membership judgments are made. It will be important for future work to examine in more depth how language and other cultural elements interact and thus impact categorical judgments, perhaps especially in scenarios where more rigid lines need to be drawn.

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Form and meaning in conceptual blending: The case of Siswati in African Wordnet

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Keywords

conceptual blending, form, meaning, African Wordnet, Siswati.

Abstract

Conceptual blending plays a crucial role in the construction of meaning in people's everyday life. The paper reveals that human minds build meaning through the construction and integration of mental spaces where reality of a statement becomes an outcome of a process of linking thought, language, and context. This paper uses the synsets created on the African Wordnet to base its arguments on African language speakers that often face difficulties and confusions when words (synsets) are used in isolation. It employs the theory of meaning because it can account for a range of phenomena related to language and meaning. Since language is the driver in the creation of meaning, it is prudent to consider it within the element of structured frames and cognitive models. The paper considers language as a means of creating and transmitting information through the synsets created in the African Wordnet.

The discussion on this paper is on Siswati as one of the languages used in African Wordnet focusing on the utterances built from mental spaces with the interaction of conceptual scenes through the created synsets. For example, the word sandla 'hand' originally refers to a body part, its use has, however, been stretched to other senses, which accounts for its meaning beyond the body parts. While hand:1 refers to the body part, hand:2 extends to the management domain to give the sense of a person who occupies the position of a deputy. The word hand:3 provides for an element functioning as a counterbalancing force in a struggle between two established powers – the relation to a hand is drawn in the swaying of the outcome of a matter. Meddling in people's matters or business is another category of sense relation whereby the word 'hand' is

used to convey a different meaning. The paper advances the understanding of words which may have various meanings depending on the context.

Topic Specific Differences and Lexical Variations in the Use of Violence Metaphors: A cognitive linguistic study of YouTube Breast Cancer Discourse in New Zealand and Pakistan

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Keywords

cognitive linguistic , corpus linguistics, social media language, breast cancer discourse, violence metaphors

Abstract

This paper explores how speakers from New Zealand and Pakistan with breast cancer use violence metaphors (Semino et al., 2018) to communicate the intensity of their experiences during various stages of illness. With the theoretical foundation in Conceptual Metaphor Theory (Lakoff and Johnson, 1980) and the use of Metaphor Identification Procedure (Group, 2007) for metaphor analysis, this study investigates how speakers with breast cancer use violence metaphors in different cultural contexts.

We collected a corpus of forty-six personal narratives from New Zealand and thirty-six from Pakistan, posted between 2011 and 2023 on YouTube by breast cancer organisations, such as 'NZ Breast Cancer Foundation' and 'Pink Ribbon Pakistan'. The data was transcribed using the Whisper AI tool and then curated to include only patients' discourse, further organised into eight narrative topics: testing phase, treatment phase, remission phase, family support, campaigns and awareness efforts, government support and funding, general information and religious discourse. In this talk, we discuss two aspects of the use of violence metaphors, a) differences in the use of violence metaphors across various narrative topics, and b) lexical variations in the choice of such metaphors.

The findings suggest that violence metaphors were used differently across various stages of illness experience. For instance, during the 'testing phase,' violence metaphors were employed to convey a sense of punishment as reflected in statements like, *feeling like it was a* ***death sentence****, an immediate* ***death sentence*** [...]' (NZ Example) and *Jese hi aap ko na breast cancer ka pata chalta hai [...] logon ko yeh hona shuru ho jata hai ke oh bas ab to* ***moat ka parwana*** *mil gaya hai*. 'Because as soon as you find out you have breast cancer [..] people start to feel that you have received a **death warrant**' (PK Example). On the other hand, violence metaphor during the 'treatment phase' highlighted negative experiences related to chemotherapy as seen in statements like *the first lot of chemo I had was* ***disastrous*** (NZ Example) and *...chemotherapy ke to, it's the worst of all. [..], it's like a* ***healing poison*** 'chemotherapy, it's the worst of all. [..] it's like a **healing poison***'* (PK Example). Second, lexical variations revealed how ***sunburn*** (a common phenomenon in NZ) was used as a metaphor to describe the effects of radiotherapy, whereas in the discourse from Pakistan, a more general term, ***burn***, was used instead. In this talk, we will explore the possible reasons behind the different word choices made by speakers from both countries to describe the same process.

This study contributes to understanding the use of violence metaphors across various narrative topics of the illness experience and explains how and why speakers from two different countries use lexical variations to describe the same process.

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Teaching conceptual metaphors to bilingual deaf individuals of the Libras-Portuguese language pair: a quasi-experimental study

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Keywords

applied linguistics and pedagogy; Cognitive Linguistics; Conceptual Metaphors; Second Language Acquisition; Deaf.

Abstract

Different studies in the field of cognition and language have focused on the investigation of figurative language processing by deaf bilinguals, as well as the teaching of conceptual metaphors for the development of metaphorical competence in second languages (IRUJO, 1986; LOW, 1988; DANESI, 1993, 2016; BOERS, 2000; LITTLEMORE, 2001; GIORA, 2003; LITTLEMORE & LOW, 2006; DOIZ & ELIZARI, 2013; BALDO, 2014; PAN, 2019, among others). These studies reveal, based on Conceptual Metaphor Theory, Conceptual Fluency Theory, and the Development of Metaphorical Competence, that the teaching and awareness of metaphorical mappings can facilitate the comprehension and retention of figurative vocabulary in second languages. In this context, the purpose of this study is to investigate whether explicit knowledge of the notion of conceptual metaphor and metaphorical mappings can contribute positively to the comprehension of metaphorical linguistic expressions in Portuguese by bimodal bilinguals in Brazilian Sign Language (LIBRAS) and Portuguese. Our hypothesis is that the explicit teaching of metaphorical mappings in Portuguese would facilitate the comprehension of metaphorical linguistic expressions by deaf learners of Portuguese as a second language. In order to test the proposed hypothesis, a quasi-experimental design was employed, involving sixteen deaf students (10 women) enrolled in the B.A. in LIBRAS course at a Brazilian university. These students had their proficiency assessed by the teacher of the Portuguese as a Second Language course they were attending at the same university. Based on the course assessment criteria and the students' performance in class, the teacher classified them into three levels: basic, pre-intermediate and intermediate. The participants were then divided into a control group and an experimental group. The results shows that explicit instruction in conceptual metaphor principles can effectively facilitate the acquisition by Deaf learners of metaphorical expressions in Portuguese

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Cognitive Phonology and Japanese Vowel Coalescence

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Keywords

cognitive phonology, Japanese vowel coalescence, articulation, pitch, sternohyoid muscle (SH)

Abstract

This presentation investigates how cognitive linguistics can contribute to the description of phonological phenomena. We discuss a case study on the phonological phenomenon of vowel coalescence in Japanese (e.g., *sugoi* 'great' can be pronounced as [suge:] (/oi/ --->[e:]), the phenomenon of which is observed in Japanese conversation and has been controversial among Japanese linguistics. We suggest that to clarify it, we must closely attend to what phonetic factors correlate with the phonological coalescence phenomenon rather than focusing solely on the issue of how phonological segmental features are computed as traditional analyses have done. With the essential tenets of cognitive linguistics including the mapping relationship between phonetics and phonology, which is considered to show a parallel relationship with that of conceptualization and semantics (Langacker 1987, 2008; Lakoff 1993), we argue that Japanese vowel coalescence is a phenomenon in which the speaker responds to (or *profiles* in cognitive-grammar terminology) the motion and timing of the sternohyoid muscle that connects the oral cavity (i.e., making segmental articulation) with the larynx (i.e., making tonal differences). Our cross-dimensional/constructional perspective demonstrates that we can solve the problems with previous studies that rely on formal phonological rules that show many exceptions and cannot deal with dialectal differences.

With Sugito's (1982) pioneering research on electromyography, which shows that the sternohyoid muscle linguistically involves major roles in (i) the tongue lowering (e.g., *i.a* or *u.e*) and (ii) the laryngeal function of pitch dropping (e.g., HL), we suggest that Japanese vowel coalescence occurs when the pronunciation requires (i) and (ii) in an unsynchronized way, and the speaker reduces the articulatory effort the unsynchronized motions produce. As shown in (1) below, in Standard (Tokyo) Japanese, two consecutive vowels (*o.i* or *u.i*) can be fused into one long vowel (*e:* or *i:*). Previous major studies (e.g., Kubozono 1990, 2015) have attempted to formalize this phenomenon using phonological feature computation, considering how the output segments are derived from the input segmental features within the phonological domain. However, as shown in (2) below, even when the same segmental conditions are met, the phenomenon may not occur. Furthermore, example (3) indicates that the same words as in (1) cannot derive the vowel coalescence in Osaka Japanese. However, when we consider the Japanese vowel coalescence as a discrepancy resolution between (i) the tongue lowering and (ii) the laryngeal function of pitch dropping, and its linguistically profiled realization (i.e.,

conventionalization), examples (2) and (3) are by no means exceptions to the rules. Instead, they should be regarded as appropriately reflecting our hypothesis. As the underlined parts of each example indicate, the vowel coalescence occurs only when there is a discrepancy between (i) and (ii) as in (1): the tongue rises (*o.i* and *u.i*) with pitch fall (HL). On the other hand, as shown in (2) and (3), without the discrepancy, the phenomenon does not occur: the tongue rises (*o.i* and *u.i*) but no pitch fall (HL).

(1) a. [oi] > [eː] (e.g. *su.go.i* [sugoi] LHL > *su.ge.e* [sugeː] LHL 'great')
b. [ui] > [iː] (e.g. *a.tu.i* [atsui] LHL > *a.ti.i* [atɕiː] LHL 'hot')
(2) Examples from Standard (Tokyo) Japanese
a. *to.o.i* [tooi] LHH > **to.e.e* [toeː] 'far'; compare with (1a)
b. *a.tu.i* [atsui] LHH > **a.ti.i* [atɕiː] 'thick'; compare with (1b)
(3) Examples from Osaka dialect
a. *su.go.i* [sugoi] HLL > **su.ge.e* [sugeː] 'great'; compare with (1a)
b. *a.tu.i* [atsui] HLL > **a.ti.i* [atɕiː] 'hot'; compare with (1b)

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The aesthetic appeal of sign languages: intrinsic appeal or cultural associations?

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Keywords

sign language, aesthetic appeal, phonaesthetics, sociocultural stereotypes, cognition

Abstract

Are some languages perceived as more appealing than others? If so, what makes them more aesthetically pleasing? While some research suggests that languages differ in their intrinsic appeal (e.g., Kogan & Reiterer 2021; Reiterer et al. 2020; Winkler et al. 2023), others argue that perceived appeal is largely socio-culturally constructed (Anikin et al. 2023). Previous research has explored those questions for spoken languages but similar endeavors are missing for sign languages. We aim to address this gap by investigating whether sign languages, specifically American (ASL) and French (LSF) Sign Languages are perceived differently in terms of appeal and what role socio-cultural associations play in shaping these perceptions.

Previous studies on spoken languages have found a "Latin-lover" effect, where Romance languages are perceived as more beautiful than, e.g., Germanic or Slavic languages (Kogan & Reiterer, 2021; Reiterer et al., 2020; Burchette, 2014). This effect likely stems from the fact that many (largely WEIRD) study participants were familiar with Romance languages, which may have triggered positive cultural associations and in turn higher perceived beauty. Based on this, we hypothesize that when participants are unaware of the languages being rated, ASL and LSF will be perceived as equally appealing. However, when participants are informed about the languages, we predict that LSF will be rated as more appealing than ASL, reflecting cultural associations that may drive the "Latin-lover" effect for spoken languages.

In our experiment, 200 WEIRD participants who are unfamiliar with sign languages or deaf culture are presented with short, standardized video clips of an experimenter performing signs for the same 20 concepts (10 being positively valenced

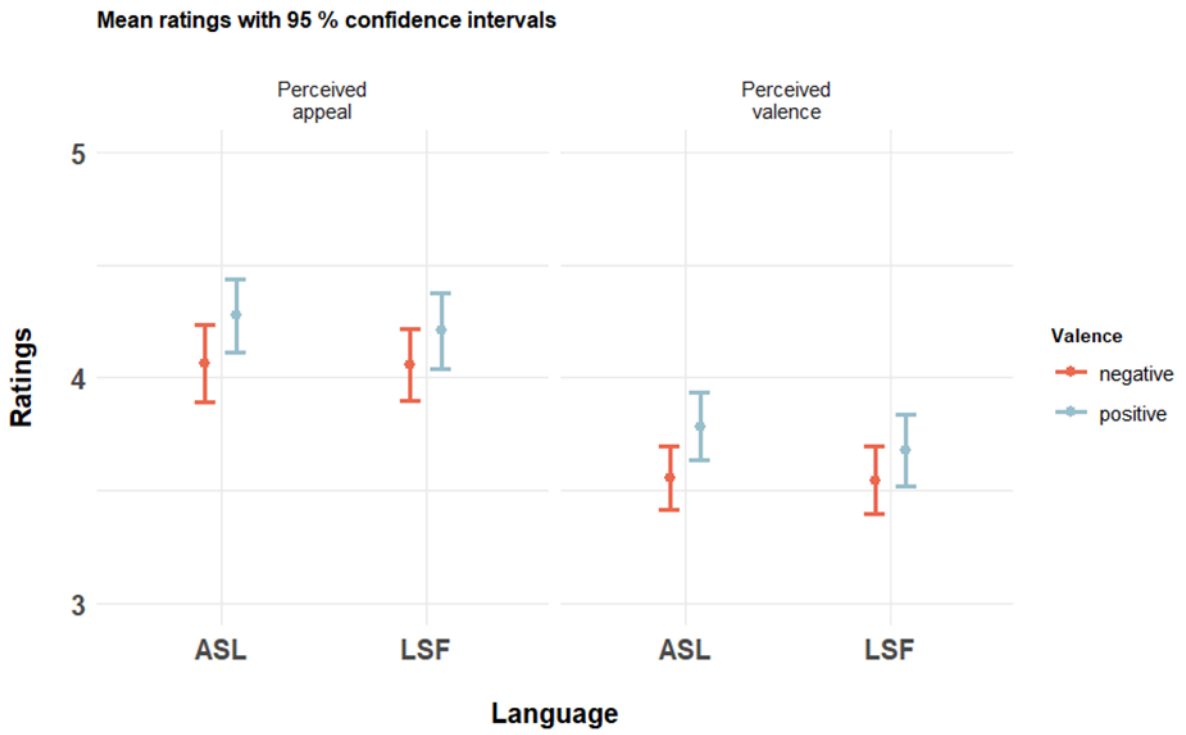
and 10 being negatively valenced) in both ASL and LSF. The signer's face is blurred to remove facial cues. Participants rate each sign on two Likert scales: (1) how appealing they find the look of the sign and (2) how positive they perceive the meaning of the sign. One half of the participants is uninformed, while the other half is informed whether the presented signs are part of either ASL or LSF. All participants are uninformed about the meanings of the signs.

Preliminary results of a cumulative link mixed model for the uninformed group show, as predicted, no significant differences in the intrinsic appeal of ASL and LSF. However, signs representing positive concepts received significantly higher ratings for both appeal and perceived valence compared to those representing negative concepts (Fig. 1). This suggests that even without knowing the meaning of the signs, participants differentiate signs based on their emotional content, and that perceived valence correlates with perceived appeal, indicating an iconic potential of sign languages (cf. Perlman et al., 2018).

In our talk, we complement these initial findings with data from the informed participant group, predicting that this group will perceive the two languages differently in terms of appeal. This offers new insights into how sign languages are perceived aesthetically and the extent to which socio-cultural associations influence these perceptions. Thus, our research links core concerns of cognitive linguistics: linguistic form, meaning, cultural framing and cognition.

Figure 1

Participants' appeal and valence ratings of videos showing negative and positive concepts in American Sign Language (ASL) and Langue des Signes Française (LSF). Participants were not informed about the languages or meanings of the signs rated. Error bars denote 95%-confidence intervals. The rating scale ranges from 1-7. A cumulative mixed effects model with language and valence as the main predictors showed a significant effect of valence but no effect of language on both the perceived appeal and perceived valence ratings.



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Cottontails, *ladyfingers*, and *laptops*: What are the roles of metaphor and metonymy in English exocentric compounds?

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Keywords

corpus linguistics, English word formation, exocentric compounds, semantic headedness, token-based semantic vector space modeling

Abstract

Exocentric compounds such as *cottontail* or *laptop* carry non-compositional meanings that cannot be deduced from the meanings of their parts. It has been argued that exocentric compounds can be classified as metaphorically/metonymically endocentric (Plag 2018). This paper aims to work out the roles of metaphor and metonymy in exocentric compounds on the basis of corpus data and distributional semantic methods, using the COCA and enTenTen21. Specifically, we aim to test whether Plag's (2018) semantic right-headedness hypothesis holds for English exocentric compounds. We operationalize headedness through distributional semantic methods (Hilpert & Correia-Saavedra 2020), creating semantic vector spaces for around 150 exocentric compounds and their components.

Our results show that only a few compounds in the dataset (e.g. *cottontail*, *ladyfinger*, *humpback*, *laptop*) clearly exhibit exocentric distributional features (see Figure 1). For these compounds, the two source words show a semantic behavior that is very different from that of the compound. For most compounds in our dataset, however, their context vector tokens overlap to a large extent with those of at least one source word, suggesting their endocentric nature. Regarding headedness, our results indicate that endocentricity does not necessarily imply right-headedness. Based on the distributional features of the MDS plots, left-headed, right-headed and double-headed exocentric compounds appear equally plausible in our dataset.

In terms of the relationship between metaphor-related compounds (e.g. *ladyfinger* representing a pastry with a finger-like shape) and metonymy-related compounds (e.g. *paleface* denoting a person with a pale face), the average classification accuracy of the multinomial logistic regression model, using MDS coordinates as two predictors, suggests that they lie on a continuum from endocentricity to exocentricity. Metaphor-related compounds tend to lean towards the exocentric end, while metonymy-related compounds are closer to the endocentric end (see Figure 2). This contrasts with Halupka-Rešetar & Lalić-Krstin's (2009) proposal on the continuum of Serbian blends, where metaphor-related blends are closer to the endocentric end, likely due to cross-linguistic or methodological differences between blending and compounding processes.

Overall, our findings offer new empirical insights into the semantic structure of English compounds that help to advance cognitive semantic theory. In addition, it may also shed light on further verification of the relative positions of metaphor- and metonymy-related compounds on the continuum from a typological perspective.

Figure 1

MDS plot for the context vectors of English compound humpback and its two source words

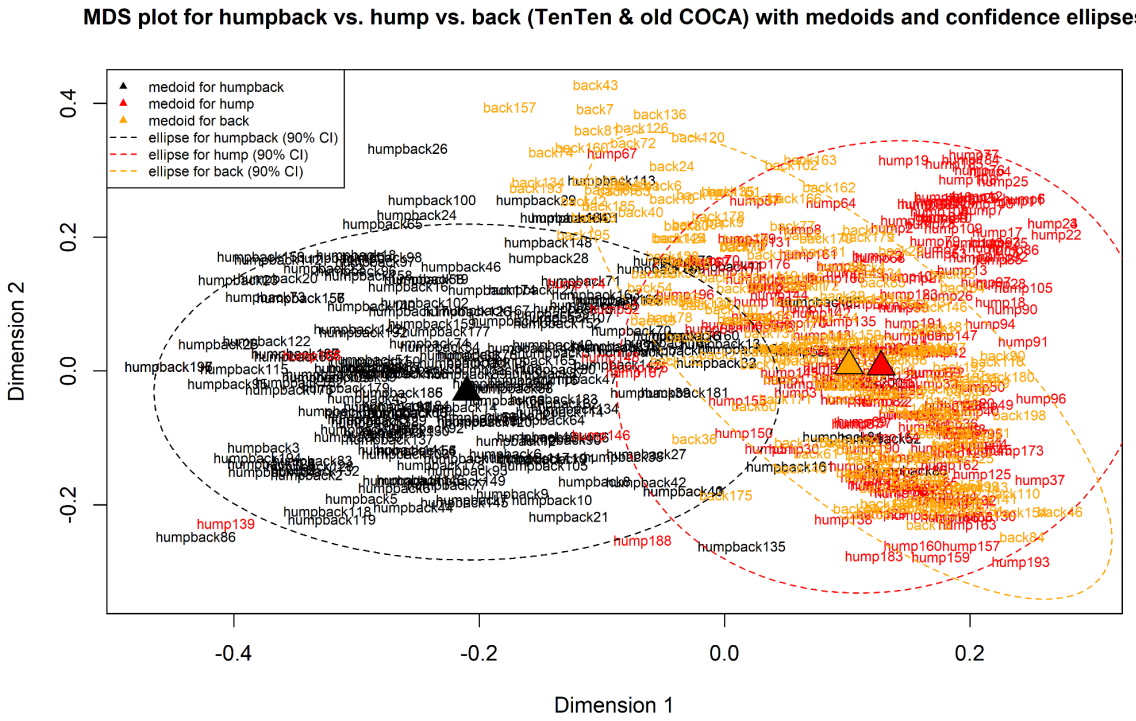
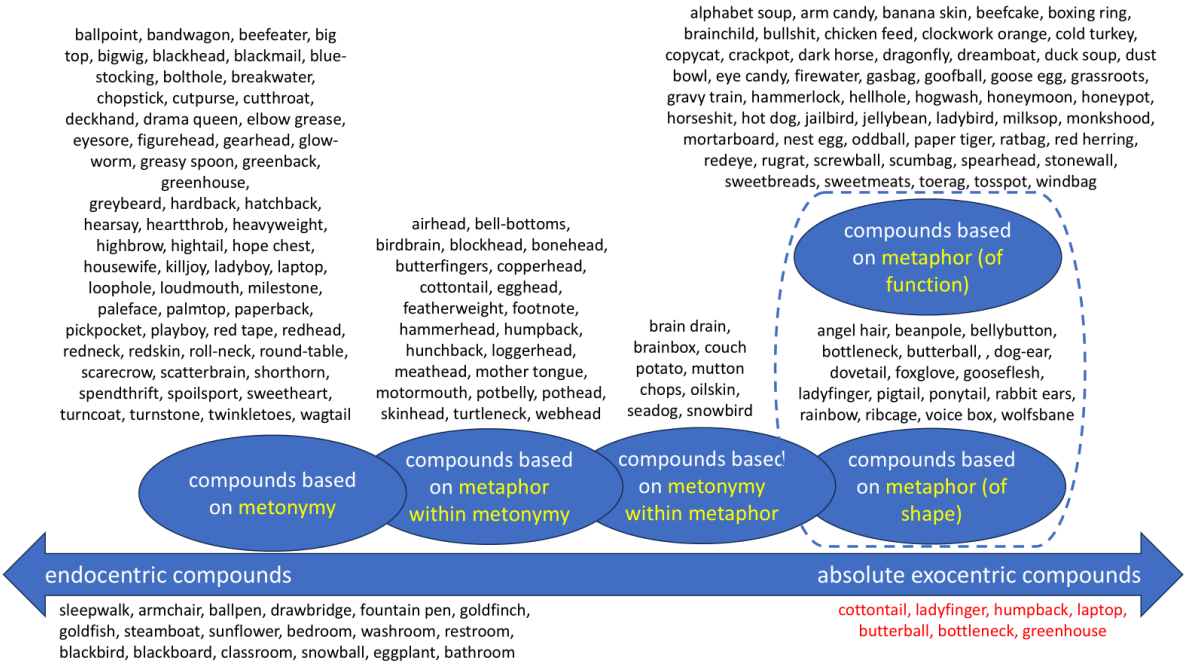


Figure 2

A proposed continuum of "endocentric—exocentric" compounds



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The Unique Role of Language in Reshaping Tactile Perceptual Discrimination: Evidence from Comparative Learning Paradigms

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Keywords

linguistic relativity, perceptual learning, cross-modal integration, embodied cognition, categorical perception

Abstract

Recent theoretical work in cognitive linguistics suggests that language may fundamentally alter our perceptual capabilities (e.g. 1, 2, 3), yet much previous research has focussed on amplifying or attenuating existing perceptual distinctions. Here, we look at whether language, and language alone, can actually help create entirely new perceptual discriminations that were previously unavailable to the senses (4-6). By looking at novel experimental evidence demonstrating that language holds a privileged position in enhancing perceptual discrimination (6), we offer a critical extension of linguistic relativity frameworks, and explore the neurobiological mechanisms underlying this language-perception interface.

Using a within-subject vocabulary learning design, we investigated whether associating difficult-to-discriminate tactile patterns with either pseudowords or matched musical sequences would differentially affect participants' ability to discriminate these patterns. Over five days, participants learned associations between tactile stimuli and either linguistic or musical labels, with stimuli counterbalanced to control for acoustic, linguistic, and cultural factors while eliminating group differences, increasing statistical power while avoiding potential confounds from using speakers of different native languages (6). We then measured using a two-alternative forced-choice task where participants discriminated between pairs of tactile patterns both before and after training. Crucially, only tactile patterns associated with language showed

post-learning discrimination scores were significantly higher than the pre-learning scores, indicating a significant improvement in discrimination accuracy for these patterns. The same subjects showed no such enhancement for similar patterns with the same exposure when they were paired with musical sequences.

This finding provides compelling evidence for language's unique role in perceptual learning, which we will explain through neurobiological principles of Hebbian learning and multimodal integration. Drawing on the cell assembly framework (7-9), we will demonstrate how language-mediated learning enhances perceptual discrimination through:

1. Formation of distributed cell assemblies that connect neurons distributed in both language and sensory cortices, following Hebb's principle that "neurons that fire together, wire together" (10, 11)
2. Reduction of representational overlap between similar tactile patterns through binding with maximally dissimilar verbal labels (9, 11)
3. Advantage of language's inherent multimodality, as verbal stimuli activate widely distributed networks across auditory, articulatory, and motor systems (12-16), providing stronger cortical feedback to perception than unimodal (musical) stimuli (17, 18).

These mechanisms extend beyond previous theoretical accounts (e.g. 19) by providing a neurobiologically constrained explanation based on specific neural circuits and Hebbian learning principles.

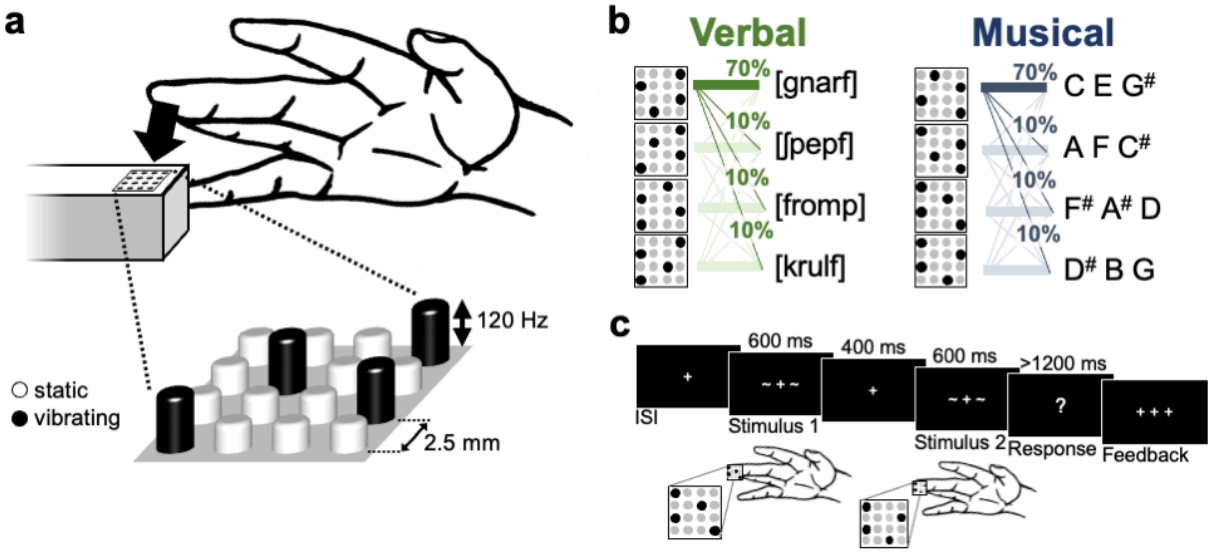

Figure 1 | Stimuli and design

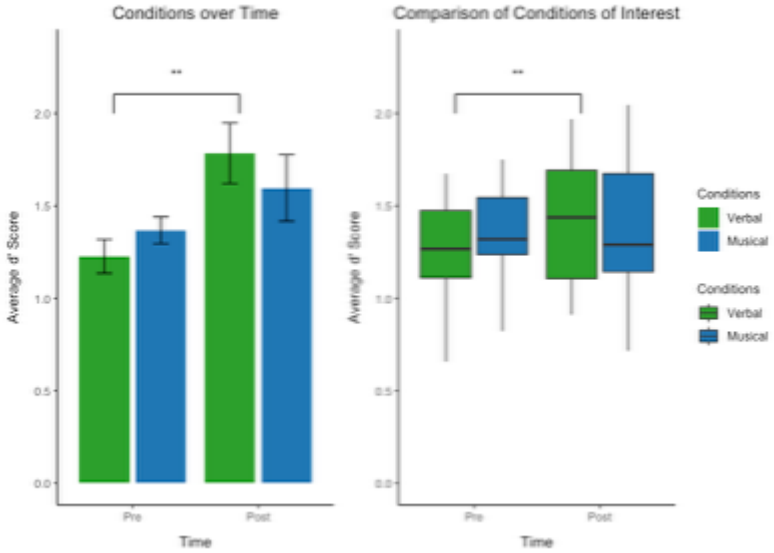

Figure 2 | Tactile Pattern discrimination performance before and after learning in context of co-presented verbal and musical stimuli

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Sensory perception and "thinking-for-translating". A corpus-based study of narrative texts

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Keywords

motion and space, cognitive typology, cognitive translation studies, narrative texts, corpus linguistics.

Abstract

This study examines the translation of sensory perception in narrative texts. More specifically, it studies the transference of facial expression (e.g. gaze, glimpse, glare) in a German>Spanish parallel corpus of narrative texts (a subsection of the PaGeS corpus, Doval & Sánchez-Nieto 2022, in press). Despite the growing body of research on the "thinking-for-translating" hypothesis (Slobin 1996, 2000), the phenomenon of "sensory perception" remains largely unexplored (with only a few exceptions focused on texts in English and Spanish, Cifuentes-Férez 2006, Rojo & Valenzuela 2000, 2004) in comparison with the phenomena of manner-of-motion (e.g. dash, limp, run) and manner-of-speaking (e.g. murmur, mutter, whisper). Prior research on the translation of manner-of-motion between languages belonging to different typologies (Talmy, 1985: 62-74) has consistently demonstrated alterations in the expression of manner (e.g. an illustrative example of omission of manner is the German sentence *Das Mädchen stürmte ins Haus* 'The girl stormed into the house', rendered in Spanish as *La joven entró en su casa* 'The girl entered into her house', Molés-Cases 2016). This phenomenon is largely attributed to typological differences between source and target language. More precisely, speakers of satellite-framed languages (including German) often pay attention to manner and to dynamic situations, while users of verb-framed languages (including Spanish) usually devote more attention to ground and to static situations, sometimes at the expense of manner (Talmy, 1985: 62-74). Thus the present contribution has a twofold aim. First, to examine translators' behaviour regarding sensory perception in a satellite-framed language>verb-framed language translation scenario (German>Spanish). The starting point of the corpus-based study is Snell-Hornby's (1983: 189) list of verbs of facial expression in German (i.e. *blinzeln* 'blink', *zwinkern* 'blink', *schielen* 'squint', *gucken* 'look', *lugen* 'peek', *spähen* 'peer', *mustern* 'scrutinize', *starren* 'stare', *stieren* 'stare vacantly', *gaffen* 'gape', *glotzen* 'stare') and Rojo and Valenzuela's (2001) translation strategies identified in a previous study on the translation on manner-of-speaking (i.e. GEN>GEN, e.g. say>*decir* 'say'; GEN>SPEC, e.g. talk>*explicar* 'explain'; SPEC>SPEC, e.g. confess>*confesar* 'confess'; SPEC>GEN, e.g. discuss>*hablar* 'speak'). Second, to compare the resulting data with findings from previous comparable studies dealing with the motion (e.g. Alonso Alonso 2018, Cifuentes-Férez 2006, 2013, Filipović 2008, Ibarretxe-Antuñano 2003, Molés-Cases 2016) and communication frames (e.g. Caballero 2015, Mastrofini 2015, Rojo & Valenzuela 2001, Ruano San Segundo 2017, Molés-Cases 2022,

2023). In the translation scenario studied here, the results suggest that translator behaviour differs depending on the frame: while manner-of-motion is often omitted in translations into Spanish (from German), manner-of-speaking and facial expression are usually transferred, or even added.

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Temporal location metaphors expressed morphosyntactically: The case of Wolof

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Keywords

metaphor, metonymy, frames, space, time, deixis/anaphora.

Abstract

The idea of temporal *location* often appears in linguistics without any mention of metaphor (e.g. Comrie 1985:6), while metaphors of time, space, and location continue to be studied (e.g. Dancygier & Sweetser 2014; Dhifallah 2024; Moore 2014). Since the idea of *temporal location* is standard in linguistics, gaining a better understanding of what it could mean will be worthwhile. To that end, the current presentation treats the linguistic structure of temporal location that is expressed morphosyntactically in Wolof (West Africa), as in example (1). Focusing on the Wolof deictic/anaphoric system that overtly expresses location, we look at two types of linguistic behavior that are particular to how this system treats temporal phenomena.

The data come from ethnographic interviews that the author did with monolinguals in rural Senegal.

1. A Time as a participant vs. a Time as setting

In frame semantics (Fillmore & Baker 2010), clauses are structured by verbs whose semantic roles are instantiated by constituents in the clause. A semantic element that instantiates a role is a **participant** (semantic argument of the verb). The verb *yem* 'reach a limit' in (1) has two participants: the entity that reaches the limit and the limit itself. The entity that reaches the limit is instantiated by *nawet* 'the rainy season'. The Limit is instantiated by *foofu* 'that place'.

1. Settamba **foofu** la nawet bi yem.
   September **that.place** NONSUBJECT.FOCUS rainy.season the reach.limit
   “September –– the rainy season reaches-limit **that place**.”
   ‘September is the end of the rainy season.’ [kn27:20]

2. **Boobu** la oto soog a jóge feneen ñów fii
   that.time NONSUBJ.FOCUS auto for.the.first.time connecter originate somewhere.else come here
   ‘It was at **that time** that automobiles first came from somewhere else to here [Senegal].’ [mn1:29:20]

Despite the similar syntax of **DEMONSTRATIVE**-FOCUS-CLAUSE, the structure of (2) contrasts with that of (1). In (1) the referent of the spatial demonstrative *foofu* ‘that place’ is a particpant in the clause since it is a semantic argument of the verb *yem* ‘reach a limit’. However, in (2) the referent of the temporal demonstrative *boobu* ‘that time’is not a participant in the clause. Instead, *boobu* designates the **setting** (i.e., background, environment, surrounding circumstances; time and place of an event. Langacker 1991:553) in which the event of the clause happened. The verbs of the clause are *jóge* ‘originate’and *ñów* ‘come’neither of which has a time specified in its frame-semantic description. To summarize, in (1), the month September is construed as a place so it can be integrated into the semantics of the verb of the clause. Example (2) is provided for contrast, showing how a Time can be expressed with a temporal demonstrative and denote a setting rather than a participant. Example (1) has the locational classifier /**-f-**/ and example (2) has the bounded-entity classifier /**-b-**/.

2. Homologous structure

Another kind of case in which the deictic/anaphoric system treats Times as Locations is that in which the temporal concepts are independently structured in a way that is reminiscent of spatial concepts. In (3), the Times are seasons, and as such are bounded and identifiable. Additionally, they have a fixed relation to each other.

3. a. Céebéet moo nekk ci diggante nawet ak noor.
first.rain 3.SUBJ.FOCUS be.located LOCPREP between rainy.season and dry.season
'Chebet (a season) is located between the rainy season and the dry season.'

b. **Foofu** céebéet moo **fi** nekk.
that.place first.rain 3.SUBJ.FOCUS **there** be.located
That place –– Chebet is located **there**.' [mj9:50]

Example (3b), which the speaker said after (3a) without any pause, emphasizes the content of (3a) using the locational deictic/anaphoric classifier /-f-/ and the same demonstrative *foofu* that we saw in (1).

Summary and Conclusions

This study shows that the temporal concepts that the Wolof deictic/anaphoric system treats as locations have certain characteristics that distinguish them from those marked with the bounded-entity classifier as times.

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Linguistic Usage and Cognitive Perception of Gender in a Hebrew Novel by David Grosmann and Its Spanish Translation

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Keywords

discourse analysis, grammatical gender, translation, Hebrew, Spanish.

Abstract

David Grossman is a prominent Israeli writer, and his books were translated to many languages. One central topic in his works is gender and the relation between people of the same or different sex. This is evident in the language he uses, as Hebrew gender is morphologically marked in nouns, adjectives, verbs, pronouns, numbers and inflected prepositions. Moreover, syntactic rules demand gender agreement for all these parts of speech. Therefore, almost every word is either masculine or feminine, and there is virtually not a single gender-neutral sentence (Muchnik, 2015).

Grammatical markedness allows the lector to immediately know the gender of literary characters or any deviation in this regard. According to Klugman (2022), Grossman approaches us to the language of the body and to the body of the language. While the meaning of the words is preserved, the rhythm, the tone and the syntax are emphasized. Gender differences have a socio-psychological impact and constitute a challenge for translating works from Hebrew to Spanish, where gender grammatical differences are much less found.

The study analyses a novel by Grossman, Baguf Ani Mevina (lit. 'In the Body I Understand'), published in 2002, where the pronoun is in the first person and the verb is in the feminine form. The gender of the protagonists is represented by the body and reflected in the language. The title of the Spanish translation by Bejarano (2019) is Lo que el Cuerpo Sabe (lit. 'What the Body Knows'), which is in the third person and does not reveal the gender of the relator. Furthermore, until the end of the second page, we do not know if the person who tells the story is a man or a woman, while in the Hebrew version this is clear from the beginning. In this case, the translator succeeds in creating tension, which is not presented in the original.

In another novel by Grossman (1998), Še Tihi Li Hasakin (lit. 'Let You [FEM] Be My Knife'), translated into Spanish by Bejarano (2005) as Tú Serás Mi Cuchillo ('You Will Be My Knife'), I found not only linguistic, but also social, cognitive and psychological differences between both

protagonists, a man and a woman. Grossman utilizes the language to show gender differences, as well as social expectations from them, which often include clear stereotypes (Muchnik, 2010). While he describes the differences between the man and the woman, at the same time he shows the confrontation between them, and the possibility of living together.

In the Hebrew original text of Baguf Ani Mevina, the gender of the characters is not always clear. In many cases in the Spanish text of Lo que el Cuerpo Sabe, the translator takes advantage of linguistic differences and hides the gender of the protagonists, "cheats" the lectors and creates tension. This mystery becomes possible because of the different and non-parallel linguistic devices in both languages.

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Individual differences in being 'stuck in a metaphor'

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Keywords

metaphor, cross-modal association, language and thought, linguistic relativity, pitch metaphors

Abstract

Languages often use spatial metaphors to refer to pitch (e.g., in English "high" and "low" refer to both spatial concepts and pitch; in Turkish words for "fat" and "thin" refer to both spatial concepts and pitch). In a previous study, we found large individual differences in how quickly English speakers could learn cross-modal associations between high/low lines and high/low pitched tones that were incongruent with the conventional metaphor. Some individuals could easily associate high lines with low tones and low lines with high tones. Others were still struggling to learn this incongruent association after 80 trials; in other words, they were 'stuck in a metaphor'. We found similar rates of individual differences for Turkish speakers to learn incongruent cross-modal associations between fat/thin lines and high/low tones.

Why might some people be stuck in a metaphor? The purpose of the present studies was to test for several predictors among English speakers: 1) English vocabulary (Study 1), 2) cognitive flexibility (Study 2), 3) music experience (Study 3), and gist memory (Study 4). All four studies followed a similar methodology. In all studies, English speakers had 80 trials in which they answered whether a tone and a line went together. They were asked to associate high tones with low lines and low tones with high lines by receiving feedback (smiley face or sad face) on their performance. Once they completed the tone-line association task, participants were asked to complete the predictor measure. In Study 1, this was the Peabody Picture Vocabulary Test, a standardized measure of receptive vocabulary in English. In Study 2, this was the Wisconsin Card Sort Task, a commonly used measure of cognitive flexibility, or the ability to adapt one's behaviour to changing task demands. In Study 3, participants reported their experience with reading music in general and playing piano specifically. We focused on pianists, as

some previous studies have shown a high degree of flexibility in learning cross-modal associations. In Study 4, we assessed participants' gist memory (vs. verbatim memory) with a commonly used Deese/Roediger-McDermott method. Gist memory refers to memory for the underlying message while verbatim memory refers to memory for the surface form. We presented participants with lists of semantically related words (e.g., including bed, blanket) that did not contain a commonly associated target word (e.g., sleep). Our measure of gist memory was the percentage of falsely remembered target words.

In all four studies, we again observed large individual differences in success at learning the incongruent association. We found no correlations between success at learning the incongruent association and vocabulary (Study 1), cognitive flexibility (Study 2), or music experience (Study 3). We did find a positive correlation between gist memory and success at learning the incongruent association. These results could mean that those who get 'stuck in a metaphor' are particularly likely to focus on remembering what they have heard verbatim, rather than the gist. These results have important ramifications for research on the link between language and thought.

A Corpus-based Approach to Aspectual Interpretation and Properties of Participants: Is It Happening or About to Happen?

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Keywords

corpus linguistics, frame semantics, aspectual interpretation.

Abstract

Introduction

The aspectual characteristics of an event described by a verb have been widely discussed in linguistics (Levin, 1993; Fellbaum, 1998; Murphy, 2010). Vendler (1957) classified verbs into four categories based on their temporal characteristics and how these categories interact with tense and aspect. Levin & Rappaport Hovav (2005) discuss the aspectual characteristics of verbs based on their semantic structure, focusing on how verb meanings influence the realizations of their arguments.

However, the aspectual interpretation of a verb can vary significantly depending on various factors within the sentence (Michaelis, 2004), as illustrated in (1). (1a), which uses the intransitive form of “be dropping,” describes an ongoing process of decreasing costs. In contrast, (1b), which uses the transitive form, describes a situation in which the release of the album is imminent. This contrast suggests that the transitive construction tends to convey a proximal future interpretation, rather than an immediate progressive one. Additionally, in (1c), where the object noun is plural, the sentence describes an ongoing series of actions, indicating that plural objects can lead to an interpretation of immediate progressive.

(1) a. The cost of solar and wind is dropping.

b. He is dropping his new album.

c. The kid is dropping his toys.

This paper, based on corpus data, examines how an event described by a verb is interpreted in relation to the characteristics of the subject and object, as well as the type of semantic frame evoked, with a particular focus on aspectual structure.

Methods

A total of 531 instances of the present continuous form “be dropping” were extracted from English Web (2021) corpus (Jakubíček et al., 2013) using Sketch Engine (Kilgarriff et al., 2004, 2014) and coded for six features: transitivity, plurality of the subject, plurality of the object, physicality of the event, evoked semantic frame, and aspectual interpretation. The relationships among these features are analyzed to determine how the aspectual interpretation of “be dropping” is influenced by the other features.

Results & Discussion

It appears that the inchoative construction significantly influences the aspectual interpretation of events: regardless of the plurality of the subject, almost all instances of intransitive use are interpreted as immediate progressive. In contrast, instances of the causative construction show a more balanced distribution between immediate progressive (61.5%) and proximal future (38.5%) inter pretations.

However, in transitive use, the plurality patterns of event participants (singular/plural subject, singu lar/plural object) exhibit skewed distributions across the two aspectual interpretation groups. While all four patterns occur evenly in the immediate progressive interpretation, the singular subject–singular object pattern accounts for 56.8% of the proximal future interpretation. In contrast, the plural subject–plural object pattern makes up only 2.7%. This distribution suggests that the plurality of participants significantly affects aspectual interpretation in the causative construction.

Additionally, different types of frames are evoked in each interpretation group.

Conclusion

The results show that transitivity and the plurality of event participants are strong factors influencing the aspectual interpretation of a verb. Additionally, this paper demonstrates the effectiveness of a corpus-based approach to studying verb aspect.

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Language evolution in strange worlds: Virtual reality as a causal laboratory to study language and cognition

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Keywords

language evolution, linguistic adaptation, virtual reality, strange world, causality.

Abstract

Designing lab experiments to understand the factors shaping language is challenging, particularly when seeking to establish causality beyond correlations in cross-linguistic studies (Roberts, 2018). While laboratory settings offer experimental control, they often lack ecological validity. While lab settings offer control, they often lack ecological validity. Virtual Reality (VR) can bridge this gap, creating environments that are both ecologically valid and tightly controlled for studying language and cognition (Peeters, 2019; Nölle & Peeters, 2025). Here I argue that VR, particularly through the design of "strange worlds," offers a powerful new method for causally investigating the relationship between language, cognition, and environment.

VR excels not only in simulating reality but also in transcending its constraints to create novel communicative and physical environments. We can design systems with manipulated modalities or explore "hyper-realities"—alternate worlds with modified physical laws (e.g., morphing objects) or object behaviours. Such manipulations allow examining fundamental questions about linguistic structure, universals, and cognitive biases (Christiansen & Chater, 2008; Hurford, 2011; Kirby, 2017; Lupyan & Dale, 2016; Berwick & Chomsky, 2017).

VR enables researchers to precisely control communication mediums, exceeding the scope of classic experimental semiotics (Galantucci, Garrod & Roberts, 2012; Nölle & Galantucci, 2022). They can manipulate parameters such as feedback immediacy, iconicity, and representational constraints (Roberts et al., 2015) and investigate novel mediums using tools ranging from virtual slide whistles (Verhoef et al., 2014) to

customizable drawing tools. Additionally, VR permits the construction of “strange worlds” to probe how environmental properties shape language. Drawing on the concept of possible worlds from philosophy and cognitive science (Loux & Crisp, 2017), we can create alternate realities where fundamental aspects of our world are altered. Consider the manipulation of object constancy, as initially proposed by Hurford (2011), creating worlds with morphing objects, challenging fundamental linguistic categories like nouns and verbs, potentially inverting typical linguistic structures.

Beyond controlling communication mediums and their parameters (Nölle & Galantucci, 2022; Roberts et al., 2015; Verhoef et al., 2014), VR permits the very construction of the worlds in which communication occurs. Drawing on the concept of possible worlds (Loux & Crisp, 2017), we can design "strange worlds" to probe how environmental properties causally shape language (see also Nölle et al., 2020a,b). This offers a novel way to investigate the origins of typological universals, such as the robust cross-linguistic preference for modifier ordering in noun phrases. A key hypothesis is that such universals reflect world structure—that is, some properties are more inherent to an object than others (Culbertson, Schouwstra & Kirby, 2020). However, ingrained cognitive biases are difficult to override with passive observation of manipulated statistics (Martin et al., 2024). VR enables a more powerful intervention via embodied interaction. For instance, in an ‘alien laboratory’, we can create worlds where a property like 'color' is stable while 'texture' is not (or vice-versa) and have participants assemble objects by applying these features. By measuring the *order of actions*—whether the stable property is applied first—we can test for the emergence of sequential preferences as a non-linguistic proxy for the cognitive precursors of word order, potentially forging a causal link between world structure and language universals.

In sum, exploring such “strange worlds” through VR opens up a new frontier for investigating the robustness and flexibility of linguistic structures and categories. We can simulate worlds with circular time, unreliable gravity, or fluid object properties, pushing the boundaries of our assumptions about natural language. By experimentally evolving languages in these alternate realities, we can directly tackle the challenge of causality in language sciences (Roberts, 2018). VR offers a unique laboratory to systematically dissect how cognitive, biological, and environmental factors interact to shape the evolution of language, both in our world and in worlds beyond our current reality.

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Antonymic facial expressions: From biologically-rooted movements to multimodal language features

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Keywords

facial expressions, multimodality, language evolution, pragmatics, cognitive semiotics.

Abstract

Cognitive-linguistic approaches increasingly conceive of language as a multimodal system (see, e.g., Vigliocco et al., 2014). While much of this focus has been on gesture (e.g., Kok & Cienki, 2017, among many others), less has been given to facial expressions, despite their fundamental role in human and primate social communication (Bliss-Moreau & Moadab, 2017). The evolutionary origins and integration of facial expressions with spoken language remain open questions. Darwin originally posited that expressions of emotions like FEAR and DISGUST evolved from sensory-regulating movements (Darwin, 1872). Here we present a novel semiotic and biocultural model of the origins and potential evolutionary stages of facial expressions as multifaceted components of multimodal language.

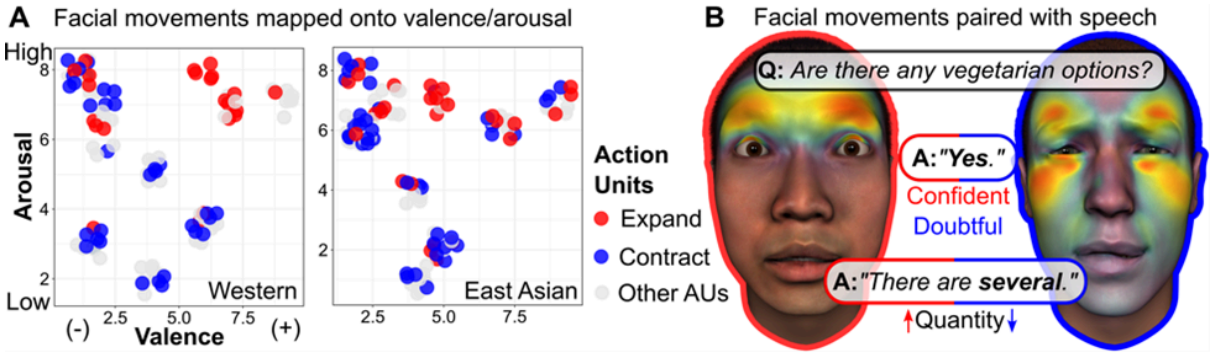
To investigate this, we analysed facial expressions and speech perception across cultures using a social psychophysics approach (Jack & Schyns, 2017). Our research utilized perception-based data-driven methods to examine facial expressions of basic emotions (HAPPY, SURPRISE, FEAR, DISGUST, ANGER, SAD) and social messages (THINKING, INTERESTED, BORED, CONFUSED) in Western European and East Asian cultures. Furthermore, we explored how these facial movements (called Action Units or AUs) influence the interpretation of speech (Nölle et al., 2022).

Our findings, consistent across cultures, reveal that social facial expressions systematically comprise opposing expansion and contraction facial movements.

Expansion movements, characterized by actions like widened eyes, are primarily associated with high arousal, i.e. high intensity of the emotion evoked by a stimulus, irrespective of emotional valence (e.g., HAPPY, FEAR). Conversely, contraction movements, such as wrinkled noses or squinted eyes, are primarily linked to negative valence, regardless of arousal level (e.g., DISGUST, SAD, BORED, CONFUSED). These patterns suggest an antonymic function of expansion and contraction movements in conveying broad affective information (Nölle et al., 2021).

Extending beyond affect, we found that these expansion and contraction movements also carry pragmatic and semantic weight in multimodal communication. In speech perception experiments (Nölle et al., 2022), expansion facial movements enhanced perceptions of speaker confidence and were associated with LARGER quantities when vague quantifiers were used (see also Lorson et al., 2024). Conversely, contraction facial movements conveyed DOUBT and SMALLER quantities. These results indicate that facial movements are not merely affective signals, but also contribute iconic and pragmatic functions to communication.

Figure 1. Mapping antonymic facial movements to meaning.



Note. A: Scatter plots showing facial movements (AUs) categorized as expansion (red) or contraction (blue) on the dimensions of valence and arousal in Western and East Asian participants. B: Heatmaps illustrate how these opposing movements influence the perception of speaker confidence and quantity in spoken language.

This supports an evolutionary model wherein facial expressions developed in stages from biologically-rooted movements: Initially, sensory regulation (Susskind et al., 2008) provided the foundation, with these movements subsequently refined into culturally variable expressions mapped to social concepts like emotions and conversational cues (Chen et al., 2017, 2024). Ultimately, these expressions integrated with modalities like

speech, evolving into complex pragmatic and semantic signals for multimodal communication. The consistent mapping of antonymic expansion and contraction movements onto broad social information across cultures, despite general cultural variations in expression perception, reinforces the idea that these biologically-rooted movements underpin a universal spectrum of facial expressions. Future research should investigate the breadth of these mappings across cultures, sign languages, and species to fully understand the evolutionary role of facial expressions in human multimodal communication.

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Relations among Pragmatic Functions, Interactional Frames, and Conventionalized Constructional Meanings

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Keywords

Frame Semantics, Construction Grammar, pragmatic functions, interactional frames, FrameNets.

Abstract

This paper aims to address two critical issues within Frame Semantics and Construction Grammar. First, Frame Semantics has taken a back seat compared to its closely related sister theory Construction Grammar (cf. Boas To Appear). Second, recent Construction Grammar studies have tended to focus on semantic frames rather than interactional frames in analyzing constructional meanings. Through an examination of various Japanese constructions, this study investigates whether interactional frames effectively describe constructional meanings. The paper argues that interactional frames are essential for adequately describing conventionalized pragmatic functions of constructions.

As Boas (To Appear) points out, understanding the nature of meaning is inherently more complex than analyzing the form of constructions. Nevertheless, it is important to look into the meaning side of constructions and in particular to incorporate conventionalized pragmatic functions into constructinal analyses. This study claims that many conventionalized pragmatic functions of constructions are characterized by interactional frames ("how we conceptualize what is going on between the speaker and the hearer, or between the author and the reader"), rather than by semantic frames ("script-like conceptual structures that describe types of situations, objects, or events along with their participants and props") (Fillmore 1982, Fillmore and Baker 2015, Ruppenhofer et al. 2016). Building upon Ohara (2024), this paper further highlights the need for developing an inventory of interactional frames.

By analyzing sentence-level and discourse-level constructions from Present-day Japanese listed in Group Jammassy (2024), this study examines constructions' conventionalized pragmatic functions, by comparing them with Croft (2022)'s comparative concepts pertaining to information structure (Croft 2022: 660). It demonstrates that pragmatic functions, such as those related to politeness and discourse patterns, are most effectively described using interactional frames. Examples include the honorific construction (1) and the folktale discourse construction (2):

(1) The Honorific Construction

{ [Subject *Tarô ga*] [Predicate *ki*$^{\text{Arriving}}$-***mashi***$^{\text{CEE}}$ *-ta*] } (polite)

NOM come -POLITE -PAST

'Taro came.'

The `Being_Polite_to_Addressee` interactional frame

– The SPEAKER is being polite to the HEARER.

(2) The Folktale Discourse Construction

{ [AdvP ***mukashi mukashi***$^{\text{CEE}}$] [LOC ***aru tokoro ni***$^{\text{CEE}}$]

long.ago certain place LOC

[Subj *oji -san to obâ -san ga*]

old.man-HON COM old.woman-HON NOM

[Pred I$^{\text{Existence}}$-***mashi-ta***$^{\text{CEE}}$] }

exist -POL -PAST

'Once upon a time in a certain place, there lived an old man and an old woman.'

The `Folktale_Narrative_Prologue` interactional frame

– The SPEAKER begins narrating a folktale to the HEARER.

Crucially, the interactional frames defined in (1) and (2) involve the frame elements SPEAKER and HEARER, even when these frame elements are not explicitly realized in the sentences, underscoring the distinction between semantic frames and interactional frames (cf. Cappelle 2017, Croft 2022).

To summarize, this study bridges the gap between Frame Semantics and Construction Grammar by demonstrating how interactional frames effectively describe conventionalized pragmatic functions of constructions.

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Expanding FrameNet Frames for a Valency Lexicon of Croatian

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Keywords

Croatian, FrameNet, semantic frames, valency lexicon, verbs.

Abstract

The role of verbs in a sentence has traditionally been viewed as central, which is why there is a long list of resources covering various aspects of verbs, starting from those focusing on their semantics, e.g., WordNet (Fellbaum 1998), FrameNet (Ruppenhofer et al. 2016); semantics and syntax, e.g., VerbNet (Kipper et al. 2006), PropBank (Palmer, Gildea & Kingsbury 2005); or semantics, syntax, and morphology, e.g., VALLEX (Kettnerová & Lopatková 2012) and Walenty (Przepiórkowski et al. 2014). Although each resource is developed within a different theoretical framework, linking them or providing mappings between different descriptions poses an extra step in building lexical resources for efficient applications, both human-oriented and machine-directed ones. For instance, VALLEX enriched its description by adding information from FrameNet (Kettnerová & Lopatková 2012), while the Unified Verb Index integrates links from diverse NLP projects such as VerbNet, PropBank, FrameNet, OntoNotes (Hovy et al. 2006), and the SynSemClass Lexicon (Straková et al. 2023). Given that there is no similar resource for Croatian yet (except for WordNet, to a certain extent), a valency lexicon is being developed to integrate different approaches and data into a semantic and syntactic description of verbs.

This paper describes how the frame-semantic description of verbs is incorporated into the valency lexicon. First, an overview of the lexicon is given. Verbs are defined on several levels in the lexicon: 1. verb sense, associated with semantic classes from Levin (1993), VerbNet, and WordNet; 2. valency frames, related to verb senses, which include examples extracted from two corpora, and an analysis of participants at the syntactic level (phrase types), morphological level (cases, prepositions, and conjunctions), and semantic level (semantic roles mainly taken from VerbNet). All data

was extracted from two Croatian general language web corpora, hrWaC (Ljubešić & Klubička, 2014) and CLASSLA (Ljubešić & Kuzman, 2024), based on manual analysis of random sample of 300 sentences for each analyzed verb.

Following the principles of Frame Semantics (Fillmore 1985; Fillmore, Johnson & Petruck 2003) and applying the FrameNet's methodology (Ruppenhofer et al. 2016), a semantic frame is identified for each verb sense, while for each participant, the appropriate frame element (FE) is determined. Using verbs of cognition as an example, this paper describes issues in applying the frames from the Berkeley FrameNet in the frame-semantic description of Croatian verbs in the valency lexicon. The argument structure of Croatian verbs such as *misliti* 'think', *pomisliti* 'think, have a thought', *razmišljati*$_{\text{IMPF}}$/*razmisliti*$_{\text{PERF}}$ 'think, think over, ponder', smisliti 'think of, come up with', zamisliti 'imagine, evision', *promisliti* 'think through, reflect on', *izmisliti* 'make up, invent, fabricate', etc., is explained, along with their semantic description within appropriate semantic frames of FrameNet, e.g., `Opinion`, `Regard` or `Coming_up_with`. Corpus examples are annotated for FEs in order to compare the verbs' valence patterns and address these key research questions: 1. Are FrameNet frames applicable to the description of Croatian verbs? 2. Which frames should be expanded, either to include more FEs or additional lexical units? Examples of verb senses for which there is no adequate frame, e.g. for the sense of *think* 'to have concern' (*I must think first of my family.*) are additionally discussed.

Most examples confirm that the existing FEs are applicable in the annotation of Croatian lexical units. One new semantic frame needed to be defined, `Take_care_of`, to describe situations when an AGENT looks after someone, takes care of someone, or thinks of someone in the same context. Certain examples exhibit a difference between a granular and a more schematic description of the verb's sense, e.g. for the senses of opinion and judgement of the verb *misliti* 'think'. Since the Verbion database does not exclusively rely on semantic frames for verb description, finer semantic nuances will be expressed in a future Croatian FrameNet.

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Prepositional phrase complements of prepositions: a cognitive grammar explanation

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Keywords

Cognitive Grammar, prepositions, word classes, irregular construction.

Abstract

The conceptual characterization of word classes has been a major topic in cognitive linguistics since its beginning (Langacker 1987; Talmy 2000; Croft 2001). However, compared to major classes such as nouns and verbs, the conceptual basis of the word classes profiling non-processual relationships has received less attention. Given this, the present study discusses the conceptual basis of prepositional phrases, especially focusing on prepositional complements of prepositions (hereafter, PCOPs), illustrated in (1-2). These complements are syntactically highly irregular, as prepositions usually take nominal complements. Purely formal, distribution-based accounts would struggle to explain these patterns. We argue that PCOPs share conceptual characteristics with noun phrases, and suggest that this semantic similarity explains their occurrence in these contexts.

(1) (a) *Other directors* will be appointed from (within) the company. (BNC: CST: 313)
(b) ⋯ *the Beretitenti* (President) ⋯ is popularly elected from (among) the members of the Assembly. (BNC: HLD: 5756)
(c) *Harry Durrant*, 92, is one of only 24 veterans from (throughout) Britain. (BNC: E9N: 217)

(2) (a) *Something* had crawled from under a stone. (BNC: CA3: 742)
(b) Just then *the moon* came out from behind a cloud. (BNC: H9U: 1748)
(c) From beyond the reef *the big fish* swam in to lap, ⋯ (BNC: G0S: 874) (Otani 2023)

Otani (2016, 2023) investigated preposition-preposition combinations in the British National Corpus (BNC), specified 15 statistically significant preposition-PCOP combinations, and demonstrated that PCOPs can be classified into two types in terms of their functions: the **Emphasis Type** and **Search-domain Type**. In the **Emphasis Type**, in (1), the head preposition (underlined) in PCOPs emphasizes the region illustrated by the noun phrase and can be omitted without changing the propositional meaning of the sentence. In the **Search-domain Type**, in (2), the head preposition is obligatory and defines a search domain where the trajector (italicized) is found, changing the propositional meaning when added. Whilst previous research has thus covered the functional difference between these two types, this paper asks a more fundamental question: why are prepositional phrases acceptable as complements of prepositions in the first place?

This study analyses data from the BNC, and discusses the conceptual characteristics of PCOPs within the framework of Cognitive Grammar. The results indicate that the two types of PCOPs share a common conceptual basis: they both highlight the bounded region in which the trajector (italicized) is located; the Emphasis Type highlights the region illustrated by the noun phrase in PCOPs while the Search-domain type illustrates the search domain together with its boundary.

The unique distribution of prepositions in PCOPs supports the common conceptual basis: the heads of PCOPs tend to be disyllabic prepositions, which usually specify the region relative to their complements (landmarks). Highly frequent monosyllabic prepositions such as at, in, and on never appear; see Table, below. Additionally, syntactic tests support the common conceptual basis: disyllabic prepositions (see (3)) and complex prepositions (see (4)), emphasizing the boundary, are more acceptable than their near-synonymous but slightly more general or abstract monosyllabic counterparts.

(3) (a) He appeared from {inside/*in} the house. [spatial sense]
(b) There is a lot to choose from {during/*in} the week-long event. [temporal sense]
(c) He was chosen from {within/*in} the group. [abstract sense]
(d) We collected samples from {throughout/*through} the UK.
(e) He pulled up the wooden chair from {beside/?by} the bed …

(4) (a) He appeared from {?on top of/??on} the hill.
(b) He came from {?in front of/*in} the garden.

These results together suggest that PCOPs become more acceptable when the region they illustrate is clearly bounded, and further indicate the continuity between prepositional phrases and nominal phrases: when PCOPs highlight a bounded region, which corresponds to Langacker's conceptual characterization of (count) nouns, their behavior becomes similar to that of noun phrases.

In conclusion, this study underlines not only the feasibility but the necessity of a conceptual characterization of word classes. Although PCOPs are rather unusual as complements of prepositions and exist in at least two types, their semantic similarity to nouns explains why they nevertheless appear in this context.

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(Inter)subjectivity and caveat in contrastive contexts

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Keywords

Contrast, (inter)subjectivity, caveat, *ocorre que*, *sendo que*.

Abstract

This study examines the contrastive connection of sentences in contemporary Portuguese, investigating the relationship between the theoretical approaches that consider (inter)subjectivity to be more strongly related to the communicative purpose and the caveat value, instantiated by the non-prototypical connectors "ocorre que" and "sendo que". These theoretical approaches suggest that the participants in the communicative situation are increasingly present in the conceptualization of the event, even if this is not explicitly evident (Traugott; Dasher, 2005; Verhagen, 2005; Tomasello, 2019). For Verhagen (2005), the notion of (inter)subjectivity can be defined by the ability to recognize that we are all agents with intentions. In a similar manner, Tomasello (2019) states that human sociability is based on shared intentionality. In this context, and in light of usage-based linguistics, the analysis proposed here addresses the specificities of the contrastive linking of segments carried out by two non-prototypical Portuguese connectors: "ocorre que" (it happens that) and "sendo que" (being that). This paper aims to investigate how these two non-prototypical Portuguese contrastive connectors express the following contrastive semantic relations: (i) by justification (Dias, 2023); (ii) by gradation of information/argumentation; (iii) by generalization (Dias; Correa, 2020) and (iv) by partial restriction (Pacheco, 2024). The following example represents item (ii): (a) Between the first day of operation and June 26, the units attended to 34,017 patients. Of this total, 23,303 were suspected to have dengue, being that (sendo que) 7,221 received hydration or medication, and 651 had to be taken to hospital (Entre o primeiro dia de funcionamento e 26 de junho, as unidades realizaram 34.017 atendimentos. Desse total, 23.303 eram pacientes com suspeita de dengue, sendo que 7.221 receberam hidratação ou medicação e 651 precisaram ser levados para hospitais); Our research is

primarily qualitative and employs a synchronic approach. The data for this study were obtained from two different corpora with the aim of verifying uses in a journalistic writing context and an institutional speech scenario: data with “sendo que” were extracted from the Corpus do Português, www.corpusdoportugues.org, section NOW, considering only Brazilian Portuguese ocurrences; data with “ocorre que” were extracted from official pronouncements of members of the Brazilian Senate (available on the institutional Senate website: https://www6g.senado.leg.br/busca), as they represent an institutional speech situation of legislative discourse. It is suggested that both in (ii) and (iv), the resources utilized by the speakers introduce a disruption in the discourse. The construction of the argument is redirected by the introduction of more salient information in comparison to the preceding segment. This new information can reveal a caveat effect, a speaker’s discursive attitude, resulting from the focalizing pragmatic effect combined with the denial of expectation. Therefore, the caveat fulfills a dual role: it assumes the validity of a given general statement while simultaneously contesting it. Preliminary results indicate that only (ii) and (iv) instantiate the caveat in contexts of contrastive connection. This will be presented in detail in the full version of this paper.

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Egocentric spatial encoding in languages with no left and right

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Keywords

motion and space; spatial language; frames of reference; egocentric encoding; sociotopography

Abstract

It is widely held that many languages do not encode egocentric extrinsic spatial representations. E.g. Majid et al's influential (2004) survey classified 30% of surveyed languages as lacking relative frame of reference, the best-known egocentric frame. Egocentric extrinsic frames are perspective-dependent, involving a third argument (viewpoint/observer) in addition to figure and ground. In relative frame, pseudo-intrinsic facets such as front, back, left and right are assigned to a ground: (1a) assigns a 'front' to the tree based on the observer's location, not any intrinsic facet of the tree. Less well-known, the observer-landmark frame (Palmer et al. 2022; Polian&Bohnemeyer 2011:878; Romero-Méndez 2011:930–933) assigns facets to the ground towards or away from the location of an observer: (1b) projects a domain off the facet closest to the observer. A significant minority of languages have been treated as lacking egocentric encoding due to an absence of terms for projective left and right. This paper demonstrates that the presence or absence of left-right terms is an inadequate diagnostic for relative frame, let alone egocentric representations in general.

While not displaying a differentiated transverse (left-right) axis, most such languages do display relative frame on the sagittal (front-back) axis. Moreover, most encode an undifferentiated relative transverse axis (='beside'). E.g. Warrwa is described as not encoding relative frame (Levinson&Wilkins 2006b:542,545,567; Majid et al 2004:112; McGregor 2006:148,156), but does encode relative on the sagittal (McGregor 2006:130; Palmer et al 2022) (2a-b), along with an undifferentiated transverse (2c). The presence of sagittal encoding without a differentiated transverse reflects weaker transverse human asymmetry also seen in later acquisition of left-right (Shusterman & Li 2016), left-right discrimination difficulties among adults (van der Ham et al 2021), and lower transverse frequencies in languages encoding both (Palmer 2021). We present data showing relative frame on the sagittal and an undifferentiated transverse in five of Majid et al's (2004) six "no-relative" languages: Warrwa, Arrernte, Tzeltal, Totonac and Mopan, along with the presence of observer-landmark frame, e.g. Arrernte (3) (Palmer et al 2022; Wilkins 2006:35). We conclude that extrinsic egocentric representations of space are much less rare than previously claimed.

Encoding egocentric frames does not imply usage frequency. Indeed, it is precisely the widespread distribution of egocentric frames that supports a shift of focus away from which frames are encoded in languages to speakers' frame choice from the available resources, following the sociotopographic approach (Lum et al 2022; Palmer 2022; Palmer et al 2017). The issue with relative frame is less that languages vary in whether they encode it, and more in why speakers may prefer or disprefer that conceptual strategy in general and in specific communicative contexts, and how variation in habitual usage relates to individual diversity in occupation, gender, age, literacy, bilingualism etc; group-level factors ranging from environment to dominant subsistence mode; and intra-speaker variation relating to task, interlocutor, speech location, etc. Recognition that most or all conceptual strategies are available to speakers of most languages brings into sharp focus the need to investigate diversity in usage of available linguistic resources.

(1) a. *the ball is **in front of** the tree*

b. *the ball is **on this side of** the tree*

(2) a. *Ngi-rr-wani-na* *nyink-an,* ***baywarra*** *kank-an* *larrkardi* *baalu.* [Warrwa]
3AUG.NOM-sit-IMP this-LOC behind that-LOC boab tree
'they were sitting there, over there **behind** the boab trees' (McGregor f.c.)

b *Juwa* *yardayi-wudany* *mi-nga-n* ***ngulumba****.*
2MIN north-ASSOC 2MIN.NOM-be-PRES in.front
'You are to the north, **in front** (of it [the tree]).' (McGregor f.c.)

c. ***Rirrban*** *yi-nga-n* *baalu,* *baanu-wudany.*
side 3MIN.NOM-be-PRES tree east-ASSOC
'The tree is **beside** it, to the east.' (McGregor f.c.)

(3) *Antyame* *arrkngerte* *athenaye,* [Arrernte]
blanket barrier lay.down
'Divide the room with a blanket,

re-atherre ***irntwarre*** *thayete-le* *inte-tyenhe-nge,*
3NPL[NOM]-two **that.side** side-LOC lie-NPAST.COMPL-DS
and those two can sleep on **that side**

ilerneke ***angathe*** *thayete-le* *ane-me-nge.*
1DU[NOM] **this.side** side-LOC be/stay-NPAST.PROG-DS
and we'll stay on **this side**.' (Henderson & Dobson 1994:388)

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A sociotopographic study of spatial language and cognition in four Indigenous Australian communities

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Keywords

motion and space, cognitive typology, spatial language, sociotopography, frames of reference.

Abstract

Recent research demonstrates considerable diversity in linguistic and cognitive spatial strategy preferences among individuals within language communities (Bohnemeyer et al. 2015; Palmer et al. 2017), correlating with sociodemographic variables, environment, task, and interlocutor accommodation. Each individual in any community selects from multiple possible representational strategies depending on the specific communicative function and social, discourse and environmental context of each usage. Sociotopography attempts to model the interaction of these factors (Palmer et al. 2017). Australian languages are significant as they are held to make heavy use of cardinals, and little use of egocentric strategies (Levinson 2003:336; Majid et al. 2004; McGregor 2006:148; Meakins&Algy 2016:480). Recent work shows this to be an oversimplification, with egocentric frames including relative and multiple geocentric strategies available (Hoffmann et al. 2022; Palmer et al. 2021). Moreover, considerable diversity exists between languages, from widely-cited heavy use of absolute in Guugu Yimidhirr (Levinson 2003:113-146) to the absence of cardinals and rare use of other geocentric terms in Murrinhpatha (Blythe et al. 2016).

This paper reports on a comparative study investigating diversity in spatial behaviour in four phylogenetically and environmentally diverse Australian language communities: Wik-Mungkan (Paman, coastal); Kukatja (Ngumpin-Yapa, desert), Kune (Gunwinyguan, riverine/savannah) and Murrinhpatha (Southern Daly, savannah/

coastal). We report here on results of the Man&Tree linguistic elicitation game (Ennever et al. 2024) and Animals-In-A-Row memory recall paradigm (Levinson&Schmitt 1993).

We ran Man&Tree with 104 participants, coding each spatial token for frame. Participant metadata enabled testing for correlations with sociodemographic variables: age, gender, occupation, education, and environmental experience. Tables 1-4 summarise findings for age and gender (Murrinhpatha data is still being processed). Among age results one striking finding is increased allocentric strategies among younger cohorts, contrasting with the generational shift from allocentric towards egocentric seen in numerous other studies (e.g. Cerqueglini 2022; Dunn et al. 2021; Lum 2018; Robbers 2022). Kune displays the familiar pattern: more egocentric and less allocentric strategy use overall. However, Kukatja and Wik-Mungkan display the opposite pattern: significantly less egocentric landmark use among younger participants, with more allocentric strategies used. In addition, the Kukatja and Kune results both indicate an increase in use of allocentric landmarks ('facing the door [of the room]') specifically, among younger speakers. For gender, our findings show striking differences between the language groups. Kukatja and Wik-Mungkan participants displayed a familiar pattern of greater use of geocentric frames among males, and somewhat higher use of relative and object-centred among females. However, there are no significant differences correlating with gender for Kune participants. Overall, Kune displays a familiar pattern for age but no effect for gender, while Kukatja and Wik-Mungkan display a familiar effect for gender but opposite to cross-linguistically typical patterns for age.

We also tested non-linguistic cognitive correlates with 71 participants, using Animals-In-A-Row. Each participant completed 6 trials (5 for Murrinhpatha). Responses were coded for orientation (Table 5) and order (Table 6). One striking finding is prevalence of monodirectional results, where participants orient the animals in the same direction (e.g. left/west) regardless of original orientation, reflecting attention to order to the exclusion of orientation. Most previous studies code such responses as mixed relative and absolute, categorizing them as untypable. Following Lum (2018:307), we argue this represents a distinct cognitive strategy. Our data shows surprisingly high frequency of such results (27%-70%).

This paper reports on the distribution of spatial strategies across our target sociodemographic variables.

Table 1

Man&Tree: age – domain function

Language	Age cohort	Intrinsic	Egocent. Relative	Egocent. landmark	Egocent. total	Allocent. landmark	Allocent. Geocentric	Allocent. total
Kukatja	8-17	27%	3%	3%	5%	20%	47%	67%
	18-34	12%	8%	5%	14%	4%	70%	74%
	35-49	47%	11%	7%	19%	2%	32%	34%
	50<	18%	10%	5%	14%	4%	64%	68%
Kune	8-17	29%	23%	31%	54%	15%	2%	17%
	18-34	22%	14%	36%	50%	4%	24%	28%
	35-49	30%	11%	13%	25%	4%	41%	45%
	50<	25%	6%	11%	16%	2%	56%	58%
Wik-Mungkan	8-17	38%	16%	8%	23%	0%	39%	39%
	18-34	32%	14%	6%	20%	0%	48%	48%
	35-49	34%	14%	6%	20%	0%	46%	46%
	50<	32%	13%	4%	17%	0%	52%	52%

Table 2

Man&Tree: age – orientation function

Language	Age cohort	Array-internal landmark	Relative	Egocent. landmark	Egocent. total	Allocent. landmark	Geocentric	Allocent. total
Kukatja	8-17	31%	0%	1%	1%	24%	43%	67%
	18-34	28%	2%	12%	14%	5%	53%	58%
	35-49	21%	1%	15%	16%	4%	59%	62%
	50<	17%	0%	28%	28%	6%	48%	54%
Kune	8-17	15%	2%	32%	34%	27%	24%	51%
	18-34	9%	1%	27%	28%	14%	48%	63%
	35-49	10%	2%	20%	21%	12%	57%	69%
	50<	17%	0%	13%	13%	18%	52%	70%
Wik-Mungkan	8-17	9%	2%	9%	11%	3%	78%	81%
	18-34	12%	0%	19%	19%	1%	68%	69%
	35-49	10%	1%	19%	20%	2%	69%	70%
	50<	12%	0%	24%	24%	1%	62%	62%

Table 3

Man&Tree: gender – domain function

Language	Gender	Intrinsic	Relative	Egocent. landmark	Egocent. total	Allocent. landmark	Geocentric	Allocent. total
Kukatja	**M**	**18%**	**5%**	**7%**	**12%**	**5%**	**66%**	**70%**
	F	**29%**	**11%**	**4%**	**15%**	**7%**	**50%**	**56%**
Kune	**M**	**27%**	**13%**	**22%**	**35%**	**3%**	**35%**	**38%**
	F	**28%**	**12%**	**21%**	**33%**	**4%**	**35%**	**39%**
Wik-Mungkan	**M**	**19%**	**10%**	**8%**	**18%**	**0%**	**64%**	**64%**
	F	**45%**	**17%**	**4%**	**21%**	**0%**	**34%**	**34%**

Table 4

Man&Tree: gender – orientation function

Language	Gender	Array-internal landmark	Relative	Egocent. landmark	Egocent. total	Allocent. landmark	Geocentric	Allocent. total
Kukatja	M	**23%**	1%	16%	**17%**	6%	54%	**61%**
	F	**23%**	0%	19%	**20%**	9%	48%	**58%**
Kune	M	**9%**	2%	23%	**24%**	9%	58%	**67%**
	F	**13%**	1%	21%	**22%**	18%	48%	**65%**
Wik-Mungkan	M	**12%**	1%	17%	**17%**	1%	69%	**71%**
	F	**10%**	1%	20%	**21%**	1%	67%	**68%**

Table 5

Animals-In-A-Row task orientation strategy summary by language

Orientation	*Relative*	*Absolute*	*Monodirectional*	*Mixed/untypable*
Kukatja (n=20)	1 (5.0%)	3 (15.0%)	14 (70.0%)	2 (10.0%)
Kune (n=19)	2 (10.5%)	3 (15.8%)	11 (57.9%)	3 (15.8%)
Murrinhpatha (n=14)	1 (7.1%)	4 (28.6%)	4 (28. 6%)	5 (35.7%)
Wik-Mungkan (n=18)	0 (0%)	5 (27. 8%)	10 (55. 6%)	3 (16. 7%)

Table 6

Animals-In-A-Row task order strategy summary by language

Order	*Relative*	*Absolute*	*Mixed/untypable*
Kukatja (n=20)	2 (10.0%)	5 (25.0%)	13 (65.0%)
Kune (n=19)	3 (15.8%)	5 (26.3%)	11 (57.9%)
Murrinhpatha (n=14)	2 (14.3%)	4 (28. 6%)	8 (57.1%)
Wik-Mungkan (n=18)	0 (0%)	6 (33.3%)	12 (66. 7%)

Note. Monodirectional strategies will look like mixed order responses.

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On Causation: The Case of Oblique ***de***-marked Causers in Spanish

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Keywords

Causation, Prepositions, Causers, Periphery, Constructions

Abstract

A long-standing tradition in Semantics has focused on lexically encoded causation. Yet very little has been investigated about the causative meanings of prepositions despite a few honorable exceptions. Our aim is to describe causation as expressed by the Spanish preposition *de* 'of/from' or CS-*de*, as in (1).

(1) Pedro murió de cáncer.
'Pedro died of cancer'

The causative paraphrase provides a piece of evidence about the encoding causation in (1).

(2) El cáncer causó que Pedro muriera.
'Cancer caused Pedro to die'

The first question is whether CS-*de* conveys the same causation as lexical verbs such as *romper* 'break'. The second question is whether CS-*de* encodes a single causation type. (3) and (4) provide solid evidence that indicates that causation in CS-*de* is unique.

(3) Elena tembló de frío.
'Elena shivered from the cold'

(4) Su cuerpo brillaba de sudor.
'His body shone from perspiration'

The unergative verb *temblar* 'shiver' does not participate in the causative alternation; there is no verb **tiritizar* meaning that something made somebody shiver. Likewise, there is no causative *brillar* 'shine'. Yet CS-*de* adds Causers and causation. This is more than an interface contrast between subjects and peripheral Causers. It is about CS-*de* encoding a causation type that we name 'soft causation' and it is involved in the Internal CS-*de* in (1), the unergative CS-*de* in (3) and the Property CS-*de* in (4). It is also part of the Psych CS-*de* in (5).

(5) María se asustó de su palidez.
'María got scared by her paleness'

A feature structure that we call 'causal grid' captures the contrast between lexical and CS-*de* causation in terms of four attributes —/Event/, /Participant/, /Transfer/ and /Chain/— and their values (Figure 1). CS-*de* is then characterized by the value [+state] in /causing event/ in the /Event/ attribute and [-individual] and [+internal] in /Causer/ Participant/ since diseases, sensations and representations are Causers in (1-5) and they are all internal states of the Causee. External Causers such as agents, instruments, or natural forces are banned.

(6) Carla se asustó *de Juan/ *de la alarma/ *del trueno
'Carla jumped *of Juan/ *of the alarm/ *of the thunder.'

By contrast, the preposition *con* 'with' and *por* 'by' allow for these Causers.

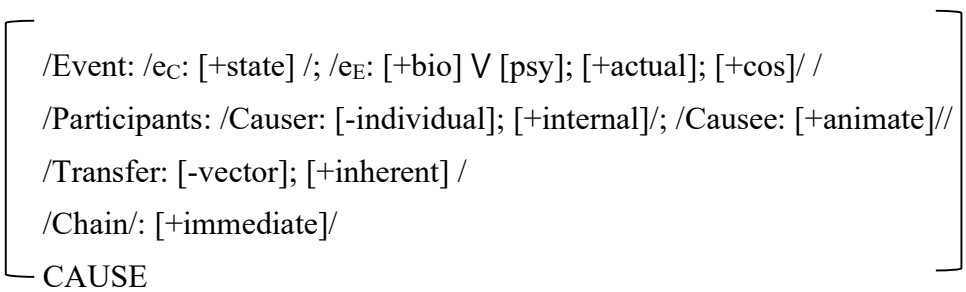
(7) Carla se asustó con/por la alarma/trueno.
'Carla got scared by the alarm/thunder'

In addition, /Causee/ is [+animate]; /Transfer/ is [-vector] since the force exerted by the Causer and transferred to the effect event is not linear or directed; it can be even [+property] as in (4). Finally, /Chain/ is [+immediate] since CS-*de* Causers are the last one of a chain as it is *miedo* 'fear'.

(8) La maestra los hizo temblar de miedo con sus historias.
'The teacher made them shiver from fear with her stories.'

Soft causation involves animate Causees affected by internal states as Causers in causing states that transfer a diffuse force or property. This pattern of values is opposed to prototypical lexical causation with external Causers in causing activities that exert directed forces toward non- animate Causees.

Figure 1: Causal Grid



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On Mixed Phrases: Nominal Infinitives in Spanish

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Keywords

Lexical Category, Phrases, Mixed Phrases, Infinitive, Noun Phrases.

Abstract

A widespread assumption held across grammatical models is that lexical categories are nuclei that project into phrases. Central properties of the phrase –its meaning, constituents and function- are correlated with the category. While this depiction is essentially right, there are phrases headed by a particular category that display syntactic distributions or functions identified with a different category. There are two ways to account for this fact. One is to propose that there are mixed lexical categories which may combine properties of nouns and verbs. In contrast, we explore the hypothesis that there are 'mixed phrases' that retain the lexical category of the nucleus while mixing properties that come from other categories at some layer of the phrasal structure. The so-called 'nominal infinitives' (NIs) in Spanish render mixed phrases that are indeed of two kinds: Strong and Weak. Example (1) expresses the Weak version. Decir ("say") is a non-finite verb form in a phrase that denotes an event and satisfies the requirement of its argument structure in the standard VP fashion since it contains an NP as direct object (mentiras "lies"). Yet, it is specified by a determiner (el "the") and functions as the subject of the sentence, two properties canonically identified with nouns.

(1) El decir mentiras lo desacreditó.
The tell lies him discredit
'Telling lies discredited him.'

Furthermore, (2) shows that the verb can be modified by adjectives (constante "constant") just like nouns while, alternatively, it can also be modified by adverbs (constantemente "constantly") just like verbs.

(2) El (constante) decir mentiras (constantemente) lo desacreditó.
The (constant) tell lies (constantly) him discredit
'Telling lies constantly discredited him.'

The Strong version of NIs is represented by (3). Its logical subject is expressed as a genitive subject in and the event type of the verb is restricted to atelic verbs (de Miguel, 1996).

(3) El dulce mirar de María es cautivante.
The sweet look of María is captivating
'María's gentle look is captivating'

In contrast, (4) represents a VP-subject that contains an infinitive form that is not specified by an article. It represents a verbal structure that can express its internal arguments within the VP.

(4) Decir la verdad le trajo rechazos.
tell the truth him brought rejections
'To tell the truth caused him rejections'

The verbal nature is further supported by the possibility of expressing a nominative subject of the clause as in (5).

(5) Llamar María a Pedro me resulta increíble.
Call María to Pedro me results unbelievable
'I cannot believe that Mary can call Pedro'

We propose to capture these data by phrases that are headed by a verb category but that at some point in the projection may switch into a noun phrase by an operation we call 'category shift'. Crucially, this switch takes place down below in Strong NIs while upper in the phrasal projection in Weak NIs. The category shift is a resource provided by Spanish grammar in order to satisfy the communicative need of predicating on events, that is, speakers need events to be the 'topic' of a 'comment'.

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The interaction between understanding of cultural and spatial relationship and playing experience in digital game space, from the perspective of embodied theory.

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Keywords

Embodied cognition, Spatial Cognition, FCMs, Metaphors, Cognitive linguistics and game studies.

Abstract

Embodied cognition theory posits that cognition is not merely an activity of the brain but rather the result of the dynamic interplay between the body, environment, and culture (Shapiro, Lawrence & Spaulding, 2024). On the other hand, cultural arrativeas an external tool for understanding the world intricately integrated with the body and cognitive systems (Holloway, 1981). From the cultural perspective, arrative shapes the very structure of human cognition (Cole & Packer, 2019; Kolstad, 2015) through language, symbols, customs, and social practices. Beside of that, cultural narrative influences individual cognitive processes and shapes how individuals perceive the world and others (Kramsch, 2014; Kramsch, 2004). The most classic example is civilization——people create rituals, dance, art, and games, which provided opportunities for embodied learning, enabling individuals to generate and reinforce social behaviours through interactive engagement (Hayashi, Aguilar, Nyanamba & Zhao, 2022; Davidson & Emberly, 2012).

This study focuses on embodied cognition within the context of digital game environments, exploring how technology serves as a mediating force that interacts with the body, environment, and culture to shape cognitive experiences. Grounded in embodied cognitive changes and experience analysis from unstructured player interviews and player self-reports, this paper explores the game spaces on players' understanding of spatial relationship and culture.

By analysing resource interactions, scene experiences, and in-game actions, as well as cultural cues, the study found that the diverse interactive mechanisms and cross-media representations of digital games provide players with a continuous, complex, and dynamic environment for understanding multiple realities (Blom, 2023; Lizardi, 2014). They provide

chances for players not only acquire cultural knowledge but also internalize cultural values and behavioral norms through metaphors and changes in their bodily and cognitive states but not necessary to be on site (Donald, 2000). This study reveals how game spaces influence players' perception and understanding of virtual worlds (Montello, 1998)—and, by extension, their reflections or designs of real-world cultural contexts (Chung, Han, Shin & Renshaw, 2016; Frith &Singer, 2008)—through the creation of embodied cues imbued with cultural or narrative significance (Blom, 2023).

The study further points out that Fuzzy Cognitive Maps (FCMs) play a pivotal role in this process (Dickerson & Kosko, 1993), which functioning in a manner consistent with human in real[1]world activities (McNamara, 1986; Patterson, 2014).The findings indicate that virtual spaces not only provide immersive experiences for participants but also reflect the cognitive interaction characteristics of human engagement with physical and social spaces (Spence & Feng, 2010) , because game spaces offer players a situational identity, enabling them to alter embodied experiences through interactions with in-game cues (Taylor, Holly, Tversky & Barbara, 1992), thereby transforming cognitive patterns and constructing new, reality-adaptive FCMs (Ramírez, López, Flores, 2013). It might have a positive impact on cross-cultural players' cultural acquisition and adaptation (Greitemeyer & Osswald, 2009; Kolstad, 2015). Therefore, future research could explore the neural mechanisms underlying the cognitive generation and response of embodied experiences when players playing digital games and conduct cultural anthropology research, which can advance development in cognitive sciences, pluralistic societies, game and inclusive cross-culture design.

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The Constructional Similarity Hypothesis and the Horizontal Configuration of the Network

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Keywords

horizontal links, vertical links, constructional similarity

Abstract

Many authors suggest that horizontal links may account for similarities between constructions (Sommerer & Smirnova 2020; Van de Velde 2014), as others point that they cover for contrast between constructions (Diessel, 2019), and others for variation/alternation between constructions (Capelle, 2006). Drawing from that discussion, I analyze a group of conditional microconstructions sanctioned by two sub-schemas: [X que]CondPos and [X se]CondNeg. So far, the analysis shows that although they share form and function properties, their meaning and formal specifications cannot be analyzed through vertical links. This is partially due to the fact that they show different degrees of conventionalization, and yet do not display substantial differences, as seen in the following examples:

O testamento particular pode ser escrito em língua estrangeira, contanto que as testemunhas a compreendam. (19Ac:Br:Lac:Misc)

The private will can be written in a foreign language, as long as the witnesses understand it.

Rejeitamos uma trégua, a não ser que atendam nossas exigências justas(19N:Br:Recf)

We reject a truce unless they meet our just demands

The above examples are instantiated by the two subschemes analyzed here, which show significant semantic, pragmatic, and contextual similarities. Despite being distinct constructions (formally at least), they all function in a very similar way: they connect clauses within content and epistemic domains, they project both a predictive condition (content domain) and an inferential prediction (epistemic domain), they can both encode epistemic distance and evidential distance. In other words, we are facing different microconstructions that differ strictly in form but, in some way, maintain considerable semantic and pragmatic similarity. For the analysis of contextual properties, I considered classical parameters such as the position of the conditional clause, the verb tense and mood, and the polarity of the main clause. This also indicates that while some differences do exist, these microconstructions are not exclusive in different contexts and thus share contextual properties. My claim is that although the analyzed microconstructions are not synonymous, they share a substantial part of constructional meaning and can be regarded as two constructional options for conceptualizing the same biosocial event. To account for these similarities, I propose the hypothesis of constructional similarity, understanding that the microconstructions do not constitute entirely independent structures but are related as alternative options for describing the same type of events. I thus assume a horizontal configuration of the network to represent not only the similarity among microconstructions but also their alternation in similar contexts, which cannot be described vertically since these contexts cannot be underspecified. By adopting the notion of constructional alternation, I assume that the network represents not only generalizations based on specific constructions, but also generalizations based on alternations that consist of information stored in users' cognitive representations. A similar claim can be found in Capelle (2005), Perek (2015), Diessel (2019, 2023). This model represents not only inheritance links but also the details of linguistic structures' usage. This is because speakers' linguistic knowledge also involves knowledge of the similarities between constructions and their usage within similar contexts, which should also be represented in the network since individuals store complex structures with experiential details in a process known as rich memory. The data for this analysis was collected from corpusdoportugues.org (Davies, Ferreira, 2006)

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Gender and deliberate metaphor use in Belgian political discourse

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Keywords

Gender, deliberate metaphor, political discourse, Belgium, federalism.

Abstract

Conceptual metaphors structure the way we perceive political reality (Lakoff, 2002, 2004). Many studies have confirmed the metaphorical nature of political concepts and systems (see among others Koller, 2009; Musolff, 2000, 2016) well as the influence of metaphorical framing on political representations (see among others Boeynaems, 2019; Perrez & Reuchamps, 2015b; Reuchamps et al., 2018; Steen et al., 2014). Recent developments have also suggested that looking at variation in metaphor use could provide more specific insights into the communicative functions of metaphors in political discourse (Perrez et al., 2019). Accordingly, political metaphor use has been shown to vary to variables such as political affiliation, political role or political context (Ahrens, 2019; Heyvaert, 2020; Heyvaert et al., 2019). Among the factors potentially influencing political metaphor use, gender has been studied in different contexts, such as the USA, Hong Kong, Britain, Ireland and Germany (see the different chapters from Ahrens, 2009). However, these different studies show contrasted results, sometimes pointing to gendered differences in metaphor use, sometimes not. These contrasted results suggest the role of gender on political metaphor production is still in need of further research.

Against this background, and based on Deliberate Metaphor Theory (Steen, 2008, 2015, 2017), this study investigates to what extent gender influences the use of deliberate metaphors in Belgian political discourse. Previous research by Heyvaert et al. (2019), based on a corpus of informal interviews, suggest that male politicians produce on average more deliberate metaphors than female politicians and use different source domains that are perceived as more masculine (see also Ahrens et al., 2024). Our study will broaden the scope of the study by Heyvaert et al. (2019) and analyze three corpora representing different forms of political discourse, namely citizen discourse (Perrez & Reuchamps, 2015a), television debates (Perrez et al., 2019) and parliamentary discourse (Heyvaert, 2020). The existing databases will be reanalyzed from the perspective of gender, more specifically looking at the frequency of deliberate metaphors and the conceptual source domains that are respectively used by male and female politicians.

The data are currently under analysis. Our findings will contribute to a better understanding (i) of the role of gender on political metaphor production and (ii) of the role of deliberate metaphors on political communication.

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The conceptual complexity of splinters. Towards a semantic classification

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Keywords

metonymy, splinter, cognitive modeling, lexical blending, evaluative meaning.

Abstract

One of the main concerns in the study of splinters is their semantic import. There are two main approaches to the definition of splinters. Scholars like Adams (1973) claim that splinters are portions of lexical items that make up lexical blends (e.g., 'br' and 'unch' in *brunch*). However, authors like Bauer, Lieber, and Plag (2013: 525) argue in favor of a more restrictive definition of splinter that assigns a splinter status to only those lexical items that meet the condition of being used recurrently in the formation of lexical blends (e.g, the non-morphemic segment *-gasm* (<*orgasm*) in *beergasm* or *bookgasm*; Barrena-Jurado 2019). A key question is whether these quasi-morphemes preserve the meaning of the source word from which they have been split off or whether the meaning of the base word is subject to reinterpretation (Bauer, Beliaeva, and Tarasova 2019, Mattiello 2019). On the basis of these observations and of Renner's (2007) distinction between reinterpreted and non-reinterpreted splinters, Author (2022) has provided a more detailed classification of these non-morphemic segments into those splinters in which the meaning of their source word is kept intact (S1) and those subject to interpretation (S2) from the point of view of cognitive modeling. This scholar has explored the role played by the metonymic operations of expansion and reduction to account for the semantic change undergone by S2 (e.g., the meaning of the S2 *-gate* in *Obamagate* is the result of an expansion operation whereby the meaning of its corresponding original form, *Watergate*, a particular political scandal, grants conceptual access to any scandal or controversy, especially in politics; by contrast, the meaning of the S2 *franken-* (<*Frankenstein*) in *frankencut* results from a process of metonymic reduction in which only one of the traits of the monster, its weirdness, is singled out). In this proposal, a more fine-grained analysis of S2 is offered from the point of view of cognitive modeling in order to account for the cognitive substratum that underlies the semantic change undergone by the meaning of these forms and for the conditions that license or block the combination of other (parts of) words with these splinters.

Moreover, an exhaustive semantic classification of S2 is put forward, especially of those whose meaning is the result of a reduction operation. The evaluative nature of splinters has remained largely underexplored in the literature, with the exception of Sánchez-Fajardo's (2022) work, which examines fifteen pejorative suffixes and combining forms making use of insights from Construction Morphology and Morphopragmatics. Based on the principles of cognitive modeling (Author and Ruiz de Mendoza 2022), and

on the basis of 150 splinters taken from the SplinterCorpus (a corpus of 200 splinters identified with the help of sections of new words of online dictionaries and the *NOW* and *iWeb* copora), our proposal specifically focuses on splinters and offers a more comprehensive classification of these segments. Here a distinction is made between:

(i) non-evaluative splinters (e.g., *-fie*, as in *shofie*)

(ii) evaluative splinters

(a) inheriting the attitudinal element from the source word they have been split off (*-pocalypse*, as in *Tweetpocalypse*)

(b) those in which the pejorative meaning is a contribution of the splinter itself and of the way it combines with other fragments of words (*splain-*, as in *mansplain*)

(iii) splinters with both evaluative and non-evaluative meanings (e.g., *-demic*, which is evaluative in *infodemic* and non-evaluative in *twindemic*)

The analysis of our corpus reveals that the range of connotations conveyed by splinters is extensive and some of them are ambivalent or multifunctional in the sense that they express different attitudinal values and different meanings depending on context (e.g., *franken-*, which carries positive overtones in *frankengarden* if the extreme beauty of the garden is highlighted, but also negative ones in *frankenmuffin*; it can mean 'weird' or 'ugly' in *frankencut*, 'genetically modified' in *frankenfood*, or 'assembled from different parts' in *frankenvehicle*).

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Assessing Endocentricity in Formal Blends: a Cognitive-Discursive Perspective

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Keywords

construction morphology, discourse analysis, conceptual blending, compounds, ideological framing.

Abstract

The word <vachina> emerged in Brazilian public discourse during the COVID-19 pandemic (2021-2022) as an antagonistic naming strategy for the vaccines being produced in China, promised to be bought and swiftly distributed by the Brazilian government. It results from a blend stemming from two discrete parts in Portuguese, both nouns: <vacina> [vaccine] and <china>, which form an overlapping blend (Mattiello, 2013), a subtype of formal blending. The word might be analysed as an endocentric construction, since <vachina> is indeed a type of vaccine, making one of the parts of the construction its head. However, although it has a head, <vacina>, the other noun, <china>, isn't a simple specifier as the construction cannot be used as an optimal substitute for <vaccine from china> or <chinese vaccine>, since the word is supposed to trigger a negative assessment towards its referent as well. The background frame that relates to this assessment of China must then be recruited by schema induction (Evans & Green, 2006).

In compounds such as <bookshelf>, for instance, the word <book> is a trivial specifier, because it simply denotes a specific type of shelf. <book>, thus, merely specifies the type indexed by the head, as it could be optimally substituted for <a shelf for books>. Therefore, I will argue that constructions such as <vachina> aren't simple segmental blends and cannot be fully described in the terms of compositional morphology, demanding a theoretical framework that comprehends mental spaces (Fauconnier & Turner, 2002), discursive events and ideology (Fairclough, 2009) as fundamental building blocks and triggers of word creation in construction morphology

(Booij, 2010, 2016; Ungerer, 2010). The negative assessment can only be sanctioned in a discourse community in which China is related to a sinophobic worldview, in which case, the word is used to both make reference to an entity and enact the speaker's ideological standpoint in mocking and evaluating this particular vaccine negatively (Pivetta & Gonçalves-Segundo, 2023).

Other blends further corroborate this approach, such as <taxad>, which combines the words <taxa> [tax] and <haddad> – the surname of Brazilian Treasury Minister Fernando Haddad – in a critical reaction to novel tax policies implemented in Brazil in 2024. In this particular case, the word is headed by a proper name and is intended to trigger an inference that portrays the referent as a *heavy taxer*. However, although we could regard the word <haddad> as a head, the word <taxa> doesn't function as a trivial specifier, since it must both trigger the inference of a negative assessment of heavy taxation and perform an attributive function towards the head.

I will argue further that this is a recurring strategy in specific discourse communities in forcing the blending of inputs as a means of enacting the aforementioned political views and rigidly associating both parts of the constructions, which instantiate discursive representations of a given social actor, thus preserving endocentricity.

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Pathways to Polysemy: Metaphorical Extension in an Artificial Language Learning Experiment

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Keywords

polysemy, metaphor, artificial language learning, semantic extension.

Abstract

Where does the unlimited expressive potential of human language come from? Previous research has focussed on the important contributions of the massive size of the lexicon (Hurford 2012) and compositionality, which allows for the combination of lexical items to yield new meanings (Pleyer et al. 2024). However, another important factor in extending the range of expressible meanings is the process of meaning extension, by which lexical items become polysemous (Vicente & Falkum 2017). Polysemy is pervasive in modern language (Floyd & Goldberg 2021). The emergence of polysemy, extended meanings and the factors involved in it have been documented in historical linguistics, especially historical semantics (e.g. Allan & Robinson 2012). In such work, metaphorical extension has been shown to be a key factor in licensing semantic change (e.g. Sweetser 1990; Anderson 2017). Two crucial questions regarding the role of metaphoric extension in the evolution of language are whether interlocutors spontaneously and 'naturally' make use of semantic extension in communication and what the cognitive mechanisms involved in this process are. Recently, insights on these questions have come from experimental studies on the cultural evolution of language (Tamariz 2017) that study metaphorical extension in experimental settings (Bowerman & Smith 2022).

The current study uses a cultural-evolutionary experimental paradigm to investigate whether participants spontaneously make use of metaphoric extension in a novel communication system and to what degree metaphoric extensions are based on conceptual metaphors as analysed in conceptual metaphor theory (Lakoff & Johnson 1980, Kövecses 2010). To test this, the study investigates the emergence of metaphorical meanings in abstract visual symbols within an "alien language" artificial language

learning game. The findings indicate that participants extend concrete meanings to abstract meanings in accordance with metaphorical mappings proposed by Conceptual Metaphor Theory; however, this process does not occur consistently across all cases. When multiple salient mappings are available, participants' responses exhibit greater variability. Certain mappings, such as SAD IS DOWN and ANGER IS FIRE, demonstrate high salience and are frequently selected, whereas others, such as POWERFUL IS UP, display less consistency. Additionally, some unexpected mappings emerged. While post hoc analyses account for certain cases, others remain unexplained. Experimental manipulations designed to enhance the salience of metaphorical mappings did not significantly influence participants' responses.

Overall, the results suggest that participants engage spontaneously in semantic and metaphorical meaning extensions, supporting the hypothesis that these cognitive mechanisms underlie polysemy and the conventionalization of new word senses. Participants' choices in semantic extensions appear to be motivated, with some driven by conceptual metaphorical mappings and others by alternative salient associative mappings. These findings contribute to theories of language evolution by underscoring the central role of metaphor and the cognitive processes that facilitate it in the development of linguistic meaning.

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The Use of the Imperfect Preterit of the Indicative Mood in Protasis of Counterfactual Conditional Periods

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Keywords

Conditional Periods, Protasis, Imperfect Preterit, Counterfactual, Copreterit.

Abstract

This paper analyzes the use of the Imperfect Preterit of Indicative Mood (PI) in protasis of conditional periods that express counterfactuality: *"Si venía como gobernador, con gusto lo recibía".* Given that in the framework of Cognitive Grammar (Langacker, 1987; Lakoff, 1987) the choice of a linguistic form where another form is possible is significant, our purpose will be to explain the meanings of PI in contrast to the normative *consecutio temporum* to express "unreality", that is, the use of the Pluperfect (PP) of the Subjunctive Mood in the protasis, followed by Compound Conditional (CC) in the apodosis: *"Si hubiera venido como gobernador, con gusto lo habría recibido".*

The conditional periods made up of PP of the Subjunctive Mood and CC are used to express "unreality" referring to the past (NGLE, 2009; Montolío, 1999). The NGLE (2009) classifies conditional constructions into three groups according to verbal tense and mode: 1) Real period (if + present or past tense of the indicative mode/ past, present or future indicative); 2) Potential period: (if + imperfect subjunctive/conditional or imperative); 3) Unreal period (if + subjunctive pluperfect/ compound conditional or subjunctive pluperfect). The NGLE points out the normative use of tenses and modes, without explaining in which contexts and with what specific meanings the different verbal forms are used. According to Montolío (1999), the presence of the PP of the Subjunctive Mood indicates the falsity of what is proposed by the conditional protasis since it refers to a possible world that is not realized, without the possibility of being modified. This type of constructions implies an implicit double negation from the logical point of view (not-p & not-q) since the apodosis describes how the world could have been if what was stated in the protasis had been fulfilled (Urrutia & De Vega, 2015).

However, the counterfactual use of the PI of the Indicative is not analyzed in the cited literature. Montolío (1999), who deals specifically with examples made up of PI in protasis and apódosis, takes only the cases that express habituality in the past; correlation of indirect speech or forms of temporal dislocation (Rojo, 1986; Veiga, 1991).

In this paper we seek to explain the communicative objective that motivates the presence of the PI of the Indicative in clauses that express counterfactual events. Our hypothesis is that the use of the PI constructs an idea of simultaneity between the narrated events and the speaker because it is a copreterit, which nuances the meaning of counterfactuality, bringing the events closer to the speaker's experience, to give the idea that by a closeness effect, the events narrated in the apodosis could have been [+real].

To demonstrate our hypothesis, we formed a corpus of examples extracted from ten journalistic news items from online portals in Argentina, which will be analyzed qualitatively and quantitatively according to three criteria: the position of the protasis; the times that correlate with the PI; the progression of information.

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Time-Moving and Ego-Moving schemas in Time-Space metaphors in Rioplatense Spanish

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Keywords

Time metaphors, time/ego moving schemas, Rioplatense spanish.

Abstract

The same conceptual metaphor can be instantiated differently across cultures and dialects. In turn, the way meaning is conveyed through specific linguistic expressions may shape the inferential structure derived from mental metaphors. Research in English has shown that certain verb forms, such as "move forward," in temporal contexts activate ego-moving and time-moving perspectives during temporal reasoning. This, in turn, influences how ambiguous spatial targets are interpreted (e.g., "The meeting of Wednesday has been moved forward two days"; Boroditsky & Ramscar, 2002). The phrase "move forward" can be translated into Spanish in various ways (e.g., "mover hacia adelante" or "adelantar"). Corpus data suggest that certain expressions in Spanish metaphorically refer to events moving away from the ego (ego-moving perspective), while others represent events moving toward the ego (time-moving perspective). Empirical research indicates that, in Spanish, speakers rely on alternative spatial motion schemas depending on the metaphorical expressions used to resolve ambiguity (Reali & Lleras, 2017).

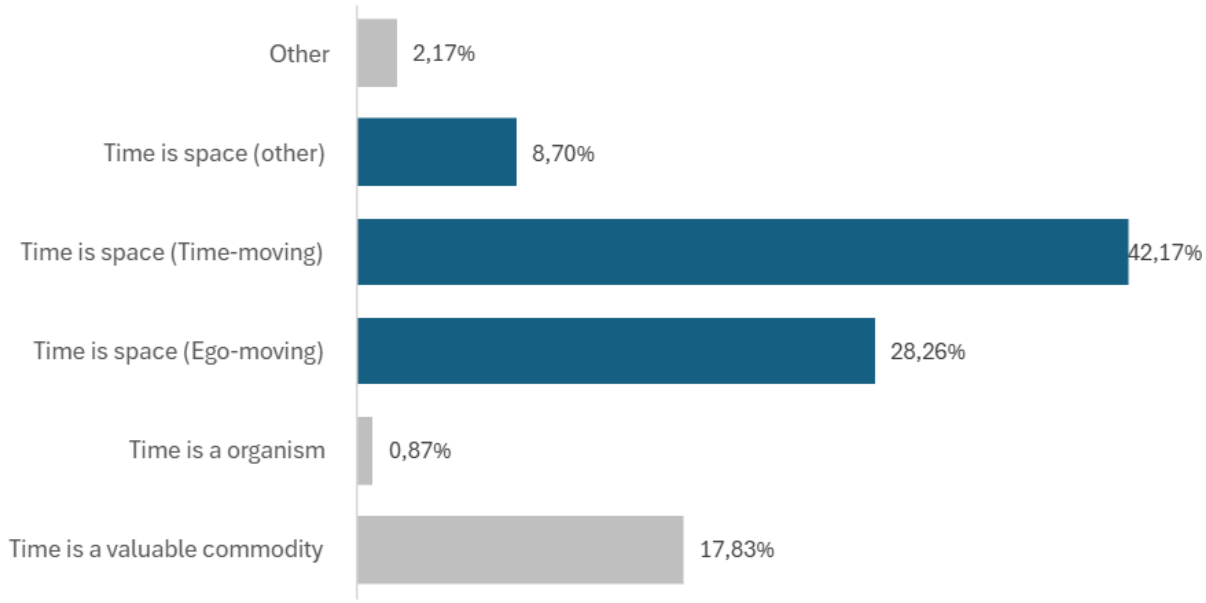
The present study explores the range of metaphorical expressions used to elicit ego-moving and time-moving frames in space-time metaphors within spoken Spanish. Transcripts from general-knowledge radio podcasts in the Rioplatense region (Uruguay and Argentina) were analyzed. A total of 22 podcasts (comprising 21 hours and 31 minutes of speech, totaling 198,030 words) provided the corpus for analysis. Temporal references were identified using key words, and two trained coders applied the MIPVU method (Steen et al., 2010) to identify metaphorical expressions where time was the target domain. Initial coder agreement was 75%, with discrepancies resolved by consensus.

A total of 230 metaphors were identified. Of these, 182 were classified as space-time metaphors, and 162 elicited either ego-moving or time-moving perspectives. From these, expressions eliciting time-moving schemas were the most common (97) and they frequently employed verbs such as "venir" (come), "llegar" (arrive), and "pasar" (go by), as in "Llega un momento donde el deseo carnal entra en juego" (tr. A moment comes when carnal desire comes into play). Ego-moving schemas were less common (65) and predominantly relied on terms such as "adelante" (forward) and motion verbs like "mover" (move) or "atravesar" (go through), as in "La tarea que tenemos por delante excede nuestros recursos" (tr. The task ahead of us exceeds our resources). Importantly, the metaphorical expressions identified were highly conventionalized, making the

schema elicited non-ambiguous. See Figure 1 for a visual summary of metaphor distribution.

This study contributes to our understanding of how space-time metaphors are linguistically encoded in Rioplatense Spanish and highlights the role of specific linguistic forms in shaping mental representations of time.

Figure 1
Distribution of time metaphors



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Studying effects of genre on real-time metaphor processing

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Keywords

language processing, metaphor, genre effects, maze reading task

Abstract

Metaphorical language varies systematically across different 'text types' or genres (Caballero 2017; Deignan, Littlemore & Semino 2013; Dorst 2015; Goatly 2011). For instance, the metaphor "breeze of contentment" would be atypical in a newspaper context, e.g., (1), but more natural in a fiction context, e.g., (2) (Beekhuizen & Raihert, under review). Yet, it remains unclear whether genre (as a type of discursive context) also affects how metaphors are processed in real time. More specifically, do readers use extralinguistic genre information to inform their expectations about the type of metaphorical language they might encounter? Our study is the first to investigate genre effects on metaphor comprehension in a word-by-word reading paradigm.

72 Native speakers of English, recruited via Prolific, were assigned to one of two groups: the Explicit Genre group (*N*=37), who was explicitly informed about the genre of the excerpts they read, or the Implicit Genre group (*N*=35), who received no such indication. In each trial, participants first read two context sentences, followed by a critical sentence presented in the 'maze' task (Forster, Guerrera & Elliot, 2009), where participants had to select between a correct and incorrect sentence continuation at every word (see Table1). Our critical stimuli (*n*=12) consisted of sentences such as (1) that expressed a news context, adapted from the newspaper section of COCA (Davies, 2008), but into which a NOUN-of-NOUN metaphor had been inserted that is atypical of the news genre, as determined by a computational corpus study (Beekhuizen & Raihert, under review). Literal baselines (*n*=12) were created by using the large language model BERT (Devlin et al. 2019) to generate likely replacements for the source domain noun of the metaphors, based on which a literal noun matched in length was manually selected (e.g., "[breeze vs. sense] of contentment").

Reading times (RT) and 'maze' accuracy at the source domain (e.g., breeze) and target domain (e.g., contentment) were analyzed using linear and logistic mixed effects models. We predicted, first, that metaphors would be more difficult to process than literal baselines in both regions, leading to longer RTs and lower accuracy. Second, we predicted that participants who were explicitly told the genre would find it more difficult to process the (news-atypical) metaphors. However, there was only a marginal effect of Genre Explicitness in accuracy, i.e., lower accuracy for both metaphorical and literal sentences in the Explicit Genre condition at the target domain (contentment) (β=-0.688, SE=0.4, z=-1.72, p=0.08), and otherwise no effect of Metaphoricity and no interaction (ps>0.05).

Our null findings point to several implications: first, they suggest that metaphor processing is not more costly compared to literal language processing (Gibbs & Gerrig 1989; Ortony, Schallert & Reynolds 1978). A post hoc Bayes Factors analysis showed that our data provide strong evidence for this null hypothesis (BF<0.1) (Lee & Wagenmakers 2014). Second, the fact that explicitly mentioning the genre did not influence the results could either suggest that genre expectations do not affect on-line metaphor processing, or that our task and/or context manipulation was unable to detect the (potentially subtle) effects. These possibilities, which will need to be studied in follow-up work, invite a broader discussion on how effects of the discursive context are to best be studied empirically (Gibbs 2023).

Examples

(1) When Hollande's hour-long speech wound to a close, the crowd intoned the national anthem. Hollande felt a breeze of contentment as he stepped down from the stage.

(2) Lincoln is tired of nobility. It has been years since he felt a single breeze of contentment. This he blames on nobility. Rectitude exhausts his every part.

Table 1

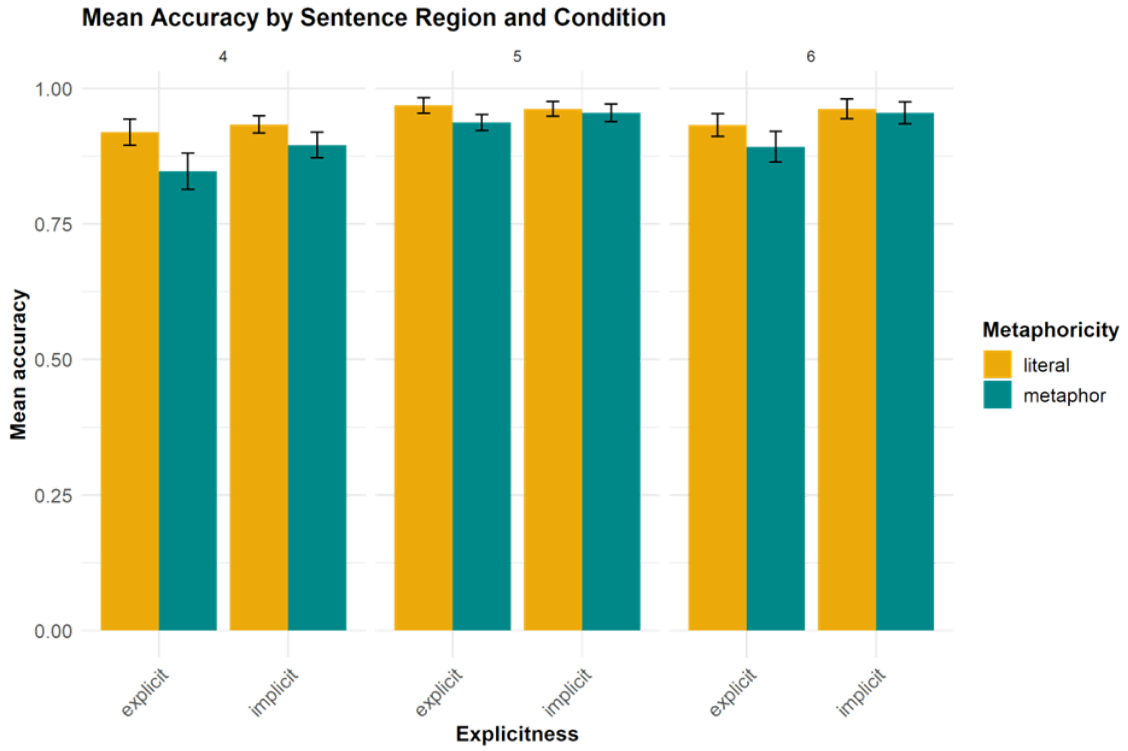
Example set of stimuli from the task.

	Explicit Genre Condition	Implicit Genre Condition
Context sentence 0	The following passage comes from The Sunday Times.	—
Context sentence 1	Many banner-waving supporters jammed the convention center.	
Context sentence 2	When Hollande's hour-long speech wound to a close, the crowd intoned the national anthem.	
Critical sentence: Metaphor	Hollande / felt / a / **breeze** / **of** / **contentment** / as / he / stepped / down / from / the / stage.	
Critical sentence: Literal	Hollande / felt / a / **sense** / **of** / **contentment** / as / he / stepped / down / from / the / stage.	

Note. Only the critical sentence is read in 'maze'.

Figure 1

Mean accuracy in the 'maze' task for Metaphorical and Literal sentences, in the Explicit and Implicit Genre conditions.



Note. There is only a marginal effect of Explicitness at the target domain region (Region 6, e.g., *contentment*).

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Metaphor Use and Syntactic Complexity Influence Veracity Judgements of Fake News in Spanish

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Keywords

fake news, veracity judgement task, metaphor, syntactic complexity.

Abstract

False stories tend to spread significantly farther, faster, deeper, and more broadly than true ones across all categories of information (Vosoughi et al. 2018). In turn, certain linguistic cues characterize fake news, as they contain more emotional and familiar language (Ghanem et al. 2020). Moreover, fake news appear to be easier to process, featuring shorter sentences (Hauch et al. 2015), and words with higher imaginability scores (Reali, in press; Ott et al. 2013).

Research on deceptive behavior shows that false statements include shorter and more concise utterances, more sentiment language, and more concrete and familiar words (Sarzynska-Wawer et al. 2022). A similar pattern was found in the case of deceptive language in Spanish (Masip 2017). Considering the low complexity and high familiarity and imaginability of fake news, the current study explores the potential effect of using metaphors and varying syntactic complexity on veracity perception. Metaphors can activate vivid imagery, as they engage imaginative processes by linking abstract concepts to sensory and emotional experiences, potentially making them more concrete and visualizable (Gibbs 1994). Therefore, the current study assesses the role of using metaphors and varying levels of syntactic complexity in participants' veracity judgments of a sample of fake news in Spanish, using adapted pieces taken from a publicly available corpus (Gómez-Adorno et al. 2021).

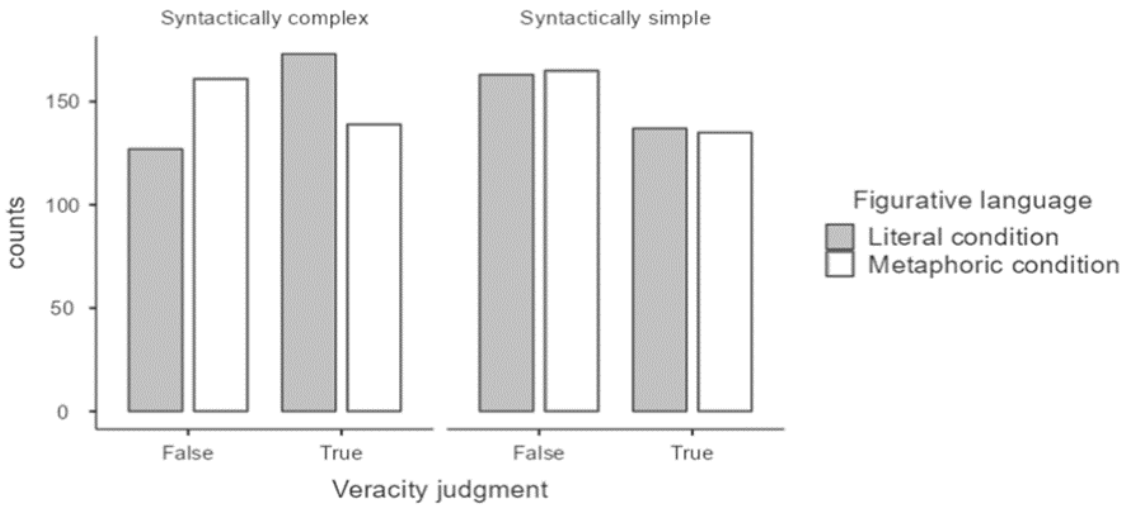
News extracts were modified to manipulate two factors in the texts: 1.presence/absence of metaphors, and 2.presence/absence of embedded clauses. The veracity judgment task followed a within-subject 2(presence/absence of metaphor) × 2(simple/complex grammatical structure) factorial design, resulting in four different versions of news items. Conditions were counterbalanced in four questionnaires. One hundred and fifty participants completed a condition-counterbalanced questionnaire, in which they were asked to judge eight news items as TRUE or FALSE and to rate their confidence in the assessment on a 1-7 Likert scale. A generalized linear mixed model was performed to assess the effect of metaphor use and syntactic complexity on participants' veracity judgments, with the level of certainty as a covariate in the model. Random effects were included for subjects and items to account for by-subject and by-item variability.

The results revealed that both factors (metaphor presence and syntactic complexity) affected veracity judgments, with the choice of “false” being positively associated with the presence of metaphors ($\chi 2(1)=4.9$, $p=.028$) and the use of syntactically

simpler sentences ($\chi2(1)=5.1$, $p=.025$). Figure 1 shows the relative frequency of false/true labels per condition. The level of certainty was also associated with veracity judgments ($\chi2(1)=5.2$, $p=.022$), as participants were more confident when judging a piece of news as "false". The interaction term (Metaphor-Presence X Syntactic-Difficulty) was also significant ($\chi2(1)=4.35$, $p=.037$). Bonferroni-corrected post-hoc analysis of the interaction showed that, as illustrated in Figure 1, the effect of syntactic difficulty on veracity judgments was particularly significant in the literal condition ($z=3.1$; $p=.015$). Taken together, the results suggest that easier-to-process news that includes figurative language is judged as less veridical than "drier", more syntactically complex pieces of information.

Figure 1

Veracity judgement counts per condition



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Commonality and Variability of Conceptualization: The Case of 'Enter' in Thai and Korean

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Keywords
conceptualization, lexicalization, grammaticalization, Thai, Korean

Abstract
Background and Aims: Languages have a fair amount of polysemies and (near-)synonyms, as a result of balance between economy and iconicity (cf. 'signal simplicity' and 'perceptual optimality', Langacker 1977) in lexicalization. The balance results from avoidance of the cognitive burden of creating and remembering words with inordinately fine semantic distinction (an extreme 'monosemy strategy', Khammee & Rhee 2022, 2025) on the one hand, and avoidance of the lack of conceptually prominent and pragmatically useful distinction in words with inordinately comprehensive meaning (an extreme 'polysemy strategy', Khammee & Rhee 2022, 2025) on the other. Thus, it has long been a topic of interest for cognitive linguists why, how and to what granularity meanings are codified in lexicon and grammar (Geeraerts 1993, Koptjevskaja-Tamm 2008, Koch 2008). In terms of semantic change, due to selective attention to a particular aspect of existing meaning ('perspectival construal', cf. Langacker 1987, Verhagen 2007) and variability of selective attention across languages, lexemes may travel different routes of semantic extension and grammaticalization. The lexemes denoting 'enter' in Thai (*khao*) and Korean (*tul-*) have not received attention individually or contrastively, and this study intends to fill this research gap by comparing the patterns of lexicalization and grammaticalization.

Theoretical Frameworks and Methodology: The theoretical frameworks adopted in this study are cognitive linguistics and grammaticalization theory with special focus on construal (Langacker 1987), semantic map (Croft 2001), conceptual space (Haspelmath 2003), and polysemization (Clancy 2001), and grammaticalization of auxiliaries (Heine 1993). The data have been collected from contemporary corpora, i.e., the Thai National Corpus (33.4 million words) and the Thai Drama Corpus (94 episodes; 163,000 words) for Thai, and the Drama and Movie Corpus (24 million words) for Korean. Using a concordance program, the relevant forms were retrieved and hand-screened for inclusion in the inventory of target forms. These forms were classified by function and further compared between the two languages.

Results and Analysis: The image schema of the event of 'entering' can be divided into a number of construed phases (i.e., Inception, Directed Motion, Arrival, Boundary Crossing, Inclusion, and Interaction) and the speaker's subjective stance (Evaluation,

Force-Dynamics, Viewpoint). The Inception meaning ('begin') is only attested in Thai. Directed Motion ('approach'), Arrival ('arrive'), Boundary Crossing ('penetrate'), Inclusion ('pack'), Evaluation ('be accepted'), and Force-Dynamics ('inflict force') are attested in both Thai and Korean, whereas and Interaction ('attend, settle') is dominant in Korean. Thai khao has grammaticalized into Imperfective aspect and Directionality-marking auxiliary (from Directed Motion) and auxiliary of Urgency and Emphasis (from Force Dynamics), whereas Korean tul- grammaticalized into the aspectual markers of Ingressive (from Boundary Crossing) and Diminutive-Graduality (from Directed Motion), derivational morphemes of Forcibility and Intensity (both from Force Dynamics), and the auxiliary of Imprudence (from Viewpoint). These lexicalization and grammaticalization scenarios strongly suggest that even lexemes of apparently simple semantics such as 'enter' show variations in semantic extension across conceptual space and that languages may pick up different aspects of the meanings in their grammaticalization and thereby create quite different grammatical markers.

Examples

(1) *khao* (auxiliary of Urgency)

rew *khâw* *săay* *lɛ̂ɛw*
fast URG late already
'Hurry up! (It's) late now!' (Speaker's emphasis on Urgency)

(2) -*ko.tul*- (auxiliary of Imprudence; note that -ko is a converb marker)

ku-nun *kunye-l* *po-camaca* *ttaci-ko.tul-ess-ta*
he-TOP she-ACC see-as.soon.as nitpick-IMPR-PST-DEC
'He began nitpicking her as soon as he saw her.' (speaker's viewpoint of Imprudence)

[Abbreviations: ACC: accusative; DEC: declarative; IMPR: imprudence; PST: past; TOP: topic; URG: urgency]

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Grammatical Constructions, Scalarity, and Intersubjectivity: The Concessive Structures [Ainda que P, Q] and [Mesmo que P, Q] in Brazilian Portuguese

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Keywords

Concessive Constructions, Scalarity, Intersubjectivity, Epistemic Stance, Corpus Analysis.

Abstract

This study contrasts the concessive constructions [Ainda P, Q] and [Mesmo que P, Q] in Brazilian Portuguese. Based on data extracted from the Corpus do Português (www.corpusdoportugues.org) and the NILC/São Carlos Corpus (https://www.linguateca.pt), the aim is to establish the semantic-pragmatic differences between these constructions (GOLDBERG, 1995). Beyond the syntactic subordination relation emphasized by traditional grammars, the hypothesis posits that, semantically, both constructions signal incongruence relations between P and Q. However, they pragmatically differ regarding notions of factuality and eventuality, associated with scalarity (DANCYGIER & SWEETSER, 2005).

Tantucci (2021) proposes a refinement of the notion of intersubjectivity, arguing that intersubjective constructions can present different degrees, as the notion of belonging to a social group ("social awareness") can be linguistically encoded by different constructions at various levels of complexity. Regarding the concessive constructions under discussion, the notion of extended intersubjectivity helps explain the incongruence between P and Q. Let us compare the examples:

(1) Ainda que esteja chovendo, nós iremos à praia.
(Even if it is raining, we will go to the beach.)

(2) Mesmo que esteja chovendo, nós iremos à praia.

(Even if it is raining, we will go to the beach.)

In referential terms, both constructions indicate that the event “going to the beach” will occur despite its incongruence with unfavorable weather conditions. Additionally, in both constructions, “it is raining” represents the upper limit of a pragmatic scale, suggesting that “going to the beach” will happen under any circumstances, including the extreme case of unfavorable conditions. However, sentence (1) characterizes the unfavorable event “rain” as factual; the speaker adopts a positive epistemic stance regarding the occurrence of the event. Sentence (2), in contrast, characterizes “rain” as potential, adopting a neutral epistemic stance. Finally, since both constructions reject the typically expected causal relation (e.g., “sunny weather” and “going to the beach”), it is argued that they are linked to intersubjectivity (TANTUCCI, 2021), as they express awareness of how other members of society would ‘normally’ think about the matter.

Based on usage data analysis, a total of 140 concessive constructions were analyzed; more specifically, 70 [AINDA QUE P, Q] constructions and 70 [MESMO QUE P, Q] constructions. In the study, instances were identified in which the journalist constructs a hypothetical scenario to support their argument, as shown in (3):

(3) O impacto ambiental das cidades e indústrias persistiria, ainda que não nascesse mais nenhuma criança no Terceiro Mundo. Esse é um dos argumentos apresentados em População, Meio Ambiente e Desenvolvimento para desnudar falácias do uso da demografia na ecologia.

(The environmental impact of cities and industries would persist, even if no more children were born in the Third World. This is one of the arguments presented in *Population*, *Environment*, and *Development* to debunk fallacies about the role of demographics in ecology.)

(Source: Folha de São Paulo (NILC/São Carlos Corpus). Available at: https://www1.folha.uol.com.br/fsp/1994/1/09/mais!/26.html)

In summary, preliminary results suggest that, in analyzing concessive constructions in Brazilian Portuguese, the notion of epistemic stance highlights the

speaker's mental association or dissociation with the event described in P (similarly to prototypical conditional structures) and the relationship established between P and Q, in which a causal relation is privileged.

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The Expansion of the Verbal Connector Network: A Case Study on "sabendo que" and "pensando que"

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Keywords

verbal connectors, Brazilian Portuguese, connectors, verbs, Construction Grammar.

Abstract

This presentation explores the expansion of the verbal connector network in Brazilian Portuguese, focusing on microconstructions such as 'sabendo que' ("knowing that") and 'pensando que' ("thinking that"). These constructions are analyzed within the framework of Construction Grammar and Usage-Based Models (BYBEE, 2010; GOLDBERG, 2006; TRAUGOTT & TROUSDALE, 2013), with an emphasis on their semantic, pragmatic, and structural roles. While previous research has primarily focused on well-known connectors such as 'visto que' ("given that") and 'sendo que'("being that"), this research pioneers the exploration of innovative microconstructions, shedding light on their relevance in contemporary language use.

Data were collected from the Corpus do Português (Historical and NOW), employing a panchronic approach. This methodology facilitates the observation of how these constructions have evolved over time and how they function in modern usage. The analysis reveals that 'sabendo que' and 'pensando que' play significant roles in discourse, particularly in contexts requiring semantic flexibility to establish relationships such as condition and cause. These microconstructions demonstrate a notable ability to adapt to diverse communicative needs while maintaining their syntactic integrity and coherence within the broader grammatical system.

Verbs forming the core of these constructions are predominantly mental or relational (CLEMENTE, 2024), reflecting cognitive processes or relational states. For instance, 'sabendo que' often implies a presupposed or established knowledge base, while 'pensando que' indicates a hypothetical or reflective stance. Structurally, these microconstructions are frequently positioned at the beginning of sentences, a placement that serves as a discursive tool to introduce backgrounded or presupposed

information. This initial positioning allows them to guide the interpretation of subsequent propositions.

The research highlights that verb factuality plays a pivotal role in determining the use of these constructions. While 'sabendo que' tends to pair with factual contexts, 'pensando que' exhibits more flexibility, encompassing both factual and hypothetical scenarios. These distinctions underscore the cognitive and contextual nuances associated with verbal connectors, illustrating their importance in shaping meaning.

Moreover, the findings indicate that these microconstructions contribute to the ongoing innovation of Brazilian Portuguese. Unlike more rigid participial connectors, such as 'visto que', microconstructions like 'sabendo que' and 'pensando que' display greater versatility. This adaptability enables speakers to craft utterances that meet specific discursive needs, reflecting a dynamic interplay between language use and cognitive processes.

The theoretical implications of this study are twofold. First, it enriches our understanding of how constructional schemas evolve by incorporating less formalized elements into established grammatical networks. Second, it demonstrates how frequent language use fosters the emergence of novel microconstructions, bridging tradition and innovation within the linguistic system. By emphasizing the cognitive mechanisms underlying these processes, the research aligns with broader discussions in cognitive linguistics on how meaning is constructed and negotiated in real-world contexts.

Ultimately, this presentation contributes to the broader field of cognitive linguistics by offering a detailed examination of underexplored verbal connectors in Brazilian Portuguese. It provides new insights into how speakers utilize microconstructions to express complex relationships of meaning, advancing our understanding of the interplay between grammar, cognition, and discourse in a usage-based framework.

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On the role of age in children's acquisition of socially meaningful language variation

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Keywords

cognitive sociolinguistics, socially meaningful language variation, age trajectories, English in Dutch, children

Abstract

Background and aim | Cognitive sociolinguistics investigates the mental processes underlying the acquisition of socially meaningful variation patterns (see e.g. Kristiansen & Dirven 2008). So far, studies focusing on children's development have found mixed results regarding age patterns. For instance, Kristiansen (2010) investigated N=150 Spanish-speaking children (6-13 y/o) and found their identification of Spanish regional varieties improves with age. Yet, variation between children persisted, which Kristiansen connects to children's differing bottom-up experience with individual speakers of the Spanish varieties. Similarly, Zenner et al. (2021) and Kaiser (2022) found general age trajectories accompanied by idiosyncrasies at the micro-level. Adding to these previous studies, this paper aims to shed more light on the role of age in children's development of social meaning.

Method | To address the research aim, we investigate how children in Flanders develop the social meaning of English lexemes in Belgian Dutch. The study is based on a large multi-methods research project investigating N=26 Belgian Dutch-speaking preadolescents (6-13 y/o, 12 boys and 14 girls). The preadolescents participated in 8 methods, among which are a sociolinguistic interview, roleplay tasks, a metalinguistic interview and peer group conversations. The resulting corpus consists of 131 hours of video recordings (7 hours per participant) and includes over 70,000 child utterances. In the corpus, all English lexemes were identified following an extensive identification protocol (Schuring & Zenner 2022).

Results: a bird's-eye perspective on 4 studies | Based on the multi-methods corpus, we conducted 4 quantitative studies. **Study 1** investigates children's use of English lexemes in a Dutch roleplay task. The findings demonstrate children use more English for roles like *rapper* and *soccer player* (25% of English) than for those of *farmer* and *minister* (5% of English). No age effects were found. **Study 2** adds data from a questionnaire and a metalinguistic interview to the roleplay data. Here too, no clear age effects could be identified. Next, **Study 3** zooms in on English in the participants' conversations with a researcher. We find an overall frequency of 3% of English which, again, is not stratified by age. Lastly, in **Study 4**, we zoom in on the participants' use of English vs. Dutch evaluative adjectives in a peer group context. Relying on the participants' own assessment of their age group, age does turn out to play a role, with

older participants (7%) inserting more English adjectives than younger participants (<1%).

Implications | Overall, the findings illustrate the complexity of the age variable: while most studies did not reveal age stratification, study 4 did. Theoretically, we discuss these findings with regard to the usage-based learning mechanism of exemplar theory (Docherty & Foulkes 2014): idiosyncrasies in the data are potentially due to children's diversified bottom-up exemplars. Methodologically, we reflect on the importance of triangulating methods and argue for the promotion of 'social' rather than 'chronological age' in cognitive sociolinguistics (Eckert 1997).

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Enactment in triadic discourse: Navigating stance, intersubjectivity and visual clues in English-to-ASL interpreting

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Keywords

Stance, perspective, multimodality, enactment, signed language, interpretation.

Abstract

Signed language users incorporate enactments (or constructed actions) to depict the actions or dialogue of others in their language production (Cormier et al., 2015; Metzger, 1995). Signers of American Sign Language (ASL) and Quebec Sign Language (LSQ) tend to use partial enactments more frequently than complete ones (Saunders, 2016), employing body partitioning (Dudis, 2004) to allow certain articulators (e.g., hands and arms) to narrate from the signer's perspective while the rest of the body remains in the actant's perspective. Blended space as proposed by Fauconnier and Turner (1996) is used to illustrate how enactment integrates the signer's conceptual and physical space, merging their body with the depicted action (Liddell & Metzger, 1998). Additionally, mouth actions can be used to convey the signer's perspective, while the rest of the head and body represent the actant, highlighting enactment's complexity in signed languages in general (Saunders, 2024).

Interpreted interactions introduce additional complexities, in particular for enactment use. ASL-English interpreters, positioned between spoken and signed language structures, mediate linguistic, cultural, and pragmatic elements (Sedran, 2012; Janzen & Shaffer, 2008), shifting a dyadic interaction into a triadic one. We question whether enactment is used as a linguistic device in English-to-ASL interpretation, and if so, when and how is it used. To explore this, we analyzed English-to-ASL interpreted data collected from seven ASL-English interpreters (3 Deaf, 3 hearing) interpreting a TED talk. Through this analysis, we identified several key points. While enactment can illustrate the English speaker's remarks in interpreted ASL, interpreters do not consistently use this device when working from English to ASL. However, enactment emerges when the speaker describes a past event in which they were involved. In such cases, the interpreter breaks eye contact with the signer and uses enactment to represent the English speaker. Additionally, interactions between the speaker and other parties, in front of the signer, are often interpreted with enactment. In contrast, direct interactions with the speaker and signer rarely involve enactment.

This raises questions about intersubjectivity in a triadic context. Both the speaker and signer understand that the interpreter facilitates communication through interpreting, and the interpreter recognizes their mediating role in this context. Due to this shared understanding, interpreters may limit enactment when representing the English speaker in direct interactions, possibly because the signer has direct visual access

to the speaker. However, when pragmatic considerations become prominent in the dialogue, enactment may still be employed by the interpreter to emphasize these cues, particularly through non-manual markers that indicate the stance of the English speaker. This helps highlight the nuanced pragmatic element at play, within the intersubjective triadic discourse.

The continual interplay between different spaces, shaped by the intersubjective awareness of all parties, is maintained throughout the interpreting assignment. This research foregrounds the role of enactment in ASL-English interpretation, particularly in relation to visual clues and intersubjectivity.

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Place Names and Landscape Terms in *Baincoca*

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Keywords

Motion and Space, Cognitive semantics, Geographical Ontologies, Colombian Siona, Western Tukanoan languages

Abstract

Place Names (PN) as the intersection of language, culture and cognition represent a *sui generis* topic for research, since they constitute a unique expression for the exhibition of spatial concepts. *Via* experience different cultures have different ways of "slicing the pie" in the way they make a partition of what at *prima facie* is a continuous surface, The Earth. Through delving into structures, systems and practices of naming among the Siona *Ziobain,* a western tukanoan linguistic family group, we strive to elicit the underlying entities and geographic concepts of the geographic reality and its relations, or the Geographical Ontologies among the Siona, as they show up in the PL, task that makes part of what has been recently coined as Ethnophysiography, a branch of Ethnosemantics. The process of undertaking an etnhnophysiographical research led to the development of the methodology called "Field treading, telling stories and describing."

In order to clear the above terms up we start saying that the study of the Geographical Ontologies belongs and is developed by Ethnophysiography, a branch of the Ethnosemantics or Cognitive Anthropology. The field of Ethnosemantics studies "The Semantic Domains mainly in the natural world, and how they are reflected interlinguistically" (O'Meara y Bohenmeyer 2008, 316). Ethnophysiography pretends to elicit, unveil, types of systems of categorization of the geographical entities, or Geographical Domain, based on ethnographic and linguistic inquiry.

The study about what entities make up the geographical reality, what geographical entities can exist and what are relation in between them belongs to the Geographic Ontology (Mark y Turk, 2003, 2013). In the exploration on how is the constitution of geographical entities, it is important to enhance or rather replace the concept of entity and being, with the term meaning, accepting this as phenomenology does, as the way the world is presented to awareness (Mohanty (1997, 2) cited in (Turk 2011, 53). The constitution of entities, the categories they belong to, and their relations are configured by meaning and the conformity of the whole in Heidegger terms (Heidegger 1998, 102). This turns this research into a Mereological research, study of the relationship between the parts and the whole (Smith 1996) cited in (Mark et. al 2013, 4), drawing attention on the role of the diferent levels of abstraction of the terms and its use in (Subordinate, Ordinate, Superordinate)

Realizing about the significance of experience and meaning in the constitution of semantic domains, spatial concepts and its correlation to cognition, led us to undertake indoor and field walking interviews mainly through the territory of “Buenavista” *or Gonsaya*, an indigenous reservation in the lower Putumayo Basin in the Northwestern Amazonia. Regarding the methodology “Field treading telling stories and describing” it actually is a phenomenological instrument since it’s conceived as the way “The person's consciousness interacts with things around them, including landscape, as part of their mode of “being in the world” (Turk 2011, 52).

The results of the research yielded information about the variation in the typologies of noun categorization and landscape categorization systems mainly as they manifest in the PN’s, being drawn out mainly from the grammar component of closed classes, conveying its conceptual structure, and from the lexical part of the open classes conveying the conceptual content, not overlooking that there are rather blurred limits between those two systems, keeping in mind the prototypes theory; they just are opposite in a continuous, or a process of grammaticalization of the classification of the entities that are experienced. We look forward to using the results of the research as base for alternative ways of representing the territory, set apart from biased GIS (Geographic

Information systems), with ecological and landscape categories brought about from the people that dwell and work the lands so that we avoid mistaking the map for the territory.

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On *off*

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Keywords
frequency, metaphor, grammaticalization, analogy, force dynamics.

Abstract
The word *off* is highly polysemous. Fundamentally, *off* is a preposition profiling non-contact with, or separation from, something, as either a state or event:

(1) a. The added soap got the crust to come **off**. (Talmy 1988: 63)
b. Stay **off** the grass.

Off is polysemously extended in a great number of metaphorical senses, as in (2).

(2) a. Take the first exit **off** highway 22.
b. That meat seems a bit **off**.

O*ff* is also found in a number of constructions (many of which are equally metaphorical), as in (3).

(3) a. Let's see if it's a **one-off**.
b. We could **go off** those instructions.

But interestingly, *off* and *off of* appear to be increasingly used in prepositional phrases where more traditionally the prepositions *on* (as in *based on*) or *from* have been used, as in (4).

(4) Next, in a kinesthetic self-assessment, students interact with given word lists and adjust **based off of** self-analysis of how the movement feels.

In this presentation, we examine the rise of *off* and *off of* as increasing in frequency in more constructional and grammatical contexts, and in particular with the verb form *based*, as in *based off* and *based off of* both in lieu of *based on*. Janda (2020: 597) proposes that *based off (of)* is in the process of replacing *based on* through metaphorization, as a "non-genteel lexical replacement". Tabachnick and MacKenzie (2023) looked at frequency rates of *off (of)* with seven verbs, including *based off (of)*, finding that the most significant increase in *off (of)* is with the verb *profit*. They also suggest, following Janda (2020), a change in metaphor from *on* as building a foundation, to *off* as extraction.

For the present study, data are collected in a corpus and quasi-corpus study of usage in the Santa Barbara Corpus of Spoken English, Corpus of Contemporary American English (COCA), and recent, currently accessible Reddit, X, and Bluesky posts. We examine prepositional *off* and *off of* over approximately a twenty-year period (early 2000s to early 2020s), and find an increase in the frequency, and a broadening of contexts of use, of *off*- and *off of*-constructions with *based*.

Results suggest that this may represent a fairly early stage of grammaticalization where one grammatical word/phrase is generalizing, effectively replacing prepositions historically more common in such constructions by analogy, which may lead to the simplification of the preposition landscape in North American English usage. Although, if this is true, it is interesting that a more complex phrase (*off of*) replaces a simpler prepositional phrase (*from*, *on*), at least in as an intermediate stage of

grammaticalization. *Based off of* overall is less frequent than *based off*, even though the two appear to be in free variation, with no difference in meaning.

We propose a force dynamics analysis (Talmy 1985, 1988; Johnson 1987) that extends both Janda's (2020) and Tabachnick and MacKenzie's (2023) metaphorical analysis, and suggests a conceptual reanalysis where the conceptualizer profiles a "taking from" or "extraction" conceptualization (*based off/based off of*) rather than an "adhering to" or "scaffolding" conceptualization (*based on*) of the relationship between the old and new state of affairs. We examine textual contexts that might give additional clues to speaker's/writers' choices in using *based on* or *based off (of)*.

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A Cognitive Linguistic Analysis of "Epistemic Modal + Perfect Progressive": From the Perspective of Temporal Structure

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Keywords

modal+perfect progressive, temporal structure, conceptualizer's viewpoint, participial situation, time of orientation.

Abstract

English has an "epistemic modal (M) + Perfect Progressive (PP)" form. Werner (2005: 255) observes that must + PP indicates a conjecture about a past event viewed from the time of speech/narration (S). Quirk et al. (1985: 212) also mention the past-time-reference use of MPPs. In fact, this use of MPPs is widely found in novels and corpora, but its behavior is not uniform. Careful examination of the data suggests that this use can be divided into two types in terms of the position of the conceptualizer's viewpoint (CVp), from which he/she evaluates the profiled part of the situation involved. When CVp is at S, the MPP refers directly to the participial situation; when CVp is at the time of orientation (TO) in the past, it refers to it via TO. In the former case, the MPP describes either a situation entirely before S or one reaching S. In the latter, it describes one of the following situations: one holding at TO, one entirely before TO, or one reaching TO.

The results of our search for the five uses in the British National Corpus are shown in Table 1. The "direct-past-reference" use describes a preceding situation viewed from S, as in (1); the "past-reference-via-TO" use describes one viewed from TO, as in (3); the "up-to-present" use (including just-before-present-reference) describes one reaching the present-zone, as in (4); the "up-to-TO" use (including just-before-TO-reference) describes one reaching the past-zone including TO, as in (2); and the "entirely-before-TO" use describes one entirely before TO, as in (5).

(1) There was bright sunshine, but it must have been raining earlier that day because I can remember how the sun was glinting on the muddy surface of the grass. (*Never Let Me Go*, p. 15)

(2) It must have been going on for some time but now they could hear the soft knocking on the door... (*The Godfather*, p. 28)

(3) As he stood on the tee with the green five hundred yards away, Kyle must have been thinking of another birdie, possibly an eagle.. (BNC: HTJ)

(4) "[…] The Robemaker must have been taking the Trees for years." (BNC: G1L)

(5) She sighed and let her fingers move slowly down the dark, smooth surface of the glass. Yes. DeVore might have been lying when he said he had no motive in helping her […]. (BNC: GUG)

Few studies have considered this phenomenon theoretically. This study describes these five uses in terms of their temporal structures based on Shimura (2024), which comprehensively analyzed the Present Perfect Progressive by integrating Cognitive Grammar (Langacker 1991, 2008) with a general tense theory (Wada 2001, 2019). In this model, any verbs (including auxiliaries) represent their own situations and event times (Nakau 1994), so the temporal structures of MPPs involve four event times. The five uses' temporal structures are schematized in Figures 1 to 5. S coincides with the event time of an epistemic modal representing a mental state/attitude (E_1), which coincides with that of *have* representing a "(resultant) state" (E_2). E_2 follows the event time of *been* representing a schematic situation (E_3), which coincides with that of *-ing* denoting an ongoing situation (E_4). The maximal scope (MS) covers the overall content; the immediate scope (IS) subsumes its foregrounded segment. The profiled (shaded) part of the situation at E_4 reflects the internal viewpoint of the progressive; the broken-line parts represent background parts.

In the direct-past-reference and up-to-present uses (Figures 1 and 3), all event times are in the IS and foregrounded; the conceptualizer at S directs his/her attention to the profiled part of the situation at E_4. In the other three uses (Figures 2, 4 and 5), only E_3

and E_4 are within the IS and foregrounded; the conceptualizer's attention goes from TO to the profiled part of the situation at E_4.

Table 1

The Number of Epistemic Modal + Perfect Progressive in Independent Clauses in the BNC

Subject	**must**	**may**	**might**	**would**
Direct-past-reference use	42	22	12	7
Past-reference-via-TO use	13	0	10	0
Entirely-before-TO use	7	0	1	1
Up-to-present use	8	0	1	2
Up-to-TO use	12	0	1	0
total	82	22	25	10

Figure 1

The Temporal Structure
of the Direct-past-reference Use

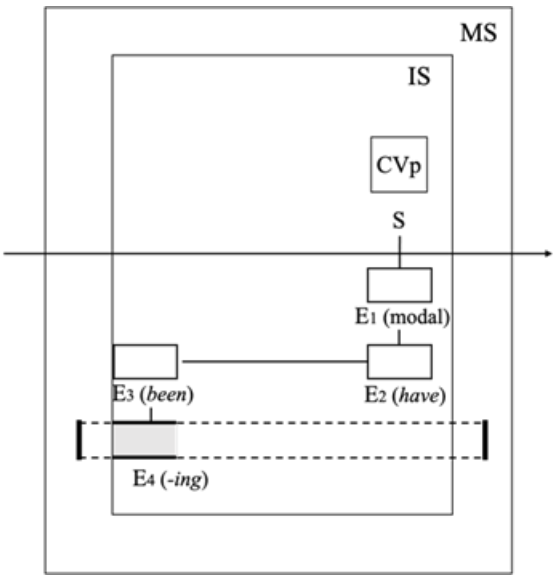


Figure 2

The Temporal Structure
of the Past-reference-via-TO Use

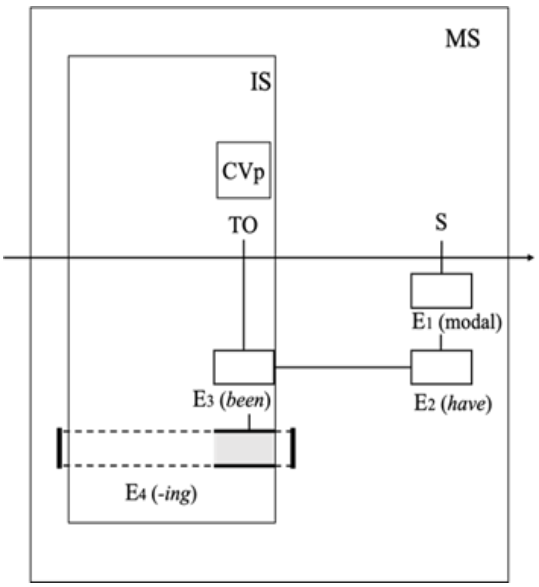


Figure 3

The Temporal Structure
of the Up-to-present Use

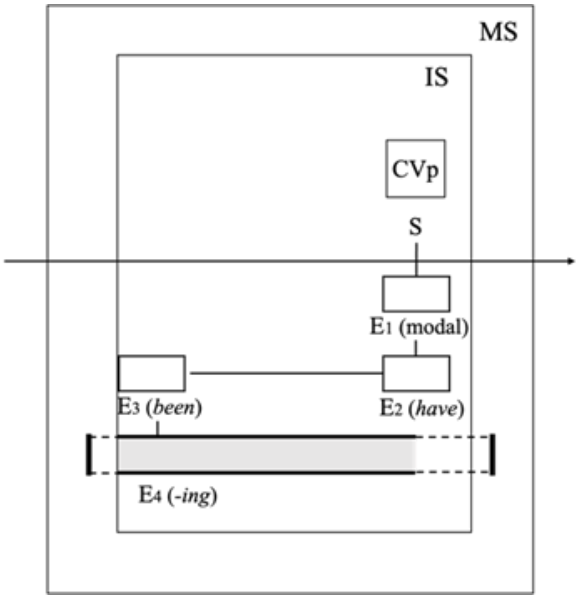


Figure 4

The Temporal Structure
of the Up-to-TO Use

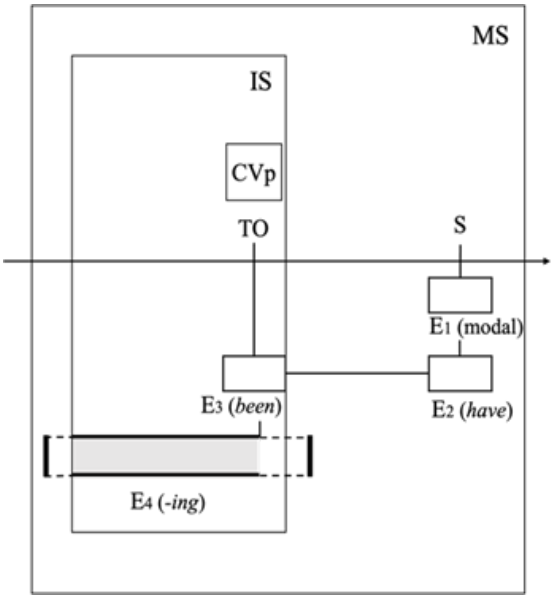
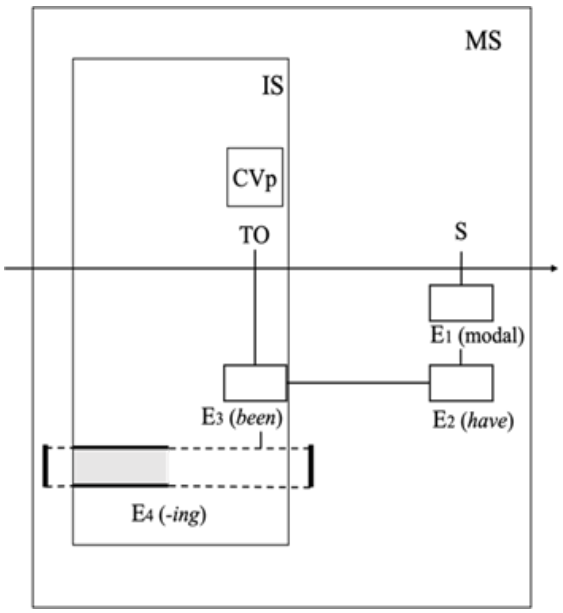


Figure 5

The Temporal Structure
of the Entirely-before-TO Use



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Alternation as a precondition for symbol grounding: insights from a referential game with silent stories

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Keywords

experimental semiotics, non-verbal communication, novel communication systems, story, symbol grounding

Abstract

"Symbol grounding" (e.g., Harnad, 1990)—i.e., connecting a form to a meaning—has been one of the central problems in language evolution (e.g., Pleyer & Hartmann, 2024). In research on the emergence of novel communication systems, both experimental (e.g., Galantucci et al., 2005; Nölle & Galantucci, 2022) and naturalistic (e.g., Senghas et al., 2004), emphasis has so far been put mostly on the meaning-making mechanisms, such as iconicity, that allow to ground new symbols. Although some studies also looked at the ecology of interaction—e.g., type of transmission or composition of the communicating societies—little attention has been paid to the smaller-scale interaction dynamics. In this study, we took a closer look at the behaviours that lead to a successful introduction of new symbols into the inventories of interacting dyads. To this purpose, we analysed a set of video-recorded interactions of pairs of participants playing a referential game with silent stories (Sibierska et al., 2023; cf., Fay et al., 2010, 2013, 2014). Their task was to take turns communicating—without the use of words—and guessing the correct order of events in a story (chronological or non-chronological). In the process, they came up with novel signs, based on several strategies: enacting (cf. Müller, 2014), attracting attention of the other participant, pointing to a metaphorical "past" or "before" behind the participant's back, numbering the conditions or the events with fingers, etc. (Sibierska et al., 2023; Zlatev et al., 2024). We rated their interactions and identified four scenarios according to which they unfolded: (1) one participant introduces a new sign and consistently uses it, the other participant does not adopt it; (2) one participants introduces a new sign and consistently

uses it, the other participant adopts it, but only for a limited number of rounds of interactions; (3) each of the participants independent introduces a new sign and consistently uses it—the participants do not adopt each other's signs; (4) participants take turn proposing and adopting each other's signs. This result has important implications for language evolution and, especially, the discussion of the emergence of novel communication systems: it suggests that alternation—coinciding with the willingness to go against egocentrism (Fay et al., 2014) and be ready to let go of one's own proposed signs—is indispensable in setting new symbols off the ground.

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Boundary-crossing events in Standard Chinese: A case of Medium-encoding by 过 -*guo* 'across'

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Keywords

motion and space, boundary-crossing, Medium-encoding, dynamic deixis, Standard Chinese.

Abstract

Boundary-crossing events, such as entering, exiting, and crossing, represent critical aspects of motion and changes of state (Aske 1989; Slobin & Hoiting 1994; Slobin 2004). Standard Chinese, classified as a satellite-framed language (Talmy 2000), uses two main linguistic devices to encode such events: path verbs and path satellites. While Goal-encoding (entering) and Source-encoding (exiting) have been widely examined, Medium-encoding (crossing) has received relatively less attention. This study focuses on the complexity of Medium-encoding in Standard Chinese. The choice of 过 -*guo* 'across' is motivated by its frequent occurrence in boundary-crossing contexts and its ability to combine with different verb types. Unlike other path markers, 过 -*guo* 'across' exhibits considerable flexibility, encoding both crossing and directional movement depending on syntactic and contextual factors.

To investigate this issue, we conducted an elicitation study with 12 native speakers of Standard Chinese, using the "*Trajectoire*" video-clips (Ishibashi et al. 2006). Participants described motion events depicted in these clips, producing a total of 673 utterances. Our analysis focuses on utterances that involve Medium-encoding, particularly those expressing boundary-crossing events (e.g., *A man crossed a bridge*).

The results show that 过 -*guo* 'across' can combine with both path and activity verbs to express boundary-crossing, but its interpretation is shaped by the nature of the Ground. Furthermore, the presence or absence of a prepositional phrase (PP) encoding

the vector of the Path influences the construal of the event. For instance, in (1), the absence of a PP presents the event as a completed action, whereas in (2), the presence of a PP draws speakers' attention from one side of the bridge to the other, emphasizing the movement over the span of the bridge. Finally, dynamic deixis plays a key role: when a reference entity (e.g., *xiǎoqiáo* 'small bridge') is foregrounded as a scene-setting element, as in (3), the interaction between dynamic deixis and *-guo* can shift the interpretation from 'crossing' to merely 'approaching' the bridge without necessarily traversing it.

By examining boundary-crossing events from a cognitive and typological perspective, this study contributes to the broader understanding of motion event encoding in Standard Chinese and provides insights for crosslinguistic comparisons.

(1) 一个男人走过一个拱桥。(Traj_046_S5)

Yí	*gè*	*nánrén*	*zǒu-**guo***	*yí*	*gè*	*gǒngqiáo.*
one	CL	man	walk-**across**	one	CL	arch.bridge

'A man walked across an arch bridge.'

(2) 一个男士从一个桥上走过。(Traj_046_S3)

Yí	*gè*	*nánrén*	*cóng*	*yí*	*gè*	*qiáo=shang*	*zǒu-**guo**.*
one	CL	man	from	one	CL	bridge=upside	walk-**across**

'A man is walking across a bridge.'

(3) 三个人在小桥上交谈，一个男人走了过去。(Traj_046_S1)

Sān	*gè*	*rén*	*zài*	*xiǎoqiáo=shang*	*jiāotán,*
three	CL	person	on	small.bridge=upside	discuss
yí	*gè*	*nánrén*	*zǒu-le-**guo**-qu.*		
one	CL	man	walk-PFV-**over**-thither.		

'Three people are discussing on the small bridge, and a man walks towards (it: the bridge / them: three people) (away from the deictic center).'

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The pragmatic functions of Standard Chinese interjections

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Keywords

pragmatics and cognition, primary interjection, pragmatic functions, semantics, Standard Chinese.

Abstract

Interjections, which are widely used in daily life speech, are broadly defined as lexical forms that typically constitute utterances on their own and do not combine syntactically with other parts of speech (Wilkins 1992; see also Ponsonnet 2023). Previous literature has shown that studies on Standard Chinese interjections, as well as their classification, have focused mainly on their morphological, syntactic, and semantic functions (Mao 2020). However, the analysis of Standard Chinese interjections from a pragmatic perspective has received relatively little attention. Given that Chinese characters in Standard Chinese are both polyphonic and polysemous, we have chosen the *pinyin* (Chinese phonetic alphabet) as the core element of our analysis to minimize confusion.

The present article examines some of the pragmatic and semantic functions of Standard Chinese interjections, with a particular focus on primary interjection (i.e., lexical forms that cannot be used in any other word class than as an interjection) (Wharton 2003). This study addresses the following question: how are the pragmatic functions of interjections organized and categorized in Standard Chinese, and what does this reveal about the structure of its interjection system? An inventory of interjections, chosen from Chinese dictionaries and reference grammar books, has been identified, analyzed, and subclassified according to Ameka's (1992) classification, which distinguishes expressive, conative, and phatic interjections. Based on the above classification, the interjections have been further organized into form-function clusters,

following a family resemblance model (Andrason & Harvey 2024). This cluster-based taxonomy has then been used to design a questionnaire for native speakers to investigate usage preferences, linguistic intuitions, and contextual functions, ensuring empirical grounding.

Our findings reveal that the semantic categories we established for Standard Chinese interjections align with its pragmatic classification. More specifically, expressive interjections, which constitute the majority of our data, can be broadly divided into two subcategories: (1) emotive interjections, which convey emotions such as anger, disgust, fear, happiness, sadness, surprise, and a generic emotional state; and (2) cognitive interjections, which indicate awareness. Conative interjections are typically auditor-oriented and serve specific functions, such as asking questions, calling attention, compelling someone to leave, stopping an action, driving an animal forward, and encouraging an action. Finally, phatic interjections, used in the establishment and maintenance of communicative contact, focus mainly on the addressee's reaction or feedback, often by expressing an opinion or response.

This study highlights the importance of pragmatic approach to understanding interjections in Standard Chinese, revealing the complex relationship between their semantic properties and pragmatic functions. By examining the meanings of Standard Chinese interjections within a contextual framework, we provide new insights into how these expressions function in communication and their role in conveying the speaker's mental state, attention-seeking actions, and social intentions.

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The language of pain across cultures: A literature review

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Keywords

pain, cognitive typology, cognitive sociolinguistics, linguistic anthropology, applied linguistics

Abstract

The ability to feel pain is universal to all human beings, regardless of ethnicity, gender, or age. It has been shown, however, that the exact nature of one's pain experience, i.e. how humans perceive and react to pain, is all but universal and can differ greatly depending on one's cultural and social identity (Craig and MacKenzie 2021; Zborowski 1969) . Hence, cultural and social differences may also result in diverse ways of expressing and describing pain, making it a particularly fruitful field of research for studying the relationship between language and culture. In order to provide an overview of what has already been done in this regard and to illustrate what could perhaps still be elaborated upon further in the future, this talk will present a literature review of previous studies on linguistic pain expressions, with particular focus on studies that have approached the topic from a cross-cultural perspective.

Research on pain language so far has been conducted from a fairly interdisciplinary viewpoint, with a variety of scientific fields having made valuable contributions to this endeavour. Therefore, a wide variety of methods has been used to investigate the use and meaning of pain terminology across languages, such as qualitative interviews (e.g. Zborowski 1969), corpus studies (e.g. Jaworska and Ryan 2018), word rating tasks (e.g. Borelli et al. 2018), or experimental studies measuring brain potentials (e.g. Dillmann et al. 2000).

Additionally, previous research has focused not only on single-word expressions, such as nouns (e.g. Borelli et al. 2018), verbs (e.g. Wierzbicka 2012), adjectives (e.g. Melzack and Torgerson 1971), and interjections (e.g. Stanford et al. 2005), but also more

complex multi-word expressions like metaphors (e.g. Munday et al. 2023) and idioms (e.g. Imperiale 2020).

Generally speaking, studies on expressions of pain may either be descriptive (e.g. Semino 2010), in a sense that they focus on describing and analysing expressions in one particular language, or comparative (e.g. Reznikova et al. 2008), in the sense that they compare pain expressions across multiple languages. However, descriptive studies on languages other than English often also compare the language of focus to English, making them implicitly comparative as well.

The applied value of such cross-cultural and cross-linguistic comparisons becomes clear in studies like Wierzbicka (2014), where she points out that a lack of awareness for cross-cultural differences in pain language may cause harm to patients in clinical situations. However, it is also observable that the bulk of studies on pain language focuses on Western populations and, for the most part, English. Looking forward, it would therefore be beneficial to try and break this bias by conducting more studies with ethnic minorities around the world to better understand whether and how their pain expressions differ from Western societies, and, by doing so, perhaps also improve intercultural pain assessment for exactly those populations that are most likely to suffer from disadvantages due to linguistic and cultural barriers.

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RELIGION metaphors in climate change discourse: A cross-linguistic and cross-cultural comparison between the US, Canada and France

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Keywords

metaphor, climate change, religion, cross-linguistic analysis, cross-cultural analysis

Abstract

Metaphors are pervasive throughout climate change-related discourse and can influence public opinion (Augé, 2023; Flusberg, Matlock & Thibodeau, 2017). Research shows that RELIGION metaphors may invalidate anthropogenic climate change, promoting skepticism (Woods et al., 2012). These often use Christian terminology (Atanasova & Koteyko, 2017; Nerlich, 2010), perhaps due to its ubiquity as the most common religion in the US (63.3%; Smith, 2021), Canada (53.3%; Statistics Canada, 2022), and France (38%; Drouhot et al., 2023). Thus, Christianity serves as a prototype for religious belief, even for non-Christians. The 2007 French election was an exception: conservatives portrayed climate advocates as Islamic extremists (Augé, 2024).

Here, we compare climate RELIGION metaphors in the US, Canada, and France. Unlike the US and France, Canadian metaphors are not well-explored. Canada provides an unusual testing ground as a bilingual country whose climate politics are in-between the US and France (Anderson & Stephenson, 2011; EIB, 2021; Hoffman, 2011). This work is part of a study documenting climate metaphors in English, French, and Spanish in Canada, France, Mexico, and the US (Sweetser & Stickles, 2024). We completed a systematic literature review cataloguing extant documented climate metaphors, re-analyzing them into a standardized format (Stickles et al., forthcoming). We are currently working to determine if each catalogued metaphor is in use in each country and language variety by searching news and social media for data exemplifying the metaphors.

Our literature review found 32 total RELIGION climate metaphors: 28 American English (AmEng) and 15 Hexagonal French (HexFr). No extant literature analyzed Canadian RELIGION metaphors. For each metaphor, we searched media for example data to identify if these metaphors were in use in AmEng, Canadian English (CanEng), HexFr, and Canadian French (CanFr). We found 31/32 metaphors in AmEng and 29/32 in CanEng. French is still in progress; thus far we have found 19/19 metaphors in HexFr and 8/11 in CanFr. In all varieties, confidence in climate science is construed as (irrational) religious belief, with climate advocates as religious leaders:

1) ...the IPCC and other **climate cultists** overvalue greenhouse-gas emissions and undervalue the role of the Sun in the warming of the Earth.
   (American English, *New American*; Murphy, 2023)
2) DeGrasse Tyson soberly bemoans the Catholic Church's 'thought police' but doesn't seem to grasp the possibility of similar forces at work today in the **Church of Climate**.
   (Canadian English, *Financial Post*; Foster, 2017)
3) Et maintenant, Greta Thunberg, **prophétesse** de la nouvelle **religion verte**. Peuple, **à genoux** ! **Prosternez-vous** devant la nouvelle **sainte** !
   'And now, Greta Thunberg, **prophet** of the new **green religion**. People, **on your knees**! **Bow down** before the new **saint**!'
   (Canadian French, *Journal de Montréal*; Martineau, 2019)
4) Sauf que nous ne parlons pas du **climat** mais de la **religion apocalyptique** dont il est l'objet, **culte** dont les innombrables **prêcheurs** [...] **psalmodient** en permanence le même message: « **La fin du monde** approche et c'est de votre faute. Mais si vous faites suffisamment **pénitence**, l'humanité sera peut-être **épargnée**. »
   'Except we are not talking about the **climate** but the **apocalyptic religion** of which it is the object, a **cult** whose countless **preachers** always **chant** the same message: "**The end of the world** is coming and it's your fault. But if you do enough **penance**, humanity may be **saved**."
   (Hexagonal French; *Le Figaro Vox*, E. Levy quoted in Devecchio, 2019)

Islam-based metaphors are distinct to France and the US. They were not found in Canada.

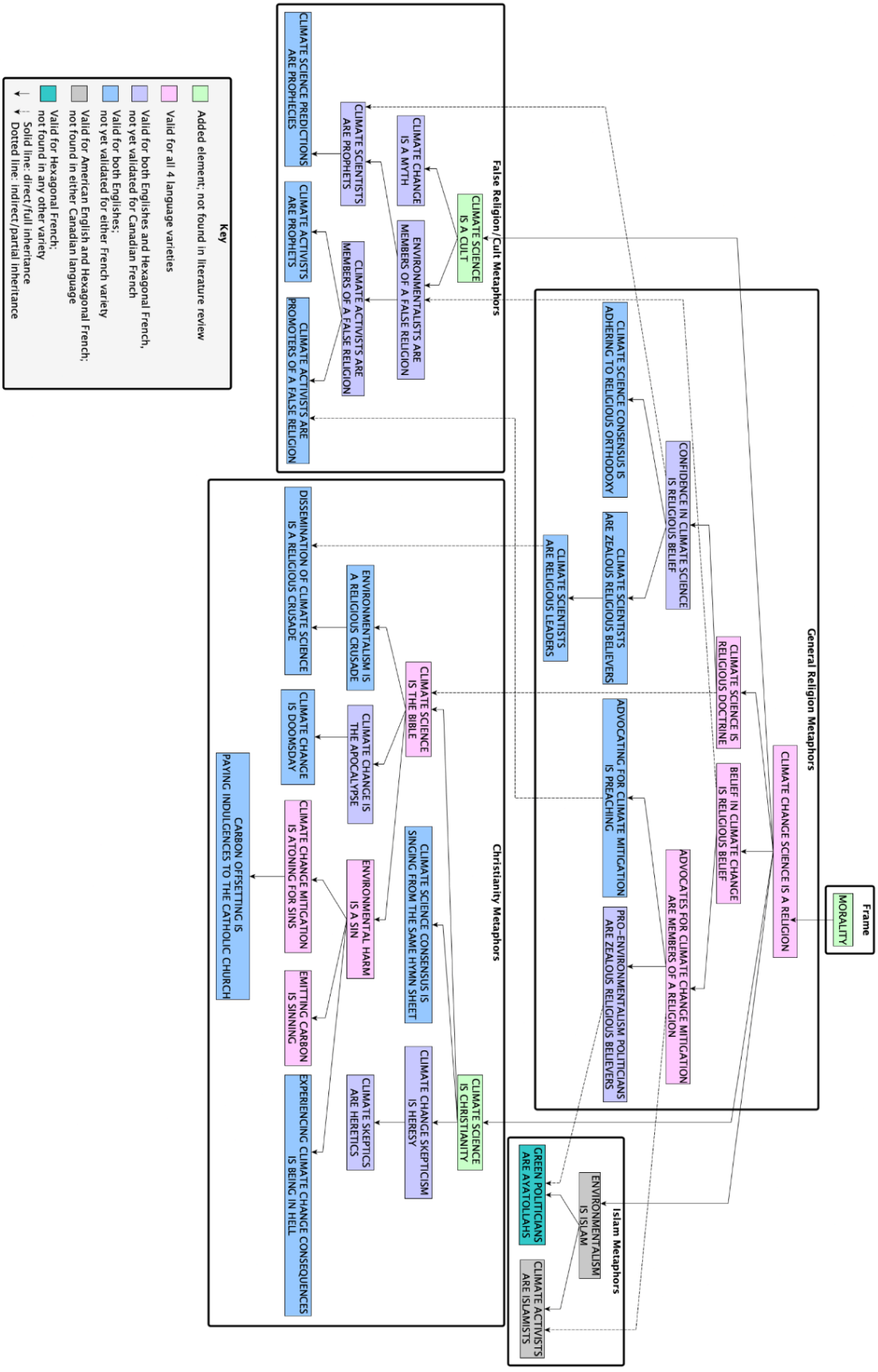
5) **Global warming zealots** have launched an aggressive **jihad** against those they brand as “deniers”, often asserting presumed fossil energy affiliations to those who don’t buy into their hysterical pronouncements.
   (American English, *Forbes*; Bell, 2011)
6) Les **écologistes fanatiques** qui sont des **ayatollahs verts** s’intéressent davantage au burkini qu’à la préservation de l’environnement.
   ‘The **fanatical environmentalists** who are **green ayatollahs** are more interested in the burkini than in the preservation of the environment.’
   (Hexagonal French; *X.com*, Odoul, 2024)

Muslims are a greater percentage of the population in Canada (4.9%; Statistics Canada, 2024) than the US (1.34%; Grammich et al., 2023), but far less than France (10%; Drouhot, 2023). This suggests neither language, nor relative frequency, explain the absence of Canadian Islam metaphors. Notably, the US and France have recent histories Muslim extremist terrorist attacks (9/11, Charlie Hebdo and related events, and Bataclan), while Canada does not; this may correspond with increased Islamophobia in those countries, in turn resulting in culturally-salient Islamobophic cross-linguistic metaphors.

In our analysis, we explore potential correlations between the differences we found across language varieties with historical events and political phenomena, illustrating the role that cultural saliency plays in the (in)validation of specific metaphors within a network of closely-related metaphors. We illustrate this analysis with a network (Figure 1) charting how these metaphors are interrelated, and how each language variety uses parts of the network.

Figure 1

Network of RELIGION metaphors for climate change.



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Semantic change of constructions: a grammaticalized interpretation of demonstrative pronoun

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Keywords

semantics, construction grammar, grammaticalization; demonstrative pronoun, semantic change, cognitive grammar.

Abstract

Semantics are crucial in grammar, and expression interprets semantics. The interaction between structure, semantics, and expression is a key area for exploration. In Chinese functional grammar, demonstrative pronouns have been extensively studied, particularly regarding the grammaticalization of "Zhe (This)" and "Na (That)". Yet, more micro-level research is needed on the grammaticalization of demonstrative pronouns concerning constructional semantic change. This paper examines the grammaticalization of "Zhe" as a conjunction and article, focusing on its impact on the semantic changes in the constructions "Zhe Che Bu Che" and "Zhe N Ni Jiu V Ba".

Prior research has explored the grammaticalization of demonstrative pronouns, but few studies have delved into their impact on constructional semantics. This study addresses this gap by combining a comprehensive literature review with a robust research design. The literature review reveals that while previous studies have examined the grammaticalization of "Zhe" and "Na," they have primarily focused on broad trends rather than specific impacts on semantic change within particular constructions.

To investigate this under-researched area, this study employs a mixed-methods approach. Language sense experiments are conducted to gauge native speakers' perceptions of "Zhe's" conjunctive tendencies in different contexts. Additionally, corpus analysis is utilized to examine the usage frequency and patterns of "Zhe" in its various grammaticalized forms across different texts.

The research design includes three main components. First, a detailed literature review establishes the foundation for understanding the grammaticalization of

demonstrative pronouns. Second, language sense experiments are designed to test native speakers' intuitions about the conjunctive and emotive functions of "Zhe" in the target constructions. Third, corpus analysis provides empirical data to support and validate the experimental findings.

The language sense experiments reveal that "Zhe" exhibits a clear conjunctive tendency, which explains the semantic shift from empathy to avoidance in "Zhe Che Bu Che." This finding indicates that "Zhe's" grammaticalization as a conjunction influences the construction's overall meaning and pragmatic function. In the case of "Zhe N Ni Jiu V Ba," corpus analysis shows that "Zhe" functions as an article to a significant extent, though its grammaticalization is not yet complete. This analysis clarifies the degree of grammaticalization and explains the semantic change from discussion to exclamation within the construction.

The study also explores cross-linguistic comparisons, noting that the grammaticalization of demonstrative pronouns is not unique to Chinese but is observed in other languages such as Chicaliana and Seya. This cross-linguistic significance suggests that the grammaticalization of demonstrative pronouns is a common phenomenon with important typological implications.

By examining the interplay between form and meaning in constructions and how they convey thoughts and emotions, this research enhances our understanding of cognitive and construction grammar. The findings contribute to the broader comprehension and development of linguistic research and have practical implications for teaching Chinese as a second language. The detailed analysis of specific constructions and their semantic changes provides valuable insights for language educators, particularly in explaining complex grammatical phenomena to learners.

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Construal of Space without Verbal Coding: Evidence from Nominal Predicate Existential Construction in Mandarin

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Keywords

cognitive grammar, spatial relations, nominal predicate existential construction

Abstract

Since man is in space and since space is also in man, the human conceptualizer must create a number of linguistic expressions to encode spatial relations. Example (1) illustrates different ways to encode the spatial relation between the moon and the sky. In (1a) and (1b), the verbs “hang” and “exist” are used to describe the same existential scene, while (1c) only consists of two nominal components. The first nominal component is a place noun (PN), and the second is a noun phrase (NP). Construction like (1c) is a special type of predication in Mandarin, which is termed as nominal predicate existential construction (NPEC). As the name suggests, the nominal predicate is a grammatical form where predicate is a nominal phrase instead of verbs. Existential is the constructional meaning to express a proposition about the presence of someone or something. NPEC is thus symbolic because it resides in the pairing between a meaning and a syntactic shape, rather than the omission of certain verbs.

(1)a. 月亮　　高悬　在　　空中
moon.NOM hang in.PREP sky.NOM
‘The moon is hanging in the sky’

b. 天上　　有　　月亮
sky.NOM have moon.NOM
‘The moon exists in the sky’

c. 天上(PN)　一轮　明月(NP)
sky.NOM a moon.NOM
‘There is a moon in the sky’

Previous research has often analyzed NPEC within broader categories. On the one hand, the conclusions cannot account for all instances. For instance, Ma (1991) claims that "sequentiality" is the primary factor enabling NP to function as predicates. However, NP in NPEC lacks sequential characteristics. On the other hand, limited data inevitably results in some incorrect judgments. The present study endeavors to conduct a quantitative analysis of NPEC and addresses two key questions: what are the collocational rules of PN and NP? What are the cognitive motivations for nouns functioning as predicates?

By collecting data from BCC and performing a covarying collexeme analysis to calculate collostructional preference (Stefanowitsch & Gries 2005), this study finds that there are three collocational rules: first, the relationship between PN and NP is strictly one of containment, where the spatial region denoted by the PN is always greater than or equal to that of the NP. Second, when the spatial region of the NP coincides with that of the PN, the collocational strength is higher. When the spatial region of the NP is a subdomain within the PN, the collocational strength is weaker. Third, the preposition *zai (在)* cannot precede PN, and the aspect marker *le (了)* cannot follow NP. These rules are grounded in the motivations of orderliness and coherence in the conceptualizer's construal of spatial relations. Orderliness refers to the conceptualizer's adjustment of PN and NP from an objective axis to a subjective axis, aligning with the process of subjectification (Langacker 1990), and from whole to partial scanning. Coherence refers to the congruence between the spatial schema represented by PN and the schematic variables represented by NP.

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Do Classifiers Shape Metaphors?
Analyzing Japanese Abstract Concepts through Corpus Data

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Keywords

first keyword, second keyword, third keyword, four keyword, five keyword.

Abstract

In his series of studies, Ikegami argues that Japanese speakers' awareness of the form of individual objects is comparatively weak due to the absence of a distinction between singular and plural nouns in the Japanese language. This stands in contrast to English speakers, who must constantly distinguish between singular and plural forms. Based upon this premise, Nomura (1996) asserts that Japanese tends to express abstract concepts using the metaphor of a "continuous" liquid, in contrast to English.

However, these studies did not assume that preferences for liquid metaphors might differ depending on the source domain or specific words, nor did they examine why such differences might occur. Addressing this point, Mano (2004) argues that Japanese allows quantification through classifiers; classifiers are used to express individuality in Japanese. She asserts that the countability provided by classifiers has a correlation with the applicability of (narrow) solid metaphors such as mageru "bend," katameru "harden" and musubu "tie."

This study selects the following four abstract nouns analyzed by Mano (2004).

- kangae ("thought")[+countable, +object metaphor]
- saino ("talent") [+countable, -object metaphor]
- jishin ("self-confidence") [-countable, +object metaphor]
- aijo ("affection") [-countable, -object metaphor]

She suggested that, as countability and usage of narrow object metaphor have a correlation, kangae-type nouns and aijo-type nouns are common. However, as saino-type nouns and jishin-type nouns also exist, further research is needed to examine the distribution of these noun types as well.

Data

This study utilizes the Balanced Corpus of Contemporary Written Japanese (BCCWJ) to obtain data. The dataset consists of instances where the target nouns appear in the nominative or accusative case, yielding 6,618(kangae), 1,533(saino), and 3,314(jishin) and 1346(aijo) instances, respectively. A manual classification was performed on the modifying elements of these nouns, and metaphorical expressions were categorized based on their conceptual domains. The token frequency of metaphorical expressions was 1,799(kangae), 487(saino), 1,293(jishin), and 508(aijo) instances, respectively.

Corpus Analysis Results

According to the findings presented in Table 1, there is a strong tendency for abstract concepts to be expressed through object metaphors, which contradicts Nomura (1996). Further, our data includes a lot of object metaphors for saino ("talent") and aijo ("affection") which stands in contrast to Mano's assertion. This discrepancy underscores the efficacy of quantitative research methods in this domain, indicating that quantitative analysis may yield more precise insights compared to qualitative research approaches. Our data clearly show that object metaphors are necessary when expressing "possession" in Japanese, as these concepts are not conveyed through liquid metaphors. Furthermore, a substantial variation in the frequency of liquid metaphors is observed among the selected words. Notably, kangae ("thought"), which, despite being categorized by Mano as [+countable, +object metaphor], exhibits some several liquid metaphorical expressions. The findings of this study suggest a strong correlation between the ease with which abstract concepts are expressed through liquid metaphors and the likelihood of classifier usage in Japanese.

Table 1

Token frequency of metaphorical expressions for individual abstract noun

	Solid obj	Living things	Fluid (Liquid)	Space
kangae 'thought'	1558 (86.6%)	104 (6.3%)	47 (2.8%)	50 (3.0%)
jishin 'self-confidence'	363 (74.5%)	73 (15.0%)	10 (2.1%)	11 (2.3%)
saino 'talent'	1197 (92.6%)	27 (2.1%)	23 (1.8%)	43 (3.3%)
aijo 'affection'	363 (57.3%)	38 (6.0%)	147 (23.2%)	55 (8.7%)

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Metaphors in International Cooperation NGO Discourse: A Corpus Linguistics Study

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Keywords

metaphor, discourse analysis, corpus, International cooperation NGOs, letters

Abstract

International cooperation NGOs face a crucial communicative challenge: justifying the necessity of their actions without questioning their effectiveness, a dilemma that sparks internal debates reflected in their discursive practices (Erro Sala, 2003; Marí Sáez, 2017). This study explores how this conflict manifests in their discourse, particularly through the use of metaphors, a key component of specialized language that remains underexplored in this context (McCloskey, 1983; Rojo López & Orts Llopis, 2010; Resche, 2022). Providing an innovative perspective through corpus linguistics, the analysis focuses on the introductory letters of NGOs' annual reports, a genre essential for summarizing their activities, engaging readers, and shaping institutional image. The objective is to identify and analyze the metaphors (Lakoff & Johnson, 1980) used in this genre to better understand their role in organizational communication.

The analysis was conducted on a corpus of 105 introductory letters from the 2017 annual reports of Spanish cooperation NGOs, serving as reading guides and summaries of the full reports (Resche, 2010; Escartín Arilla, 2022). The study employed the Metaphor Identification Procedure (MIP) of the Pragglejaz Group (2007), cobined with source domain approach (Deignan, 1999) and an integrated metaphor and framing approach (Semino et al., 2016). From an initial sample of 15,000 words, metaphorical expressions were identified and manually verified across the entire 46,600-word corpus. These metaphors were analyzed in three stages: identifying semantic fields as source domains, conducting a quantitative analysis of the metaphors according to these domains, and performing a qualitative analysis to evaluate framing effects, crucial for shaping specific understandings and evaluations of content (Lakoff & Johnson, 1980; Musolff, 2019; Ritchie & Cameron, 2014; Semino et al., 2016).

The results reveal various discursive practices in NGOs, including metaphors that avoid direct mention of economic contributions, such as *gesto* 'gesture', or *granito*, 'grain', and those associated with micro-management, like *maratón* 'marathon' and Metaphors from business and marketing language, such as *apostar* 'betting on', or *posicionarse*

'positioning', are also adopted, alongside metaphorical uses of economic terminology like *nuestro mayor activo* 'our greatest asset'. Additionally, metaphors from political economy and critical development studies, such as *umbral de la pobreza* 'poverty threshold', are reproduced, along with metalinguistic expressions with a denouncing tone, such as *los mal llamados paraísos fiscales* 'so-bad-called tax havens'.

The analyses identify three main source domains: JOURNEY, CONSTRUCTION and FIGHT (Semino et al., 2016). Metaphors such as THE NGO'S ACTION IS A JOURNEY provide essential interpretive keys to understanding how NGOs conceptualize and communicate their mission, reflecting different trends in the field of cooperation, ranging from reformist to maximalist approaches, and orientations toward transaction or transformation. In conclusion, studying metaphors is crucial for unraveling how NGOs navigate their complex relationship with the commercial sector, offering deeper insights into how they articulate and project their objectives and challenges.

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Traces of the meaning of ‘do’ in an interrogative ‘do’-support construction from a northern Italian dialect

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Keywords

language change and grammaticalization, compositionality, do-support, presupposition, dialectal variation.

Abstract

In its initial stages, the meaning of most auxiliary verb constructions (strings consisting of Aux.FIN + V.INF) is largely compositional, tied to the (evolving) meaning of the auxiliary (e.g. Bybee, Perkins & Pagliuca 1994). With progressive grammaticalization, any meaning component from the auxiliary may be entirely lost. This research looks at the ‘do’-support (DS) used in questions in the Camuno dialect of Val Camonica, northern Italy, and makes brief comparisons to DS in early English. Assuming that primitive DS is also compositional, it asks what semantic contribution comes from ‘do’.

In different Camuno varieties, DS ranges from optional to obligatory. When obligatory (as in the Monno dialect: Benincà & Poletto 2004) DS is used with all verbs except ‘be’ and ‘have’, but including modals (Swinburne 2024a). If compositional, the ‘do’ morpheme adds no additional meaning to the construction, and must be bleached. Yet when optional, experimental evidence suggests the auxiliary still shows traces of the lexical semantics of main verb ‘do’ as DS is most common with agentive-subject, activity verbs (Swinburne 2024a,b).

The optional DS construction also has ‘special’ meanings as analyzed here from a dataset of 264 minimal pair examples, part of the larger dataset of 15,000 examples gathered during conversations with individual native dialect speakers. To obtain the ‘special’ meanings, informants were simply asked what each variant in the pair ‘meant’, and in what situation each would be appropriate.

The hypothesis explored here is that the collection of meanings (logical, expressive, and social: Swinburne 2024c) are derived from the semantics of main verb ‘do’, which is connected to energy and intensity. In a question this results in doubt, implying the speaker has a prior expectation or presupposition. Thus while in the non-DS (1a), this speaker is equally open to a ‘yes’ or ‘no’ answer, in the DS-variant (1b), he expects the answer ‘no’ (the more common presuppositional direction).

(In the grocery store): Do you sell artichokes?

1. a.	’indì=f	i	articiòc?		(Non-DS)
	sell.PRS.2PL=SCL.2PL	the	artichokes		
	‘Open question.’				

b. Fì=f vindì i articiòc? (DS)
do.PRS.2PL=SCL.2PL sell.INF the artichokes
'Presupposes that there aren't any artichokes for sale (because there are none visible).'

With a wh-question, in the optional dialects the wh-item is also presupposed and indicates the existence of a particular referent whose identity already exists in the mind of the speaker.

In early Modern English, Stein (1990), noted that affirmative DS is used selectively to highlight and foreground the propositional material over the rest of the passage (2). This indicates an intensification function for 'do', to indicate that what is found is abnormal and runs counter to the hearer's (presumed) existing expectations – i.e. is presuppositional. Alternatively it is used for contrast (3), which sets up the presupposition.

2. ...and did set all the tenants upon me, and did seize all his land.
(Paston letter, 15th century, Norfolk)
3. Doth wit rest in strange words, or else standeth it in wholesome matter?
(Wilson, 1560, Art of Rhetorique)

Thus in two, only distantly related languages, when DS is optional, it has a presuppositional meaning. This is most likely if it comes from the contribution made to the construction by the same 'do' morpheme. In both instances, when optional, this primitive construction has a strong degree of compositionality; when used obligatorily that special meaning is lost.

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Patterns of clausal complementation with *remember*, *forget*, and *expect* in 17th-19th century English: A comparison of individual and population level variation

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Keywords

language change and grammaticalization, cognitive sociolinguistics, English syntactic variation, lifespan change, corpus linguistics.

Abstract

Long-term variation is often viewed on the population level, with the role of individuals considered 'reduced below the level of linguistic significance' (Labov 2012: 265). Such views narrow the scope of research by tightly focusing on social identity, minimizing the influence of individual differences. By studying individuals, we may uncover how they accommodate change in their understanding/use of language over their lifetime, and how individual differences in cognitive processing impact the spread of variants (Petré and Anthonissen 2020, Blas Arroyo 2023).

This paper provides a study of 20 renowned male white authors across three 100-year periods of late Modern English (from c. 1650, 1700, 1800, respectively). It investigates changes in their use of competing variants of finite vs. nonfinite complement clauses (CCs) with the complement-taking predicates (CTPs) *remember*, *forget* and *expect*. In this variation, the finite CCs (*that*-clauses and zero-complementation clauses; the older forms) compete with the nonfinite CCs (the *to*-infinitive, the newer form, although first attested late 14th century; see Los 2005: 254-255) and the *ing*-form (emergent). A preference for a certain form could be due to processing considerations, a (personal) determination of a semantic/pragmatic difference, or even a (conscious) social association (as suggested by Cheshire, Kerswill and Williams 2005; and contrary to Labov 2001: 28). While the nature of their competition appears to change, all patterns continue to coexist.

Data consist of >500,000 words per individual, annotated for CCs with *remember*, *forget* and *expect*, and coded on seven variables. Multifactorial classification models (cf. Fonteyn and Nini 2020) are employed to determine which language-internal factors condition individuals' variation, and how these constraints vary between individuals, between periods, and during the lifespan of an individual. Preliminary results from >4,000 instances show individuals tend to organise their own behaviour using partly idiosyncratic systems; we argue this accounts for the persistence of long-term variation. A drop in the degree of idiosyncrasy between the earlier and later periods shows potential standardisation at play. In addition, lifespan analysis reveals (almost) all authors increase their use of that-clauses (previously regarded as an older form) across their lifespan. We propose this tendency relates to all of them being professional writers who are increasingly placing more emphasis on the clarity of their prose.

Generally, the results suggest that individuals may have different cognitive representations of certain constructions, and that population-level change is simply a change in the average semantic-pragmatic or social understanding of the different forms, and/or the relative processing advantages.

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Gestural triggers and humorous stance: The case of political debates

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Keywords

gestural triggers, humor, facial expressions, political debates, multimodality.

Abstract

Recent studies on humor emphasize research on interaction and multimodality (Tabacaru, 2019; Priego-Valverde, 2023), bringing into focus the elements that allow shifting the different discourse spaces. Specifically, interaction allows interlocutors to enrich the common ground (Clark, 1996) that they share by emphasizing certain key elements in order to turn the tables on their opponent (Brône, 2008). Using elements that are made available by their interlocutors, speakers try to divert the meanings already created in discourse, through the use of humor and incongruity (Raskin, 1985). For this, speakers also make use of non-verbal elements, such as facial expressions, in order to make their humorous intentions salient to the audience. These facial expressions, such as raised eyebrows, for example, are known to play an accentuation role in speech (Rockwell 2000; Krahmer et al. 2002). Such visual markers help the interlocutors/audience to intersubjectively connect to the same common ground on which they construe their meanings.

The present paper explores such exchanges, as used by the candidates to the American presidential elections of 2016 and 2020 (Hilary Clinton vs Donald Trump; Joe Biden vs Donald Trump) and the French presidential elections of 2022 (Emmanuel Macron vs Marine LePen). The corpus allows to explore the use of key elements (Brône, 2008) on which meanings are construed and then shifted by their opponent in order to persuade the public in their favor. This is linked to humorous stance (see also De Vries, Oben, Brône, 2021) by the way the opponents have to highlight their divergent viewpoints and the way speakers have to coordinate with each other's intentions and behaviors. These nonverbal elements play a crucial role in intersubjectivity as the

speakers need to constantly coordinate their meanings and expectations (Schelling, 1960). The results show a preference for both facial expressions and head movements, similar to other studies (staged and spontaneous). I argue that, in the case of political debates, humor plays a role in persuasion (Li & Pryor, 2020) as the setting is not at all aimed at amusing the audience. This underlines the pervasiveness of humor in all kinds of interactions, which further reinforces its complexity, both from a mental and emotional perspective.

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An Image-schema Approach to Agentive *By*

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Keywords

Cognitive grammar, Image-schema approach, Preposition, Polysemy, Metaphor

Abstract

The preposition *by* has various meanings and is taken as polysemous (Lindstromberg 1998, 2010). Some previous studies (Hanazaki 2005; Author 2022) suggest that there are some relations between the usages/meanings of *by*. Agent preposition *by* in the passive construction may be considered as homonymous with other usages/meanings of *by*. However, from a cognitive linguistic perspective, Agent *by* is also considered as one of the polysemous meanings of *by* because there are some similarities between them for the reason mentioned later.

It has been generally said that the *by*-phrase in the passive construction expresses Agent. For example, Nakau (1994:389) regards agentive *by* as assigning the semantic role Agent to the noun phrase following it. Thus, in (1), the police and a bullet, both of which perform the action of the verb, can be put on the position following *by*. However, there are some kinds of nouns which cannot appear in the *by*-phrase of the passive construction, even though they express the action/situation of the verb. As (2) shows, while both George Washington and Ann are accepted as the subject of the active construction, only George Washington serves as Agent in the passive construction. Such a difference is true of (3). This acceptability difference comes from the notion "pragmatic affectedness" by Bolinger (1975), which requires that the referent of the noun phrase following by exert influence over the action or the situation.

(1) a. {The police / A bullet} killed the reporter.
b. The reporter was killed by {the police/ a bullet} (Nakau (1994:390)

(2) a. {George Washington/ Ann} lived in this house.
b. This house was lived in by {George Washington/ *Ann}.

(Bolinger (1975), cf. Nakau (1994:392))

(3) a. {The two thieves/ The two customers} entered the store.

b. The store was entered by {the two thieves/ *the two customers}.

(Nakau (1994:390))

In this study, I argue that the characteristics of agentive *by* arises from the metaphorical inheritance of a spatial meaning of *by* because they share some similarities in their image-schemas. For this purpose, I use the notions of trajector (TR) and landmark (LM) (Langacker 2008) and semantic-network approaches (Lakoff 1987, Tyler and Evans 2003), explaining the acceptability difference in question from a cognitive linguistic perspective. Based on semantic-network approaches and some ideas from Author (2022) and Author et al. (2023), the image-schema of Agent *by*—which has not been considered thus far— is constructed, as illustrated in Figure 1. This schema shares some semantic properties such as "bounded area" and "TR horizontal movement to the bounded area" with the schema of the spatial meaning "Dropping in" of *by* (Figure 2). I argue that through the metaphor CLOSENESS IS STRENGTH OF EFFECT (Lakoff and Johnson 1980:128), agentive *by* is seen as extending metaphorically from the spatial meaning "Dropping in" in such a way that an entity near the "controller" can be controlled by the latter. I also argue that Bolinger's "pragmatic affectedness" derives from the image-schema of Agent *by*, because the landmark in the *by*-phrase should have the property "influence" over the trajector (i.e., the relevant situation) based on pragmatic knowledge; for example, if the two thieves steal lots of jewelry, they will cause so much damage that the store cannot open. In this way, it is explained why George Washington and the two thieves are acceptable in the *by*-phrase, whereas Ann and the two customers are not, as in (2) and (3).

Figure 1

Image schema of Agent *by*

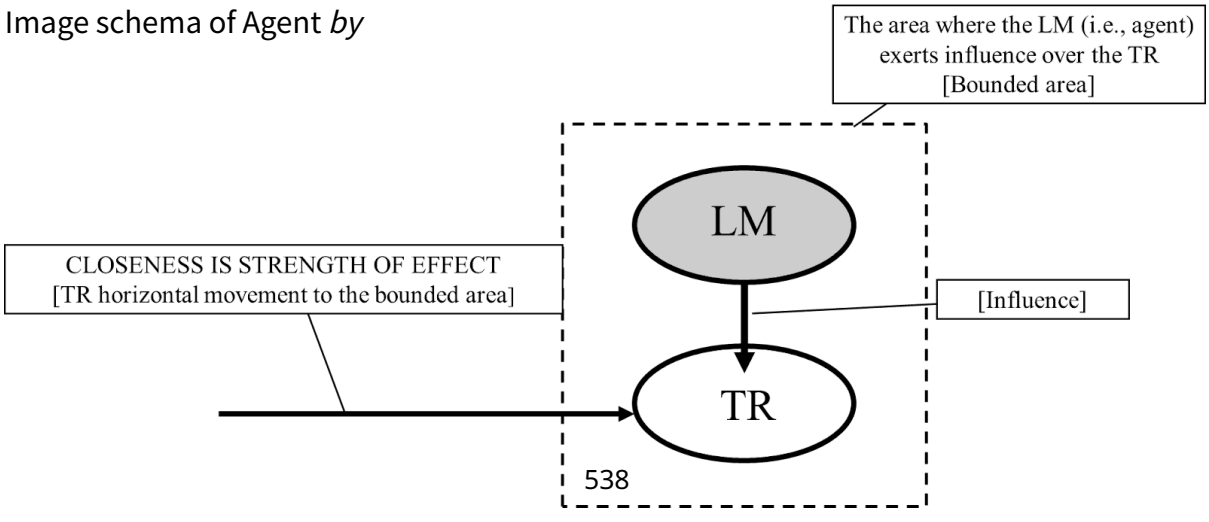
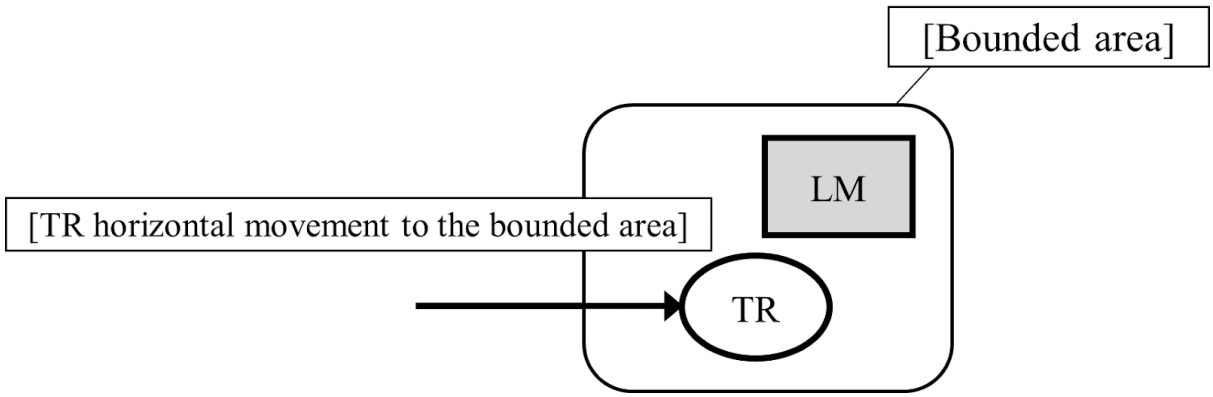


Figure 2

Image schema of Dropping in



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Construal and perspective as guiding principles in the analysis of causal prepositional allostructions in Spanish

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Keywords

construal, allostructions, causality, Spanish prepositions, Construal Level Theory

Abstract

Guided by the notion of construal (Langacker 1990, 2008; Verhagen 2010) and the Construal Level Theory (Trope and Liberman 2010), this paper argues that, in order to represent cause-effect relationships, Spanish speakers select particular prepositions offering varied spatial perspectives that align with their subjective interpretations of reality. Based on the theorisations around the schemas emerging from mechanical causation initially forwarded by Michotte (1963) and further elaborated by Leslie (1982) and Mandler (1992), we propose the existence of a basic CAUSALITY or CAUSE-EFFECT schema, typically representing the visuo-spatial notion of one entity causing the movement or reaction of another. Drawing on the concept of allostruction (Capelle 2006), and based on analysis of corpus data, we also argue that spatially-grounded prepositional constructions expressing causality in Spanish can be viewed as part of the same allostructional network.

Our methodology involved the semantic classification of a randomised sample of 1000 concordances for each of the 16 Spanish prepositions inventoried by Alarcos Llorach (2000). These concordances were extracted from the *esTenTen* corpus (Kilgarriff et al. 2014). After a bottom-up semantic analysis, where constructions were classified as primarily spatial, temporal or abstract, a total of 640 concordances were identified as possessing an abstract sense with causative values. These causative constructions include structures with the prototypically causative *por* ('because of', 'due to') and less prototypical causal items such as *ante* ('before', 'in front of'), *tras* ('behind', 'after'), *bajo* ('under') and *con* ('with'). While previous research has focused on the semantic particularities of individual prepositions or small groups of prepositions, our study adopts a paradigmatic approach (Murphy 2003), examining the broader range of Spanish prepositions to explore their semantic relationships and understand their construal effects.

The result of our analysis suggests that prepositional structures can form part of a network or, more precisely, a gradient of causality, that ranges from more abstract and high-level conceptualisation, typically lexicalised by *por*; through to more spatially-grounded representation, typified by the causative uses of *tras*, *ante* and other prepositions, as illustrated in 1):

1) [⋯] *Y Bolaños murió el 11 de junio de 1994 tras un derrame cerebral. (esTenTen)*
'[⋯] And Bolaños died on the 11th of June 1994 after a brain stroke.'

where *tras* triggers a spatial scene in which the cause-effect chain is seen a sequence of entities in motion, spatially and temporarily, with one following the other. The causal link is inferred as: Bolaños' death did not occur independently after the stroke, but rather because of it.

2) *El Ayuntamiento opta por sacar adelante un texto ante la imposibilidad de alcanzar el consenso con las partes implicadas (esTenTen)*
'The City Council opts to push forward a text due to [facing] the impossibility of reaching consensus with the with the involved parties'

In 2), the preposition *ante* generates a spatial scene in which *el Ayuntamiento* ('City Council') acts as a trajector facing a landmark (a cause, in this instance): *la imposibilidad de alcanzar el consenso con las partes implicadas* ('the impossibility of reaching consensus with the involved parties.'). In this scene, the act of facing the landmark allows the effect, *optar por sacar adelante un texto* ('Opt to move forward with a text') to occur.

The above examples, together with the results of our analysis, suggest that despite the variation in lexicalisation there seems to be an underlying representation of causality, rooted in early embodied knowledge of mechanical causation. Typically acquired in early childhood, this foundational understanding is later extended to less concrete domains, enabling us to comprehend abstract relationships between cause and effect.

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Subjectification and Phonologization: A Case Study from Japanese Voice Onset Time

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Keywords

cognitive phonology, subjectification, phonologization, voice onset time

Abstract

This presentation proposes a case study of how cognitive linguistics can be utilized to analyze phonological phenomena. We shall demonstrate that the notion of subjectification (Langacker 2008), which has often been employed in cognitive grammar to analyze grammar and meaning, can also capture the phonologization process observed in phonological development from voiced/voiceless sound opposition to tonal differences (Hyman 1984; Ohala 1993). Demonstrating the parallelism between the grammaticalization process led by subjectification and phonologization, we suggest that the gradual shifts of voice onset time (VOT) observed in Japanese word-initial stop consonants (Takada 2011) can be reframed as a grammatical phenomenon that is in the early stage of subjectification.

While synchronically and diachronically examining tonal characteristics of Asian languages, Hyman (1984) and Ohala (1993) generalize that these languages' tonal contrasts have been derived from prevocalic consonantal voiced/voiceless distinction. While examining their discussion of the tonal development, we find that their focus of description on the phonologization is very similar to that of Langacker's (2008:528) subjectification on semantic extension and shift. First, the essence of subjectification may be summarized as follows: the elements that are intrinsic but incidental in the original meaning are brought into focus (i.e. foregrounded) and as a result, interpreted externally as an independent element in the extended/shifted meaning. A classic polysemous example of English be going to is provided in (1), in which the future sense of (1b), i.e., the temporal development, is regarded as having developed out of the temporal transition inherent in the subject's motion (1a).

(1) Tom is going to mail a letter.

a. Tom’s spatial motion toward a goal with the intent of mailing a letter upon reaching it.

b. Tom will mail a letter (perhaps just by clicking a mouse).

（Langacker 2008:538）

Second, concerning the tonal distinction observed in Northern Kammu in Table 1, Hyman (1984) and Ohala (1993) suggest that the contrast has developed out of the voice/voiced distinction observed in Southern Kammu, and as show in Diagram 1, the voiced/voiceless distinction inherently have tonal/pitch differences though it is still incidental to the

consonantal pronunciation. Thus, this phonologization phenomenon from the voiced/voiceless distinction to that of tone can also be seen as a change from intrinsic to extrinsic factors.

While phonological theories rely on dichotomy between allophonic variation, cognitive linguistics including the notion of subjectification excels especially in describing linguistic gradual nature. In this regard, the Japanese VOT presents a very interesting fact. Japanese speakers rarely have communicative discrepancies such as mishearing /b/ and /p/ in Japanese conversation, which indicates that the Japanese voiced/voiceless consonantal distinction is phonological. Furthermore, Japanese speakers seem to be unaware of the pitch difference that occurs when voiced/voiceless stops are used (Diagram 1), which implies that the distinction is not regarded as showing an allophonic relationship. However, as shown in Table 2, there is a fact that Japanese people today make little distinction between voiced and voiceless phonetically (a5 in Table 2), even though it was clearly differentiated around 100 years ago (a1 in Table 2). In other words, the current Japanese speakers rely considerably on the initial frequency of F0 (the pitch) and its transition to the following vowels, when it comes to the voiced/voiceless consonantal differentiation (Takada (2011:194)). To capture this subtle shift between phonemic and allophonic variation, the concept of subjectification is indeed effective beyond the realm of meaning.

Table 1 (Ohala 1993:240)

Southern Kammu	Northern Kammu	Translation
klaaŋ	kláaŋ	eagle
glaaŋ	klàaŋ	stone

Diagram 1 (Ohala 1993:214)

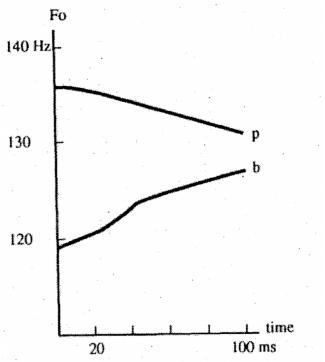
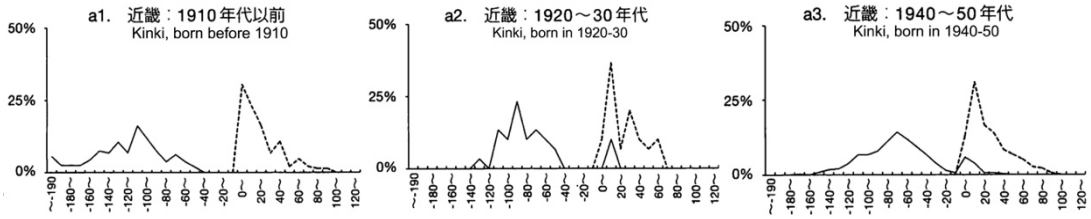
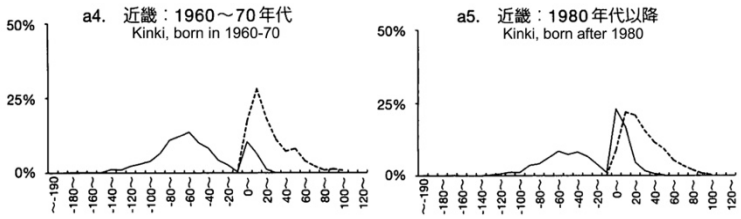


Table 2 (Takada 2011:145)





Note. Solid lines are voiced stop, broken lines, voiceless stop. Essentially the same tendency is observed not only in Kinki Japanese, but also in Tokyo Standard Japanese.

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Does Impersonal-*it* Become More Tangible at the Existential Level? On the Impersonal-*it* Construction with the Predicate *Be Time*

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Keywords

Cognitive Grammar, English, impersonal-*it* construction, existential experience, cognitive model.

Abstract

This study adopts the framework of Cognitive Grammar to examine the English impersonal-*it* construction that involves the extraposition of a subject complement clause, as exemplified in (1). Langacker (2009) analyzes this construction through the Epistemic Control Cycle (ECC), a general cognitive model that reflects mental experience, and equates the referent of *it* to the field (F) in Figure 1. The field (F) represents the scope of awareness, encompassing everything evoked by a conceptualizer (Langacker 2009). While ECC provides the essential basis for understanding the construction, the meaning of impersonal-*it* remains elusive at an abstract mental level. This study seeks to establish a more concrete understanding of impersonal-*it* by situating it within the domain of existential experience.

(1) It is {possible / conceivable / plausible / feasible / imaginable} that they could be of some use to us. (Langacker 2009)

To achieve this goal, we first trace the history of this construction back to Old English, when it emerged through the insertion of *(h)it* in subjectless impersonal constructions. At that time, most co-occurring predicates pertained to existential

experiences of 'happening,' as seen in (2) (Möhlig-Falke 2012). Assuming that its insertion was motivated by these existential predicates, impersonal-*it* is expected to manifest more tangibly in such contexts.

(2) Forðæm **hit gebyreð** oft **þæt** God nylle... nan unaberendlice broc him an settan...
'Therefore **it happens** oftentimes **that** God... does not wish to set on him any unbearable affliction' (Möhlig-Falke 2012)

The next step is to identify an existential predicate that has remained in Present-Day English. This study focuses on *be time* as a promising candidate. The impersonal-*it* construction with *be time* exhibits an idiomatic yet crucial feature: the occurrence of the hypothetical past in its complement, as shown in (3).

(3) **It is time that** you **went**. (Langacker 1978)

Looking back on its history, *be time* (4a, 5a) alternated with *getimian* (4b) in Old English and *tīmen* (5b) in Middle English to express an existential contrast in relation to speech time: *be time* signaled the nonexistence of an event designated by its complement, while *getimian* and *tīmen* indicated its existence. In Present-Day English, the counterpart of *be time* has become obsolete, but the hypothetical past in (3) still marks non-existence or non-immediacy. Therefore, *be time* provides a valuable context for analyzing impersonal-*it*.

(4) a. **Hit is tima þæt** ic gehwyrfe up to þam... (*OED*: *Oxford English Dictionary*, OE)
'**It is time that** I turn(ed) up to them...'

b. **Hit getimað** hwiltidum... **þæt** his trendel underscyt ðære sunnan to ðan swiðe þæt heo eal aðeostrað...
'**It happens** sometimes... **that** the moon's orb passes beneath the sun's in such a way that the sun is completely eclipsed...' (*Aelfric's De temporibus anni*)

(5) a. Sires, **it is tyme þat** we hennes hye. (*OED*, c1412)

b. Ofte **hit timeð þat** tat leoueste bearn... sorheð & sweameð meast his ealdren on ende. (*OED*, c1230)

Moreover, *be time* also highlights our mental experience when the present tense occasionally appears in its complement (four instances on *BNC*) and the sentence form and meaning in (6) become similar to those in (7) with *be possible*. Here we observe that the meaning of *be time* extends from 'existential' to 'epistemic,' as the meaning of impersonal-*it* extends from 'more tangible' to 'less tangible.'

(6) ...**it is time that** the marine environment **is given** the recognition and protection it deserves. (*BNC*)

(7) **It is possible that** dolphins **are** smarter than people. (Langacker 2002)

The cognitive model shown in Figure 2 summarizes the analysis of the impersonal-*it* construction with *be time*. It relies on Langacker's analysis of impersonal-*it* and finite clauses. *Be time* profiles speech time (T_0) and strongly identifies the conceptualizer (C_1) with the speaker (C_0). The field (F_1) surrounds the strongly identifying speaker and speech time (i.e. now and here), allowing the speaker to perceive the referent of *it* or "everything" at this existential level; thus, the field can be apprehended more clearly than in ECC. Furthermore, this model highlights a parallel with the Inclination of ECC in Figure 1, demonstrating that the closer the meaning of *be time* gets to that of epistemic predicates, the more abstract the referent of impersonal-*it* becomes, and vice versa.

Figure 1 (Langacker 2009)

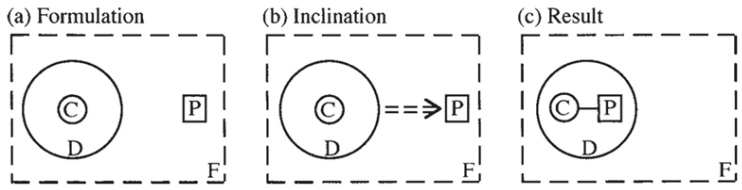
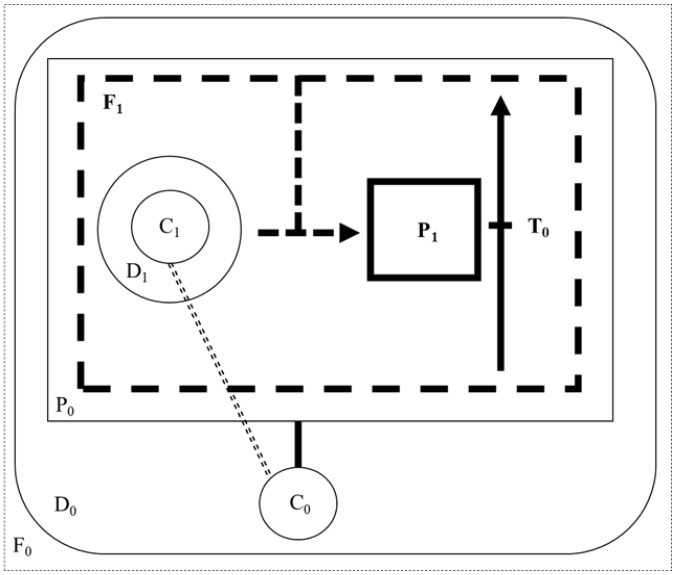


Figure 2

The impersonal-*it* construction with *be time*



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Conceptual Compression and Systematic Forgetting: The Case of Irony Attrition

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Keywords

irony, viewpoint, source memory, conceptual blending, metapragmatics

Abstract

The dynamics of perspective taking are crucial to meaning construction, but our capacity for representing the viewpoints of other people is limited and susceptible to bias. These limitations are widely studied in decision making and memory, but their specifics are less often discussed in cognitive linguistics. This paper suggests that the model of conceptual compression introduced in Conceptual Blending Theory is well suited to addressing how biases in viewpoint recall contribute to linguistic phenomena. It presents an illustrative integrated account of "irony attrition" (Tobin 2021): when people start out saying or doing something ironically, only to become increasingly earnest in that usage over time.

One interesting and under-studied site where the effects of irony attrition can be seen is in the context of sociostylistic variation, as in (1-2):

(1) i used to say "lol" ironically while speaking after I heard two girls saying it out loud, then i started hearing it coming from my mouth while talking in public [Twitter 2019]

(2) I started say "dawg" as some dumb joke and now saying it to my manager...it's starting to be a problem [Reddit 2020]

This paper presents a corpus of metapragmatic comments (Culpeper and Haugh 2014; Dynel 2023), drawn from social media, to examine patterns in speakers' descriptions of this kind of usage event. Several useful generalizations arise. Qualitative

analysis of these examples shows irony attrition arising under conditions of routinization (Haiman 1994) and as an outcome of entrenchment (Langacker 1987; Bybee 2007), in which repetition leads to changes in how linguistic knowledge is organized in the minds of speakers. A model of the ironic stance as a complex viewpoint arrangement resting on viewpoint compression (Fauconnier and Turner 2002) allows us to see how these changes are consistent with findings in memory research (Schacter 1999) that show a systematic tendency to lose track of certain layers of attribution when we try to attend to source information over time.

This paper's contributions to the irony literature lie in identifying an important phenomenon in verbal irony, describing it accurately, and analyzing its theoretical implications. As well, these case studies reveal that irony is often a waystation in trajectories of linguistic diffusion (Labov 2007). As part of the panel "Advances in Conceptual Blending Theory," this paper also illustrates the continuing analytic utility of Fauconnier and Turner's model of *conceptual compression* and its compatibility with the modern cognitive science of memory.

Irony attrition has recently been the subject of urgent commentary and concern in the context of so-called "irony poisoning" (Smith 2023), in which a constant diet of provocative jokes and memes online may "poison" would-be ironists with sincerely extremist views. However, focusing too closely on irony poisoning as a flagship example of attrition is misleading. Considered on their own, those cases invite the counterclaim that attrition is merely the dropping of pretense around pre-existing earnestly held attitudes. Taking a wider view, as in this study, gives a clearer picture of irony attrition as a neutral phenomenon..

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Intersubjectivity in news genre? A case of explaining in easy language news

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Keywords

dimensions of construal, intersubjectivity, easy language, explaining

Abstract

The case of explaining is discussed as an example of explicit intersubjectivity in news genre where on standard schemas it doesn't necessarily belong; it brings forth the lack of common ground (e.g. Clark 1996) and the active attempt of evoking necessary domains for the shared current discourse space (Langacker 2008) for the audience to be able to carry on and understand the news broadcast..

The research is using qualitative text linguistics as its method and the aim of the study is to map out what gets explained by easy language news and how these explanations are construed. The viewpoint of this study is dialogic (Verhagen 2005; other-orientedness see also e.g. Bahtin 1986[1953]) and intersubjectivity is seen as a fundamental feature in discourse and, as such, compatible with cognitive grammar (Möttönen 2016; summary of discussions about the notions of intersubjectivity see e.g. Brems 2023).

Explaining (e.g. Calsamiglia & Van Dijk 2004; Dalton-Puffer 2007) can be seen as part of dialogical interaction written into the text that calls the audience to be a part of the discourse community of news genre. In other words, it makes both primary and secondary conceptualizers visible (Verhagen 2005; construed reader see also e.g Jaakola, Töyry, Helle & Onikki-Rantajääskö 2014). In the data, explaining occurs as the bolded text in the example below:

Hybridiautojen myynti on kasvanut Euroopassa. **Hybridiauto voi kulkea sekä bensalla että sähköllä.** Viime vuonna hybridiautoja myytiin ensimmäisen kerran yhtä paljon kuin dieselautoja. ---- YleSELKO88

[The amount of hybrid cars has grown in Europe. **Hybrid cars can use both gas and electricity.** Last year for the first time hybrid cars were sold as many as diesel engine cars. **---**]

Through dimensions of construal (Langacker 2008), different intersubjective strategies of explaining are mapped including e.g. leaning to conceptual hierarchies (see example above) or processual description. The results show for example different kinds of approaches on how subjectively or objectively the conceptualizer is construed to the explanation and how the explanations differ in the way they're being mentally scanned. Also, explaining in easy language news is compared with explaining in standard language news and their differences in this respect will be discussed.

The data set of this study is self-collected corpora of non-topic-related easy language news on radio and their standard language counterparts (n 105 pairs from years 2019–2022, Yle Finnish broadcasting company). Easy language (e.g Leskelä, Mustajoki & Piehl 2022) is language form designed for people to whom standard language is too difficult (reasons being e.g. language learner status or developmental disability).

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Shaping Time through Manner of Motion: the Emotional and Cognitive Impact of Manner Verbs in Temporal Expressions

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Keywords

metaphor, motion and space, time, emotion.

Abstract

Humans commonly rely on spatial concepts to structure their understanding and communication of time, as reflected in the Time is Space metaphor (e.g., Clark, 1973; Lakoff & Johnson, 1980). While research has extensively examined path verbs (i.e., pass, go) in temporal metaphors, manner-of-motion verbs -those specifying aspects such as speed or effort- have received less attention, despite their potential impact on subject time perception (e.g., Feist & Duffy, 2020; Valenzuela & Illán Castillo, 2022, Illán Castillo, 2024).

This study explores how manner of motion verbs contribute to temporal conceptualization and emotional engagement, comparing their influence to that of path verbs in shaping subjects experiences. Four experiments were conducted with native English speakers, including in-person participants (undergraduate students from UC San Diego's Department of Cognitive Science) and on-line respondents from Prolific.

Study 1 analyzed the effects of verbs denoting rapid movements (e.g., fly, zoom) vs slow movement (e.g., drag, creep) on meaning and emotional interpretation.

Study 2 investigated whether manner verbs elicit different emotional valences in literal vs metaphorical contexts

Study 3 examined the connection between manner verbs in temporal metaphors and non-verbal emotional associations , using emoji-based responses

Study 4 employed a fill-in-the-blanks task to determine whether participants favor manner or path verbs in emotionally expressive contexts

The results indicate that manner verbs play a crucial role in shaping perceptions of time. Fast-motion verbs create vivid, engaging temporal experiences, linked to positive emotions and a sense of control, whereas slow-motion verbs generate impressions of stagnation and passivity, often associated with negative emotions. These effects are particularly pronounced in metaphorical contexts, where manner verbs encode subtle emotional connections that go beyond their literal meanings. Participants also showed a preference for manner over path verbs when describing emotionally charged situations. By examining the relationship between motion semantics and temporal cognition, this research highlights the impact of language on the emotional and subjective experience of time, providing a foundation for future cross-linguistic enquiry.

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Distinguishing shades of blue across 80 languages

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Keywords

blue shade discrimination, color terms, label-feedback hypothesis, linguistic relativity.

Abstract

Fast distinctions between light and dark blue can be critical when accurate color recognition influences safety (e.g., distinguishing water vs. chemicals in pipelines) or decision making (e.g., distinguishing shallow vs. deep waters in maritime navigation). Numerous studies (e.g., Winawer et al., 2007; Thierry et al., 2009; Athanasopoulos et al., 2011) have shown that contrasting color terminology for different shades of blue in one's native language modulates visual discrimination speed and similarity ratings. Namely, participants were found more sensitive to blue color distinctions when two blues belong to distinct linguistic categories in their native languages. Many experiments in the area exhibit serious limits in that many rely on two-language comparisons and modest sample sizes.

Here we address both limitations with a dataset of 3912 participants from a sample of 80 native languages out of which 16 lexically distinguish blues (2B) based on brightness (incl. Azeri, Burmese, Greek, Thai, Turkish, Ukrainian) while in the remaining languages (1B) the basic color terminology expressing shades of blue lexically overlap (incl. Abkhaz, Basque, English, Farsi, Hungarian, Tagalog). We used a new 'color guesser' game. Participants saw grids of blue tiles in 3x3 arrangements, with the middle left blank. Two blue probes appeared under each grid, manipulating within/between/across blue combinations. The task was to quickly decide which probe completes the grid.

Contrary to predictions, mean reaction times showed little between-group differences (1B Across M=2224.85, SD=1354.73 vs 2B Across M=1980.3, SD=906.98; 1B Between M=1838.22, SD=784.68 vs 2B Between M=1881.03, SD=913.43, and 1B Within M=2258.84, SD=1524.76 vs 2B Within, M=2370.23, SD=1189.13), with no statistically significant group*condition interaction, neither with raw RTs (β=119.26, SE=237.87, p=0.61) nor with subtracted RTs (Within-Minus-Between-RT) that better control for individual differences in response speed (β=119.26, SE=237.87, p=0.61). Within-blue grids were most difficult for both groups based on the mean proportions of correct answers (1B Within 60.22% vs 2B Within 57.84%), followed by Across blues (1B Across 76.26% vs 2B Across 73.33%). Contrary to predictions, Between-blue trials reached near-ceiling accuracy rates in both groups (1B Between 92.53% vs 2B Between 91.43%).

Why did language-specificity not surface? Three explanations come to mind. First, it is possible that near-ceiling performance may have neutralized differences in the guessing task involving subtle shades of blue. The second possibility is that the context of a gamified experiment differs from carefully controlled lab-based testing conditions to

an extent that variability in how shades of blue were displayed on participants' devices could have swallowed shade-sensitive language-driven biases observed in previous studies. And third, if color discrimination in bilingual speakers is flexible depending on the language context (Athanasopoulos et al, 2011), instructions in English could have primed alignment with English-like/1B-like patterns in 2B language speakers. In other words, if language context shapes cognitive processing, English may have neutralized 2B-based color discrimination. Aligning with the conference theme, we contextualize our findings in color-focused research that bridges culture and cognition (e.g., Gibson et al., 2017), and we also draw implications for theoretical models that posit top-down linguistic modulations of visual perception (e.g., Lupyan, 2012).

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Understanding reading: theoretical and applied implications of an analysis of the comprehension of written texts

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Keywords

applied linguistics and pedagogy, reading, text, multimodality, construction grammar.

Abstract

Teaching to read well is a challenge in education. By forming proficient readers, schools prepare individuals for life, capable of critically searching for information on their own. A few decades ago, as in Gough (1972), reading was seen as decoding graphic signs and organizing syntactic structures of sentences. Such models convey that it is enough for the reader to decode isolated sentences – not involving the construction of meaning in the text. This vision stands even more as myopic considering that reading approaches in schools and large-scale assessments still do not include "the design of texts and skills related to the search and evaluation of the information found" (Coscarelli; Ribeiro, 2019, p. 104). In this work, following Coscarelli (2002), we see reading as a complex cognitive process, with domains related to form (lexical and syntactic processing) and meaning (construction of local, thematic, and external coherence). Our objective is to discuss two implications of this proposal, and suggest other aspects that urge to be considered regarding text comprehension. We first suggest that Coscarelli (2002)'s approach can be pursued to corroborate recent proposals that types and genders are constructions, in terms of Construction Grammar (Hoffmann, 2024). Constructions are defined as pairing of form and function; form being associated to morphosyntax, and function to semantic content and discursive function (Croft, 2022). Constructions are also associated with socio-cultural contexts (Nikiforidou, 2018). However, we claim that, even acting together, these two approaches cannot account for text comprehension today. Also considering digital environments, reading includes searching and browsing through different texts and the processing of multimodal aspects (the semiotic diversity orchestrated in texts) (Azevedo, 2013, Kress, 2003).

Therefore, we propose that a reading model involves linguistic/multimodal, cognitive, and discursive elements. To achieve this, the processing of design aspects and multimodal resources, and critical analysis of the socio-cultural context of the materials read must be incorporated in both Coscarelli (2002)'s model and Construction Grammar applied to texts. The domains of reading processing relate to elements of constructions: the form: lexical items, syntactic patterns, and, as we argue, multimodal resources; and the function: the three types of coherence: local, corresponding to semantic content; thematic, to discursive function (including knowledge about the genre); and external, to socio-cultural contexts (including critical analysis). This view of reading, based on different components of constructions/types or genres, can signal to the teacher which skills they should help their students to develop, so that they become proficient readers, and they can be taken as reference in detecting the causes of reading problems. These sub-processes, although interdependent, can be worked on separately, to emphasize one or another. Developing skills related to each sub-process is a way to improve reading as a whole. This proposal was applied to develop a software to help teachers select texts for reading activities and assessment (Rodrigues, 2022). Although in development, the software proved to be efficient and promising. We conclude that this understanding of reading indicates good paths for theoretical research and school practice, which we intend to develop in further detail.

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Copilots for Linguists 2025

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Keywords

Construction Grammar, Large Language Model, FrameNet, Retrieval Augmented Generation (RAG), Fine-tuning, Artificial Intelligence.

Abstract

We report research on AI research tools for linguists, concentrating on two areas: (1) enhancing and expanding FrameNet, a computational lexicography project characterizing semantic frames triggered by words and phrases, and (2) supporting Construction Grammarians. This pairing of Frames and Constructions is a natural fit in cognitive linguistics, as Constructions are situated in scenes often structured by Frames.

We demonstrate that AI Large Language Models (LLMs) can be beneficial for FrameNet development. We present various ways these LLMs can function as research assistants, including: frame augmentation via the proposition of new candidate lexical units for existing frames and frame definition based on suggested inheritance relations with existing frames. We examine the limitations of AI LLMs in frame analysis, particularly for languages beyond English.

This AI project, "Copilots for Linguists," is now three years old. Our ICLC17 presentation will briefly recap highlights from past conferences, but then focus on new discoveries. Namely, we report on new experiments focusing on the potential for using AI models to extract structured data and to label news articles automatically for multimodal features. The proposed pipeline integrates visual and textual inputs, combining image analysis models with large language models to identify entities, events, and scene-level information. These outputs are aligned using a frame-semantic structure that supports downstream tasks such as multimodal machine translation, cross-modal retrieval, and fine-grained annotation. The pipeline includes checkpoints

for human validation, recognizing the risks of automation—such as bias, misrepresentation, or loss of context. We treat these validation steps not as optional corrections, but as a core part of the process, especially when working with real-world data involving sensitive topics or social narratives. We also review the benefits of accelerating data labeling while relying on human validation to ensure accuracy and accountability. Finally, we report on specific findings regarding the comparative strengths and weaknesses of recent models: Llama-3.2-11B-Vision-Instruct, ChatGPT-4o, and Qwen2-VL-7B-Instruct.

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The meaning of separability: Evaluating semantic hypotheses on (in)separable verbs in contemporary Dutch

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Keywords

semantics, (in)separable complex verbs, corpus linguistics, experimental linguistics, Dutch.

Abstract

Dutch compound verbs are traditionally classified as either separable (SCVs) (1) or inseparable (ICVs) (2). While their formal distinction is straightforward, their semantic differences are more complex and remain a topic of debate.

(1) *Hij* ***hakt*** *de boom* ***om****.* ('He cuts down the tree.')
(2) *Ze* ***doorbreekt*** *de stilte.* ('She breaks the silence.')

Booij (2002), for instance, proposes that SCVs are typically associated with concrete and spatial meanings, whereas ICVs convey abstract and aspectual meanings. However, Blom (2005) contests this claim by presenting counterexamples that show that SCVs can also express abstract and non-spatial meanings, while ICVs may also adopt concrete and spatial meanings. Blom (2005) further emphasizes the role of resultativity, arguing that resultative meanings are exclusively expressed by SCVs, whereas non-resultative meanings may occur with both SCVs and ICVs. Despite these claims, neither hypothesis has been systematically tested on a large scale, and counterexamples continue to complicate the semantic distinction between SCVs and ICVs.

This study aims to evaluate these hypotheses using a twofold methodological approach. First, a computational analysis was conducted on 251 compound verbs with the prefixes *door-* ('through'), *om-* ('around'), and *over-* ('over'), yielding 89,331 attestations from the NlTenTen20 and SoNaR corpora. Using Alpino parses for SoNaR and SpaCy's library *nl_core_news_sm* for NlTenTen20, the direct objects of these verbs were automatically extracted and analysed as proxies for the verbs' meanings (Frasinelli and Schulte im Walde 2019; Pijpops et al. 2021). These objects were then linked to the concreteness ratings provided in Brysbaert et al.'s (2014) dataset. Contrary to Booij's hypothesis, binomial logistic regression analyses revealed no significant difference in concreteness between SCVs and ICVs, suggesting that concreteness is not a distinguishing feature of separability in Dutch compound verbs.

Second, a forced-choice experimental task with nonsense verbs has further investigated the semantics of separability. In this experiment, about 100 university students were presented with sentences containing either abstract, concrete, resultative or non-resultative meanings. Participants were asked to decide whether an SCV or an ICV

form of the verb fitted better in each given context. Mixed effects logistic regression models revealed a systematic relationship between concreteness and the verb's formal separability for the particles *om-* and *over-*. In contrast, for the particle *door-*, a significant correlation was found between resultativity and separability.

The findings of both studies, which shed new light on the semantics of Dutch compound verbs, will be the main focus of the talk.

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The non-finite -*ru* and three types of "S_1 *to* S_2" constructions with specific past-time reference in Japanese: With reference to their English counterparts

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Keywords

-*ru* forms, anteriority, temporal-sequence indicator *to*, private self, public self.

Abstract

Kuno (1973) divides the "S(entence)$_1$ *to* S(entence)$_2$" construction in Japanese into the "general/habitual state" type, e.g., (1)—where *to* serves as conditional marker—and the "specific past-time reference" type, e.g., (2)—where *to* serves as temporal-sequence indicator (Hasegawa 2015). However, the latter type seems too complex to form a single category. Careful examination reveals that it can be distinguished into at least three sub-constructions: the "sequence" type, which suggests a sequential relationship between S_1 and S_2, e.g., (3); the "trigger" type, which requires S_1 to be a specific cause/trigger for S_2, e.g., (4); and the "discovery" type, in which S_2 describes the scene that the observer finds out after S_1 is over, e.g., (2). An argument for this sub-division is their different behaviors in "paraphrase". The "sequence" type can be paraphrased into "S_1 {-*te (kara)/-ta ato*} S_2", which imply "before-after" relationships; the "trigger" type into "S_1 -*ta* {*node/kara*} S_2", which imply "cause-effect" relationships; and the "discovery" type into "S_1 (-*te mi*)-*ta toki* S_2" (cf. Maeda 2009), which imply "perception-and-recognition" relationships. This sub-division is also supported by the fact that their English counterparts tend to be described by different expressions, as in (5), (6), and (7), which are English translations of (2), (3), and (4), respectively: in the "discovery" type (5), expressions with verbs of perception/cognition (e.g., *see*) in S_1; in

the “sequence” type (6), “S_1 *and* S_2”; and in the “trigger” type (7), “*when* S_1, S_2”. In these English cases, the past forms are required in both sentences (if finite).

Meanwhile, the three sub-constructions share a common characteristic: The *-ru* form in S_1 expresses anteriority relative to the time of S_2 as reference time. This challenges the most prevailing position in Japanese tense theory, where *-ru* usually denotes non-anteriority/non-pastness.

Few studies have considered these points in detail. This study therefore aims to explain (i) how the anteriority reading of the *-ru* in S_1 comes about, (ii) why the English counterpart of the *-ru* in S_1 is past tense, and (iii) what is the interpretation mechanism of the three sub-constructions, by adopting the comprehensive theory of tense interpretation pursued by myself (Wada 2013, 2019, 2021), which has been shown to explain a variety of tense phenomena of finite and non-finite forms in English and Japanese from a functional-cognitive perspective. As for (i), assuming with Mihara (2015) and Tagawa (2019) that Japanese has the non-finite *-ru*, I claim that this *-ru* form is non-finite and indicates anteriority relative to the reference time due to the interaction of its non-finite nature with the characteristics of the situation/aspect type and the sequentiality represented by *to* as temporal-sequence indicator. (ii) is explained by the different temporal structures of English and Japanese tense forms motivated by English as public self (the subject of communicating)-centered language and Japanese as private self (the subject of thinking/consciousness)-centered language (Hirose 2015, 2024). (iii) is explained by the “proposition-internal” relationship between S_1 and S_2, the different positioning of the private self and public self involved, the different temporal structures represented by finite *-ta*/*-ru* and non-finite *-ru*, and the context.

(1) Kono ie-wa, natsu-ninaru to totemo atsu-i.

this house-Top summer-become conditional marker very hot-Pres

‘When it becomes summer, this house is very hot.’ (Kuno 1973)

(2) Ken'on-o sumase-te oki-te-miru

temperature check-Acc be.done-Ger get.up-Ger-see.Aux

to komakai yuki-ga furi-dashi-tei-ta.

temporal-sequence indicator (TS) fine snow-Nom fall-start-Asp-Past

(3) … putto fukidasu to isoide de-teit-ta.

burst.out.laughing TS in a hurry go.out-Asp-Past

(4) …kimatta-to kiku to kyūni damarikon-de-shimat-ta.

decided hear TS suddenly fall.silent-Ger-Asp-Past

((2)-(4): *Kusa no Hana*)

(5) We got up after our temperatures had been taken and saw that a fine snow was falling.

(6) The nurse stared at him, chuckled, and rushed out.

(7) … and nobody said another word when it turned out the matter had been decided.

((5)-(7): *Flowers of Grass*)

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Dialogic Resonance: A Cognitive Linguistic Perspective on Interactive Meaning-Making

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Keywords

dialogic resonance, frame, conceptual blending, discourse analysis

Abstract

Dialogic resonance refers to the phenomenon in which linguistic and conceptual elements of one utterance echo, align with, or transform those of another, contributing to interactive meaning-making in dialogic contexts. While resonance has been studied in social and functional linguistics and conversation analysis (Du Bois, 2014; Poldvere et. al. 2021; Tannen, 1989), its cognitive foundations remain underexplored. This study employs a cognitive linguistic framework to examine how resonance emerges from dynamic interactions between cognitive processes and linguistic structures, shedding light on the interplay between individual mental construals and collective meaning construction.

Central to this investigation is the integration of dialogic syntax theory (Du Bois, 2014) with cognitive linguistic models such as conceptual blending (Fauconnier & Turner, 2002) and mental spaces theory (Fauconnier, 1994). These perspectives frame resonance as a process of mental alignment facilitated by linguistic cues such as repetition, reformulation, and paraphrasing. This study analyzes naturalistic conversational data (English dialogue from https://talkbank.org/ and Chinese dialogue from https://bcc.blcu.edu.cn/) to identify patterns of resonance and explores the mechanisms that enable speakers to negotiate shared perspectives, construct intersubjectivity, and co-create meaning in real time.

The findings reveal three primary cognitive mechanisms underpinning dialogic resonance:

1.Frame Alignment: Resonance often involves the activation and alignment of overlapping conceptual frames (Fillmore, 1982), enabling speakers to establish common ground.

2.Conceptual Blending: By blending elements from multiple mental spaces, interlocutors generate emergent meanings that extend beyond the individual contributions of either participant (Fauconnier & Turner, 2002).

3.Cognitive Entrenchment and Accessibility: Repeated structures and patterns within dialogic interaction become entrenched, enhancing their cognitive accessibility and facilitating resonance (Langacker, 2008).

These mechanisms illuminate how linguistic forms act as scaffolding for the negotiation of meaning, while cognitive processes operate as the driving force behind this negotiation. The study also situates resonance within broader discussions of intersubjectivity (Zlatev et al., 2008) and linguistic creativity, proposing that resonance serves as a key site for the emergence of novel meanings and linguistic innovation.

Implications of this research extend to several domains. In second language acquisition, understanding how resonance facilitates the co-construction of meaning can inform pedagogical approaches emphasizing dialogic interaction. In discourse analysis, the study provides tools for identifying and interpreting resonant structures within complex conversational exchanges. Moreover, the findings contribute to cognitive semantics by highlighting the role of interaction in shaping conceptualization and meaning construction.

This research bridges cognitive linguistics and dialogic theory, proposing dialogic resonance as a vital lens for understanding the cognitive and interactive dimensions of language use. By combining theoretical insights with empirical analysis, the study underscores the value of interdisciplinary approaches to exploring language as both a cognitive and social phenomenon.

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Viewpoint shifts and mental spaces in academic discourse

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Keywords

viewpoint shifts, mental space, academic discourse, engineering.

Abstract

Fauconnier (1985) developed the notion of mental spaces, which captures the dynamic creation of conceptual structures during language processing. In the present study, we use the concept of mental spaces to analyse the dynamic interaction between discourse, culture and cognition. Previous literature has explored mental spaces in narrative discourse and fictive interaction (e.g., Pascual, 2008; Krieken & Sanders, 2019). In this study, we analyze research articles with respect to shifts in mental spaces in order to understand how, within the conventional constraints of a particular discipline, the writer creates a series of mental spaces that manipulate the attentional focus of the reader. These shifts in mental spaces help guide the reader through the intricacies of the research being described.

The macro-structure of research articles, that is, the division into sections appropriate for each discipline or sub-discipline, can be seen as representing large-scale codified shifts in mental spaces. At this level, the author has to construct their narrative according to certain cultural norms. Within a section such as the Introduction or Methodology, however, it is up to the author to construct a discourse with a coherent sequence of indicators of mental spaces and mental space shifts to facilitate understanding on the part of the reader.

For this research, we analyze shifts in mental spaces in the Introduction, Methodology, Results & Discussion (R&D), and Conclusion sections of 100 Engineering research articles. To identify shifts in mental spaces, we first look for changes in verb tense or realis/irrealis as indicators of a mental space shift. We pay particular attention to finite verbs since, in Cognitive Grammar, they function as the primary means of grounding propositions in reality and establishing temporal reference points (Langacker, 2008). This grounding function makes finite verbs especially relevant for tracking shifts in mental spaces. We then scan the previous text to locate any other markers of mental space shifts, including adverbial phrases, evidentials, conjunctions, adverbs, and pronouns. If one of these categories is present, we take that to be the marker of the new mental space. Given this methodology, we can then provide a picture of the construction of mental spaces within the different sections in the Engineering research articles. Our findings reveal, for example, that viewpoint shifts occur most frequently in the Conclusion and least frequently in R&D.

Interestingly, this cognitive perspective contrasts with the typical rhetorical move analysis structure, which shows R&D to be more complex than the Conclusion (Le et al.,

2023). Exploring this cognitive dimension provides new theoretical and methodological insights into how academic discourse is structured in terms of mental spaces and viewpoint shifts.

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Conceptual and phonological overlap in signed languages

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Keywords

signed language, cognitive grammar, discourse,
Brazilian Sign Language, Argentine Sign Language.

Abstract

In his short story *Funes, the Memorious*, Jorge Luis Borges tells about a man for whom each scene in his life was perceived as a unique and unitary experience. As a result, he wanted a single word to express every unified experience. But language cannot provide a fixed, unitary expression for every conceivable situation. Language requires speakers and signers to break up holistic experiences into parts and then assemble the parts into an expression following the conventions of their language. This requires knowing how the elements in each part correspond to elements in the other parts. These correspondences between parts represent conceptual overlap. In saying *Me gusta el vino tinto* we know that the unspecified or schematic elements in the verb correspond to the specified nominal arguments, *me* and *el vino tinto*.

In this paper we will explore conceptual overlap in two signed languages. Our data comes from natural discourse in Brazilian Sign Language (Libras) and Argentine Sign Language (LSA). Our analysis relies on theoretical constructs derived from cognitive grammar, which posits just three core elements: semantic structures, phonological structures, and symbolic structures which are associations of the first two (Langacker, 2008). Signed languages use symbolic structures called Places (Wilcox & Occhino, 2016) to express nominal grounding (Martínez & Wilcox, 2019), to conceptualize space in signed discourse (Wilcox, Martínez, & Morales, 2022), and to express list constructions (Wilcox, Xavier, & Siltaloppi, 2023).

We demonstrate the use of Place in conjunction with another ubiquitous conceptual phenomenon called reference points (Langacker, 1993). We also rely on the concept of placing (Clark, 2003): locating a sign at location in space to either create a new or recruit an existing Place. We show that a common way signed languages express conceptual overlap is with phonological overlap: placing signs at the same spatial location. Our data shows how this functions to establish nominal referents and discourse topics, create associations among referents, and structure the flow of information. Finally, we offer an account of so-called agreement as a type of conceptual overlap expressed by phonological overlap. A currently popular account of agreement in signed languages proposed that these expressions consist of “fusions” of language and gesture (Schembri et al., 2018). Our account relies solely on linguistic elements and is shown to

be compatible with that of agreement as multiple symbolization (Langacker, 2008), and with accounts offered by Croft (2013) and Kibrik (2019).

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Terms as Tools of Remapping Conceptual Domains in Old English

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Keywords

translation and cognition, Old English, terminology, semantic mapping, loans, calques.

Abstract

In spite of the fact that the vocabulary of Old English, being vast but limited, is generally well described (Hogg 2002, Kastovsky 2005, etc.), some of its units require a deep investigation as for their semantic and pragmatic aspects. This paper focuses on conceptual domains 'Grammar' and 'Natural Sciences' appearing in late Old English due to the spread of scientific treatises, caused by the Benedictine reform. Concepts forming these domains get expression by means of foreign and calqued terms, often duplicative.

Applying the idea and principles of semantic mapping (Haspelmath 2003, François 2008, Georgakopoulos et al. 2021) to terms revealed in Old English scientific prose (Ælfric's Grammar (1880), Ælfric's "De temporibus anni" (2009) (a translation of Bede's treatise "De natura rerum") and Byrhtferth's Manual (1929)), we consider their origin, structure, and distribution in the texts. While Latin terms appearing in the treatises as single code-switches remain in fact on the periphery of the Old English lexical system, their Old English equivalents – semantic and morphemic calques suggested by Anglo-Saxon scholars – fill the newly formed domains. Of these two kinds of calques, the semantic ones are of more interest as they display interaction of non-similar meanings in their structure, which can be characterized as colexification (the term borrowed from (François 2008)).

Differentiating the phenomena of polysemy and colexification, we understand the former as a natural diachronic process leading to the apparition of secondary (metaphorical, metonymical, etc.) meanings in the lexico-semantic structure of the word. Unlike polysemy, colexification should be viewed synchronically as the ability of the word to combine distinct senses, that is, have non-similar referents. It should be borne in mind that new terminological meanings do not develop in the lexico-semantic

structure of the words under study but rather are attributed to them. This deliberate attribution, or charge, can be identified in terms of sociolinguistics as a kind of change from above (Labov 2006 [1966]).

Contrasting terminological and non-terminological meanings of calques in the treatises reveals intricate interaction of conceptual spheres that had existed in previous periods and those that were formed due to Latin – Old English cultural transfer. While morphemic calques, being monosemantic, belong to only one domain, semantic calques displaying colexification enter different domains, e.g. 'Community' and 'Grammar' (OE *cynn* (Lat. genus) "folk, tribe" and "grammatical gender") or 'Physical impact' and 'Prosody' (OE *sweg* (Lat. accentus) "stroke" and "accent"). Further development of English terminology (in particular, loss of Old English calques of all kinds and their substitution by Latin or French loans) led to the formation of new concepts and their regrouping. It allows us to claim that terms, in accordance with their origin, semantics, and morphemic structure, can be a powerful tool of remapping conceptual domains.

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A Diachronic Cognitive Study of the Chinese-Japanese Homograph “心中”/「心中」 Based on Distributional Semantics

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Keywords

homograph, 心中, Distributional Semantics, diachronic cognitive study, cultural difference.

Abstract

Chinese-Japanese homographs are a distinctive cross-language phenomenon where the same kanji may share identical meanings, overlap or diverge entirely (Okochi, 1992), for instance, “普通”/「普通」, “手纸”/「手紙」 and “无理”/「無理」.

This study focuses on the overlapping homograph “心中”/「心中」(*xinzhong*, “in the heart”). Derived from “心” (*xin*, “heart”) , “心中” is typically a noun phrase representing either (i) in the physical organ or (ii) the emotional and intellectual aspects of mind (Arkadiusz et al., 2019). However, its usage diverges in Chinese and Japanese. In Chinese, “心中” refers primarily to the emotional and intellectual aspects of mind (Example 1), whereas in Japanese, it had also developed the meaning of “suicide” (Example 2).

(1) Chinese example

a. 有一件事，他**心中**想起来一直不安。

There was one thing that made him uneasy whenever he thought about it.

b. 看到这个标题，让我忍不住**心中**一喜。

When I saw this title, I couldn’t help but feel happy.

(BLCU Corpus Center)

(2) Japanese example

a. それを聞いて**心中**穏やかならざるものがあった。

Hearing it upset him.

b. 無理**心中**。

a forced double suicide

(『プログレッシブ和英中辞典』3rd ed.)

Why does “心中” tend to be associated with more abstract meanings in Chinese? What are the underlying factors behind its semantic evolution? Why did 「心中」 in Japanese extend to denote “suicide”? This study aims to explore the semantic changes in “心中”/「心中」 both within each language and across languages, through the theoretical framework of distributional semantics. Furthermore, the study seeks to uncover the cognitive mechanisms and socio-cultural factors that might have contributed to these shifts.

We employ quantitative computational methods to gather and analyze diachronic data from two corpora: (a) the BLCU Corpus Center (Chinese data); (b) the Asahi Shimbun Cross-Search (Japanese data). The time span for analysis covers the 1900s to 2010s, a period during which significant changes in the usage of “心中” are observable.

The study begins with time series analyse to identify and compare the usage trends of “心中” in both Chinese and Japanese. Subsequently, we perform a collocation analysis using Sketch Engine to examine the collocational relationships and strengths of “心中”, integrating with the trend changes further to see the detailed semantic changes. Finally, we conduct sentiment analysis to explore the emotional connotations of “心中” in both languages. Preliminary findings suggest that “心中” in Chinese tends to carry positive connotations (e.g. “心中充满了感动/爱/希望”, “be filled with emotion/love/hope”), whereas in Japanese, it predominantly carries negative connotations, such as in expressions like 「心中はV(ない)」 (*shinchuu* + Vneg) or 「一家心中」 (“a family in suicide”).

By combining these analyses, we aim to reveal how socio-cultural factors and cognitive differences have shaped the semantic evolution of “心中” in both languages. This study not only uncovers the dynamic nature of cross-linguistic homographs, but also provides a replicable paradigm for future diachronic studies of similar phenomena.

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An Experimental Study on Japanese and Chinese Action-Motion Multi-verb Construction and their event packaging conceptualization

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Keywords

Multi-verb constructions, Event Conceptualization, Japanese Converbal Complex Predicate, Chinese Serial Verb Construction, Action-Motion event.

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Abstract

This study experimentally examines multi-verb motion constructions in Japanese and Chinese, namely Japanese Converbal Complex Predicate (hereafter JCCP) and Chinese Serial Verb Construction (hereafter CSVC) that express an Action-Motion sequenced event, with a special focus on their conceptualization in event packaging. The goal is to provide empirical evidence for the isomorphism (Givón 1983) of language-concept mapping. I argue that the two languages exhibit common conceptual constraints that is related to their monoclausality, and highlight common conceptual constraints and language specific properties found through the experiments.

Background: Action-Motion JCCPs like (1) can be compared with Action-Motion CSVC like (2).

(1) Action-Motion JCCP (monoclausal)

Taroo	*wa*	*hon-o*	*kat-te*	*kaet-ta.*
Taro	TOP	book-ACC	buy-CONV	return-PST

'Taro bought a book and bring it home.'

(2) Action-Motion CSVC (monoclausal)

Zhāngsān	*mǎi*	*shū*	*huí*	*jiā*	*le.*
PN	buy	book	return	home	PRT

'Zhangsan bought a book/books and returned home'.

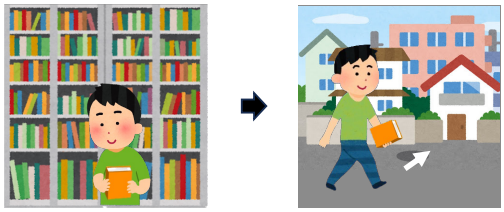
Both examples are monoclausal constructions that describe sequenced events (Matsumoto 1996 for JCCPs and Yin 2025 for Action-Motion CSVC). The Chinese directional complement construction, such as *mǎi-huí jiā* ('buy (something) and return home'), is not considered in this study. (1) is more restricted in the V1-V2 relation than (2) as it requires a visible connection between the two verbs. (1) implies that Taro is holding the purchased book when returning home, while such a connection is not required in (2).

Hypothesis: Action-Motion JCCP and Action-Motion CSVC exhibit similarities in conceptualization when disruptions in time, space, causal connection occur within the event.

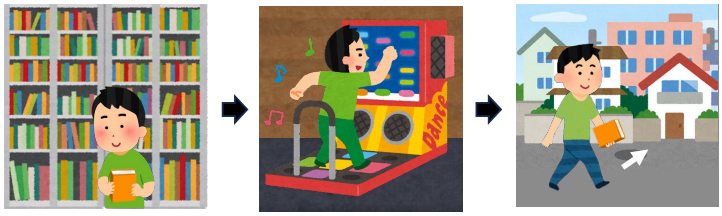
Experiment: In the experiments, 20 speakers of each language rated the appropriateness of using the textual stimuli like (1) and (2) to describe the pictorial stimuli (Figure 1) on a scale of 1 to 5 (1 = unacceptable, and 5 = perfectly acceptable). Three types of pictorial stimuli were used:

- Set A: a sequence of Action-Motion events without any disruptions on the continuity of the two events.
- Set B: spatio-temporal disruptions to the event (e.g., going somewhere else to perform an unrelated action between the two events).
- Set C: resultant nullification in the event (e.g., the result of the event of V1 is canceled before motion).

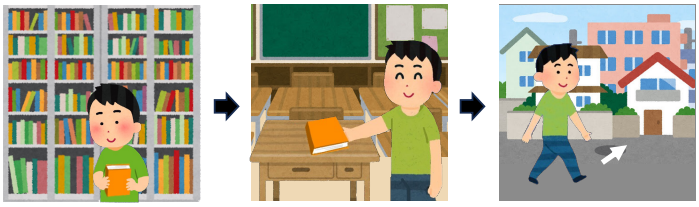
Figure 1. Examples of pictorial stimuli



Set A



Set B

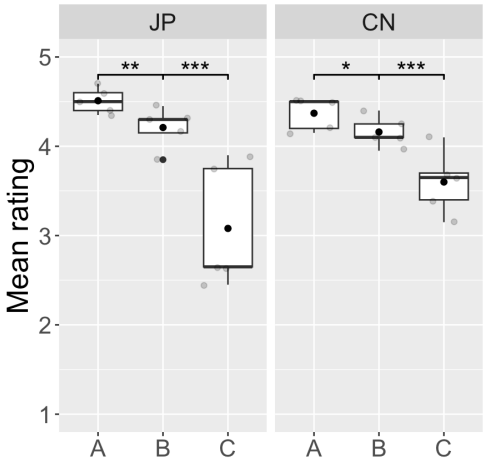


Set C

Among the 78 Japanese and 82 Chinese stimuli, 30 (15 in each language) were the focus of this study.

Results: Using a cumulative link mixed model (R, version 4.4.1, function "clmm()"), the results show significant differences between the sets in both languages (Figure 2). However, JCCPs were rated significantly lower than CSVCs in Set C (p=.01, <.05). A further breakdown shows that V1s that create visible results/effects, such as *motsu* ('become to hold') and *kiru* ('wear'), receive lower ratings than those where visible results/effects are not mandatory, such as *kau* ('buy').

Figure 2. Mean Appropriateness Ratings by Set in Japanese and Chinese



*Note. Significant level of p < 0.001 is denoted as '***', 0.001 ≦ p < 0.01 as '**', 0.01 ≦ p < 0.05 as '*'.*

Discussion: The hypothesis was supported by the results: Action-Motion JCCP and CSVC share similarities with respect to spatio-temporal and resultant continuity. However, JCCP was more sensitive to causal disconnection than the latter. This is due to the stricter requirements for the V1-V2 relation in JCCP. The less visible the results/effects are required by the V1, the higher the ratings.

Conclusion: This study revealed that both Action-Motion JCCP and CSVC exhibit cognitive constraints on spatio-temporal and resultant continuity of events, indicating a cross-linguistic unification of grammar-conceptualization correspondence on clausal level. The results also disclosed the visible connection between V1-V2 in JCCPs, suggesting a language-specific feature that calls for further investigation.

Glossary

ACC = accusative case particle
CONV = converb
PRT = sentence-final particle expressing the change of a new situation/state
PST = past tense
TOP = topic particle

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Iconicity and metaphor: why modified reduplication is associated with pejorativeness

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Keywords
cognitive phonology, metaphor, reduplication, iconicity, typology.

Abstract
The use of ablaut and rhyming reduplication to refer to negatively evaluated qualities such as pejorativeness and disorder has been attested in many languages (e.g. Abbi 1992, Armoskaite & Kutlu 2015, Benczes 2012, Leslau 1961, Thun 1963, van de Weijer et al. 2020, Yliniemi 2024). While Fischer (2011) attempts to explain pejorative meanings of reduplicated constructions through metaphorical and metonymic shifts, we suggest in this paper that pejorative meanings associated with ablaut and rhyming reduplication are motivated by the iconic potential of their phonological form, which we call modified reduplication (MRD). MRD subsumes ablaut and rhyming reduplication along with the rarer constructions where medial consonant is modified (1). All these constructions trigger the perception of two forms being almost but not exactly the same.

With data from more than 40 languages, we first demonstrate that MRD constructions crosslinguistically depict similar negatively evaluated, nonnormative, meanings (2). Then we offer two motivations for why that is the case. The first motivation is based on the iconic potential of MRD, which differs from full reduplication. While full reduplication is an icon of the notion 'more of the same', MRD is iconic with the notions 'more of similar but not identical' and 'deviation' (Yliniemi 2024). The first notion applies to sounds, items and locations, giving rise to depictions of duality/plurality of similar but not identical sounds (e.g. English *tick-tock*), items (e.g. Turkish *bulut-mulut* 'clouds and the like') and locations (e.g. Dzongkha [dzo] *pchamchim* 'scattered'). The second notion, "deviation", which is relevant for the discussion here, arises when two juxtaposed or adjacent phonological forms are perceived to be similar but not identical. One of the constituents, such as *flam* in *flimflam* 'deceitful nonsense', functions as a point of comparison, a norm, to which the other constituent, such as *flim*, is compared, with the result that the phonological form is an icon of deviation and so motivates meanings that express deviation from a norm (e.g. clear and truthful speech). Thus, nonnormative meanings may reveal cultural ideals (Yliniemi 2024). The iconic process is based on perception of similarity and difference, which is basic to human cognition (Simmons & Estes 2008: 781). The suggested iconic reading arises from comparing the overall structure of the two constituents, not individual sounds, as has been suggested (e.g. Jespersen 1942: 176).

The second motivation, which applies at least to some languages, is the two-sided conceptual metaphor stating that 'being in the same place or being joined is order and good function' and 'not being in the same place is disorder and dysfunction'. In the English clause *his drumming was all over the place*, for instance, being scattered is viewed as dysfunction. When MRD constructions depicting plurality of locations are interpreted through this metaphor, meanings expressing nonnormativity arise naturally. In many languages the same construction may depict both scatteredness and nonnormativity, e.g. Finnish *huiskin haiskin* 'scattered; carelessly (of work)', Lhomi (lhm) *phaŋsriŋ phuŋsriŋ* 'scattered (of items); inconsiderate speech'.

(1) a. Vowel modification

Finnish	*hujan hajan* 'higgledy-piggledy', *mullin mallin* 'topsy-turvy'
English	*flimflam* 'deceptive nonsense', *mish-mash* 'confused mixture'
Tibetan	*ka re ko re* 'devious way of speaking; dilly-dallying; crooked'

b. Modification of initial consonant:

Finnish	*hyrskyn myrskyn* 'in a scattered, confused state', *nurin kurin* 'topsy-turvy'
English	*hotchpotch* 'a confused mixture', *helter-skelter* 'involving disorder and confusion'
Tibetan	*'a la ma la* 'confused, unconnected, irregular', *zi ling bi ling* 'turbulent, noisy, disorderly, chaotic'

c. Modification of medial consonant

Mising (mrg)	*buzer bujer*	'pull something and spread it too much'
	luzer lujer	'say something and spread it too much'

(2) Constructions expressing nonnormative ways of speaking

English (eng)	*flimflam, fiddle-faddle, chit-chat, bibble-babble, mumbo jumbo*, *tittle-tattle*, *jibber-jabber*
Tibetan (bod)	*cab cob* 'ranting, nonsense', *cal col* 'idle talk', *nyag nyog* 'confused speech', *ldab ldib* 'tittle-tattle, idle talk', *mag gi mug ge* 'unclear, mumbling speech', *lab lob* 'meaningless talk, gossip', *shab shub* 'speak falsely; whisper' (Yliniemi 2024: 171, 237–238, 243, 247, 248, 251)
Denjongke (sip)	*pampom* 'inconsiderate speech' (Yliniemi 2024: 203)
Lhomi (lhm)	*phaŋsriŋ phuŋsriŋ* 'inconsiderate speech; scattered (of items)' (Yliniemi 2024: 214)
Assamese (asm)	*abɔ̃l-tabɔ̃l* 'blabbering' (Pathak et al. 2022: 90:6)
Duhumbi (cvg)	*dapadopo* 'garbled manner of speaking', *balabolo* 'insincere speech' (Bodt 2020: 280, 283)
Amharic (amh)	*kuri muri* 'nonsense, unintelligible talk' (Leslau 1961: 206)
Hungarian (hun)	*lárifári* 'nonsense/codswallop/bunkum' (Brdar et al 2023:19)
Norwegian (nor)	*vissvass* 'nonsense'
Udmurt (udm)	*mygyl'-magyl'* 'slurred, incomprehensible speech' (Piechnik 2023: 76)
Breton (bre)	*ha bardi ha barda* 'depiction of speaking unimportant language'

	(‘and *bardi* and *barda*’) (Jouitteau 2023: 297)
Basque (eus)	*tibiribiri-tibiribiro* ‘chattering away’ (Ibarretxe-Antuñano 2023: 318)

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How Verbs of Perception Come to Express “Understanding”? Variations and Mechanisms of Comprehension Usage in French and Japanese Verbs of Involuntary Audition

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Keywords

perception, inference, comprehension, fictivity, synecdoche.

Abstract

In multiple languages, instances can be observed where the concept of “understanding” is expressed with verbs of perception (e.g. *I see* in English, *Je vois* in French) (cf. Sweetser 1990). From a cognitive linguistic perspective, perception involves engaged cognition, where the conceptualizer (A) interacts with the external world through their simulation (A’), whereas understanding corresponds to disengaged cognition, where the conceptualizer lacks external engagement (cf. Langacker 2008: 535-539).

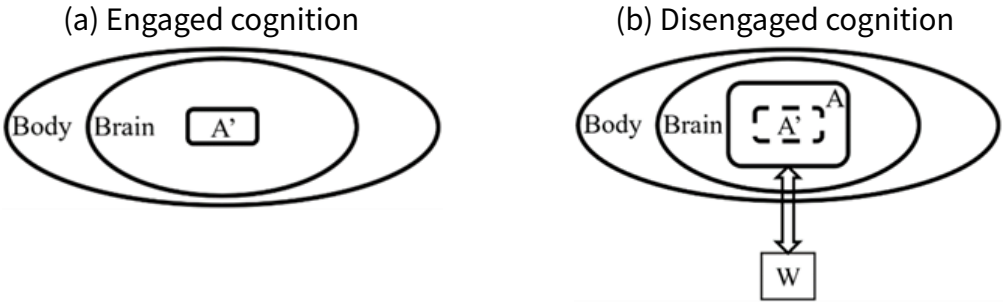

Figure 1. Engaged Cognition and Disengaged Cognition (cf. Langacker 2008: 535)

However, the mechanism by which these contrasting cognitive types are expressed using the same verb of perception remains unexplained. Previous research (e.g. Soga 2010, Lacassain-Lagoin 2015) has analyzed the inference usage of perception verbs in French, particularly the involuntary audition verb *entendre* (e.g. (1)). Similarly, in Premodern Japanese, the involuntary audition verb *kikoeru* conveys not only inference

but also general comprehension usage (e.g. (2)) and conviction usage (e.g. (3)) (cf. Nakamura et al. 1984).

(1) J'*entends* que les enfants sont rentrés. (Soga 2010: 4)
"I hear the children coming back."

(2) [...] *kikoe*-nu koto-domo ī-tsutsu yoromeki-taru [...] (*Tsurezuregusa*, Section 175)
"[A drunken old priest] is babbling nonsensical things and staggering around [...]"

(3) Mumu *kikoe-ta*. (Chikamatsu Monzaemon (1722) *Shinjū Yoi Kōshin*, Vol. 1)
"Hmm, I see."

This study uses examples of verbs of involuntary audition in French and Japanese to demonstrate the following: [1] Inference, as an approximate form of understanding, serves as an intermediary between perception (engaged cognition) and understanding (disengaged cognition). [2] The general comprehension usage emerges from inference through synecdoche, illustrating a transition from engaged cognition to disengaged cognition.

For [1], the study analyzes contemporary data (20th-21st centuries) from the *FRANTEXT* corpus (ATILF) for French and the *Balanced Corpus of Contemporary Written Japanese* (National Institute for Japanese Language and Linguistics) for Japanese. For [2], diachronic data (8th-20th centuries) is analyzed using the *Corpus of Historical Japanese* (National Institute for Japanese Language and Linguistics).

The results indicate the following: for French, the verb *entendre* conveys inference meaning in 28.04% of instances through finite complement clauses such as *que*-clauses (e.g. (4)), but in 71.96% of instances, it is expressed through similative constructions like *comme si* (e.g. (5)).

(4) [...] avec le son d'ambiance, souvent on *entend* qu'elles sont plusieurs dans la même pièce, [...] (Matthieu Luzak (2021) *Poudre blanche, sable d'or*)
"[...] with the ambient sound, you can often hear that there are several of them in the same room, [...]"

(5) Il *entendait* dans la pièce des chocs rythmés, comme si on tapait avec un bâton sur un sac rempli d'eau. (Alexis Jenni (2011) *L'Art français de la guerre*)
"He heard rhythmic thuds in the room, as if hitting a water-filled sack with a stick."

Similarly, in Japanese, the verb *kikoeru* frequently employs similative expressions such as the auxiliary verbs *yōni* or *mitaini* to express inference (e.g. (6)).

(6) [...] kuruma-ga yorokonde-iru yōni (enjin-no oto-toka-de) *kikoe-ru* [...]
(Anonyme (2005) Yahoo! Chiebukuro)
"I hear the car sounding happy from the engine noise and such"

In Japanese diachronic data, the inference usage of *kikoeru* appears in the 10th century. According to the *Japanese Dictionary of National Language*, the general comprehension usage emerges in the 11th century (as seen in *Genji Monogatari*) ; however corpus data shows that it appears in the 13th century and reaches its peak frequency in the 17th century. The conviction usage emerges in the 17th century and peaks in the 18th century.

The use of similative constructions to convey inference in both languages aligns with Langacker's observation that "simulation is always attenuated relative to engaged experience. Because it is not driven by immediate perceptual input, or harnessed to actual motor activity, it lacks the intensity or vividness of such experience" (Langacker 2008: 536). In the cases studied, the conceptualizer uses auditory stimuli to perform inference, which can be regarded as a form of auditory understanding. Furthermore, the diachronic evolution of the verb *kikoeru* in Japanese demonstrates that inference, as approximate understanding, undergoes super-schematization and instantiation (cf. Kuroda 2007), giving rise to synecdochic meanings. These meanings eventually generate general comprehension and conviction usages, unrelated to auditory stimuli.

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A crosslinguistic exploration of the role of food label overlaps in flavour perception

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Keywords

gustatory processing, flavour perception, food labels, multimodal integration, label-feedback hypothesis, linguistic relativity, taste sensation.

Abstract

Do people's native languages differentially affect their taste sensation? Previous research has reported language-specific effects not only on visual processing (Lupyan et al., 2020) but also on auditory perception (Dolscheid et al., 2013), olfactory categorisation (Vanek et al., 2021), and tactile discrimination ability (Miller et al., 2021). A hitherto less explored sense from a crosslinguistic perspective is taste. Within-language studies documented labeling effects on flavour expectations (Yeomans et al., 2008) and on activating gustatory brain regions (Grabenhorst et al., 2008), jointly suggesting top-down language-induced modulations of taste processing. This idea was extended in Bylund et al. (2024), who examined if crosslinguistic differences in the lexicalization of edible bulbs (*garlic/onion* are lexically distinct in English, but *hvitløk/løk* lexically overlap in Norwegian) differentially affect taste similarity ratings. No language effect was found in ratings, possibly because a few pungent and spicy food stimuli may have overridden language-driven biases.

Substantially broadening the flavour range to 32 samples, the present study used two experiments to investigate if language-specific overlaps in food labels affect native speakers of English and Mandarin in their similarity ratings and taste categorisation. In Experiment 1, Mandarin and English native speakers (N=20/group) were tested to see if linguistic encoding exerts language-induced biases in food similarity ratings. To illustrate, in Mandarin, *cherry* (樱桃/literally 'baby peach') and *peach*/(桃) share the character '桃', whereas *cherry* and *peach* are lexically distinct in English. In contrast, *apple* and *pineapple* share the morpheme "apple" in English but they do not overlap in Mandarin 苹果 (apple) and 菠萝 (pineapple). If label overlaps warp gustatory perception, we expected biases in Mandarin speakers to judge flavours with character overlaps as relatively more similar.

Participants rated flavour similarity of 16 food pairs with overlaps in one of the languages (e.g., *cherry-peach*, *apple-pineapple*) and 16 pairs without overlaps (e.g., *peach-apricot*, *apple-banana*) from 1 (extremely different) to 8 (extremely similar). For mixed effects analyses, ratings of critical trials were subtracted from ratings of control trials. Familiarity and pleasantness ratings (1-8) per item were also collected to check individual differences on these levels. In Experiment 2, different groups of Mandarin and English speakers (N=20/group) were given 24 triplets of food samples (e.g.,

apple/banana/pineapple) to perform ABX categorisations. We predicted more frequent apple-pineapple-like categories and less frequent peach-cherry-like categories in English than in Mandarin speakers. As additional manipulations, we also co-presented correct/false/pseudo labels with the corresponding food samples to test if Label Type affects gustatory processing similarly to visual processing (Lupyan, 2012).

Contrary to predictions, language-specific overlap types did not significantly affect either similarity ratings (β=-0.02, *SE*=0.07, p=0.77) or categorisation patterns (β=-0.01, *SE*=0.17, p=0.42). No significant effects of Label Type emerged, either on similarity ratings ($x2$(25)=0.23, p=1) or on categorisation patterns ($x2$(25)=5.44, p=1). Our findings corroborate those of Bylund et al. (2024). We interpret them as an absence of top-down linguistic modulation of chemosensory signal processing and label priming. Aligning with the conference theme, we also draw implications for prominent theories that bridge culture and cognition.

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Metaphor in legal translation: Conceptualising human rights in English and Lithuanian

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Keywords

metaphor, legal discourse, translation, English, Lithuanian.

Abstract

Legal discourse, often treated as rigorous and formulaic, is very abstract and inevitably metaphorical (Gibbs 2018). Previous research in the metaphoricity of legal discourse has demonstrated preferences given to one or another metaphor depending on a branch of law, type of discourse (spoken or written), and some other factors. For example, when discussing copyright matters, the metaphor of parasites (Loughlan 2006) is frequent. In company law, object and person metaphors prevail (Twardzisz 2013).

Human rights, a sensitive topic in legal and non-legal settings, in metaphor research, has so far received limited attention (but see Mannoni 2022). Cross-linguistic aspects of metaphoricity of legal discourse have been touched upon discussing specific topics or genres, such as money laundering (Šeškauskienė et al. 2016), legal academic discourse (Urbonaitė 2017), or translating legal terms (Järve & Kerremans 2023).

The present paper focuses on the metaphoricity of human rights in English and Lithuanian. The investigation is based on a corpus of ca 100,000 words in English and approximately the same number of words in Lithuanian. The corpus consists of the publication *Handbook on European Non-discrimination Law* (2018), jointly produced by the European Court of Human Rights and the European Union Agency for Fundamental Rights. The publication has been translated into all official EU languages, including Lithuanian. The text is not legally binding but is an important educational source for law professionals.

The research methodology is based on cognitive linguistic principles, including the Conceptual Metaphor Theory (Lakoff & Johnson 1980/2003) and its further development. The procedure consisted of four steps: 1) extracting concordances with

the word *right(s)* with the help of AntConc software (Anthony 2024); 2) identifying metaphorical and non-metaphorical combinations relying on the main principles of Metaphor Identification Procedure especially the step concerned with the identification of the basic meaning (Pragglejaz Group 2007; Steen et al. 2010) and the notion of a metaphorical pattern (Stefanowitch 2006), consisting of a target domain word combined with a source domain word in the text; 3) manually extracting Lithuanian equivalents for English metaphorical patterns, and 4) identifying coinciding and differing metaphorical patterns, and interpreting them. For the last step, the model employed by Šeškauskienė & Urbonaitė (2018) was used. The model helps identify if the metaphors in the two languages are preserved, and if so, whether the same source domains are maintained.

Preliminary results demonstrate that English is more prone to the metaphoricity of human rights. The tendency to employ (valuable) object and person metaphors in both languages seems to confirm previous findings. However, there are rather subtle differences, e.g. rights conceptualised as a measurable object/material is characteristic of English and not identified in Lithuanian.

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Three Exemplar-Based and Constructional Semantic Representations: a confirmatory and exploratory approach to Adverbial Adjectives in Brazilian Portuguese

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Keywords

adverbial adjectives, semantics, exemplar theory, usage based construction grammar, constructional architecture.

Abstract

The objective of this research is threefold: firstly, to analyse the semantics of adverbial adjectives (AAs) in Brazilian Portuguese; secondly, to identify their structural representation; and thirdly, to verify the psychological reality of this representation. In the following examples, it is evident that the adverb in (1a) appears to be semantically interchangeable with other modifiers, namely (1b) an adverb with the suffix -mente, (1c) a prepositional adverb, and (1d) a gerundial adverb.

1. a) Ele fala rápido. (He speaks fast.)
   b) Ele fala rapidamente. (He speaks quickly.)
   c) Ele fala com rapidez. (He speaks at a fast pace.)
   d) Ele fala correndo. (He speaks in a rush.)

However, AAs also exhibit unique semantic and formal properties, as illustrated in the following examples:

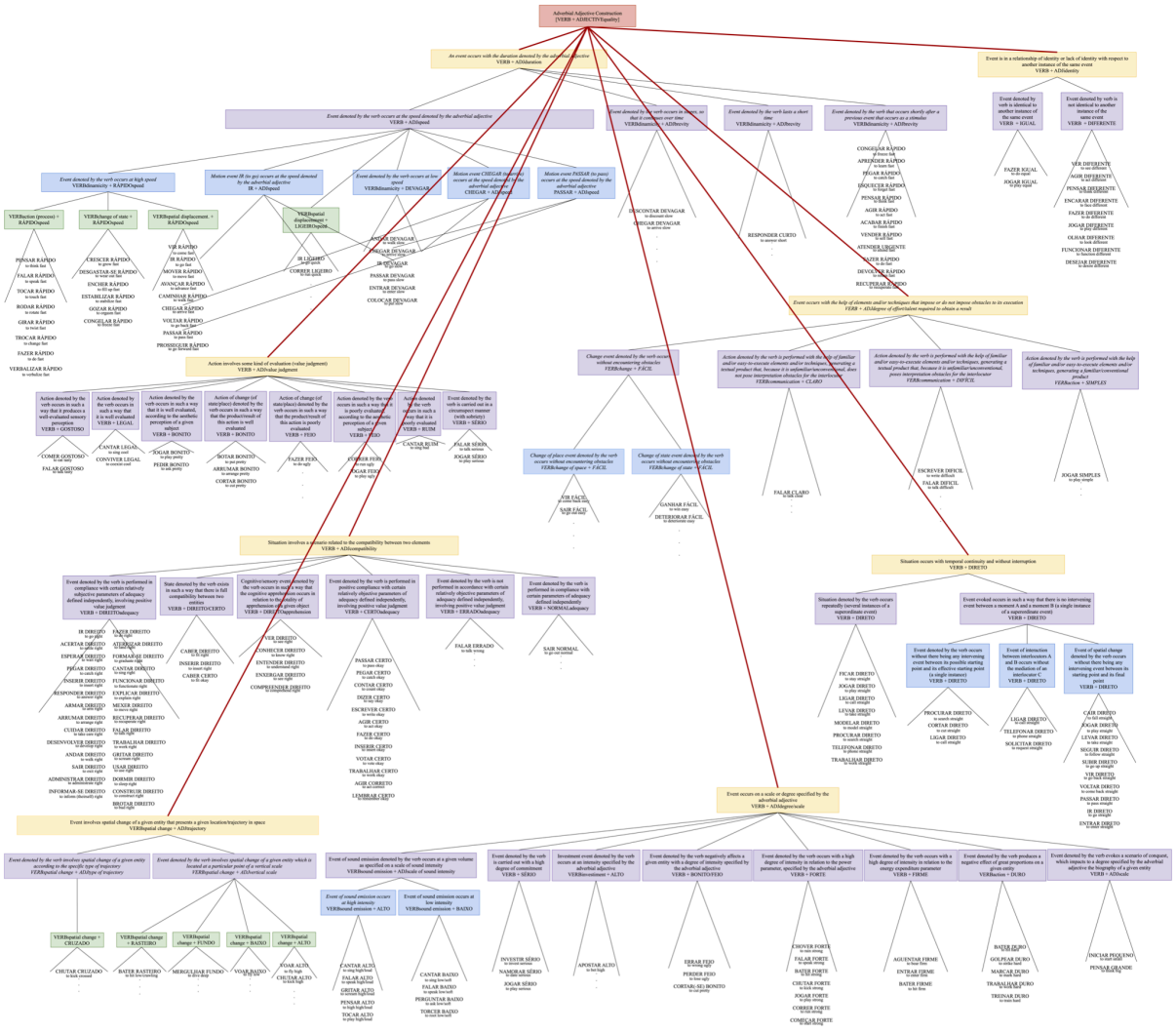
2. a) Ele fala bonito. (He speaks beautifully.)
   b) *Ele fala bonitamente. (*He speaks prettily.)
   c) *Ele fala com beleza. (*He speaks with beauty.)
   d) *Ele fala embelezando. (*He speaks beautifying.)

The given sentences demonstrate that, whilst AAs and other adverbial forms can be interchangeable in some contexts, they remain distinct in others. In accordance with the theoretical assumptions of Usage-based Construction Grammar (Diessel, 2015; Goldberg, 2006, 2013; Bybee, 2010, 2013) and Exemplar Theory (Bybee, 2005; Bybee & Eddington, 2006), we hypothesised that these similarities and differences are reflected in linguistic representation through an intermediate level of semantic classes, and these semantic classes license adverbial items.

In order to test this hypothesis, data was collected from four Linguateca corpora and 280 utterances containing AAs were analysed. In this preliminary phase, an analysis was conducted of the qualitative and interpretative aspects of the data through introspection. The initial analysis revealed distinctions between constructions in terms of frequency and the combinations of lexical items filling the adverbial slot. In the course of developing a constructional architecture, various levels of schematicity were identified, encompassing eight intermediate-level semantic classes that define distinct constructions: The factors under consideration are as follows: duration, degree of effort/talent, trajectory, degree/scale, evaluation/value judgement, identity, conformity, and temporal continuity (see Figure 1).

Figure 1

Proposed AA architecture based on qualitative-interpretative analysis of the corpora data



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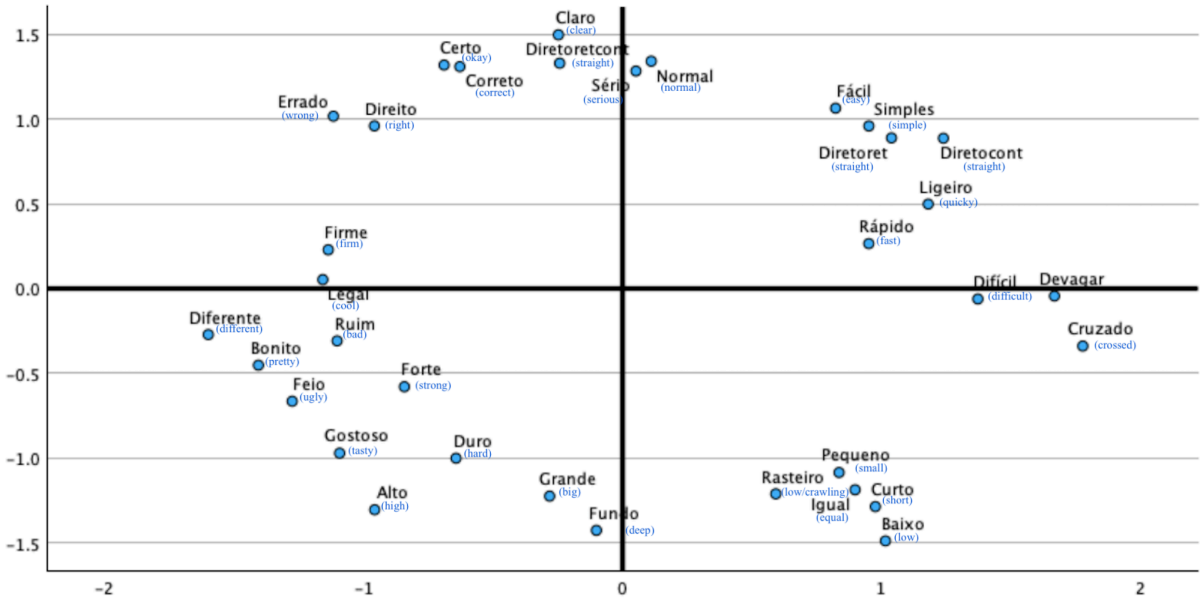
In order to assess the psychological reality of this representation, a semantic proximity judgment experiment was conducted with 100 native speakers of Brazilian Portuguese. The results indicated two possible ways of semantically grouping AAs: (1) three to five clusters in a two-dimensional representation (see Figure 2 in the PDF) and (2) seven clusters in a three-dimensional representation (see Figure 3 in the PDF). The five semantic groups identified in the 2D representation manifested overlapping clusters, thereby suggesting the presence of shared meanings across categories: The following factors must be taken into consideration: identity/conformity, absence of obstacles/interruptions, presence of obstacles/interruptions, degree of distance, and degree/scale of evaluation.

Figure 2

The distribution of adverbial items in the AAC experiment



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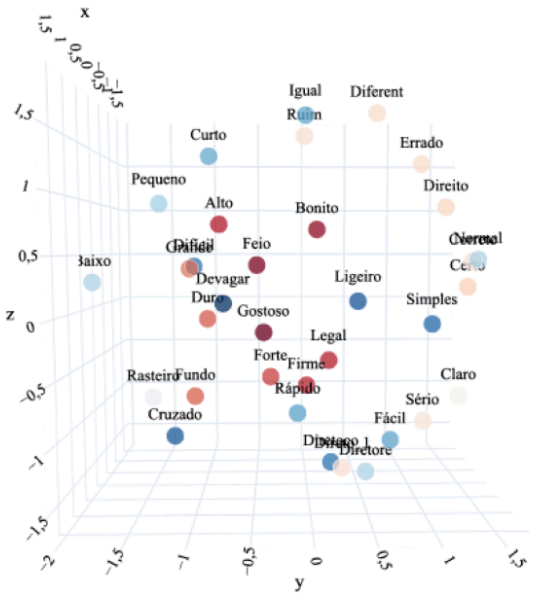
In contrast, the seven semantic groups in the 3D representation formed well-separated clusters, categorised as Compatibility/Identity, Evaluation of Interpretative Techniques, Interaction with Space/Time, Absence of Obstacles, Brief Relational Distance, Evaluation/Value Judgment, and Degree/Scale of Intensity/Dimension.

Figure 3

Each face from the 3D experimental representation of adverbial adjective items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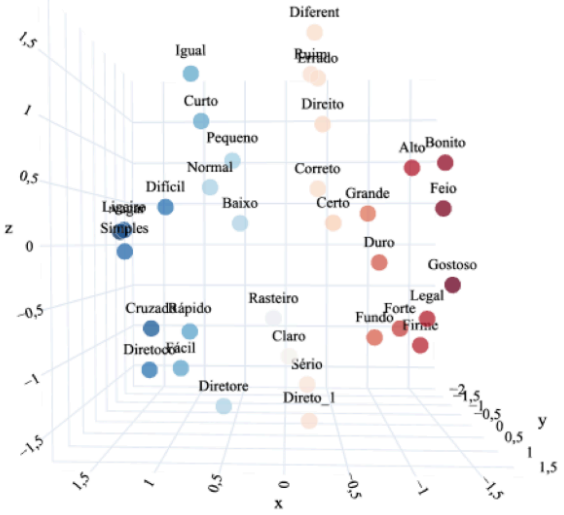
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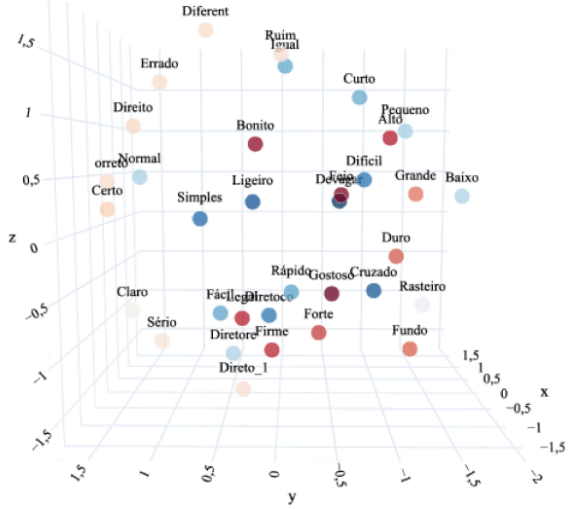
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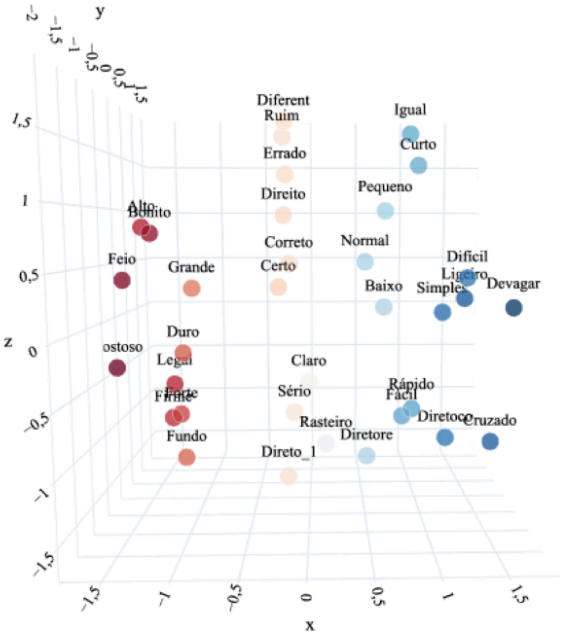
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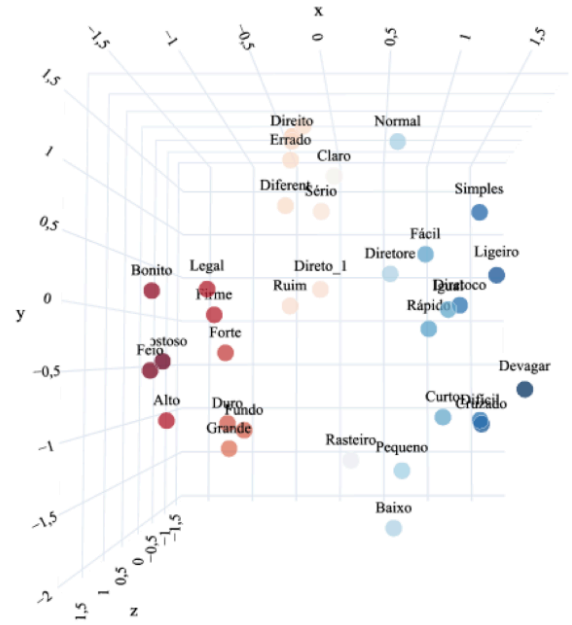
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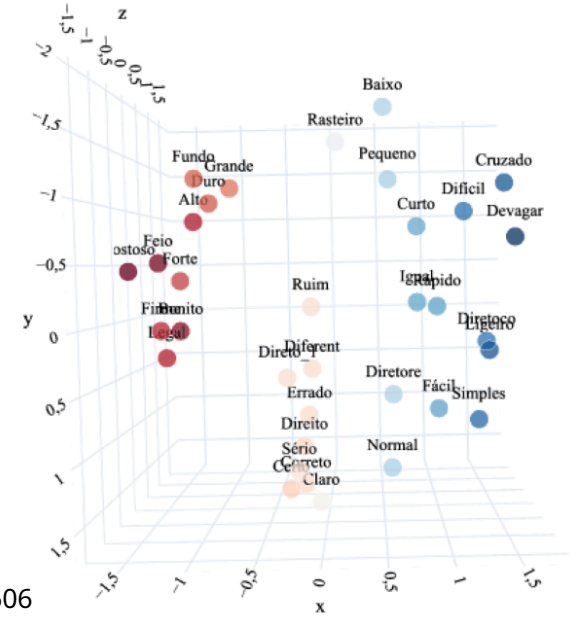
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Note. In order to interact with the three-dimensional representation or to achieve a higher resolution of it, please click on the link: sites.google.com/view/smadelino/mestrado/architecture-representations?authuser=1#h.diy8kpq3e0ff

The findings demonstrate that the architecture of AAs consists of a restricted number of semantic classes that influence the selection and licensing of adverbial items, particularly those expressing gradation, compatibility, and value judgement. Furthermore, the qualitative-interpretative analysis yielded a more detailed representation than the quantitative experimental analysis. With regard to the experiment, the 3D representation was found to be more effective than the 2D representation in capturing semantic structure, due to its superior capacity to account for spatial relationships. This study makes a significant contribution to the field of experimental models of linguistic representation and semantic classification in the study of adverbial adjectives.

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Social distribution of figurative language in the female Uruguayan population

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Keywords

Cognitive Metaphor, Cultural Immersion, Age, Residence, Figurative Language.

Abstract

People use figurative, non-literal language to enhance cooperation and efficiency in communication (Gibbs, 1994). Figurative or non-literal language can take various forms, including similes and metaphors. Since Lakoff and Johnson (1980) suggested that our conceptual system is metaphorical, and other authors proposed that metaphors are an essential part of human cognition through time (Bowdle & Gentner, 2005; Kövecses, 2005), the universality, cultural variation, and variety of foundations of conceptual metaphors have been widely documented, evidenced, and debated by psycholinguists, sociolinguists, and cognitive linguists. The present research aimed to capture the generational distribution of certain Rioplatense Spanish metaphors related to the period in which the speakers lived in Uruguayan and Argentine societies. Consequently, recording the periods and modes of use of figurative expressions by Rioplatense Spanish speakers would help explore the metaphor vitality (how generational — cohorts adolescents to elderly — retain or abandon metaphors), social distribution — the interplay of residence duration, age, production, and reception—, and the semantic stability — whether metaphors persist as conventionalized mappings or undergo attenuation (Traugott & Dasher, 2001) and the role of the reference. This study tested a set of figurative expressions[1] such as “Hoy viene el profesor Pérez, ¡estamos en el horno! (Today comes Professor Pérez, we are in the oven!)”, “¡No me banco un examen más! (I do not bank one more exam!)”, “Vos sí que andás volando (You are flying, indeed)”, “Mi mamá no me da bola. Mom doesn’t pay attention to me”, “El entrenador nos dará de

palos en la práctica (The trainer will lay about us)", "Romina siempre le da manija (Romina always winds him/her)" grounded in six cognitive metaphors used by Rioplatense Spanish speakers (BEING IN THE OVEN IS DIFFICULTNESS/HAZARDNESS, BANKING SOMETHING/SOMEBODY IS BEARING IT, BE FLYING IS DOING SOMETHING WELL, TO PASS BALL IS TO PAY ATTENTION, TO LAY ABOUT IS TO BE DEMANDING, and TO WIND IS TO MANIPULATE). The actuality of these cognitive metaphors in Rioplatense Spanish has been studied in previous research, and examples of the used Spanish expressions can be found in well-recognized regional and international dictionaries and databases. Two hundred sixty-seven female Spanish speakers from the Rioplatense region completed an online, self-administered questionnaire and answered independently. After requesting sociodemographic data, 6 Spanish figurative expressions were presented individually with five alternative meanings (metaphorical, opposed to metaphorical, literal, non-related, and unknown). Secondly, two seven points (never [NVR], rarely [ANVR], few times [FEWT], sometimes [STM], frequently [FRQ], almost always [AALW], always [ALW]) Likert scale questions asked participants about the frequency in which they perceive auditorily (hear) or produce orally (say) figurative expressions as those previously tested. Using Multiple Correspondence Analysis (MCA) as a visual exploratory statistical tool, the study identified privileged associations that ground metaphorical thinking and social life. The results show strong relationships between residence and age in identifying metaphorical literacy generations. The Adolescence (LA), Young Adulthood (YA), Middle Adulthood (AA), Mature Adulthood (AT), and Elderly (ES) groups remain active in the metaphors examined. Concerning the residence, the study highlights two groups, (AA) and (AT), who have lived in Uruguayan or Argentine societies for more than 55 years, as well as a diffuse cross-age group of residents under 8 years old, all of whom are not very active in using the metaphors examined. Cultural Immersion and Metaphorical Proficiency were proposed to explain the difference between generational evolution/change and the social distribution of those figurative non-literal expressions as tokens of conventional metaphors. However, although MCA appears to be a helpful tool for understanding and modeling the metaphors' vitality, the relatively small percentage of variance (15%-19%) explained by the found dimensions suggests introducing additional categories to achieve an adequate proportion of this variance and integrating *lexical typology* (Barcelona, 2001) or *discourse context* (Cameron, 2003) items. Considering that some authors suggested

that women are less likely than men to use various forms of non-literal language, our results provide a valuable background for future studies that seek to compare the use of cognitive metaphors tested with other gender populations. Additionally, as a descriptive study on the social distribution of language use, this study did not aim to develop or categorize the studied metaphors according to the categories offered in the existing literature. However, the data might be helpful for someone who wants to delve deeper into this kind of analysis.

* English translations of figurative phrases are rough approximations to English wording in some not indicated national varieties (UK, USA, Australia). In Spanish, the noun “banco” -from which the verb “bancar” is derived- has two meanings: the financial institution (bank) and the piece of furniture (bench), pronounced in the same way. Additionally, there are no diachronic or etymological studies on the matter to know from which meaning the metaphor was constructed. The option BANKING was selected arbitrarily.

Table 1

Contribution of active variables for all six studied metaphors

	Dimensions											
Metaphors	MP				CI				Inertia		% explained variance	
Case	A	R	H	S	A	R	H	S	MP	CI	MP	CI
OVEN/HAZZARDNESS	**0,685**	**0,675**	**0,480**	**0,519**	**0,828**	**0,824**	0,187	0,128	0,476	8,17	0,397	6,81
BANKING/BEARING	**0,607**	**0,688**	**0,480**	**0,519**	**0,645**	**0,637**	0,281	0,321	0,458	9,59	0,399	8,35
FLYING/DOING WELL	**0,663**	**0,652**	**0,504**	**0,500**	**0,746**	**0,738**	0,216	0,292	0,503	9,51	0,424	8,01
BALL/ATTENTION	**0,591**	**0,657**	**0,487**	**0,459**	**0,801**	**0,758**	**0,092**	0,320	0,442	9,29	0,398	8,37
LAY/DEMANDING	**0,675**	**0,629**	0,344	**0,409**	**0,853**	**0,854**	0,071	0,155	0,414	7,7	0,402	7,54
WIND/MANIPULATE	**0,583**	**0,538**	**0,457**	0,389	**0,747**	**0,766**	0,279	0,061	0,423	7,77	0,406	7,46

Symbology: Age (A); Residence (R); Hearing (H); Saying (S); Metaphorical proficiency (MP); Cultural immersion (CI); Contribution(C). The rows ‘Reference', ‘Category’s contribution’, and 'Total' were removed from the original tables to obtain a simplified form of the table. Black words indicate that the values are significant.

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Effects of literal and metaphorical linguistic framing on the mental lexicon of Uruguayans

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Keywords

Frame Semantics, Cognitive Metaphor, Prototypes, Categorization, Mental Lexicon

Abstract

The mental lexicon provides a window into the configuration of conceptual domains in the human mind. The results of semantic norm studies represent a snapshot of a moment in time. Generally, these studies are not designed to collect information on the within-subject effects of linguistic and non-linguistic framing during feature evocation or semantic association. Depending on the framing, a word can acquire different meanings, sometimes literal or metaphorical. Since the activation of metaphorical mappings is contextual and they tend to freeze (see Lakoff & Johnson, 1980; Bowdle & Gentner, 2005), it is possible that the difference in framing does not affect the mental lexicon, the semantic domains evoked do not change, and no distinct semantic networks are generated for a framed literal or metaphorical clue.

Moreover, among the mechanisms of conceptual projection, cognitive metaphor appears to be strongly anchored to the framing that is to be activated. This research examined how linguistic framing affects the semantic domains evoked and the semantic networks that convey them. This was investigated by manipulating the framings between metaphorical, literal, and filler alternatives for ten metaphors present in Rioplatense Spanish. A total of 120 speakers of Rioplatense Spanish (M= 29; SD= 11.26) participated in a five-word forced association task. In this task design, each trial began with a prime (a short three-sentence text with the alternatives of metaphorical, literal, or

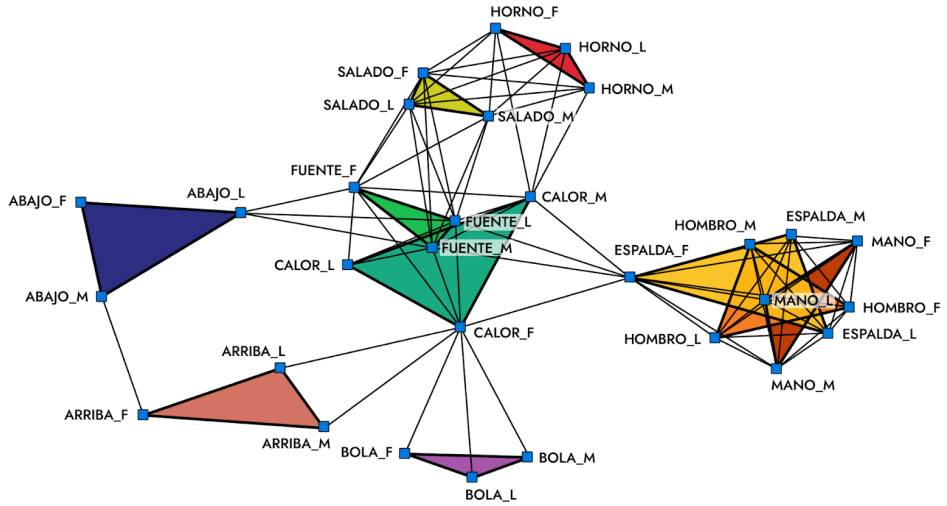
filler) before the clue. Then participants were instructed to read the clue and, immediately, provide five words that they considered to be associated with the clue.

From the quantitative analysis (using semantic network data, specifically the Definition Finder and Synonym Finder software [Vivas et al., 2014] and UCINET software [Borgatti & Everett, 1997]), the results suggest that the mental lexicon remains stable even when the immediate linguistic framing changes. In addition, the different levels of demand or cut-off in the formation of the clusters suggest greater connectivity and resistance for specific nodes in their various framings (Fig. 1). This finding suggests different evolutions of the scopes in the distancing-approaching of the conceptual domains to which each node is connected. The clustering suggests the organization of the semantic network according to spatial and activity domains, as well as the central role of one of them (e.g., the clue “Fuente”). Moreover, the analysis of the preferences of the semantic relations of the clue-associate pairs showed that the literal and metaphorical framings but not fillers have a restrictive effect on the semantic relations chosen by the speakers.

In the qualitative analysis (using the Spanish adaptation [Macedo et al., 2023] of the coding instruments created by Wu & Barsalou [2009] and Wiemer-Hastings & Xu [2005] to categorize semantic relationships), it was observed that the filler framing facilitated a wider range of semantic relations compared to the other framings. Most relevant was that participants showed greater selectivity for introspective relations for the metaphorical framing and greater selectivity for taxonomic and situational relations for the literal framing (Fig. 2). The results, mainly the central role of the clue “Fuente”, open some questions about synonymy and the effects of lexicalization on the transparency of semantic mapping mechanisms that could underlie the semantic projection and evolution of lexical items to refer abstract notions.

Figure 1

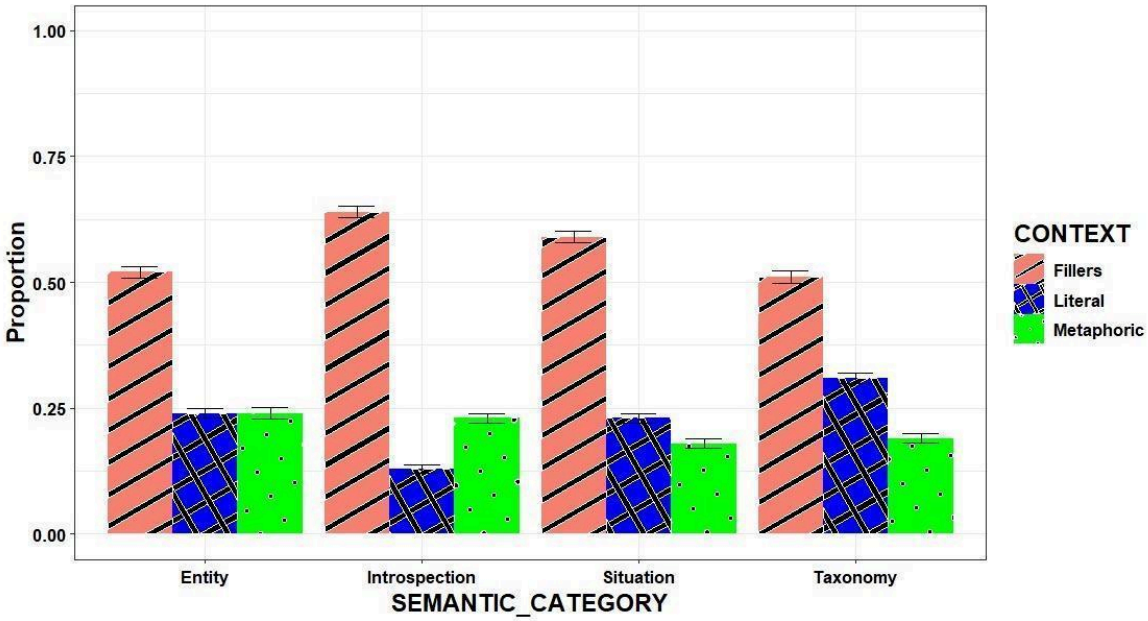
Clustered representation of the cosine similarity matrix, sliced at r = .10



Note. The letter at the label of the nodes indicates the framing: metaphorical [M], literal [L] and filler [R].

Figure 2

Associates semantic categorization of judges by framing



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Conceptual metaphors in Argentine deaf education: Analyzing hearing teachers' metaphorical expressions on language teaching, learning, and acquisition

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Keywords

Metaphor, signed language, deaf education, conceptualization of language, language acquisition.

Abstract

Cognitive linguists have extensively analyzed conceptual metaphors across various spoken and signed languages worldwide (Lakoff 2006, Lakoff & Johnson 2008, Massone & Martínez 2013, Wilcox 2000, among many others). In this presentation, we aim to explore the metaphorical expressions related to language teaching, learning, and acquisition in the context of deaf education. These metaphorical expressions were produced in spoken Spanish by ten hearing teachers who work at two public bilingual primary schools for deaf children in Buenos Aires, Argentina. Our team interviewed them throughout the year 2022, as part of a bigger study on bilingual didactic materials for teaching the subject “Language Practices” within deaf education (Martínez; González López Ledesma; Gibaudant; Caballero Menas & Morales 2024).

Our exploratory approach focuses on the Spanish expressions used by the teachers during these interviews. We selected particularly those related to languages and their users, as well as language acquisition, teaching, and learning.

The results reveal highly consistent metaphorical expressions that can be systematized across the interviews. Specifically:

o The way they conceptualize languages and their users is metaphorical: languages are seen as liquid, as a measurable object, or as a vehicle, while users are conceptualized as different kinds of containers, such as a sponge, a vessel, a building under construction, etc., or as passengers of a vehicle.

o These conceptualizations of languages and their users produce an impact on how teachers understand language teaching, learning, and acquisition. Particularly, deaf students who arrive at school without having acquired Argentine Sign Language (LSA) are seen as empty containers (tabula rasa). However, this perception changes once they come into contact with LSA. Language acquisition, teaching and learning is viewed as an immersion in liquid, or as a long journey that may take a lifetime, or as the process of constructing a building.

These conceptualizations have further implications in the agency they assign to the actors involved in the education process (e.g. hearing teachers tend to conceptualize deaf students as having less or no agency when they start school, but the situation changes once they acquire LSA).

Future research will contrast these metaphorical expressions with those produced in LSA by deaf teachers who work at the same schools.

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Linguistic input, pragmatic functions and vocabulary teaching

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Keywords

discourse analysis, vocabulary teaching, linguistic input, pragmatic functions

Abstract

From a psycholinguistic perspective, the importance of exposing children to a diverse range of words frequently and in varied contexts from an early age has been emphasized (Rowe, 2012). The gradual and systematic learning of diverse words is highly important, as the breadth of vocabulary children possess is a strong predictor of their literacy skills (Snow, 2017). The pragmatic function of teacher talk during vocabulary instruction becomes particularly relevant, as the introduction of new or unfamiliar words without contextual explanation can cause misunderstandings or issues in the comprehension of the material being taught (Anderson et al., 2023). Based on this, the following questions were raised: Are there differences in the linguistic input provided by kindergarten and first-grade teachers to their students when developing the same thematic unit? Are there differences in the pragmatic functions provided by teachers during vocabulary instruction in kindergarten and first-grade classrooms?

The complete development of the thematic unit “Types of Jobs” was filmed in four kindergarten classrooms and four first-grade classrooms in Córdoba. The videos were transcribed following the CHAT system criteria and structured into teacher talk segments (MacWhinney, 2020). First, the linguistic input provided by the teachers during the first class hour was measured. Quantitative measures were obtained for: (a) total word count, (b) number of different types of words, (c) number of lexical words spoken, and (d) lexical diversity. Subsequently, the teacher talk segments were categorized based on the pragmatic function they served during vocabulary teaching. The results showed similarities in the linguistic input—total number of words, different types of

words, and lexical diversity—provided by kindergarten and first-grade teachers. However, first-grade teachers used a greater number of types of nouns [W(4) = 26.5, p = .028] and verbs than their kindergarten counterparts [W(4) = 26.5, p = .028]. On the other hand, kindergarten teachers used more speech acts aimed at vocabulary teaching than their first-grade counterparts. Regarding the pragmatic functions of these speech acts, first-grade teachers used more expansions than kindergarten teachers. These results are discussed based on previous research. Additionally, they allowed for an evaluation of the quality of the linguistic input to which pre-school and early elementary school students are exposed during social studies classes

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A tendency towards literalness? Primary metaphor comprehension by children on the autistic spectrum

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Keywords

metaphor, autism spectrum disorder, Cognitive Linguistics, language processing, figurative language.

Abstract

According to Lakoff and Johnson's Conceptual Metaphor Theory (2003), metaphors are cognitive resources that structure our conceptual system, which, in turn, governs both our thoughts and our actions. However, difficulties in understanding metaphors, as well as other figurative language phenomena, have been identified as a common feature of autism spectrum disorder (ASD) (Kalandadze et al., 2021; Pastor-Cerezuela et al., 2020; Rundblad & Annaz, 2009). In this sense, the present study was developed with the aim of contributing to studies on the topic, as well as initiating data collection for the validation and use of the Instrument for the Evaluation of Figured Language Comprehension – COMFIGURA among clinical populations. The theoretical framework adopted consisted of the premises of Cognitive Linguistics, in particular Lakoff and Johnson's Conceptual Metaphor Theory (2003) and Grady's Primary Metaphor Theory (1997). In this research, six school-aged children aged between 7 and 10:10 (mean = 8:9, SD = 1:6) diagnosed with levels 1 and 2 of ASD were interviewed and given two COMFIGURA metaphor comprehension tasks, one for primary verbal metaphors and one for primary non-verbal metaphors. In addition to metaphors, the instrument assesses comprehension of three other phenomena, namely metonymy, idioms and proverbs, and is in its final stages of development, with ample evidence of validity in typical populations (Siqueira et al., 2023; Ferrari, 2025). The participants' answers were analyzed qualitatively, looking primarily for possible literal interpretations of the stimuli presented. Results showed a better performance on tasks involving non-verbal metaphors compared to verbal ones, as well as higher scores on questions requiring a lower level of verbal development on the part of the participants (i.e., open-ended questions, as opposed to closed questions). Nevertheless, contrary to what was expected, the sum of the overall performance for both tasks was above average (65% expected responses), with few records of literal interpretations, demonstrating that there was, in the case of the participants in this research, a certain capacity for metaphorical comprehension. The main reason for this higher-than-expected performance is the type of metaphor investigated, i.e. primary metaphors, which have the main characteristic of being universal and more independent of factors such as linguistic and/or cultural knowledge. For future studies, it is recommended to expand the sample of participants and carry out a comparison with a control group of neurotypical participants.

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From modal or conditional clause to argumentative additional operator: the role of intersubjectivity in the emergence of [sem falar] in Portuguese

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Keywords

argumentative operator, addition, Usage-based linguistics.

Abstract

In this presentation, we describe the uses and emergence of the argumentative operator [sem falar] in Portuguese, employed in textual flow to include new convergent arguments - e.g.: “há críticas sobre a ausência de gameplay concreto e facilmente identificável, **sem falar** na ausência de uma demo transmitida on-line para todo o mundo - There are criticisms about the lack of concrete and easily identifiable gameplay, **beyond** the lack of a demo broadcast online to the entire world”. Simultaneously, we aim to identify the possible cognitive motivations underlying its origin. To this end, we draw upon the theoretical and methodological assumptions of Functional-Cognitive Linguistics (Rosário, 2022), particularly the notions of intersubjectivity (Traugott & Dasher, 2002) and general cognitive processes (Diessel, 2019). The research was conducted based on 301 tokens, extracted from two corpora (one synchronic and one diachronic), analyzed from both qualitative and quantitative perspectives. The synchronic data show that [sem falar] is predominantly used as an argumentative strategy to add convergent arguments, which can be attributed the status of a knock-out argument (cf. Koch, 2004). Meanwhile, diachronic data suggest that [sem falar] emerged in Portuguese through the analogization of a construction with a similar function: [sem contar] – e.g.: “há, pelo menos, 125 expositores na classe dos cereais, 80 na de grassinos, 75 na de legumes, 21 na de condimentos, 123 na de Bebidas fermentadas, **sem contar** os produtos coloniais – There are at least 125 exhibitors in the cereals class, 80 in the

grasses class, 75 in the vegetables class, 21 in the condiments class, 123 in the fermented drinks class, **beyond** the colonial products" . Based on our analyses, we propose that this new categorization was driven by the cognitive mechanism of intersubjectivity, as the innovative use prompts listeners or readers to attribute, contextually, a new meaning to the construction—addition, instead of a negative or conditional mood.

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Spatial features rules for 70 verbs in Rioplatense Spanish

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Keywords

Lexical processing, motion, space, Image scheme, verbs.

Abstract

The human perceptual system analyzes objects and events in terms of characteristics selectively perceived by attention. Through attention and memory, simple mental representations, image schemas, and preconceptual structures based on sensorimotor experiences are formed (Lakoff & Johnson, 1987). Primary image schemas such as container, trajector, or support are related to the structure of action and our recursive body experience with the environment. Notably, the image schema of trajector has been tested in developing image-scheme norms for verbs in languages such as English (Richardson et al., 2001; Meteyard & Vigliocco, 2009) and Spanish (Moreno & De Vega, 2006). This schema appears relevant to these norms for semantic (i.e., moving the eyes from left to right when reading Spanish sentences) and syntactic reasons (i.e., the agent as the role on the left of the verb and the patient on the right in SVO sentences). From a corporeal cognition perspective, it has been argued that the temporal and causal organization of human actions is projected onto syntax, giving the order SVO conceptual and perceptual motivation (Givón, 1983; Langacker, 1991; Talmy, 2000; Goldberg, 2006; Zlatev, 2007). In this study, we wonder how much spatial information remains schematically encoded in cognitive representations of words and how much of it becomes accessible when we process words. For the mind, this movement involves the uptake of perceptual-motor information as part of events and actions. Still, it also requires schematization as an abstraction of that information into a spatial format. This study sought to identify spatial feature attributes that would classify verbs descriptively. This study incorporated movements in the three directional axes (vertical, horizontal,

sagittal), which were partially present in previous normalizations (Meteyard & Vigliocco, 2009; De Vega & Moreno, 2006; Richardson et al., 2001). Although the spatial features evaluated in this study are not image schemas, they are typically found in different image schemas or may be particularly defined in specific image schemas, such as the trajectory schema. The developed tool aims to enhance the distribution of verbs along the axes and directions of the trajector's schema, yielding more discrete results than those obtained in previous studies mentioned above. Seventy verbs were selected from Meteyard and Vigliocco (2009) and translated into Spanish using the OPUS corpus (Tiedemann & Nygaard, 2004). 639 speakers of Rioplatense Spanish participated. The task consisted of an online questionnaire with a hieroglyphic sentence similar to that used in previous normative studies translated into Spanish ("círculo" verb "cuadrado") and response options (yes, no, I don't know) on the spatial features (up/down, left/right, forward/backward). Trials were divided into four congruency conditions according to the matching between the standard Spanish sentence structure (SVO) and expected responses (congruent accepted, congruent rejected, incongruent rejected, and incongruent accepted) to the spatial features depicted by the hieroglyphic sentence., The results showed significant differences between the extreme conditions (incongruent rejected and congruent accepted). The incongruent accepted condition, the least expected, generated more significant uncertainty, while the congruent rejected condition stood out for distinguishing spatial features according to the item evaluated. In general, participants showed low agreement on most items, although they rejected more of the incongruent conditions and accepted more of the congruent ones. The chi-square analyses suggest clear patterns in the congruent accepted and incongruent rejected conditions. The study indicates that, while spatial features were mainly rejected, splitting the responses into congruence conditions for each verb makes it easier to identify which schemas are firmly rejected and which are randomly rejected, given that the incongruent rejected condition is consistently significant. This suggests that semantic spatialization and the features evaluated are relevant to understanding how speakers categorize spatial concepts across languages. Additionally, the results suggest searching for a procedure that allows informants to consider several concurrent image schemas, as proposed in the literature from the field of cognitive linguistics (e.g., container, path, link, support, cycle, or contact).

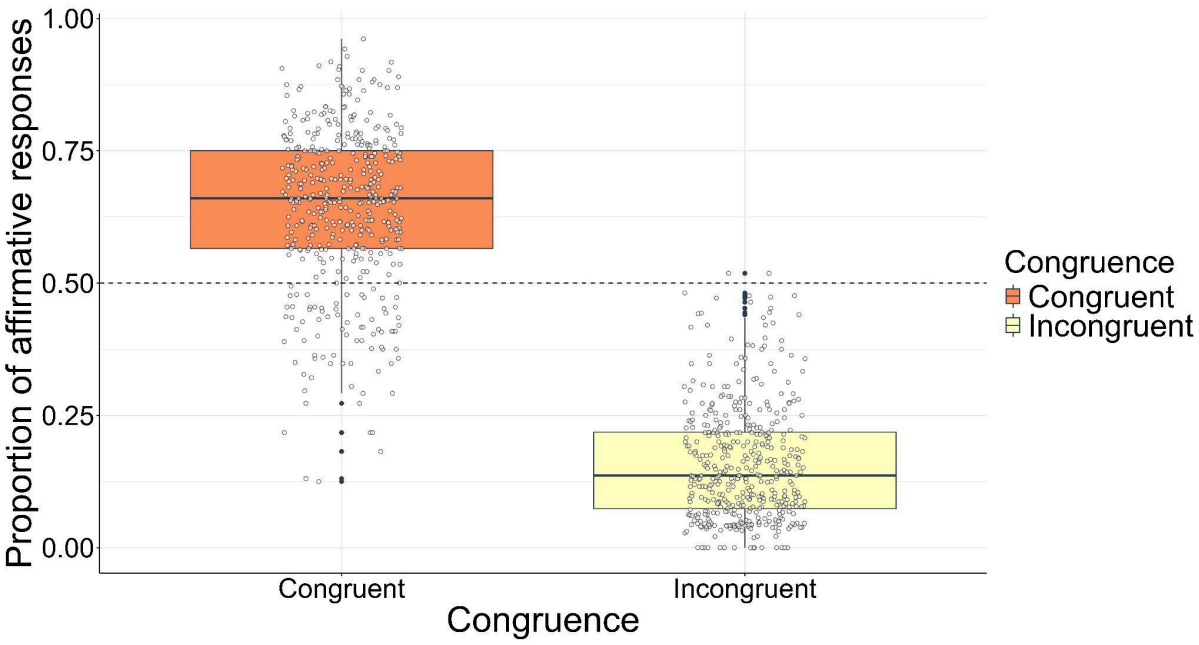
Table 1

Responses by item

Item	Selected spatial features	Prop. "Yes"	χ^2 Goodness	P- value
admira	vertical up	0.87	59.25	1.38*e-14
alza	vertical up	0.86	52.89	3.51*e-13
aparta	horizontal right	0.91	76.94	1.75*e-18
aplana	vertical down	0.86	51.96	5.63*e-13
arrastra	*saggital back*	*0.58*	*1.47*	*0.2249*
baja	vertical down	0.82	9.78	0.0018
barre	horizontal right	0.90	32.96	9.40*e-09
castiga	vertical down	0.83	24.0	9.63*e-07
caza	saggital	0.87	13.5	0.0002
comienza	horizontal right	0.79	18.13	2.06*e-05
corre	horizontal right	0.96	44.30	2.80*e-11
cuelga	vertical down	0.74	25.25	5.02*e-07
declina	vertical down	0.76	15.29	9.21*e-05
escurre	vertical down	0.76	5.76	0.0164
gatea	horizontal right	0.81	22.34	2.27*e-06
patea	horizontal right	0.94	40.69	1.78*e-10
piensa	vertical up	0.90	34.88	3.49*e-09
rebota	vertical down	0.75	14	0.0001
regresa	horizontal left	0.77	6.54	0.0105
sube	vertical up	0.75	6	0.01
suda	vertical down	0.73	20.31	6.55*e-06
vierte	vertical down	0.87	52.12	5.20*e-13

Figure 1

Proportion of “Yes” answers by congruence



Note. *Proportions of “yes” responses by congruence condition. Each point represents a combination of item, scheme, and congruency. The dotted line indicates the expected proportion by hazard (0.5).*

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Cognitive Approaches to Sign Languages: A Comparative Study of Libras, ASL, LSF, and Gestuno

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Keywords

cognitive grammar, grammatical constructions, LIBRAS, ASL, GESTUNO.

Abstract

This paper proposes to describe, through a narrative bibliographical review, the cognitive approaches to grammatical constructions of sign languages - with an emphasis on LIBRAS (Brazilian Sign Language), ASL (American Sign Language), LSF (French Sign Language), and GESTUNO (International Sign Language), based on 32 studies carried out in the theoretical-methodological field of Cognitive Grammar (CG) or Cognitive Linguistics (CL).

This research is justified by the relevance of observing the use of visuo-spatial signs as a privileged semiosis in the construction of meanings by deaf communities and by the need for an analytical comparison between signs and gestures in the process of producing and understanding grammatical constructions in sign languages. For this review it was necessary to survey publications in the theoretical field aforementioned, available on databases such as Periodicos Capes, ResearchGate and Google Scholar, using the index words: cognitive grammar and Libras, cognitive grammar and ASL, cognitive grammar and LSF and cognitive grammar and Gestuno, with the aim of listing the largest number of titles relevant to the proposed theme.

Among the results listed, only papers that contained in their abstracts the following categories were selected and cataloged: a) the concepts of CG or LC (conceptual metaphor and metonymy, categorization, conceptual blending, image schema, cognitive iconicity, embodiment, frames, etc.); b) their subfields of study (pragmatics, sociolinguistics, semiotics, semantics, phonetics-phonology); c) the relationship between gesture and grammatical resources in sign languages.

We collected a total of 32 studies which have the determining characteristics for our analysis, namely: the cognitive approaches to signs or gestures, the research procedures adopted (methodology) for the studies catalogued and the contributions of CG and CL to exploring the semiosis present in sign languages, or which presented exploratory discussions on the grammar of Libras, ASL, LFS and Gestuno, based on the cognitive approaches such as the one put forward by Langacker (1987), Salomão (2009), Filmore (1982), Talmy (2000) and others.

We then laid out the theoretical framework of the perspectives and visions of the studies aforementioned, presenting a review of the data observed and analyzed in the corpus of each work. Finally, we bring about a discussion of the data, highlighting the diversity of the research corpus on the subject, the relevance of cognitive theories for understanding sign language grammar and the apparent confusion that still exists in research about the limits of the visual-spatial gestures used in both oral and sign languages.

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Pragmatic markers of Portuguese in a functional-constructional perspective

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Keywords

pragmatics and cognition; grammatical Construction; Functionalism; pragmatic markers; Portuguese Language.

Abstract

Our presentation aims to describe and analyze members of the class of pragmatic markers (PM) in contemporary Portuguese in light of Traugott's proposal (2021; 2022a; 2022b). According to the author, this class is characterized by a set of traits: it lacks truth value, conveys procedural meaning, is multifunctional and (inter)subjective, operates outside the strict syntactic axis, has relative mobility, exhibits a light structure and is prosodically delimited. Traugott (2022a; 2022b), drawing on the functional-constructional perspective originally presented in Traugott & Trousdale (2013) and introduced in Brazil by Rosário (2022), argues that the grammatical construction approach, as outlined in Croft (2001) and Croft & Cruse (2004), must systematically incorporate the pragmatic level of language. According to Traugott (2022a; 2022b), it is crucial to effectively consider properties related to interactional contexts in functional-constructional research, particularly when investigating the semantic-syntactic linkage levels of PMs. To develop our research, we adopt a mixed-methods approach (Lacerda, 2016), combining qualitative and quantitative data analysis to control both contextual factors and type and token frequency (Bybee, 2007). Our studies have identified three functional types of PMs in contemporary Portuguese:

a) **Social markers**, related to negotiating attentional orientation between interlocutors, as the invitational PM highlighted in:

(1) "**Bora curtir** o fim de semana? Se liga na lista do Rolês de Gorpa."

b) **Epistemic markers**, concerning the conveyance of beliefs and attitudes in interaction, as in:

(2) “Tem dias que dá vontade de abrir um buraco no peito, e sair do corpo por alguns minutos, não digo morrer, **sei lá**, uma vontade de me desligar de tudo.”

c) **Discourse-structuring markers (DSMs)**, which mediate symmetrical articulation between textual segments following the schema [D1 DSM D2], as in:

(3) “Houve, mas só de passagem. O que houve mesmo, de fato, foi a aprovação do primeiro turno da emenda da reeleição na Câmara. Dirão que depende do ponto de vista. **Vá lá**. Mas o que não é pura interpretação é a vontade com que o senador Antônio Carlos assumiu seu posto no Senado.”

Based on these three illustrated types, we postulate that the PM class should be treated as a hyperconstruction in Diewald's terms (2020), that is, as a complex and holistic construction of interdependent paradigmatic members that, in turn, constitute specific constructions or microconstructions. From this perspective, the Portuguese PM hyperconstruction forms a type of schema (Traugott & Trousdale, 2013) within the constructional network of the language. As we have demonstrated (Oliveira & Sambrana, 2022; Oliveira, 2023), this is a broad and hybrid paradigm, comprising members with procedural and (inter)subjective natures, whose meaning emerges from the inferential interplay between interlocutors, as argued by Traugott & Dasher (2002).

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Inter-sentential connectors of the [[X de]que]$_{connect}$ network

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Keywords

Construction Grammar, connectors, schematicity, adverbial hypotaxis, [[X de]que]$_{connect}$

Abstract

In light of Usage-Based Functional Linguistics (Furtado da Cunha, Bispo & Silva, 2013; Author, 2022), from a constructional perspective, this study aims to demonstrate that the [X que]$_{connect}$ network undergoes an increase in schematicity (Traugott & Trousdale, 2013) by incorporating the [X de]$_{conect}$ network as one of its subschemas, which was initially responsible for connecting non-finite clauses. This indicates a significant expansion of the primary inter-sentential connector network in Portuguese.

The interaction between the [X de]$_{connect}$ and [X que]$_{connect}$ networks results in the creation of the constructional subschema [[X de]que]$_{connect}$, instantiated by expressions such as *além de que [in addition to]*, *à exceção de que [with the exception of]*, *em face de que [in light of]*, *apesar de que [despite the fact that]*, *a respeito de que [concerning]* etc.

Two examples extracted from tokens of language use illustrate the [[X de]que]$_{connect}$ network: (01) "Today, no one has come forward as 'responsible' for the place, [despite the fact [**apesar de que**] that the court is used by students from two schools in the neighborhood for physical education classes]. Source: http://180graus.com/sirene-policial/vizinhos-dizem-que-incidente-nao-e-o-1-em-quadra-que-morreu-garcom. Accessed on 05/08/2023; (02) Men consider this practice cruel, [in addition to [**além de que**] being a sign of immaturity and feminine manipulation]. Not much time left! We are counting down the days until Facebook's total transformation into Orkut. Source: http://ahduvido.com.br/ Accessed on 05/08/2023.

Although these connectors are observed in language use, they are practically absent from normative descriptions of the Portuguese language due to their complexity. The research methodology involves a synchronic *corpus* study of written language from a qualitative perspective (cf. Lacerda, 2016).

Our results confirm that the [[X de]que]$_{connect}$ subschema is nourished by the [X de]$_{connect}$ network while maintaining much of its semantic properties. Furthermore, the migration of connectors from the [X de]$_{connect}$ network to the [X que]$_{connect}$ network serves to make these connection elements more versatile as they begin to express different manner-temporal expressions.

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Managing interruptions: A cross-linguistic study of gestural and verbal strategies in Indonesian and Hebrew

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Keywords

interruptions, discourse suspension, recurrent gestures, Indonesian, Modern Hebrew

Abstract

This study investigates the multimodal practices employed in managing interruptions across two typologically distinct languages, Jakarta Indonesian and Modern Hebrew. While extensive research has examined turn-taking dynamics and discourse suspension in various languages (e.g., Kendrick et al., 2023; Mondada, 2007; Scott, 2002), less attention has been paid to cross-linguistic variations in interruption management strategies, particularly regarding the integration of verbal and gestural resources. Drawing on data from issue-oriented television talk shows, aired between 2006 and 2024 and available on YouTube, this research examines how speakers employ various multimodal resources to negotiate interruptions.

Our analysis reveals significant cross-linguistic variations in both verbal and gestural interruption management strategies. In the verbal domain, Hebrew speakers predominantly utilize discourse markers of suspension, such as such as *rega* (lit. 'moment') (e.g., Maschler & Schiffrin, 2015: 197) and *shniya* (lit. 'second') (e.g., Bardenstein & Shor, 2019), which are equivalent to the English *wait*, *hang on*, *one sec*. In contrast, Indonesian speakers often use full-fledged metalingual expressions or utterances, such as *sebelum kita masuk ke soal itu* 'before we get into that problem,' *sebelum ke sana* 'before going there,' *tapi sebelum Anda jawab* 'but before you answer.' The gestural analysis demonstrates both shared and language-specific patterns. While speakers of both languages utilize addressee-directed pointing gestures (e.g., Inbar, 2025), the Raised Index Finger gesture (e.g., Inbar, 2022), the Holding Away gesture (Bressem & Müller, 2014; Harrison, 2018; Kamunen, 2018; Kendon, 2004), and progressive palm-down hand extensions (cf. Sweetser & Sizemore, 2008), they differ markedly in that Hebrew speakers show a strong preference for the precision grip gesture family, such as the Grappolo gesture and the Ring-gesture (e.g., Kendon, 1995, 2004; Neumann, 2004). We will offer an interpretation of what these findings suggest regarding the construction and conceptualization of the interactive practices of interruption and discourse suspension in these two cultures.

Furthermore, our findings indicate significant differences in the social dynamics of interruption management. In Indonesian talk shows, discourse suspension is predominantly initiated by hosts, primarily serving pragmatic functions such as

clarification requests or program management. In contrast, Hebrew talk shows exhibit more distributed patterns, with both hosts and interviewees actively employing interruption strategies for various purposes, including disagreement expression, topic control, and floor maintenance.

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Vocabulary Depth and Code-Switching in Spanish Heritage Speakers: The Role of Language Experience

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Keywords

Heritage Speakers, Code-switching, Language Experience, Vocabulary Depth, Spanish.

Abstract

Bilingual individuals distribute their word knowledge across languages. Vocabulary depth encompasses meanings, connotations, usage, collocations, and semantic relationships. Deep vocabulary knowledge enables effective bilingual communication, often involving strategies like code-switching, where speakers integrate both languages to facilitate expression (Dörnyei & Scott 1997; Dörnyei & Kormos 1998). This study explores the relationship between code-switching and vocabulary depth in Spanish among heritage speakers, with a focus on how individual differences in bilingual language experience—measured as language entropy—moderate this relationship. Grounded in the Adaptive Control Hypothesis (Green & Abutalebi, 2013), which posits that bilinguals adapt their language control strategies to their communicative environments, this research investigates whether code-switching enhances or hinders lexical-semantic processing under different sociolinguistic conditions, as the relationship between code-switching and bilingual experience remains complex (Gosselin & Sabourin 2024).

The study addresses two primary research questions: 1) How does code-switching influence accuracy in a Spanish depth of vocabulary measure? and 2) Do individual differences in interactional language experience—language entropy—moderate the relationship between code-switching and Spanish vocabulary depth accuracy?

Participants included 32 English-Spanish bilingual adults from Southern California, comprising simultaneous (n=18) and early sequential bilinguals (n=16, first exposure to English ≤ age 6). Participants completed the *Conciencia de Vocabulario* task, which consisted of 26 Spanish word-triplets (e.g., *Lengua–Inglés–Gusto*). For each triad, participants identified two semantically associated words and provided an explanation in Spanish. Code-switching was permitted and analyzed as a communicative strategy. Responses were scored for pair accuracy and explanation accuracy, and coded for strategy use (e.g., code-switching). Language entropy—reflecting bilingual integration—was assessed across six domains (e.g., family, peers, school) using a language history questionnaire (Marian et al., 2007).

A Generalized Linear Mixed-Effects Model (GLMM) was used to assess the influence of code-switching and context-specific entropy on accuracy. Fixed effects included code-switching behavior and entropy in each domain. Covariates included Spanish exposure, Spanish use, Spanish receptive vocabulary, and bilingual type. Random intercepts and code-switching slopes were modeled at the subject level.

Results showed that participants performed with high accuracy in identifying associated word pairs (mean = 92%) but were less accurate in providing semantic explanations (mean = 76%). Code-switching was associated with significantly lower accuracy on the task. However, this negative effect was moderated by family language entropy. For individuals with low family entropy (i.e., one language dominantly used at home), code-switching was associated with decreased accuracy. In contrast, for individuals with high family entropy (i.e., frequent use of both languages at home), the detrimental effect of code-switching disappeared. Additionally, higher entropy in peer interactions (e.g., using both languages with friends) positively predicted vocabulary depth performance. Stronger Spanish receptive vocabulary was linked to accuracy.

These findings suggest that while code-switching is a common strategy among heritage speakers, it may be less effective in tasks requiring semantic reasoning in the weaker language—especially in environments characterized by language separation. However, in contexts where bilingual integration is the norm, such as bilingual family or peer environments, code-switching may no longer be detrimental. This underscores the importance of considering interactional language experience when interpreting bilingual performance and supports the view that bilingualism is best understood as a dynamic, context-sensitive phenomenon.

Table 1
Influence of code-switching and context-specific entropy on Spanish vocabulary depth accuracy.

Fixed Effects	B	SE	Z value	p
(Intercept)	1.404	0.24	5.537	<.001
Receptive vocabulary	0.503	0.11	4.045	<.001
Bilingual group	0.406	0.21	2.088	0.037
Code-switching	-0.503	0.20	-2.842	0.004
Friend entropy	0.229	0.10	2.346	0.019
Code-switching * Family entropy	0.320	0.16	1.979	0.048

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Comprehension of syntactically complex sentences in Spanish-speaking children with hearing loss and with typical hearing: Strategies across development

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Keywords

first language acquisition, deaf and hard-of-hearing children, sentence comprehension, morphosyntactic complexity, comprehension strategies.

Abstract

Many children with hearing loss who acquire oral language through hearing devices (CHL) show linguistic development that deviates from that of their peers with typical hearing (Boons et al. 2013; Geers et al. 2009). In particular, they often have difficulties comprehending syntactically complex sentences, especially those with non-canonical word order and/or embedding (Friedmann & Szterman 2006; Fujiyoshi et al. 2012; Moita & Lobo 2022; Ruigendijk & Friedmann 2017). However, this has been scarcely studied in Spanish. The present study aimed to compare the development of sentence comprehension across different syntactic structures between Spanish-speaking CHL and children with typical hearing (CTH) and to analyze their comprehension strategies.

A cross-sectional study was conducted with 71 CHL and 71 CTH aged 3 to 11 in hearing age (i.e., time of access to sound, which for CTH corresponds to their chronological age). Each participant in the CHL group was matched to a child with typical hearing on hearing age and sex. A sentence-picture matching task was designed,

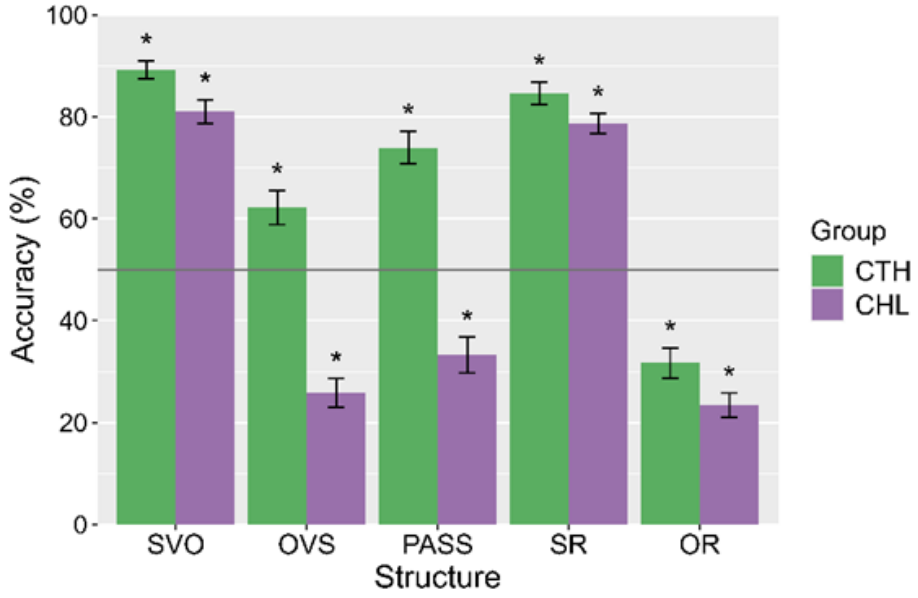
in which children had to select which of two illustrations of an event corresponded to an auditorily presented sentence. The task included simple active sentences with canonical order, sentences with topicalized (fronted) object, passives, and subject and object relative clauses. To examine developmental patterns, the sample was divided into hearing age quartiles.

The CTH group outperformed the CHL group across all sentence structures. While the CTH group performed above chance on all structures except for object relatives, which they comprehended below chance, the CHL group only showed above-chance performance for simple active sentences with canonical order and subject relatives (see Figure 1). The other three structures were comprehended significantly below chance. Performance across hearing age quartiles revealed that, at younger ages, both groups showed good comprehension of simple active sentences and subject relative clauses, but struggled with topicalized sentences, passives, and object relative clauses (see Figure 2). The CTH group improved in topicalized and passive sentences across quartiles, eventually reaching or approaching ceiling performance. In contrast, the CHL did not exceed chance-level performance with these structures at any age, although some improvement was observed for passives. Object relatives posed difficulties for both groups at all ages; however, comprehension levels increased in the eldest CTH, suggesting emerging acquisition.

The comprehension patterns of CHL, as well as those of young CTH, suggest an agent-first bias (Gertner & Fisher 2012), where thematic roles are assigned linearly: the first noun phrase is interpreted as the agent. This linear strategy appears to be dominant in CHL across the hearing age range examined, whereas CTH gradually abandon it as they grow older and learn to integrate morphosyntactic cues. These results contribute to the debate on whether the difficulties observed in CHL constitute a delay or a deficit (Ruigendijk & Friedmann 2017; Tuller & Delage 2014). Additionally, they are relevant for the design of language training programs aimed at supporting morphosyntactic processing in CHL.

Figure 1

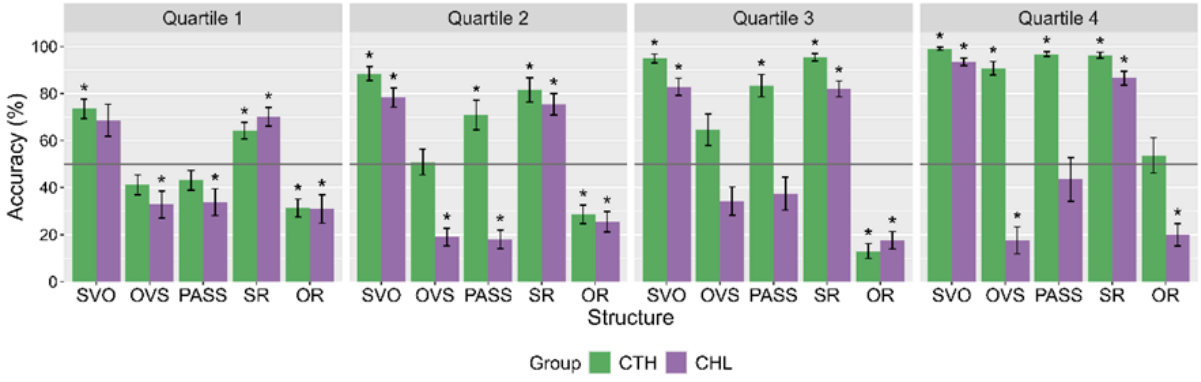
Mean percentage of correct responses in simple active sentences with canonical word order (SVO), object-topicalized sentences (OVS), passives (PASS), subject relative clauses (RS), and object relative clauses (RO), for children with typical hearing (CTH) and children with hearing loss (CHL)



Note. Error bars indicate the standard error of the mean. The gray line represents chance level (50%). Asterisks indicate performance significantly different from chance.

Figure 2

Mean percentage of correct responses in simple active sentences with canonical word order (SVO), object-topicalized sentences (OVS), passives (PASS), subject relative clauses (RS), and object relative clauses (RO), for children with typical hearing (CTH) and children with hearing loss (CHL) in each hearing age quartile



Note. Error bars indicate the standard error of the mean. The gray line represents chance level (50%). Asterisks indicate performance significantly different from chance.

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Player or character? The use of first-person expressions to refer to entities during tabletop roleplaying sessions in Río de la Plata Spanish

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Keywords

ludolinguistics, cognitive grammar, reference, first-person, blended entity.

Abstract

Tabletop roleplaying-games (TTRPG) present a unique opportunity to study how referring expressions are chosen to identify an entity. Their gameplay consists mainly of extended conversations about a socially-created fiction, with multiple candidates for reference even in the first-person singular (speaker, character, miniature, etc.). While reference could be ambiguous, there appears to be very few instances of participants misinterpreting the intended referent.

While both sociology (Fine 2002) and cognitive grammar (Langacker 2000, Van Hoek 2003) have contributed to the understanding of the identification of conflicting referents, we follow the model developed by Cook (2017) for describing reference in TTRPG in English. Based on concepts from cognitive linguistics such as *mental spaces* (Fauconnier 1981), *conceptual blends* (Fauconnier & Turner 1998), and *blended entity* (Tea & Lee 2004), she incorporates the notion of *active mental space* to differentiate which of the possible mental spaces that could contain the referent is active.

After adapting Cook's model to Spanish, we used it to search for patterns that emerge when hearers identify the referents of first-person singular expressions. The corpus was a three-minute fragment of a TTRPG online session in Río de la Plata Spanish. We transcribed it, identified 27 pertinent expressions, and created a form to share with native Spanish speakers[1], who assigned a referent to each expression, based on the video fragment and transcription. We considered two variables: the expression's

[1] Mostly of the Río de la Plata variety.

linguistic form (null, verb inflection for person, personal pronoun, or possessive pronouns) and the referent type (player, character, blended entity, or unsure). We used descriptive statistical measures to calculate what linguistic forms are understood to refer to each referent type, and what linguistic forms tend to have a more ambiguous reference (where respondents didn't coincide or were mostly unsure). We controlled them with our own answers.

The first round of answers was discarded because of some problems with the form's design; 28 participants answered the second round (see table 1)[2].

We found that nulls and possessives have a strong tendency to be assigned to characters more than to any other referent (79.76% and 75.71%, respectively) while personal pronouns and verb inflexion have a mild tendency to be assigned to players (46.43% and 36.48%, respectively). Also, respondents assigned a specific referent 97.22% of the time, usually a character (47.62% of the time).

For 88.88% of the expressions, more participants tended to coincide with our answers than not (see table 2). In most of them (66.66%), over 70% of participants agreed with us.

These results suggest that there *are* patterns in the use of first-person singular forms within TTPRGs that may not refer to the speaker. First, there is a clear tendency for some of them to refer to the speaker's character rather than to the speaker; and second, most of the hearers are sure of the referent in most cases.

In the future, we will analyse whether this pattern is mediated by the referent's accessibility or by demographic variables (age, native language, etc.).

Table 1

Answers of the second round, by expression type and referent type

Expression type	Expressions to judge	Player	Character	Blended entity	Unsure
Total	27	223 (7)	360 (14)	152 (6)	21 (0)
Null	3	1 (0)	67 (3)	13 (0)	3 (0)
Possessive pronoun	5	14 (1)	106 (4)	18 (0)	2 (0)
Personal pronoun	5	65 (2)	45 (2)	26 (1)	4 (0)
Verb inflection	14	143 (4)	142 (5)	95 (5)	12 (0)

Note. The numbers in parentheses are the control answers.

[2] The link to the form is https://forms.gle/YNUBv6FNzhvc9MYC6.

Table 2

Answers of the second round, by expression, expression type, referent type and control answer

Expression	Expression type	Player	Character	Blended entity	Unsure	Control
Mi personaje	Possessive pronoun	14	12	2	0	Player
Voy a proteger	Verb inflection	1	16	11	0	Character
mi pueblo	Possessive pronoun	0	22	6	0	Character
no puedo	Verb inflection	7	7	12	2	Amalgam
no puedo	Verb inflection	8	5	14	1	Amalgam
tiro	Verb inflection	24	2	1	1	Player
no me da	Personal pronoun	12	8	8	0	Amalgam
No puedo	Verb inflection	11	5	11	1	Amalgam
tiro	Verb inflection	25	1	2	0	Player
tiro	Verb inflection	26	1	1	0	Player
tengo	Verb inflection	6	13	8	1	Amalgam
¿Tiro…?	Verb inflection	26	0	1	1	Player
por-migo	Personal pronoun	2	15	10	1	Character
utilizar	Null	0	22	6	0	Character
mis ideales	Possessive pronoun	0	22	6	0	Character
me voy a plantar	Verb inflection	1	21	5	1	Character
sin mirarlos	Null	1	22	4	1	Character
mirando	Null	0	23	3	2	Character
voy a gritar	Verb inflection	1	21	5	1	Character
yo	Personal pronoun	1	22	4	1	Character
voy a proteger	Verb inflection	0	23	4	1	Character
mi hogar	Possessive pronoun	0	25	2	1	Character

no puedo	Verb inflection	7	7	13	1	Amalgam
no tengo	Verb inflection	0	20	7	1	Character
se me ocu-	Personal pronoun	25	0	2	1	Player
se me ocurre	Personal pronoun	25	0	2	1	Player
mi vida	Possessive pronoun	0	25	2	1	Character

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A Study on Evidentiality System in Chinese from the Perspective of Baseline/Elaboration

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Keywords

frame semantics, evidentiality system, Baseline/Elaboration, grounding, cognitive grammar.

Abstract

The evidentiality system, which refers to the linguistic means by which speakers indicate the sources of their information as well as their attitudes toward that information, remains a focal topic of debate and research in the field of cognitive linguistics. Central to this discussion is the concept of Grounding, defined as the process through which events are situated within specific contexts or situations, thus enabling their integration into discourse for purposes of cognitive grammar and semantic interpretation. Despite its theoretical significance, the question of how Grounding can be comprehensively applied within the framework of cognitive grammar to Chinese remains largely unresolved. Furthermore, the mechanisms underlying the formation and manifestation of evidentiality in Chinese continue to be uncertain and underexplored, which has hindered the development of a more unified and explanatory model for evidentiality in the Chinese language.

To address these gaps, this study adopts Langacker's (2016) Baseline/Elaboration (B/E) Organization model as the principal theoretical framework. The B/E model distinguishes between baseline, which represents the fundamental, prototypical pattern of information construction, and elaboration, which encompasses the various modifications, extensions, or contextual enrichments added to this foundational structure. This distinction is particularly valuable in examining how speakers in Chinese construct, observe, and express information, and how these processes contribute to the linguistic realization of evidentiality and Grounding.

Building on this theoretical foundation, the study proposes an adaptation of the B/E model specifically tailored to the unique features of the Chinese language. To ensure empirical rigor, data collection is carried out using the CECPC large-scale corpus. The data are systematically processed, with parts of speech tagged and various statistical analyses conducted within the R programming environment. This quantitative approach allows for a robust examination of the actual usage patterns and grammatical structures involved in evidentiality marking and Grounding within Chinese discourse.

A key focus of the research is the exploration of how lexical expressions, the speaker's informational attitudes, and grammatical structures are deployed in Chinese to achieve Grounding. By closely analyzing these dimensions, the study sheds light on both the cognitive and linguistic strategies that underlie evidentiality marking in Chinese. The findings reveal the evolutionary components and developmental trajectory of Grounding as it operates within the Chinese evidentiality system. These results not only deepen our understanding of the interplay between cognitive grammar and evidentiality in Chinese but also contribute to broader theoretical debates in cognitive linguistics.

Ultimately, the study aspires to advance the development of a systematic and empirically grounded account of the Chinese evidentiality system, thereby offering new insights into the cross-linguistic applicability of the B/E model and the cognitive grammatical and semantic interpretation of evidentiality. The empirical evidence provided by this research is expected to inform future comparative studies and stimulate further exploration of evidentiality systems in other languages from a cognitive linguistic perspective. By doing so, this research not only enriches the understanding of evidentiality and grounding in Chinese, but also contributes valuable resources and perspectives for the broader field of cognitive linguistics and cross-linguistic grammatical studies.

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On the Classifications of Chinese Relative Complex Sentences from the Perspective of Baseline/Elaboration

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Keywords

frame semantics, cognitive grammar, Baseline/Elaboration, classification.

Abstract

The classification of Chinese relative complex sentences has long been a subject of considerable debate within the field of Chinese linguistics. While some scholars have proposed classifications by focusing on individual types of relative complex sentences, these approaches often treat types in isolation, failing to differentiate them from others or to articulate their distinctive features in a systematic way. Other studies, meanwhile, are criticized for lacking either rigorous theoretical explanations or comprehensive, systematic descriptions of the phenomena in question. As a result, there remains a significant need for research that aims to establish an organized and internally coherent system for categorizing Chinese relative complex sentences, one that is grounded in a suitable and theoretically robust framework. Addressing this gap, the present study adopts Langacker's (2016) Baseline/Elaboration framework in order to provide a novel account of the classification of Chinese relative complex sentences.

According to Langacker's theory, the *baseline* refers to the prototypical and simplest conceptualization associated with a linguistic unit, serving as the fundamental meaning upon which more complex interpretations can be built. *Elaboration*, in contrast, involves modifications and extensions of this baseline, reflecting context-dependent or domain-specific nuances that enrich the original conceptual structure. Although the Baseline/Elaboration framework was initially developed to explain English sentences, this study adapts and refines it to better suit the unique grammatical and semantic characteristics of Chinese.

To ensure empirical validity, we utilized large-scale corpora, including COCA and CECPC, from which we randomly selected a wide array of Chinese complex sentences for

analysis. The theoretical framework was then reformed and tailored to the Chinese context, enabling a more precise account of the language's structural and interpretive particularities. Through a detailed analysis of both semantic and syntactic interpretations, the study reveals that the conceptualizing subject typically regards the main event or main clause as the baseline. Relational events or clauses are then introduced by explicit or implicit relational markers, linking these subordinate events to relevant components of the main clause. This process produces a semantic interpretation and syntactic structure that may be extended linearly in either direction, left to right or right to left, thus giving rise to symbolic structures that correspond to various types of complex events, such as semi-embedded, adjunct, free, or multiple relational constructions.

Through these investigations, the study not only proposes a refined classification of Chinese relative complex sentences but also demonstrates how different types of complex events interact dynamically with their corresponding symbolic structures. These mappings underscore the interplay between syntax and semantics in complex sentence formation and highlight the value of applying a cognitive, usage-based theoretical model to the study of Chinese grammar. The findings contribute to a deeper understanding of how Chinese relative complex sentences are structured and interpreted, offering new perspectives for future research in both theoretical and applied linguistics.

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Cracking the code to the letterbox: phonological awareness and reading in deaf children

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Keywords

Sign Language, Literacy, Phonological awareness, Deafness

Abstract

Learning to read at an age-appropriate level is an issue for many (though not all) people who are born deaf, regardless of the language(s) they acquire (Antia et al., 2020; Vizzi et al., 2022). Historically, compared to their hearing peers, deaf children's reading level is on average subpar achievement, whether they sign or speak (review by Kyle, 2018). However, about 10% of deaf students read beyond the age of 13-14 years or at a similar level as their hearing peers (Goldin-Meadow & Mayberry, 2001).

A long-standing debate is whether deaf children learn to read in the same way as their hearing peers. More specifically, questions are raised whether deaf children use the phonological route when reading. In the past, most studies started from the assumption that since written language is an encoding of a spoken language, it is sufficient to solely focus on deaf children's spoken language development (Arfe, 2015), i.e. on the phonological representation of this spoken language. Still, a large proportion of deaf children have delayed or degraded access to sound phonology and it is generally believed that only about 30% of speech is lip readable. Moreover, research has shown a weak correlation – about 11% - between spoken phonological awareness and reading comprehension in deaf children (review Mayberry et al., 2011). The age of first language exposure (Mayberry, 2007) and knowledge of a sign language (Chamberlain & Mayberry, 2008) are among the main factors contributing to better reading skills. Some studies have suggested these children might be using approaches based on fingerspelling or sign (Stone et al., 2015; Holmer et al., 2016). Thus, deaf children with a sign language as their first language might use or benefit more from an alternative sign phonological

route to achieve good reading skills. Could sign language phonological awareness be the missing link?

Conceptually speaking, sign language phonological inventories are constructed in the same way as spoken language inventories and are composed of a finite set of structures, which are combined at a sub-lexical level and meaningless when isolated (Sandler & Lillo-Martin, 2006). Through the case of Flemish Sign Language (VGT) and written Dutch, we examine what role is reserved for deaf children's sign language during the process of learning to read, VGT, as other sign languages, has no written from equal in use and status to the written form of Dutch (or other spoken languages). Dutch is a language whose orthography is highly consistent and transparent at the grapheme-phoneme level (with a few notorious exceptions) (Geudens &Sandra, 1999: 285). To this day the impact of (sign) phonological skills on the reading development of Flemish deaf signing children remains unknown.

We aim to map deaf children's Flemish Sign Language phonological awareness (VGT PA) in relation to their level of reading proficiency. Do increased VGT PA abilities enhance deaf children's reading in Dutch? By investigating the role of sign rhyming and fingerspelling, and their possible functional connection to learning to read we aim to unravel (part of) the complex reading mechanism from which deaf signing children may benefit. (1) Are deaf children sensitive to sign phonology when presented with a VGT sign rhyme judgement task, and does this particular skill contribute to their reading abilities in Dutch? (B) Is deaf children's comprehension of VGT fingerspelling proportional to their reading ability in Dutch?

Method

The study combines standardized and newly developed assessments in order to uncover the potential networks and mechanisms that can lead to successful reading comprehension outcomes in deaf children. These assessments involve background and language measures including a questionnaire (e.g. demographics, (parental) hearing status, type of education, language exposure and print exposure), non-verbal subtests of the Wechsler Intelligence Scale for Children (Wechsler, 2018), spoken phonological awareness, reading skills and semi-spontaneous spoken ang signed language (story retelling). A Rhyme Judgement Task for VGT based on the ASL-PAT assessment's

template (McQuarrie, 2012; Enns et al., 2016). It measures children's ability to identify similarity relations in VGT signs. The assessment includes 20 videos of the stimuli each followed by 4 drawings. Children were asked which item rhymes with the stimulus sign. A fingerspelling test includes videos of fingerspelled real words (n=20) and nonsense words (n=15). Children have to decide on their legitimacy by responding YES/NO, if YES, they are asked to produce the corresponding sign.

The collected data includes videos and test results of 7 deaf children who were all enrolled in the same school for the deaf.

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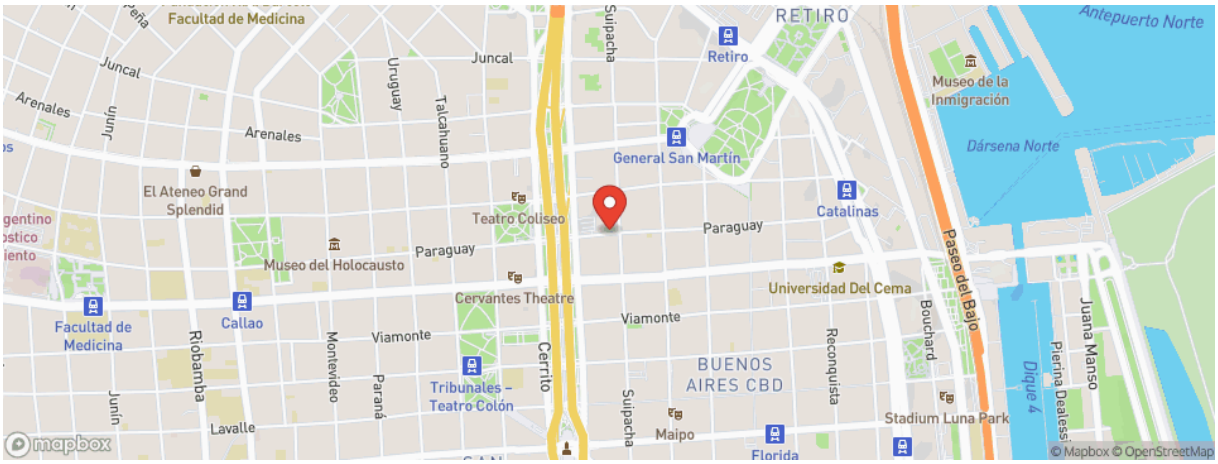

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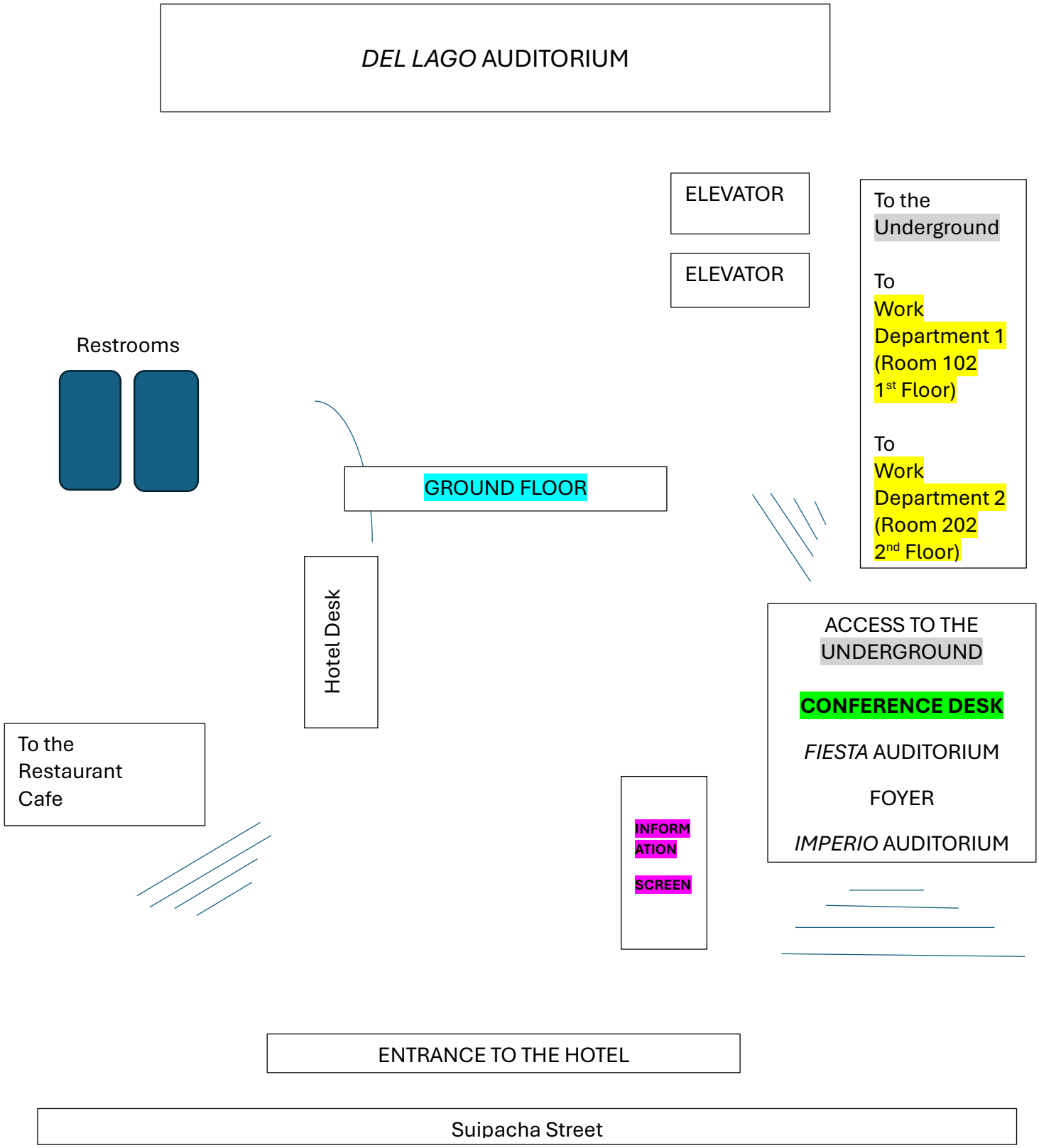

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- Banks: Open 10:00 a.m. to 3:00 p.m.
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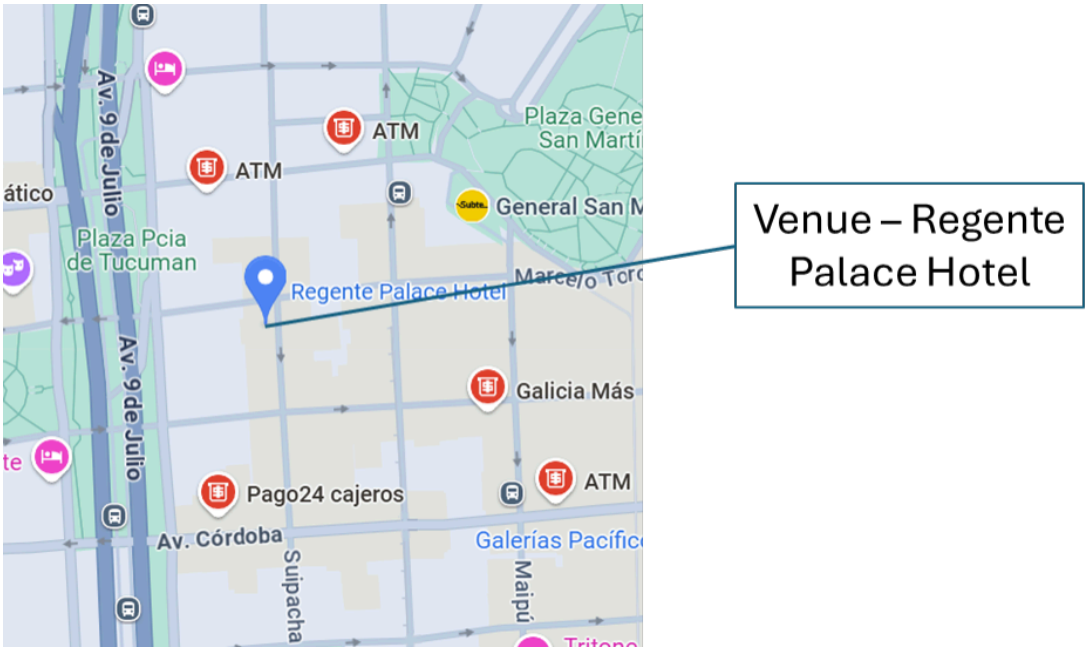

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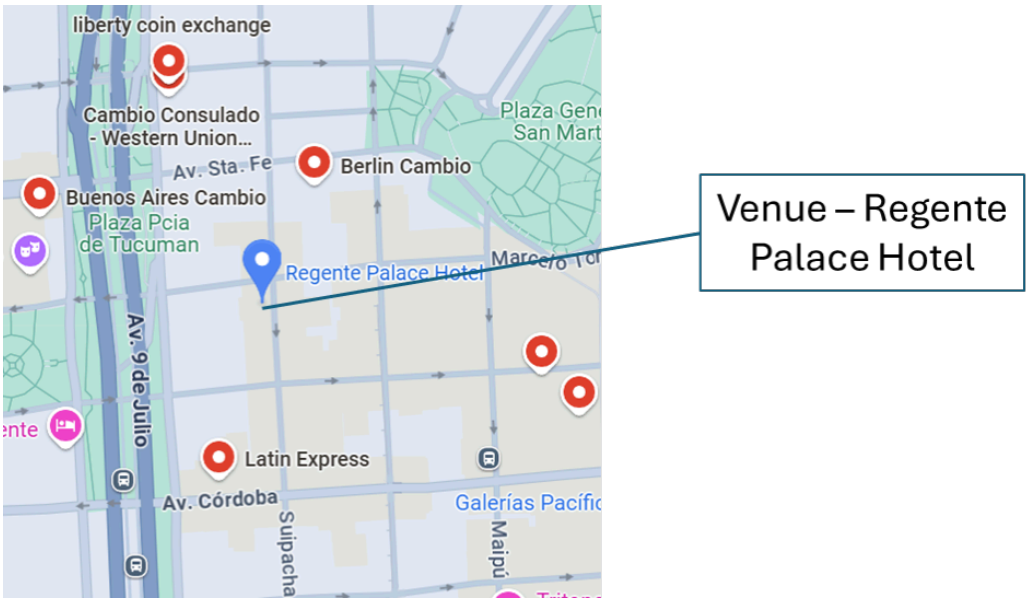
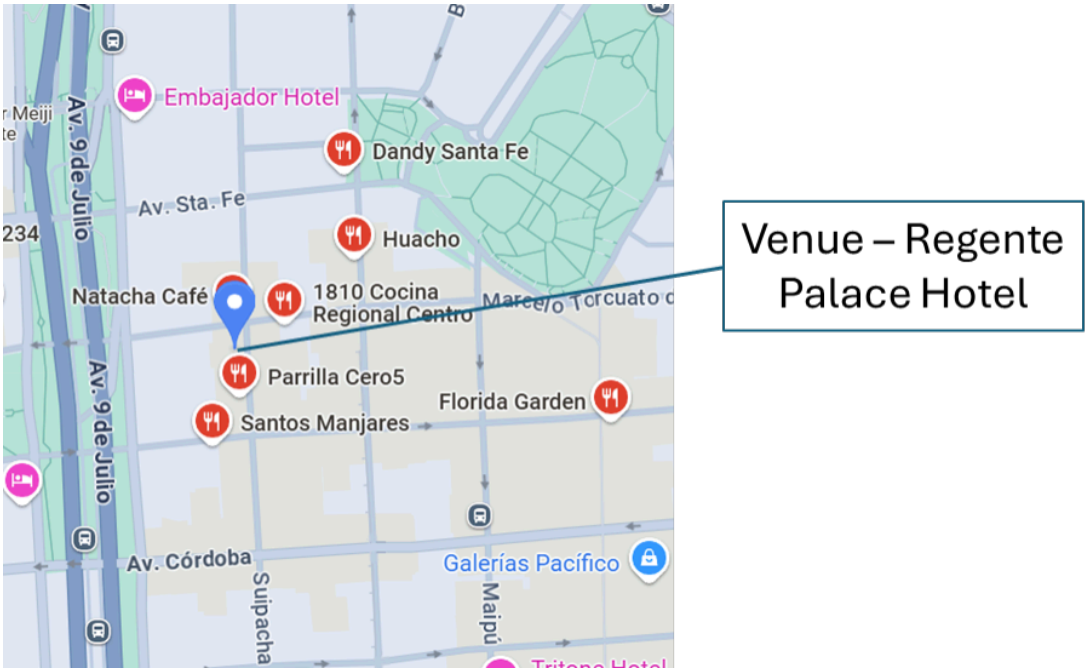
- Berlín Cambio – Av. Santa Fe 850
- Galerías Pacífico – Av. Córdoba 550
- Hotel Regente Palace desk (the Venue)

See the following map.



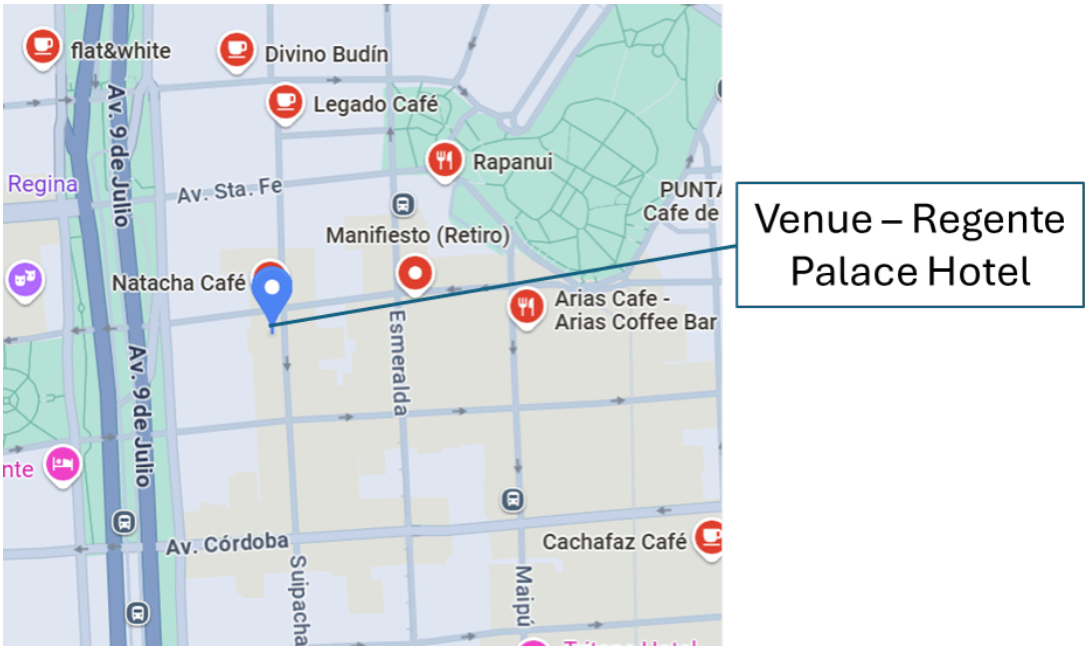
Restaurants and Cafés near the Venue

Restaurants



You can also have lunch at the Restaurant–Café of the Regente Palace Hotel.

Cafes



Tourism

The ICLC17 Team suggests:

1) Tango Porteño – Cerrito 570 (4 blocks from the venue – safe area for walking)

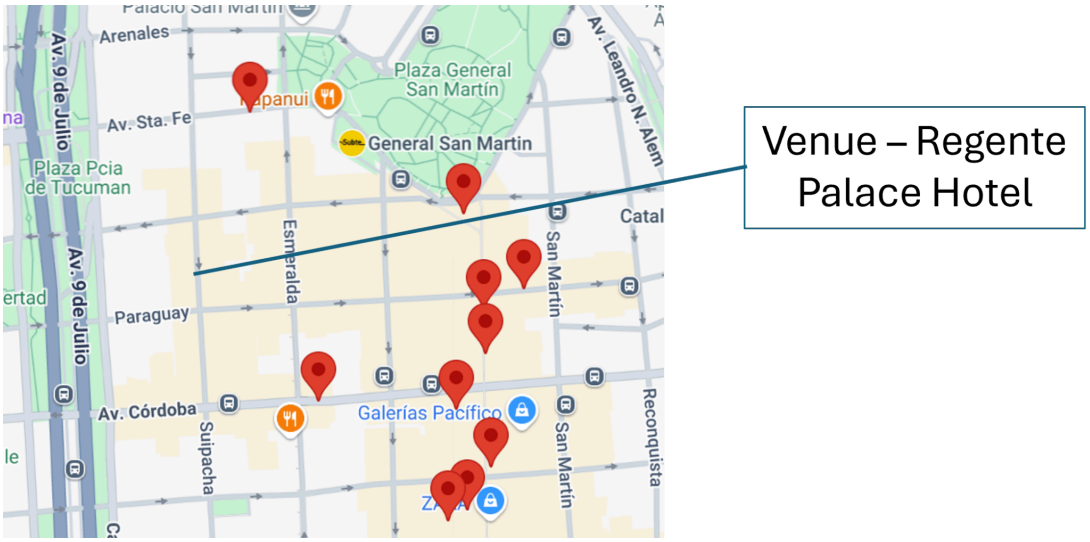
- Friday, July 18:
  - 8:15 p.m. – Dinner (free drink)
  - 10:00 p.m. – Tango Show (1h 20m)
- Price: 45 USD / AR$55,000
- Register and pay (exact amount in US dollars or Argentine pesos) **up to and including Wednesday, July 16** at the ICLC17 Conference Desk located in the foyer of the underground level of the Venue (Regente Palace Hotel).

2) Tourist Bus – Buenos Aires City:

In the following links you will find information about two tourist buses that have different routes:

- https://www.buenosairesbus.com/en
- https://buenosairescitybus.com/index.php

Tickets can be purchased online, at the official store located at Santa Fe 808 (the departure point), just two blocks from the venue, or at any of the other official stores shown on the map below.



3) Walking Tour: ***"Essential Buenos Aires: a Historical-Cultural Journey"***

An essential tour to understand the past and present of Buenos Aires. We walk through:

- Plaza de Mayo: the political and historical epicenter of the city.
- Diagonal Norte and its architecture.
- Obelisk: the symbol of Buenos Aires' identity.
- Plaza Lavalle and its theatrical environment.
- Corrientes Avenue: books, theaters, pizzerias, and cafes.

Duration: 2.5 to 3 hours.
Price: ARS 8,000 per person (payable on site) or 15 USD by Wise.
Children under 14: free.
Meeting point: the venue (Regente Palace Hotel).

Reservations and contact:
Reservation Code: ICLC17
Judith Eidelman — `juditheidelman@gmail.com` / +54 9 11 5574 9150

More Info

Other information, materials, and brochures on what to do in Buenos Aires can be found at the Hotel desk of the Regente Palace, the Venue.

Conference Programme

The 17th International Cognitive Linguistics Conference: Culture, Discourse and Cognition(July 14-18, 2025, Buenos Aires, Argentina)
Hotel Regente, Suipacha 964, Buenos Aires

PROGRAMME

Monday, July 14th

9:00 – 17:00	REGISTRATION (FOYER IMPERIO Auditorium – FIESTA Auditorium)				
9.30	**OPENING (IMPERIO AUDITORIUM)** Welcome address by the Dean of the Faculty of Philosophy and Letters at the University of Buenos Aires, Ricardo Manetti Welcome address by the President of AALiCo, Adriana Collado Welcome address by the President of ICLA, Jamin Pelkey				
10:00 -11.30	**Plenary 1. Concepción Company Company** (Universidad Nacional Autónoma de México) ***Context. A unit of language change. From speech verb to evidentiality in Spanish*** (Imperio Auditorium)				
11:35 – 12:00	BREAK				
Room	Imperio Auditorium	Del Lago Auditorium	Fiesta Auditorium	Work department 1	Work department 2
Category	Theme Session **Advances in Conceptual Blending Theory: Past and Future** Jamin Pelkey (Toronto Metropolitan University) Ľudmila Lacková Bennett (Palacký University Olomouc) & Mark Turner (Case Western Reserve University)	Theme Session **Intersubjectivity in grammar, discourse and cognition** Augusto Soares da Silva (Portuguese Catholic University) & Diogo Pinheiro (Federal University of Rio de Janeiro)	Session 1 **Corpus Linguistics** Chair: Lucía Bernardi	Session 2 **Language processing, prototype and categorization** Chair: Javier N. Martínez Ramacciotti	
12:00 – 12:25	Mark Turner Introductory spot:30 Years of Conceptual Blending Theory	Arie Verhagen Intersubjectivity: arguments and commitment in action coordination	Barbara Shaffer & Terry Janzen On 'off'	Norbert Vanek, Samuel Mehr, Courtney Hilton & Štěpán Matějka Distinguishing shades of blue across 106 languages	

12:30 – 12:55	Thomas Hoffmann & Mark Turner Creative Construction Grammar: The process behind construction combination is Conceptual Blending	Augusto Soares da Silva (Un)mediated and personal/social intersubjectivity	Qingnan Meng, Weihua Luo & Martin Hilpert Cottontails, ladyfingers, and laptops: What are the roles of metaphor and metonymy in English exocentric compounds	Ziyi Zhuang, Norbert Vanek & Danaé Larsen A crosslinguistic exploration of the role of food label overlaps in flavour perception	
13:00 – 14:00	LUNCH				
Room	Imperio Auditorium	Del Lago Auditorium	Fiesta Auditorium	Work department 1	Work department 2
Category	Theme Session **Advances in Conceptual Blending Theory: Past and Future**	Theme Session **Intersubjectivity in grammar, discourse and cognition**	Session 3 **Corpus Linguistics** Chair: Vanina A. Barbeito	Theme Session **Cognitive Insights, Pedagogical Shifts: Rethinking Language Teaching** Helen Zhao (The University of Melbourne) & Kyoko Masuda (Georgia Institute of Technology)	Session 4 **Sign language** Chair: Gisela E. Müller
14:00 – 14:25	Jussara Abraçado & Paulo Henrique Duque Conceptual Blending Operations in Constructions of Brazilian Portuguese: An Approach Based on the Articulation of Conceptual Blending Theory and Construction Grammar	Feng Yijia & EstherPascual Fictive interlocutors in contemporary American talk shows	Michele Cardo Interactive and Salient Functions of Question Sequences in Digital Monologic Discourse	Opening presentation	Sherman Wilcox, André Xavier & Rocío Martínez Conceptual and phonological overlap in signed languages
14:30 - 14:55	Ricardo Maldonado Dative blends in Mexican Spanish	Diogo Pinheiro Intersubjectification and (meta)normativization	Ann-Sophie Vrielynck The meaning of separability: Evaluating semantic hypotheses on (in)separable verbs in contemporary Dutch	Helen Zhao &Norbert Vanek Compatibility between cognitive linguistics and concept-based language instruction: An empirical validation	Josiane Marques da Costa & Adriana Fernandes Barbosa Teaching conceptual metaphors to bilingual deaf individuals of the Libras-Portuguese language pair: a quasi-experimental study

15:00 – 15:25	Anna Wilson Future Conceptualizations in English Speech and Co-Speech Hand Gesture via Conceptual Blending	Clara Sousa & Brendha Portela Investigating counter-expectation constructions: From information structure to Cognitive Grammar	Jan Leite & Maria Eduarda Alves "Casting a blank ballot": Selection of visual/verbal information during comprehension of metaphors in political cartoons	Noriko Iwasaki & Kyoko Masuda Cultivating Awareness of Sound Symbolism through Manga for Learning Japanese Vocabulary	Theresa Matzinger, Monika Boruta, Aoife Jordan & Hannah Marwan-Schlosser The aesthetic appeal of sign languages: intrinsic appeal or cultural associations?
15:30 – 15:55	Ľudmila Lacková Bennett Disanalogy and participative opposition in Digital Writing	Ricardo Maldonado & Juliana de la Mora Ya ves (que) 'You see (that)': Evidentials, Epistemics and Miratives. Intersubjective paths	Takashi Kobayashi English Demonstrative Pronouns Referring to Proximal Entities: A Cognitive Linguistic Approach	Natalia Dolgova "Isn't all of it just contrast?": Applying Cognitive Linguistics and Concept-Based Language Instruction to teach English cohesive devices of contrast	Felicia Bisnath & Benjamin Anible Do depictive and descriptive forms in Norwegian Sign Language differ in morphosyntactic integration?
16:00 – 16:25	Margaret Freeman AI and the Nature of Poetic Creativity	Lilian Ferrari Intersubjective meanings of person deixis in Brazilian Portuguese: The cases of generic 1st and 2nd person pronouns	Daiki Yoshitake How Verbs of Perception Come to Express "Understanding"? Variations and Mechanisms of Comprehension Usage in French and Japanese Verbs of Involuntary Audition	Shu-Ling Wu & Lihong Huang A Cognitive Linguistics Approach to L2 Acquisition of Chinese Modal Verbs	
16:30 – 17:00	BREAK				
Room	Del Lago Auditorium	Fiesta Auditorium	Work department 1	Work department 2	
Category	Theme Session **Advances in Conceptual Blending Theory: Past and Future**	Theme Session **Intersubjectivity in grammar, discourse and cognition**	Theme Session **Cognitive Insights, Pedagogical Shifts: Rethinking Language Teaching**	Session 5 **Metaphor and metonymy** Chair: Cynthia P. Audisio	
17:00 – 17:25	Jamin Pelkey Kinesthetic Spaces: Bodily origins of advanced blending	Kutilda Khammee & Seongha Rhee Monologual questions and intersubjectivity: The cases of Thai and Korean	Kyoko Masuda Teaching the Japanese causative by incorporating insights from corpus studies and concept-based language instruction	Elena De Wachter Conceptual creativity: the poetic modes of Elizabeth Bishop's water metaphors	

17:30 – 17:55	Anna Bonifazi Material anchors for experiential blending: The case of 7th to 5th century BCE catabatic stories and artefacts	Anna Inbar & Yael Maschler Marking the interactional achievement of intersubjectivity: The case of whole-handpointing at the addressee in Hebrew face-to-face interaction	Eunhye Hess & Michael Amory Rethinking the Teaching of Korean Honorifics through the Lens of Cognitive Linguistics and Concept-Based Language Instruction	Claudia Raihert, Barend Beekhuizen & Emily Atkinson Studying effects of genre on real-time metaphor processing
18:00 – 18:25	Robert Williams 4E blending in problem-solving, collaborative reasoning, and teaching	General discussion	Q/A & discussion time	Elise Stickles, Kimberly Grogan & Leah Steinfeld Religion metaphors in climate change discourse: A cross-linguistic and cross-cultural comparison between the US, Canada and France
18:30 – 18:55	Stanley Mandosela Form and meaning in conceptual blending: The case of Siswati in African Wordnet			Elena Nicoladis Individual differences in being 'stuck in a metaphor'
19:00 -20:30	WELCOME RECEPTION (Imperio Auditorium)			

Tuesday, July 15th

9:00 – 17:00	REGISTRATION (FOYER IMPERIO Auditorium – FIESTA Auditorium)				
9:00 – 10:30	**Plenary 2. André Nogueira Xavier** (Universidade Federal do Paraná) ***Pinkie First: Digital List Constructions in Brazilian Portuguese*** (Imperio Auditorium)				
10:35 – 11:00	BREAK				
Room	Imperio Auditorium	Del Lago Auditorium	Fiesta Auditorium	Work department 1	Work department 2
Category	Theme Session **Advances in Conceptual Blending Theory: Past and Future**	Theme Session **Stance-taking and gesture** Maíra Avelar (State University of Southwestern Bahia), Alan Cienki (Vrije Universiteit Amsterdam) & Olga Iriskhanova (Moscow State Linguistic University)	Session 6 **Construction Grammar** Chair: Javier N. Martínez Ramacciotti	Session 7 **Cognitive Sociolinguistics** Chair: Adriana Collado	Session 8 **Cognitive Phonology** Chair: Vanina A. Barbeito
11:00 – 11:25	Suzanne Kemmer Teaching Conceptual Blending Theory	Maíra Avelar, Alan Cienki & Olga Iriskhanova Introduction	Inés Lozano & Francisco José Ruiz de Mendoza Ibáñez 'Type-of' integration patterns in the non-compositional construal of lexical blends	Rafael Soto Setzke The language of pain across cultures: A literature review	Kosuke Matsuura & Yuki-Shige Tamura Cognitive Phonology and Japanese Vowel Coalescence
11:30 – 11:55	Mariangela Albano The Mythological Mind: Blendings & Memory	Alan Cienki, Olga Agafonova, Anna Leonteva & Olga Prokofeva Recurrent gestures in light of verbal stance markers: The case of "Offering" gestures	Francisco Gonzálvez-García & Mª Sandra Peña-Cervel Exploring formal and functional elements in English lexical blends through cognitive modeling: A cognitive-functional approach	Oleksandra Osypenko, Silke Brandt, Aina Casaponsa & Panos Athanasopoulos Cognitive restructuring in trilinguals: effects of individual differences and L2 proficiency on categorization and memory recall in Ukrainian-Russian-English speakers	Yuki-Shige Tamura & Kosuke Matsuura Subjectification and Phonologization: A Case Study from Japanese Voice Onset Time

12:00 – 12:25	Kimberly Grogan & Elise Stickles Selective projection and viewpoint: How conceptual Blending Theory clarifies metaphoric framing	Maíra Avelar Recurrent gestures and prosodic cues as epistemic markers in Brazilian Portuguese	Lucas Pivetta Conceptual word blending: an issue with endocentric constructions	Annika Labrenz An interconnected perspective on linguistic structure, extralinguistic contexts, and cognition	Farhat Jabeen & Theresa Matzinger Differential use of prosodic cues for speech segmentation
12:30 – 12:55	Eve Sweetser, Elise Stickles, Lorianne Z Fan, Xu Zhang, Jiani Cao & Jiaying Zhang PANDEMIC IS WAR metaphors: multimodal blends with varied inputs and meanings	Julie Janssens, Geert Brône, Bert Oben & Dorien Van De Mieroop Joint Attention and Stance: How feedback facilitates joint attention and vice versa	Antonina Bondarenk Verbless sentences: constructions or constructs? A contrastive corpus approach	Karlien Franco Variation and change in lexical diversity: Does synchronic change mirror diachronic leveling?	Juha Yliniemi & Sarat Kumar Doley Iconicity and metaphor: why modified reduplication is associated with pejorativeness
13:00 – 14:00	LUNCH				
Room	Imperio Auditorium	Del Lago Auditorium	Fiesta Auditorium	Work department 1	Work department 2
Category	Theme Session **Advances in Conceptual Blending Theory: Past and Future**	Theme Session **Stance-taking and gesture**	Session 9 A **Language Acquisition** Chair: Gisela E. Müller	Session 10 **Corpus linguistics** Chair: Enrique Menéndez	Session 11 **Construction Grammar** Chair: Malena Trotta
14:00 – 14:25	Lei Huang, Esther Pascual & Todd Oakley "Conscience, You Counsel Well!": A Multimodal and Polysemiotic Fictive Interaction Blend for Internal Dialogue Externalisation in Shakespearean Theatre	Schuyler Laparle & Eve Sweetser Projecting Viewpoint: Material and immaterial discourse anchors	Kinga Patterson, James A Street & Andriy Myachykov Frequency and literacy as predictors of Individual Differences in on-line processing and comprehension of English complex, non-canonical constructions	Teresa Molés Cases Sensory perception and thinking for translating. A corpus based study of narrative texts	Wataru Kono Panchronic Analysis of the Have it (that) Construction
14:30 – 14:55	Mingjian Xiang Saying the unsayable: Allegories as intersubjective mixed viewpoint discourse constructions in an early Daoist text	Katerina Papadopoulou, Cornelia Müller & Jeanette-Christine Bauer Gesture sequences: How politicians embody affective stance	Alfredo J Hernández-Abella & Darwin Jobani Tejeda García Grammatical Beliefs on Aspectual Distinction in Spanish: The Role of Cognitive Instruction in Developing Language Awareness Among Native Teachers	Gabriela Ribeiro Grammatical Constructions, Scalarity, and Intersubjectivity: The Concessive Structures [Ainda que P, Q] and [Mesmo que P, Q] in Brazilian Portuguese	Lixia Chen & Zaijiang Wei A metonymic approach to classifier constructional metonymies in Mandarin

15:00 – 15:25	Vera Tobin Conceptual Compression and Systematic Forgetting: The Case of Irony Attrition	Beatriz Graça, André Lisboa & MaíraAvelar Recurrent gestures and stance-taking in contexts of negation	Session 9 B **Applied Linguistics and Pedagogy** Chair: Gisela E. Müller Carla Viana Coscarelli & Luana Lopes Amaral Understanding reading: theoretical and applied implications of an analysis of the comprehension of written texts	Camila Sanches The Expansion of the Verbal Connector Network: A Case Study on "sabendo que" and "pensando que"	Pedro Ivorra-Ordines & Caterina Chinellato Reduplication and Construction Grammar. A cross-linguistic analysis of reduplicative genitive superlative constructions in English, Italian, Spanish and French
15:30 – 15:55	Wenyue Xi, Zhongheng Cheng & Mark Turner Empirical Benchmark of Generative AI for Frame Blending Generation	Thaís Lima & Lilian Ferrari A contrastive analysis of Brazilian Portuguese and English spatial deixis	Rosalía Calle Bocanegra Acquisition of motion event expression and deictic motion verbs by Czech advanced learners of Spanish	Dan Xing A Corpus-based Study of Spatial Ambiguity in Mandarin 'N1 + F + yǒu (have) + N2' Sentences	Rongxin Sun Construal of Space without Verbal Coding: Evidence from Nominal Predicate Existential Construction in Mandarin
16:00 – 16:25	Danny Arlen de Jesús Gómez-Ramírez Formal Conceptual Blending as a fundamental tool for developing artificial mathematical intelligence and for training large language models	Schuyler Laparle The quote-unquote "quoting gesture" on American late-night television talk shows		Krisda Chaemsaithong & Say Young Kim Reporting or creating fear? The case of COVID-19 news reports in English-language newspapers in South Korea	
16:30 – 17:00	BREAK				
Room	Imperio Auditorium	Del Lago Auditorium	Fiesta Auditorium	Work department 1	Work department2
Category	Theme Session **Advances in Conceptual Blending Theory: Past and Future**	Theme Session **Stance-taking and gesture**	Session 12 **Cognitive Semiotics** Chair: Javier N. Martínez Ramacciotti	Session 13 **Language processing** Chair: María de las Mercedes Luciani	Session 14 **Metaphor and metonymy** Chair: Roberto Aguirre

17:00 – 17:25	Renata Geld Making the Invisible Visible: Integrating Conceptual Blending and Learning from the Future for Innovation	Closing discussion session	Barbara Dancygier & Lieven Vandelanotte Multimodal communication and the expression of emotion	Rocío Bartolomé Rodriguez, Marcos Meo, Ángel Javier Tabullo, Gustavo Gasaneo, Mere Ortiz & Ana Rosa Terroba Using local eye-tracking parameters and multifractality measures to investigate the effect of plain language on reading processing: a pilot study	Javier Valenzuela & Rosa Illán Castillo Shaping Time Through Manner of Motion: The Emotional and Cognitive Impact of Manner Verbs in Temporal Expressions
17:30 – 17:55	Concluding Spot: Conceptual blending, past and future	Session 15 **Cognitive Grammar** Chair: Luis París Daniel William Ferreira de Camargo & Flávia Bezerra de Menezes Hirata-Vale Cognitive-Functional Analysis of [só que x]: Perspectivation in Brazilian Portuguese	Sabina Tabacaru Gestural triggers and humorous stance: The case of political debates	Paula Eugenia Barral, Candela Erika Quispe, Blas Alfredo Mascherini, Santiago Andrés Besi, Elio Andrés Soria, Ailin Farre, Agustín Ramiro Miranda & Mariela Valentina Cortez Performance on Verbal Fluency Tests Conducted in Virtual versus In-Person Settings AmongLactating Postpartum Women in Córdoba, Argentina	Rosa Illán Castillo & Javier Valenzuela Using AI to replicate human experimental results: three metaphorical motion studies
18:00 – 18:25		Igor Amaral Vitral Hollerbach Athayde, João Scarano Guerra & Julia Figueira Salvador "Jogar Algo Pela Janela": a Construction Grammar Approach to Emotional Expression	Daniel Kjellander & Suzanne Kemmer Multimodality in Lexical Blending: Applying New Methodologies to Understand Blend Formation		Inés Lozano A typology of ironist, target and interpreter roles in verbal irony: a cognitive-pragmatic account
18:30 – 18:55			Yen-Ting Lin Bilingualism and Spatial Cognition in Taiwan: Lexical Specification Across Frames of Reference		Jurga Cibulskienė & Dovydas Kubilius Metaphorical framing of wars in Joe Biden's Speeches: The Cases of Russo-Ukrainian and Israel-Hamas Wars
19:00 – 20:00		**BOARD MEETING**			

Wednesday, July 16th

9:00 – 17:00	REGISTRATION (FOYER IMPERIO Auditorium – FIESTA Auditorium)				
9:00 – 10:30	**Plenary 3. Maarten Lemmens** (Université de Lille) ***The cognitive and social impact of words: from manner of location to perinatal loss*** (Imperio Auditorium)				
10:35 – 11:00	BREAK				
Room	Imperio Auditorium	Del Lago Auditorium	Fiesta Auditorium	Work department 1	Work department 2
Category	Theme Session **Extravagance and creativity through the empirical lens** Stefan Hartmann (Heinrich Heine University Düsseldorf) & Tobías Ungerer (University of Toronto)	Session 16 **Corpus Linguistics** Chair: Lucía Bernardi	Session 17 **Construction Grammar** Chair: Adriana Collado	Session 18 **Language change** Chair: Enrique Menéndez	Session 19 **Multimodality** Chair: Gisela E. Müller
11:00 – 11:25	Stefan Hartmann & Tobias Ungerer Introduction: Extravagance and creativity through the empirical lens	Hajime Nozawa & Kazuho Kambara A Corpus-based Approach to Aspectual Interpretation and Properties of Participants: Is it happening or about to happen?	Thomas Herbst & Patrick Krauss Expectation Building through Constructions and in the brain	Yoshimi Kawabata Cognitive Shifts in the Grammaticalization of 'wo' and 'ga'	Denise Sedran & Daz Saunders Enactment in triadic discourse: Navigating stance, intersubjectivity and visual clues in English to ASL interpreting
11:30 – 11:55	Nik Gisborne Non- extravagant extending creativity	Hidetoshi Inoo Skating 'on Thin Ice' and Landing 'in the Soup': A Diachronic Analysis of Constructional Changes in English	Kyoko Ohara Relations among Pragmatic Functions, Interactional Frames, and Conventionalized Constructional Meanings	Seongha Rhee & Kutilda Khammee Commonality and Variability of Conceptualization: The Case of 'Enter' in Thai and Korean	Julie Janssens, Geert Brône, Bert Oben & Dorien Van De Mieroop Joint Attention and Stance: How feedback facilitates joint attention and vice versa

12:00 – 12:25	Maria Koliopoulou & Jim Walker Extravagance on a creative scale	Zihan Chen & Deliang Wang A Comparative Cognitive Study of Diachronic Semantic Changes of Dog in English and Gou (狗) in Chinese	Marcelo Viridiano, Tiago Torrent, Thomas Hoffmann, Arthur Lorenzi & Mark Turner Copilots for Linguists 2025	Michel Fontes Measuring chunking effects in the emergence of a focus particle in Portuguese	Svetlana Kuleshova, Michael Pleyer, Przemysław Żywiczyński, Slawomir Wacewicz, Johan Blomberg & Stefan Hartmann Do humans "understand" ape gestures and sound-symbolic vocalizations? An experimental study
12:30 – 12:55		Yuhan Han Metaphorical Conceptualization of Emotion: A Cross-Cultural Study of Heart-Related German and Chinese Idioms			Jonas Nölle, Yichen Wu, Pablo Arias, Chaona Chen, Oliver G B Garrod, Philippe G Schyns & Rachael E Jack Antonymic facial expressions: From biologically-rooted movements to multimodal language features
13:00 – 14:00					**Stefan Hartmann & Terry Jansen** **HOW TO PUBLISH**
13:00 – 14:00	LUNCH				
Room	Imperio Auditorium	Del Lago Auditorium	Fiesta Auditorium	Work department 1	Work department 2
Category	Theme session **Extravagance and creativity through the empirical lens**	Session 20 **Corpus Linguistics** Chair: Patricia C. Hernández	Session 21 **Construction Grammar** Chair: Lucía Bernardi	Session 22 **Language change** Chair: Martín Califa	Session 23 **Cognitive semiotics** Chair: María de las Mercedes Luciani
14:00 – 14:25	Susanne Flach Creativity and productivity in a dynamic link-based network perspective	Julien Perrez, Raymond Echitchi & Min Reuchamps Gender and deliberate metaphor use in Belgian political discourse	Diego Leite de Oliveira Towards a constructionist typology of argument focus in Brazilian Indigenous languages	Michael Pleyer, Elizabeth Qing Zhang & Marek Placiński Pathways to Polysemy: Metaphorical Extension in an Artificial Language Learning Experiment	Jonas Nölle Language evolution in strange worlds: Virtual reality as a causal laboratory to study language and cognition

14:30 – 14:55	Pedro Ivorra Ordines Unraveling creativity. A constructionist approach	Masako Fidler & Václav Cvrček Tracking discourse prototypes for "East" and "West" over the 20 years in the Czech media	Priscilla H Pacheco & Nilza B. Dias (Inter)subjectivity and caveat in contrastive contexts	Jaakko Leino Emerging person marking in Finnish non-finite verbs	Mateja Lasnik & Wen-Yu Chiang Cognitive Linguistic Insights into Gender and Culture: Shifting Gender Metaphors in Slovene Comics
15:00 -15:25	Irene Pagliai Off the beaten track without getting lost: Exploring the creative potential of Italian idioms	Laura Suárez Campos, Ana Escartín Arilla & Lucía Gómez Vicente Metaphors in International Cooperation NGO Discourse: A Corpus LinguisticsStudy	Taisa Peres de Oliveira The Constructional Similarity Hypothesis and the Horizontal Configuration of the Network	Wu Yanxin & Wang Deliang A Diachronic Cognitive Study of the Chinese-Japanese Homograph "心中"/「心中」 Based on Distributional Semantics	Marta Sibierska, Klaudia Karkowska, Monika Boruta & Sławomir Wacewicz Alternation as a precondition for symbol grounding: insights from a referential game with silent stories
15:30 – 15:55	Martin Fuchs & Scott Schwenter The extravagance of the Argentinian Spanish conditional progressive	Sara Malik, Andreea Calude & Joseph Ulatowski Topic Specific Differences and Lexical Variations in the Use of Violence Metaphors: A cognitive linguistic study of YouTube Breast Cancer Discourse in New Zealand and Pakistan		Ning Sun Semantic evolution of constructions: a grammaticalized interpretation of demonstrative pronoun	Yekaterina Yakovenko Terms as Tools of Remapping Conceptual Domains in Old English
16:00 – 16:25	Renata Enghels, María Sol Sansiñena & Mar Garachana Camarero Productivity and creativity in diachrony: a study of aspectual Spanish periphrastic constructions				
16:30 – 17:00	BREAK				
Room	Del Lago Auditorium	Fiesta Auditorium	Work department 1	Work department 2	
Category	Theme session **Extravagance and creativity through the empirical lens**	Session 24 **Frame semantics** Chair: Adriana Collado	Session 25 **Cognitive Sociolinguistics** Chair: Malena Trotta	Session 26 **Language processing** Chair: Enrique Menéndez	

17:00 – 17:25	Victoria Cataloni Extravagant use-conditional meanings expressed by morphological diminutives in Brazilian Portuguese	Andrea Ariño-Bizarro & Iraide Ibarretxe-Antuñano Talking and Thinking about Causality in Spanish and Basque: A Verbal and Non-verbal Categorisation Study	Vladimir Glebkin, Ekaterina Ivleva & Tatiana Kogan Differences in linguistic competence among L1 speakers: A series of experimental studies	Tally McCormick Miller & Friedemann Pulvermüller The Unique Role of Language in Reshaping Tactile Perceptual Discrimination: Evidence from Comparative Learning Paradigms
17:30 – 17:55	Gabriella Souza Oliveira Creating novel ideophones in Brazilian Portuguese	Antonio Barcelona Sánchez Metonymy triggers and degree of metonymy activation	Vladimir Glebkin Ad hoc meaning within the framework of multimodal communication: A developmental study of adaptors and gestures	Ewa Dabrowska Community grammars, speaker grammars: Partial productivity in Spanish verbal morphology
18:00 – 18:25	Tobias Ungerer, Theresa Matzinger, Michael Pleyer & Stefan Hartmann Extravagance in the lab: How social biases affect the emergence of linguistic innovations	Kevin Ezra Moore Temporal location metaphors expressed morphosyntactically: The case of Wolof	Siqi Xu A Corpus-based Critical Discourse Analysis of Stigmatization Discourse on Unmarried Women in China	Karlien Franco & Melissa Schuring On snacks and sounds: The kiki/bouba effect is mediated by experiential properties
18:30 – 18:55	Discussion: Extravagance and creativity through the empirical lens	Ana Ostroški Anić & Ivana Brač Expanding FrameNet Frames for a Valency Lexicon of Croatian	Maria Julia Bernardo Comarim & Flávia Bezerra de Menezes Hirata-Vale If only there was a presentation dedicated to irony on insubordinate constructions with [SE AO MENOS]	
19:30 – 23:30	CONFERENCE DINNER (Imperio Auditorium)			

Thursday, July 17th

9:00 – 17:00	REGISTRATION (FOYER IMPERIO Auditorium – FIESTA Auditorium)				
9:00 – 10:30	**Plenary 4. Alice Gaby** (Monash University) ***Biases in language, cognition and linguists*** (Imperio Auditorium)				
10:35 – 11:00	BREAK				
Room	Imperio Auditorium	Del Lago Auditorium	Fiesta Auditorium	Work department 1	Work department 2
Category	Theme session **Compositionality in Cognitive Constructional Perspective** Corrine Occhino (The University of Texas at Austin), Terry Janzen (University of Manitoba), Daz Saunders (University of Manitoba), Sally Rice (University of Alberta), Jalon Begay (Austin Community College) & Cornelia Müller (European University Viadrina Frankfurt)	Session 27 **Cognitive Grammar** Chair: Cynthia P. Audisio	Theme session **Studies on the Río de la Plata Spanish from a Cognitive Linguistics Approach** Adriana Collado (National University of San Juan) Patricia C. Hernández (University of Buenos Aires, Universities of Orléans & Rouen) & María Soledad Funes (CONICET & University of Buenos Aires)	Theme session **Language as human behavior: The legacy of William Diver & Érica García** Ludmila Novotny (Universidad Nacional de La Plata), Lucía Zanfardini (Universidad Nacional del Comahue), Ilia Afanasev (University of Vienna) & Daan van Soeren (University of Amsterdam)	
11:00 – 11:25	Introduction	Michael Barlow Entrenchment and individual differences in language usage	Patricia C. Hernández *De corazón* vs *desde el corazón*: different ways of saying *from the heart*. Semantic and pragmatic contrast between Spanish prepositions *de* and *desde*	Ludmila Novotny, Lucía Zanfardini, Ilia Afanasev & Daan van Soeren Introduction: On Columbia School linguistics and the ethnopragmatic approach	

11:30 – 11:55	Daz Saunders Mouth actions in Quebec Sign Language: Compositional units or context-dependant gestures?	Yuan Wei, Heng Gong & Michael Barlow Viewpoint shifts and mental spaces in academic discourse	María Soledad Funes The discursive marker *por lo menos*: focalizer or reformulator?	Igor Dreer A sign-oriented contrastive analysis of tense usage in Russian and Hebrew source and translated texts: A parallel corpus study of "Kolymskiyerasskazy" by Varlam Šalamov and "Sumchi" by Amos Oz	
12:00 – 12:25	Terry Janzen, Barbara Shaffer & Lorraine Leeson Frankensteining the word: Compositionality and nonconventional innovation	Naoki Otani & Willem Hollmann Prepositional phrase complements of prepositions: a cognitive grammar explanation	Lucía Bernardi Secondary interjections: between intersubjectification and grammar	Ilia Afanasev Grammatical system of czas przyszły złożony in Polish: preliminary considerations	
12:30 – 12:55	Jalon Begay How Chunking has led to Misalignment & Readjustment in Navajo	Haruka Shimura & Naoaki Wada A Cognitive Linguistic Analysis of "Epistemic Modal + Perfect Progressive": From the Perspective of Temporal Structures	Adriana Collado The role of the adjectival strategy in the distribution of textual information	Ludmila Novotny CS for the study of indigenous languages: Examples from Mapudungun	
13:00 – 14:00	LUNCH				
Room	Imperio Auditorium	Del Lago Auditorium	Fiesta Auditorium	Work department 1	Work department 2
Category	Theme session **Compositionality in Cognitive Constructional Perspective**	Session 28 **Cognitive Grammar** Chair: Cynthia Audisio	Theme session **Studies on the Río de la Plata Spanish from a Cognitive Linguistics Approach**	Theme session **Language as human behavior: The legacy of William Diver & Érica García**	Session 29 **Construction Grammar** Chair: Mónica Trípodi
14:00 – 14:25	Sally Rice Compositionality or contextualized collocation? The linguistic hothouse versus the real world in form-meaning mapping in language	Ivana Brač, Kristina Despot & Branimir Belaj Interaction between metaphorical shifts in verbs' meaning and their valency patterns	Vanina Andrea Barbeito Agreement in number and its discursive realization: A focus on Pronoun Duplication	Daan van Soeren Phonology without the phoneme	Kazuho Kambara, Hajime Nozawa & Yoichiro Hasebe Constructional Identification of Eventualities: A Usage-based Account

14:30 – 14:55	Cornelia Müller Emergent decomposition of gestures: The case of gesture families	Luis París & Martín Califa On causation: the case of oblique de-marked causers in Spanish	Mariana Morón & Sofía Gutiérrez Böhmer Impersonality strategies in Spanish: a nominal perspective	Lucía Zanfardini Significant contribution and distribution of "para" in Spanish	Yoichiro Hasebe Discourse Connectives as Constructions: Developments in Conceptual Domains and Properties as Linguistic Units
15:00 – 15:25	Corrine Occhino Does Usage-based Construction Grammar make Compositionality Obsolete?	Mª Sandra Peña-Cervel & Francisco Gonzálvez-García The conceptual complexity of splinters. Towards a semantic classification	Javier N. Martínez Ramacciotti A counterfactual construction with no "counterfactual ingredients": the role of metonymy	Verónica Mailhes Preparados, listos… ¡ya! The distribution of a linguistic sign: a semiotic-semantic analysis of Spanish "ya"	Naoaki Wada The non-finite -ru and three types of "S1 to S2" constructions with specific past-time reference in Japanese: With reference to their English counterparts
15:30 – 15:55	Discussion	Jinke Song Boundary-crossing events in Standard Chinese: A case of Medium-encoding by 过 -guo 'across'	Gisela Elina Müller Communicative acts and their strategic construals in scientific lectures on sustainability. The case of judging	Yliana Rodríguez The contrast between "tú" and "vos" in the Spanish spoken in Montevideo, Uruguay	Motomi Kajitani Non-Exhaustive List Construction, Evaluation, and the Unprepared Mind: The Case of the Japanese X toka Construction
16:00 – 16:25		Eliisa Uotila Intersubjectivity in news genre? A case of explaining in easy language news		Concluding Spot: General discussion	
16:30 – 17:00	BREAK				
Room	Imperio Auditorium	Del Lago Auditorium	Fiesta Auditorium	Work department 1	Work department 2
Category	Session 30 **Cognitive Grammar** Chair: Luis París	Session 31 **Cognitive Sociolinguistics** Chair: Sofía Caballero Menas	Theme session **Studies on the Río de la Plata Spanish from a Cognitive Linguistics Approach**	Session 32 **Motion and space** Chair: Analí R. Taboh	Session 33 **Discourse Analysis** ChairS: Roberto Aguirre

17:00 – 17:25	Patrick Duffley Disappearances can be perceptive – what human language reveals about perception and its relation to conceptualization	Alberto Hijazo-Gascón, María Gómez-Bedoya & Luna Filipovic The Role of Swearwords in Forensic Linguistics and Police Interpreting	Luis París &Lilia Dieguez On Mixed Phrases: Nominal Infinitives in Spanish	Camilo Segovia Place Names and Landscape Terms in Baincoca	Malka Muchnik Linguistic Usage and Cognitive Perception of Gender in a Hebrew Novel by David Grosmann and Its Spanish Translation
17:30 – 17:55	Thiago Da Silva & Karen Alonso Binomial Possessive Constructions in the Academic Writing of Brazilian Students in English	Estefania Tamayo Pineda Construal and perspective as guiding principles in the analysis of causal prepositional constructions in Spanish	Cynthia Pamela Audisio, María Laura Ramírez, Macarena Sol Quiroga & Francesca di Gianni Do referential choices in Spanish-learning preschoolers align with Preferred Argument Structure patterns?	Michele Feist, Rosa Alonso Alonso & Paula Cifuentes-Férez Following path and manner beyond lexicalization patterns	Jinke Song & Yu Zhang The pragmatic functions of Standard Chinese interjections
18:00 – 18:25	Shione Takahama An Image-schema Approach to Agentive By	Camila Bracamonte The polysemy of Posta (que) in Argentine Spanish	María de las Mercedes Luciani & Carla Mariana Lauria Learners' Choices in the Use of the Perfect Aspect: Grammatical Error or Different perspectivization?	Bill Palmer Egocentric spatial encoding in languages with no left and right	Inesa Šeškauskienė Metaphor in legal translation: Conceptualising human rights in English and Lithuanian
18:30 – 18:55	Riho Terayama Does Impersonal-'it' Become More Tangible at the Existential Level? On the Impersonal-'it' Construction with the Predicate 'Be Time'	Melissa Schuring, Laura Rosseel & Eline Zenner On the role of age in children's acquisition of socially meaningful language variation		Rodrigo Ponce de León & Florencia Reali Time-Moving and Ego-Moving schemas in Time-Space metaphors in Rioplatense Spanish	Deliang Wang Dialogic Resonance: A Cognitive Linguistic Perspective on Interactive Meaning-Making
19:00– 20:30	ICLA GENERAL ASSEMBLY (IMPERIO Auditorium)				

Friday, July 18th

9:00 – 14:00	REGISTRATION (FOYER IMPERIO Auditorium – FIESTA Auditorium)	
Room	Del Lago Auditorium	Fiesta Auditorium
Category	Session 34 **Cognitive Sociolinguistics** Chair: Florencia Reali	Session 35 **Motion and space** Chair: Gisela E. Müller
9:00 – 9:25	Nicola Swinburne, Peter Petre & Hubert Cuyckens Patterns of clausal complementation with remember, forget, and expect in 17th-19th century English: a comparison of individual and population level variation	Hedda Lausberg & Katharina Hogrefe The roles of the right and left hemispheres in gesture production
9:30 – 9:55	Nicola Swinburne Traces of the meaning of 'do' in an interrogative 'do'-support construction from a northern Italian dialect	María Rosa Alonso Alonso, Steven Clancy, Michele Feist & Jan Leite ' Slow Horses' move across languages: Exploring cross-linguistic motion descriptions in a corpus of audio descriptions
10:00 – 10:25	Florencia Reali Metaphor Use and Syntactic Complexity Influence Veracity Judgements of Fake News in Spanish	Nihal Bouabida & Michele Feist Are Translation Equivalents Actually Equivalents or Overlaps? A Cognitive Linguistic Analysis of Spatial Prepositions
10:30 – 11:00	BREAK	
11:00 – 12:00	POSTER SESSION (FOYER IMPERIO Auditorium – FIESTA Auditorium) 1. Gabriela Simon-Cereijido, Beatriz Barragan, Lucía I. Méndez & Aoi Kikkawa. Vocabulary Depth and Code-Switching in Spanish Heritage Speakers: The Role of Language Experience 2. Sebastián Carignano, Alejandra Menti & María Patricia Paolantonio. Linguistic input, pragmatic functions and vocabulary teaching 3. Isabel Cony. A tendency towards literalness? Primary metaphor comprehension by children on the autistic spectrum 4. Roberto Aguirre, María Noel Macedo, Manuel García Ruiz & Yliana Rodríguez. Social distribution of figurative language in the female Uruguayan population 5. Roberto Aguirre, María Noel Macedo, Lázaro González, Jimena Grecco Biassini & Santiago Rista. Effects of literal and metaphorical linguistic context on the mental lexicon of Uruguayans 6. Analí R. Taboh, Diego E. Shalom & Carolina A. Gattei. Comprehension of syntactically complex sentences in Spanish-speaking children with hearing loss and with typical hearing: Strategies across development 7. Sofía Caballero Menas, Nadia Gisel Gibaudant & Rocío Anabel Martínez. Conceptual metaphors in Argentine deaf education: Analyzing hearing teachers' metaphorical expressions on language teaching, learning, and acquisition	

	8. Maria Eduarda Oliveira Alves, Samara Hellenn Juvito da Costa & Jan Leite. Cognitive Approaches to Sign Languages: A Comparative Study of Libras, ASL, LSF, and Gestuno 9. Beatrijs Wille. Cracking the code to the letterbox: phonological awareness and reading in deaf children 10. Martín Van Houtte. Player or character? The use of first-person expressions to refer to entities during tabletop roleplaying 11. Maria Noel Macedo & Roberto Aguirre. Spatial feature rules for 70 verbs in Rioplatense Spanish 12. Sara Adelino. Three Exemplar-Based and Constructional Semantic Representations: A Confirmatory and Exploratory Approach to Adverbial Adjectives in Brazilian Portuguese 13. Ivo Rosário. Inter-sentential connectors of the [[X de]que]connect network 14. Mariangela Rios de Oliveira. Pragmatic markers of Portuguese in a functional-constructional perspective 15. Monclar Guimarães Lopes. From Modal or Conditional clause to Argumentative additional operator: the role of Intersubjectivity in the emergence of [sem falar] in Portuguese 16. Poppy Siahaan & Anna Inbar. Managing interruptions: A cross-linguistic study of gestural and verbal strategies in Indonesian and Hebrew 17. Mengkai Wang. A Study on Evidentiality System in Chinese from the Perspective of Baseline/Elaboration 18. Mengkai Wang & Congxuan Yue. On the Classifications of Chinese Relative Complex Sentences from the Perspective of Baseline/Elaboration
Room	Del Lago Auditorium	Fiesta Auditorium
Category	Session 36 **Cognitive Typology / Prototype and Categorization** Chair: Adriana Collado	Session 37 **Metaphor and metonymy** Chair: Vanina A. Barbeito
12:00 – 12:25	Sarah MacDougall, Cassandra Jacobs & Andrés Buxó-Lugo Assessing category belonging using experimental and computational approaches	Chan Fang & Deliang Wang Meteorological Science Popularization Metaphors in "Heaven's Way and Human Culture": A Multi-level Analysis Based on Extended Conceptual Metaphor Theory
12:30 – 12:55	Olga Glukhova Cognitive typology in linguistic diversity issues: a bibliometric review using PRISMA protocol and VOSviewer	Ting Wang Conceptual Metonymy and Empathy in Extrinsic Emotion
13:00 – 14:00	LUNCH	
Room	Del Lago Auditorium	Fiesta Auditorium
Category	Session 38 **Cognitive Typology** Chair: Cynthia P. Audisio	Session 39 **Metaphor and metonymy** Chair: Javier N. Martínez Ramacciotti

14:00 – 14:25	Bill Palmer, Joe Blythe, Tom Ennever, Laurits Stapput Knudsen & Eleanor Yacopetti A sociotopographic study of spatial language and cognition in four Indigenous Australian communities	Richard Huamán Flores, Frank Domínguez Chenguayen & Yeni Alcahuamani Ccallo Motivation, Semantics, and Cognition in Maize Names in the Quechua-speaking Community of Puyca
14:30 – 14:55	Yuqi Yin An Experimental Study on Japanese and Chinese Action-Motion Multi-verb Construction and their event packaging conceptualization	Esther Serwaah Afreh & Obed Atta-Asamoah 'Jɔɔgye kumpala, maame container': a cognitive linguistic study of metaphors used by auntie Naa on Oyerepaafutuo, Oyerepa radio/tv, Kumasi –Ghana
15:00 - 15.25	Jiamin Peng & Yaning Wang The interaction between cultural adaptation and cognitive experience in video game space, from the perspective of embodied cognition and cultural adaptation theory.	Kohei Suzuki Do Classifiers Shape Metaphors? Analyzing Japanese Abstract Concepts through Corpus Data
15:30 – 16:00	CONFERENCE CLOSING (Del Lago Auditorium)	

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