# International Semantics Conference 

Book of Abstracts

21-23 November 2022
In honorem
Professor Fátima Oliveira
"A round lake with a statue in each corner"


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Plenary Sessions


On Accomplishments in European Portuguese
Fátima oliveira

## The Maximalization of Events

## Hana FILIP

In this talk, I will explore maximalization strategies that govern the interpretation of perfective forms (verbs and verb `complexes') across different languages. Crosslinguistically speaking, perfectivity is a rather heterogeneous category, when it comes to its formal expression and there is also a great variation among languages in how they semantically delimit their perfective forms (Dahl 1985). This also raises the question of their relation to the semantic property of telicity (and specifically to (non) culminating uses of perfectives of accomplishments). Assuming that perfective forms uniformly introduce a maximization operator MAXE on events (originally proposed by Filip and Rothstein 2005, see also Filip 2008), there is a typology of $M A X_{E}$ operators in natural languages (Filip 2017), all of which share the requirement of selecting the maximal (contextually determined) stage ('stage' in the sense of Landman 1992, 2008) of a certain eventuality type $P$, at which they cease to develop ('cessation', see Altshuler 2014). The notion of culmination corresponds to a special case of maximalization when $P$-eventualities culminate, and so cease to develop, with respect to the inherent culmination condition, lexically specified by telic Ps (accomplishments and some achievements), on which MAXE operates.

Sequence-of-Tense, "tenselessness", and the scale of clausehood

## Brenda LACA

Approaches to subjunctive tenses in Romance can be roughly split into two groups: those that propose that "the subjunctive" lacks a semantically independent temporal specification, and those that propose that subjunctive morphology follows the same patterns as indicative morphology and exhibits parallel Sequence-of-Tense behavior. However, the issue of the alleged "tenselessness" of the subjunctive has two sides to it that have not been sufficiently teased apart: either it is a property of subjunctive morphology as such, or it is a property of a particular type of clausal structure, flagged by subjunctive morphology, that lacks a full-fledged C/T domain. Raposo (1985) is, to my knowledge, the first theorist to have explicitly sided with the latter alternative. He claims that "tenselessness" is a property of a subtype of subjunctive clauses, those embedded under verbs of volition and directives (his W predicates), which lack a tense operator in the C-domain. This subtype corresponds to the intensional subjunctive clauses later identified by Quer (1998) on the basis of four distinctive properties, none of which involves "tenselessness".

In this contribution, I will try to bring together some central ideas from two recent strands of research on clausal structure and on SoT. My goal will be to develop an analysis in the spirit of Raposo's original claim for a case of variation in the distribution and interpretation of the [Present under Past $]$-pattern in Spanish subjunctive clauses. The variation alluded to can be schematically represented as follows (Guajardo \& Goodall 2019, Colonna et al. 2022, Laca et al. (in prep.)):

$\left.$| PRESENT-under- <br> PAST | Dialect A <br> Standard Spanish, Mexico, <br> Spain | Dialect B <br> Uruguay |
| :--- | :--- | :--- | | Dialect C |
| :--- |
| Argentina | \right\rvert\, | - DAR | - DAR | - DAR |  |
| :--- | :--- | :--- | :--- |
| Intensional Sbj-Cl | NO | YES | YES |
| Emot-Fact Sbj-Cl | NO | NO | YES |
| Polarity Sbj-Cl | NO | NO | YES |

Table 1: The interpretation of [Present under Past] in subjunctive clauses in three varieties of Spanish ([- DAR] = lack of double access reading)

In a nutshell, Dialect A seems to follow the SoT pattern for all subjunctive clauses alike, insofar as violations of the DAR-constraint (lack of double access reading) are disfavored in all cases. Dialect B deviates from the SoT pattern in the
case of intensional subjunctive clauses, insofar as in this case violations of the DARconstraint are frequently attested and [Present under Past] is judged no less acceptable than [Past under Past] when the eventuality in the complement clause precedes Speech Time. However, Dialect B follows the SoT pattern in the other types of clause. Dialect C does not follow the SoT pattern in any type of subjunctive clause: violations of the DAR-constraint are attested in all types (although they are marginally more frequent in intensional subjunctive clauses).

The consensual view on the DAR-constraint is that it stems from an indexical present tense, i.e., a present tense that needs to be interpreted with regard to Speech Time, over and above being interpreted with regard to the matrix time (Ogihara \& Sharvit 2012, Altshuler 2016). Against this background, the difference between Dialect $A$ and Dialect $C$ can be simply captured by the idea that Dialect $A$ has an indexical and Dialect $C$ a non-indexical present subjunctive. But what do we make of Dialect B, in which the present subjunctive behaves "non-indexically" in intensional subjunctive clauses, and "indexically" in other subjunctive clauses?

|  | Proposition | Situation | Event |
| :--- | :--- | :--- | :--- |
| Minimally required <br> domains | Operator domain <br> TMA domain | TMA domain <br> Theta domain | Theta domain |
|  | Theta domain <br> $(\cong \mathrm{CP})$ | $(\cong \mathrm{T} /$ Asp-P $)$ | $(\cong \mathrm{V} / \mathrm{VP})$ |
| Complexity | most complex | intermediate | least complex |
| Type or SUBJUNCTIVE <br> CLAUSE | Emotive-factive <br> Polarity | Intensional |  |

Table 2: Complement composition (adapted from Wurmbrand \& Lohninger 2020)
For the analysis of argument clauses, I will resort to Wurmbrand \& Lohninger's (2020) Implicational Complementation Hierarchy (ICH), which distinguishes, from more clausal to less clausal, the three main semantic types represented in Table 2:

Since the ICH only establishes lower bounds, but no upper bounds for syntactic complexity, it explicitly predicts syntax-semantic mismatches, in which there may be (vacuous) syntactic structure that has no consequences for interpretation (Wurmbrand \& Lohninger 2020). This feature of the ICH allows us to capitalize on Kauf \& Zeijltra's $(2018,2022)$ idea that semantic Operator Tenses and Morphological Tenses both contribute a (possibly different but compatible) denotation of their own, in order to solve the problem posed by the distribution in Table 1. I will argue that (i) intensional subjunctive clauses, by contrast with the two other types, uniformly lack Operator Tenses; (ii) Dialect A's present subjunctive denotes an indexical present; (iii) Dialect B's present subjunctive denotes a "relative present" whose indexical interpretation is obtained from embedding under an Operator Present; and (iii) Dialect C's present
subjunctive is genuinely "tenseless" (infinitive-like, Wurmbrand 2014; Goodall \& Guajardo 2019; Bochnak et al. 2019) and therefore neither requires nor allows licensing by an Operator Tense -it simply contributes a time variable that is equated to the attitude holder's NOW. A welcome feature of this analysis is that variation only stems from the different semantics of a morphological form, which is furthermore constant for each variety, and in no way compromises the overall typological status of the language as a SoT language.

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## Invited Talks

- by surname in alphabetical order

When Syntax meets Semantics
Inês Duarte

## From verb complexes to complex predicates in European

## Portuguese

Anabela Gonçalves

Sequences of the type finite Verb + non-finite Verb (1)-(4)) have been the focus of wide and rich research regarding their syntactic and semantic properties. These structures mainly raise two related issues: (i) what is the status of the first verb auxiliary or main verb; (ii) what are the properties of the non-finite domain, in particular concerning the absence or the presence of T , and, in case T projects, its relation with matrix T .
(1)
a. Essa empresa tem entrevistado muitos candidatos estrangeiros.
b. b. Os candidatos estrangeiros foram entrevistados pela empresa.
(2) A empresa quer contratar os candidatos estrangeiros.
(3) A empresa pode contratar os candidatos estrangeiros.
(4) O administrador mandou entrevistar os candidatos aos diretores.

The first issue results by and large from the fact that, contrary to English, Portuguese auxiliary verbs do not exhibit a specific behaviour concerning, for example, negation and subject-auxiliary inversion (Huddleston \& Pullum 2005), which distinguishes these verbs from main verbs. This led to divergent classifications, particularly in Portuguese traditional grammars, which mostly considered notional criteria to distinguish auxiliaries from main verbs. When syntactic criteria are considered (see, a.o, Pontes 1973, Gonçalves 1992, Gómez Torrego 1999), there is a consensus on the auxiliary nature of ter and (passive) ser followed by the Past Participle of a main verb (1), a structure I will call verb complex; nevertheless, the status of other verbs is subject to discussion. This is the case of a subset of Control, Raising and causative verbs (see (2)-(4), respectively), which allow (although not necessarily) for clitic climbing (5) and passive -se along with long object movement (6), two phenomena that make those verbs close to auxiliaries. Structures of this kind have been analysed as instances of complex predicates: Restructuring in the case of Control and Raising verbs (after Rizzi 1982; see Gonçalves 1999 for E(uropean) P(ortuguese)); faire-Inf (FI) in the context of causative verbs (after Kayne 1975; see Raposo 1981, Gonçalves 1999 for EP).
(5)
a. A empresa não os quer contratar.
b. A empresa não os pode contratar.
c. O administrador não \{os mandou entrevistar aos diretores. / Ihes mandou entrevistar os candidatos\}.
(6)
a. Querem-se contratar candidatos estrangeiros nessa empresa.
b. Podem-se contratar candidatos estrangeiros nessa empresa.
c. Mandaram-se entrevistar os candidatos aos diretores.

The second issue relates to the monoclausal/biclausal approach to the finite Verb + non-finite Verb sequence. For auxiliaries, a monoclausal structure has been unanimously accepted, in the sense that only one T projects. However, different analyses have been proposed to complex predicates: some authors consider that Restructuring and Fl are monoclausal (e.g., for Restructuring, Wurmbrand 2001, 2015; Cardinaletti \& Shlonsky 2004; Cinque 2006; for FI, Guasti 1993, Gonçalves 1999); others propose a biclausal structure in the case of Restructuring (see BokBennema \& Kampers-Manhe 1994; Gonçalves 1999, in press; Gonçalves, Cunha \& Silvano 2010; Oliveira, Cunha \& Gonçalves 2004; Paradís 2019).

The main goal of this talk is to compare verb complexes with complex predicates in order to show that: (i) the same transparency effects may result from different structures - biclausal Restructuring vs. monoclausal FI and auxiliaries; (ii) the similarity between biclausal complex predicates and monoclausal structures results from the projection of a defective T in the former, a case of tense dependence, and the lack of T in the latter. This will allow to establish a scale of reduced non-finite complements: auxiliaries>Fl>Restructuring.

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## Reporting an experience in diachronic linguistics

Rodolfo ILARI

In this talk I recall the experience of writing a chapter for the volume on diachronic semantics of the series Historia do Português Brasileiro, directed by Ataliba Castilho, and conceived as a showcase and an account for the activities of the project PHPB itself. As in my former training in semantics I have dealt mostly with synchronic issues, this task faced me not only with realization that traditional concepts such as 'neologism' or 'archaism' are vague and problematic, but also that no obvious plan existed for the expected chapter. Given this situation, I decided to comment what I had realized while analyzing and annotating different texts from the corpora gathered by the participants of the PHPB project. In this process, for instance, I got convinced of the soundness of the belief (1) that language readapts old materials rather than creates new ones from scratch, and this adaptation affects its morphology and syntax in countless ways; (2) that, the trigger of change is often to be sought not in the words themselves, but in the setting and in the kind of verbal interaction achieved by the text.

## Relato de uma experiência em semântica diacrônica

Nesta comunicação conto como foi minha experiência de escrever um capítulo para o volume sobre semântica diacrônica da coleção História do Português Brasileiro, dirigida pelo professor Ataliba Castilho. Tendo trabalhado quase sempre numa perspectiva formal e sincrônica, a surpresa foi não só perceber que conceitos como "neologismo" ou "arcaísmo" são vagos e precários, mas ainda que o capítulo esperado não tinha uma estrutura previsível. Resolvi então usar meu capítulo para contar um pouco do que eu vinha aprendendo no trabalho de ler, analisar e anotar textos disponíveis no projeto PHPB, de que a coleção acima mencionada é porta-voz. Nesse aprendizado, pude confirmar, por exemplo, (1) que a língua readapta de várias maneiras mais do que cria, explorando, por exemplo, a morfologia; (2) que o mecanismo que desencadeia a mudança, pode ser mais facilmente compreendido quando se olha para o tipo de texto em que a modificação ocorre.

## Oral Presentations

- by surname in alphabetical order of first author


Mecanismos de mitigação em realizações indiretas conversacionais: o caso do ato ilocutório de proposta
Carla Aurélia de Almeida

O presente trabalho está ancorado numa perspetiva semântico-pragmática (Verschueren, 1980, pp. 274-284; Verschueren, 1991, pp.1-8; Verschueren, 1999; llie \& Norrick, 2018) de análise dos fenómenos linguísticos, tendo como enfoque analítico o estudo de mecanismos discursivos e de estratégias discursivas (Gumperz, 1980, 1982) que denotam o sentido partilhado (Norrick, 2001, p.78) ou a coconstrução do sentido (Fonseca, 1994, p.120; Schegloff, 2001, p.234).

Tendo por base o estudo da organização e do funcionamento do ato ilocutório de proposta, analisar-se-á a sua realização indireta em sequências discursivas que apresentam mecanismos de mitigação: estudar-se-á, assim, a construção da interatividade entre locutor e alocutário (Schegloff, 2001, p. 235) com a consequente verificação do modo como o alocutário realiza o reconhecimento ("uptake", segundo Austin, 1962, p. 117) e a avaliação do que o locutor "quis dizer", problematizando o "querer dizer Não Natural" de Grice (1989 [1957]). Deste modo, proceder-se-á ao reequacionamento deste último constructo de Grice (Terkourafi, 2021, p. 79) que, baseado nas intenções comunicativas do falante, tem limitações e necessita, por isso, de integrar aspetos contextuais, formais (usos linguísticos particulares de marcadores discursivos), sociais e culturais específicos (Terkourafi, 2021, pp. 79-83).

Considerando este enquadramento teórico e metodológico, o presente estudo pretende ser um contributo para a análise dos mecanismos de mitigação desenvolvidos pelos interlocutores em corpora orais em Português Europeu (PE). Convoca-se, assim, o estudo de um conjunto de aspetos linguístico-discursivos: (i) a cooperação e o conflito que coexistem em toda a interação verbal, uma vez que os atos de discurso variam em grau de maior ou menor ameaça da face (KerbratOrecchioni, 1992, 2001); (ii) o desenvolvimento de estratégias argumentativas ao serviço da persuasão e da eficácia interacional; (iii) a relação entre mitigação (Caffi, 2007), modalidade (Oliveira \& Mendes 2013) e efeitos interacionais (Fraser, 2010); (iv) a relação entre mitigação (Caffi, 1999) e competência pragmática (Fraser, 2010, p. 15) dos interactantes.

Ter-se-á, assim, em consideração o ato ilocutório de proposta (HoutkoopSteenstra, 1987) que, sendo um ato híbrido ("diretivo comissivo"), apresenta uma
dimensão diretiva e comissiva na sua realização indireta (Almeida, 1998). Na linha de Fraser (2010), considerar-se-á a mitigação através do estudo dos seus dispositivos: i) os elementos linguísticos que funcionam como atenuadores e modificam a força de ilocução (Fraser, 1980; Fraser, 2010) e que é também chamada de "internal' mitigation" (cf. Blum-Kulka et al. 1989); ii) a relação que se pode estabelecer entre a mitigação ("hedging"), a vagueza, a proteção e a delicadeza; iii) os mitigadores que afetam a modalidade deôntica (Oliveira, 2003, p. 248), reduzindo as obrigações do alocutário em relação ao que é dito no conteúdo proposicional expresso nos atos ilocutórios com uma dimensão diretiva (Caffi, 1999); iv) o funcionamento das présequências de justificação que constituem mecanismos de mitigação que fazem parte da "mitigação externa" (Caffi, 2007); v) as estratégias indiretas que se inscrevem em fórmulas de sugestão e em sequências preparatórias do ato de proposta, isto é, a análise de realizações indiretas não convencionais ou "mitigação não natural NN (Sbisà, 2001).

A análise dos mecanismos de mitigação em sequências discursivas com o valor ilocutório de proposta permitirá verificar de que modo os interactantes procuram "evitar riscos desnecessários, responsabilidades e conflitos" (Caffi, 1999: p. 89), visando a eficácia interacional e tendo, em segmentos específicos delimitados no corpus em PE, "efeitos discursivos de delicadeza" (Fraser, 2010, p. 15; cf. também Eelen, 2001; Lakoff \& Ide, 2005).

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## No Answer Required

## Valentina Bianchi and Silvio Cruschina

1. Formal models of the conversation in possible world semantics focus mainly on information-seeking discourse moves targeting a Question Under Discussion and aimed and making public the participants' commitments, and/or increasing the Common Ground information (Stalnaker 1978, 2002; Roberts 1996; Gunlogson 2001; Farkas \& Bruce 2010, a.o.). Thus, a speaker asking a canonical question is by assumption ignorant about the answer and assumes the addressee to be knowledgeable about it; vice versa, in canonical assertions the speaker presents themselves as having ground for the asserted proposition and assumes that it is undecided in the addressee's epistemic state (Farkas 2020). An interesting challenge for this approach is constituted by non-canonical questions that do not require an answer. In this discussion we limit ourselves to polar questions (PQs):
(1) [A meeting B]: Did you have your hair cut?
(confirmation PQ)
(2) [B does something very stupid]: Are you an idiot?
(rhetorical PQ)
(3) [A enters B's room and finds them in bed]: Are you still in bed at this hour?!
(surprise/disapproval)
(1) differs from a canonical PQ in that the lack of an answer does not violate cooperativity, and indeed conveys the addressee's tacit confirmation - as is the case in declaratives (Farkas \& Bruce 2010). In rhetorical questions such as (2), the speaker "presupposes that the answer is entailed in the context of utterance" (Biezma \& Rawlins 2017).

In surprise/(dis)approval questions (Obenauer 2004), the true answer can be directly inferred from evidence that is available to both participants in the speech context.

Prima facie, these question types seem to convey a specific speaker attitude towards the proposition $p$ denoted by the PQ's sentence radical. However, an account in terms of a speaker attitude falls short of explaining why these discourse moves are implemented as questions in the first place. This is because the role of the addressee as the potential source of the answer, which characterizes canonical questions, is completely obliterated.

We outline here an alternative account in which the addressee's role is maintained. In a nutshell, we propose that the non-canonical imports are not about the core proposition p , but they convey the speaker's evaluation of the relative likelihood of the addressee's possible answers.
2. We adopt Kratzer's (1981 and seq.) approach, based on two contextual parameters: for any world $w$,

- the modal base $\mathrm{B}(w)$ is a set of worlds compatible with a given body of information or evidence;
- the ordering source $\mathrm{O}(w)$ is a set of stereotypical propositions that partially orders the worlds in the modal base, according to their closeness to an ideal of normalcy;
- BEST $(\mathrm{B}(w), \mathrm{O}(w))$ is the subset of worlds in $\mathrm{B}(w)$ that are top-ranked by $\mathrm{O}(w)$.

Let $w$ be the evaluation world:
(4) For any two worlds $v, u: v$ is AT LEAST AS CLOSE as $u$ to the stereotypical ideal of $\mathrm{O}(w)$ iff all the propositions of $\mathrm{O}(w)$ that are true in $u$ are true in $v$ as well.
(5) For any two propositions $p, q$ : $p$ is AT LEAST AS LIKELY AS $q$ w.r.t. $\mathrm{B}(w)$ and $\mathrm{O}(w)$ iff none of the $q$ and-not $p$ worlds is closer to the ideal of $\mathrm{O}(w)$ than all the $p$-and-not $q$ worlds.
(6) For any two $p, q: p$ is MORE LIKELY THAN $q$ iff $p$ is at least as likely as $q$ w.r.t. $\mathrm{B}(w)$ and $\mathrm{O}(w)$, not vice versa (some $p$-and-not $q$ worlds are closer to the ideal than all the $q$-and-not $p$ worlds).
(7) $p$ is CERTAIN iff all the BEST worlds in $\mathrm{B}(w)$ relative to $\mathrm{O}(w)$ are $p$ worlds.
3. We propose that the speaker's evaluation of likelihood does not apply to the core proposition p , but to the possible answer on the part of the addressee. Specifically, we adopt the distinction between at- issue content and Common Ground Management (CGM) content (Krifka 2008, Romero 2014): the latter indicates the status of the at-issue content w.r.t. the CG.

Let $q$ be the proposition that $p$ is entailed by the addressee's epistemic state $\left(\mathrm{E}_{\text {addr }}(w) \subseteq p\right)$. Intuitively, $q$ conveys that the addressee's epistemic state in $w$ supports a confirming answer.

The negation of $q$, not- $q$, conveys that $p$ is negatively decided or undecided in $E_{\text {addr }}(w)$. The second case, however, clashes with the speaker's assumption that the addressee is competent about $p$; therefore, we take not- $q$ to convey that $p$ is negatively decided, corresponding to an expected reversing answer.

The CGM-content associated to (1)-(3) can be characterized as follows:
i) for a confirmation PQ like (1): $q$ is more likely than not- $q$, relative to the speaker's doxastic state (modal base) and their stereotypical expectations (ordering source) in the utterance world (and time). The speaker believes that a confirming answer is probable.
ii) for rhetorical questions: $q$ is certain (or, more frequently, not-q is certain), relative to the speaker's doxastic state and their expectations in the utterance world (and time). The speaker believes the addressee to be undoubtedly in the position to confirm (reverse) the core proposition $p$.
iii) For a surprise/(dis)approval question like (3): $q$ is certain. Importantly, in this case the speaker's evaluation of certainty always rests on a circumstantial (rather than doxastic) modal base embodying direct evidence that becomes available to the speaker in the utterance context: whence the overtone of sudden discovery, in the sense of DeLancey (1997).

The import of (dis)approval can be expressed in a counterfactual form (cf. Heim 1992). Informally: the modal base is extended by including maximally similar not- $q$ worlds in which the addressee gives a reversing answer. The not-q-worlds are ranked above the $q$-worlds by a buletic ordering source anchored to the speaker: the speaker would have preferred a reversing answer to a confirming one.
4. Empirical evidence for the CGM approach comes from discourse particles (Authors 2022). In various Central/Southern varieties in Italy, the so called whatparticles (homophonous to the wh-word) have two distribution patterns. In some varieties, the particle cannot introduce a canonical PQ, but it optionally marks the non-canonical PQs (i)-(iii). In other varieties, the particle can mark canonical questions as well as the non-canonical ones. There seems to be no variety where the particle optionally marks canonical PQs only. The distribution is thus sensitive to the likelihood scale: canonical PQs < confirmation PQs < rhetorical and surprise PQs. By (5)-(7), if a proposition $p$ is certain, it is also more likely than not-p and at least as likely as not-p. Hence, if the import of the what-particle is (i), the particle is allowed in confirmation PQs and a fortiori in rhetorical and surprise PQs. If the whatparticle is allowed in canonical PQs (the core proposition $p$ is at least as likely as not-p), then a fortiori it is also allowed in the non-canonical PQs (i)-(iii).
5. A possible extension of the CMG approach concerns the "adversative conjunction" ma (but) in Standard Italian, which introduces non-canonical PQs parallel to (1)-(3), but not canonical ones:

| (4) [Context of (1)] A: (confirmation PQ) | Ma hai |  | tagliatoi | capelli? |
| :---: | :---: | :---: | :---: | :---: |
|  | but | ve. 1 sg | cut | the hair |
| (5) [Context of (2)] A: |  | sei be.pres.2sg | matto? <br> crazy |  |
| (rhetorical PQ) |  |  |  |  |
| (6) [Context of (3)] A: (surprise/disappro | Ma but al PQ | sei be.pres.2sg | ancora still | a letto? in bed |

(7) Stasera c'è una festa all' Atlantico: (\#Ma) ci sei mai stato? tonight there's a party at-the A. (but) there= be. 2 sg ever been?
'Tonight there's a party at the Atlantic Club: Have you ever been there?' (canonical PQ)

Giorgi (2018) analyses ma as a discourse-level operator that connects a silent proposition representing the speaker's expectations to a PQ, and conveys that the PQ's propositional content is incompatible with it. Consider, however, the confirmation question (4): plausibly, here speaker A had no expectations at all about B's hair-cutting (considering the interval since they last met B); they simply had no elements to anticipate that the issue would arise. In (5), A's rhetorical question is a reaction to a completely unforeseen behavior by B. Thus, the counter-expectation import cannot be easily generalized.

We speculate that ma bears the CGM import that the speaker did not expect their question to arise in the utterance context (independently of their expectations about the interlocutor's answer). As a first approximation: the PQ's at-issue propositional content is made salient by evidence that becomes available to the speaker in the utterance context. The problem here is how to characterize the notion of salience without making reference to an already established Question Under Discussion. We leave this issue for future research.

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## Desafios de um estudo experimental: as classes aspetuais dos

predicados
Bruna Bragança

As primeiras fases de um novo estudo experimental sobre a aquisição da morfologia de aspeto em português por crianças falantes de português L2, e em especial as dificuldades na planificação das diversas tarefas envolvidas, salientam propriedades muito interessantes das diferentes classes aspetuais, nomeadamente das atividades, das culminações e dos processos culminados. Esta comunicação tem assim o principal objetivo de usar estas dificuldades como ponto de partida para a discussão dessas propriedades, mostrando, mais uma vez, que estas classes aspetuais, tal como as conhecemos em Vendler (1957) e em desenvolvimentos seguintes (cf. Moens \& Steedman 1988, Cunha 1998), estão longe de ser compartimentos estanques em que cada situação pode ser facilmente arrumada ou que nos permitem formular predições de elevada precisão.

As categorias de tempo e aspeto, apesar de distintas, estão intimamente ligadas (de Swart, 2012). A categoria tempo permite localizar temporalmente uma oração e associá-la cronologicamente a um momento, que pode ou não corresponder ao momento da enunciação (Comrie, 1976; Oliveira, 2013). Por sua vez, o aspeto permite analisar a estrutura interna da oração, independentemente do tempo (externo) (Comrie, 1976; Cunha, 2013). De acordo com Smith (1991), podemos distinguir a representação da estrutura interna dos acontecimentos através de pontos de vista expressos morfologicamente (aspeto gramatical ou viewpoint) e através da natureza semântica dos predicados e dos seus argumentos externos e internos (aspeto lexical ou Aktionsart).

O aspeto lexical depende em grande parte (mas não só) da natureza semântica do predicado da oração. A situação descrita pela frase pode caracterizar-se, entre outros valores, por ser: a) dinâmica, quando envolve uma alteração no interior ou no decurso da situação enquanto um todo e contempla um conjunto de fases sucessivas, ou não dinâmica; b) durativa, se o evento se prolonga num determinado intervalo de tempo, ou pontual; c) télica, se tem um limite temporal intrínseco, ou atélica.

As situações podem dividir-se em dois tipos: os eventos e os estados. A propriedade relevante para a distinção entre ambos é a dinamicidade, ou seja, a presença (eventos) ou ausência (estados) de fases que fazem progredir a situação e alterar o estado inicial (Raposo, 2013). Assim, na classe dos eventos temos: i) processos culminados - caracterizam-se por serem situações durativas e télicas, que
incluem ainda um estado resultativo. Por exemplo, construir uma casa é um processo culminado porque inclui uma fase intermédia, que leva tempo e que termina quando acaba a construção - a culminação; ii) atividades (ou processos em Cunha, 2013) são eventos durativos sem uma culminação, por exemplo, o Pedro passeou no parque; iii) culminações - são eventos não durativos e télicos, como, por exemplo, entrar em casa. Na classe dos estados temos situações não dinâmicas que se podem dividir entre estáveis, episódicas e faseáveis (de Swart, 2012; Cunha, 2013; Raposo, 2013).

Relativamente ao aspeto gramatical destacamos os valores de aspeto gramatical perfetivo e imperfetivo. O valor aspetual perfetivo ocorre quando um acontecimento é perspetivado na sua globalidade como um todo fechado, integrando, por isso, um ponto inicial e um ponto terminal, enquanto o valor aspetual imperfetivo não faculta qualquer tipo de informação sobre aqueles dois momentos (de Swart, 2012; van Hout, 2016). Relativamente ao imperfetivo, iremos focar o progressivo (estar a + infinitivo), em vez do imperfetivo no seu todo (habitual, genérico e progressivo), porque: i) o progressivo permite-nos perspetivar a situação a partir do seu interior, no seu desenvolvimento, e assim pode ser contrastado com o perfetivo, em que a situação é perspetivada a partir do seu exterior, como um todo completo (Cunha, 2013, Alzamora, 2018) e ii) o progressivo é mais fácil de testar do que os outros valores do imperfetivo, por ser mais naturalmente oposto ao perfetivo do que, por exemplo, o habitual (pelo menos no passado; cf. Pratas, 2021:69, fn47): só recorrendo ao progressivo passado é possível estabelecer uma oposição entre uma situação em curso e uma situação terminada ou concluída (perfetiva), ambas localizadas quanto ao mesmo tempo de referência; no caso do habitual, este valor (associado tipicamente, no passado, a formas verbais do pretérito imperfeito), devido ao seu significado temporal menos específico, pode denotar uma repetição de situações, sendo mais difícil de contrastar com um único evento dinâmico terminado.

De forma a investigar o processo de aquisição da morfologia de aspeto em português, desenhámos uma sequência de trabalhos experimentais que nos pareceram adequados, nomeadamente duas tarefas de produção e uma de compreensão.

A tarefa de produção espontânea (anexo1), foi concebida para elicitar as formas do passado através do reconto oral de uma história com o apoio de imagens a fim de determinar se existem diferenças no uso da morfologia perfetiva e progressiva. A história inclui contextos que propiciam o uso de predicados das classes aspetuais acima referidas (não incluímos os estados por apresentarem ainda maiores
dificuldades quanto à criação de imagens ilustrativas de ambos os valores de aspeto gramatical em estudo).

A tarefa de produção induzida (anexo2), foi concebida para elicitar o uso das formas do passado consoante o tipo de predicado, de forma a verificar se os falantes dominam a morfologia flexional de tempo e aspeto do português. Assim, foram criados seis contextos resultantes da combinação de duas variáveis: aspeto lexical (atividades, culminações e processos culminados) e aspeto gramatical (perfetivo e progressivo). Esta é uma tarefa de completamento de frases, em que as crianças veem uma imagem e têm de completar a frase que lhes é apresentada oralmente, descrevendo a ação terminada ou a decorrer que é representada na imagem.

Quanto à tarefa de compreensão (anexo3), os dados serão recolhidos através de uma tarefa de seleção. A tarefa foi concebida para investigar se os aprendentes compreendem o uso das formas morfológicas do aspeto no passado em diferentes contextos. Pretendemos que os participantes respondam a uma pergunta, selecionando, na imagem que lhes é apresentada, a personagem que já realizou ou está a realizar uma ação. Desta forma, apresentamos situações associadas a frases com morfologia perfetiva (descrevendo ações que já terminaram) e a frases com morfologia progressiva (descrevendo ações em curso/a decorrer num determinado ponto de referência temporal).

Para pilotar as tarefas que concebemos, estas foram aplicadas a 9 crianças e 9 adultos falantes de Português Europeu. As tarefas foram aplicadas, maioritariamente, via Zoom, sem limite de tempo e foram efetuadas as alterações necessárias ao aperfeiçoamento das mesmas.

Ao analisar os resultados, identificámos problemas com as imagens, particularmente quanto àquelas que potencialmente induziriam a produção de determinadas classes aspetuais, o que parece ser motivado por: (i) dificuldades na ilustração das diferentes classes aspetuais combinadas com certos aspetos gramaticais (por exemplo, a associação do progressivo às culminações; existe ou não uma fase processual? E, se sim, porque não correspondem estas situações, afinal, a processos culminados?); (ii) a relevância da estrutura argumental dos verbos, para distinguir processos culminados de atividades (por exemplo, como considerar ao certo que um argumento é contável ou não contável? Mais concretamente, o que é que distingue beber um copo de água de beber água quando esta última versão envolve também um copo?) e (iii) a representação inequívoca dos tempos verbais.

Assim, o contributo deste trabalho consiste, sobretudo, em refletir, partindo de exemplos concretos que serão devidamente apresentados e discutidos, sobre as
dificuldades inerentes ao desenho de um estudo experimental envolvendo as classes aspetuais dos predicados, no que diz respeito à combinação entre estes e diferentes valores de aspeto gramatical.

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## Anexo 1



Exemplo de item da tarefa de produção espontânea (história do coelhinho)

Anexo 2


Exemplo de item da tarefa de produção induzida: O coelhinho encontra o macaco Gabriel. O macaco Gabriel está muito satisfeito porque...

## Anexo 3



Exemplo de item da tarefa de compreensão: Estão duas raposas na imagem. Qual delas construiu uma casa? (Espera-se: a raposa castanha escura).

## Rebuff, Redress, (Re)Wire: Illegal Reflexivization and Hidden Me

## Patrick BRANDT

Certain classes of productive (morpho-)syntactic constructions exhibit semantics that appears incongruent with their surface form, given standard assumptions about compositionality and the syntax-semantics interface. For example, no particular marker or established compositional mechanism seems to justify

- modal interpretations of excessive constructions (e.g. (It is) too heavy as conveying "(it is) heavier than it should be"),
- change of state (COS), modal or comparative interpretations of certain constructions often characterized by reflexive morphology (e.g. inchoatives or middles) or
- COS interpretations of constructions with directional prepositional complements (e.g. German (Den Besen) in [den Schrank] ${ }_{A C C}{ }^{\prime}$ (Put the broom) into the locker').

Merely stating the facts, mainstream analyses employ invisible and otherwise unmotivated operators to capture intransparent meaning aspects (generative grammar) or associate hidden meanings with morphosyntactic constructions holistically (construction grammar). We offer a compositional analysis instead that involves three general steps:

1. a lexical item's logical form (LF) or the combined LF of lexical items amounts to a contradiction when interpreted in situ. A particularly weak but troubling part of the literally coded LF - noninstantiation of a property by an individual (not:P) - is not locally interpreted (rebuff).
2. The uninterpreted LF not:P is passed on and interpreted in terms of what is negotiated in the ensuing syntactic-semantic cyle, namely, times, worlds or thresholds (redress).
3. Providing an economic shortcut to a requisite COS, modal or comparative meaning, the process in 1. and 2. is hard-wired for
paradigmatic form con- stellations as representing, e.g., configurations of verbs and prepositions or adverbs ((re)wire).

Special attention will be paid to a grammatical element that takes the form $z u$ 'to(o)' in German, with uses as a verbal or a degree particle, but also as a preposition or as an infinitival marker. We submit following Brandt (2019) that semantically, zu combines the existential positive (some $\times \mathrm{P}$ ) and existential negative (some $\times$ not P ) but features only one quantifier (some $\times \mathrm{P}$ and not P ). zu thus marks a condensed reflexivization operation the output of which is however always contradictory and hence illegal. In fact, zu's troubling LF creates added value: It is the presence of the negative property to be redressed that makes zu flexible and popular because depending on properties of the linguistic environment, not:P may be used to construct the pre-state of an event and thus a complete COS (substituting the VP meaning for $P$ ), or it may be used to construct a threshold as marking the cutoff point between the negative and positive extensions of a property and thus get to a comparative meaning as in the case of excessives. Analogously, the circumstanital or deontic meaning of modal infinitives results from ascribing not:P to a possible world (substituting an independently constructed propositional meaning for P ).

We argue illegal reflexivization is similarly behind some of the surprising meaning aspects of constructions with non-standardly used reflexive markers. In inchoatives or middles, the THEME syntacticosemantically binds the CAUSE, twisting the requirement that binders be more prominent semantically than bindees. The consequentially uninterpretable negative property implementing the required differential gives rise to COS (inchoative) or comparative (middle) interpretations. Arguably, the generic interpretation typical of middles and paraphrasable by means of the German subject only pronoun man likely reflects a further maneuver of redress aiming at a subject that is as inclusive as possible. Prepositional complement constructions finally instantiate illegal reflexivization at the level of semantics only, namely, they code spatiotemporal inclusion of the THEME by the GOAL. The semantic inclusion relation contradicts the construction's transitive (structural accusative case) syntax (cf. Gehrke 2008) that requires well-distinguished referents in the semantics and leads to redress in terms of COS meaning (by predicating not: $P$ of a time, with $P$ substituted for by the VP (post state) meaning).

Pursuing results from experimental as well as corpus studies (Brandt and Schumacher 2021, Brandt (in press)), we discuss corollaries of the account that pertain to grammatical connections between reflexivization and totalization ( $\approx$ universal quantification). The central fact behind the striking productivity of $z u$ in word formations
is that below the word level, zu's problem appears to be healable by elements that effect universal quantification locally, such as the form all 'all' (cf. allzu 'all too') or superlative morphology (cf. zutiefst 'most deeply) or cliticized definite determiners (cf. zum 'to it', zur 'to her'). The connection between reflexivization and totalization is less surprising if, as we propose, binding is eventually defined in terms of indifference where x indifferently binds y iff all properties of y are also properties of x .

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## Borderline behavior of mesmo(s) and mesma(s) in academic writing

Ana Luísa Costa and Carolina Silva

## Introduction

Academic writing is a main concern to students' academic success. Specific syntactic structures and processes required in more formal contexts, as in academic genres, need to be intentionally scaffolded to improve writing development (Caels et al., 2019). In many cases, issues in the interface syntax-semantics-pragmatics may be related to late acquisition, and are of most interest for educational linguistic matters. This may be the case of the overuse of mesmo(s)/mesma(s) in scholarly adult writing performance.

The aim of this study is to analyze non-canonical and borderline uses of mesmo(s) and mesma(s) that affect the general quality of referential cohesion in undergraduate students' written essays.

In European Portuguese, mesmo(s)/mesma(s) is a highly multifunctional item, not only because it belongs to different word classes, but also because it may assume different roles as a pronoun in referential chains. The following examples put in evidence uses of mesmo as a noun (1)-(2), an adverb (3), an adverbial conjunction (4), a pronoun (5), and a determiner (6).
(1) Podes seguir pela esquerda ou pela direita que vai dar ao mesmo.
(2) Mudou o Governo, mas ficou tudo na mesma.
(3) O condutor travou mesmo a tempo.
(4) Mesmo antecipado o problema, ela não o pôde evitar.
(5) As alunas de $3 .{ }^{\circ}$ ano denunciaram os abusos de autoridade dos docentes e as mesmas fizeram queixa à reitoria.
(6) As alunas de $3 .{ }^{\circ}$ ano denunciaram os abusos de autoridade dos docentes. Estas mesmas estudantes fizeram queixa à reitoria.

The items mesmo(s)/mesma(s) may be preceded by other determiners such as articles, demonstratives, possessives, as in (7)-(9), or personal pronouns, as in (10).
(7) Entro à mesma hora no trabalho há dez anos.
(8) Entrei por esta mesma porta há dez anos.
(9) O Xavier saiu da escola e tu mesmo mo disseste.

According to Brito (2003), determiners like those above express an emphatic contrastive value.

In a text, referential chains are formed between nominal expressions, in which the first element is an expression that introduces a new referent and the remaining elements are expressions that recover that reference. The first element works as the antecedent and the others are the anaphoric expressions. The formation of referential chains can be conditioned by grammatical and extra-grammatical factors.

In Lobo (2013), mesmo(s)/mesma(s) are also considered anaphora expressions, facilitating a reading dependent on a pronoun, such as ela ou em si in example (10).
(10) A Ana perdeu a confiança nela / em si mesma.

In the anaphoric relations with mesmo(s) and mesma(s), there is always referential dependency of the anaphoric term concerning its antecedent, which, in turn, always needs to occur first. This means that they cannot be used cataphorically. Moreover, mesmo(s) and mesma(s) must agree in gender and number with the antecedent.

Based on syntactic information, Binding Theory (Chomsky, 1981) distinguishes nominal expressions by their referential status, depending on their ability to be referentially autonomous. Other theoretical proposals have emerged, like the Reflexivity Theory (Reinhart \& Reuland, 1993), which also considers the role of the semantic information of predicates. In turn, Grodzinsky \& Reinhart (1993), based on acquisition studies, defend that coreference and binding are not governed by the same module of grammar, proposing a rule of pragmatic nature that regulates coreference within the domain of the sentence and relating it to a complex computation task. Psycholinguistic proposals such as the Accessibility Theory (Ariel, 2001) or the Position of Antecedent Hypothesis (Carminati, 2002) seek not only to address differences between anaphoric expressions, establishing a relation between an anaphoric form and the properties of its antecedent, but also try to identify different factors involved in the processing of anaphoric expressions at the sentence and at the discourse level.

## Methodological Approach

Following a naturalistic approach, data were collected from real classroom tasks. Participants were $1^{\text {rst }}$ year undergraduate students of the course Language and Textual Practice (LTP), in Media Studies, and $1^{\text {rst }}$ year students of a Workshop on Portuguese for Academic Purposes (WPAP), from different faculties in a higher education institution. The texts gathered in the corpus may be classified as academic genres (Caels et al., 2019), since they were produced for academic purposes.

Table 1 - Corpus

| Source | Number of <br> texts | Number of <br> words |
| :---: | :---: | :---: |
| LTP | 75 | 18297 |
| WPAP | 35 | 5404 |
| Total | 110 | 23701 |

We searched for all the occurrences of mesmo(s)/mesmas(s), distinguished canonical, non-canonical and borderline uses, and classified each item in terms of parts of speech. The analysis of the syntactic and discourse context of the items underpinned the categorization proposed in the following section.

## Preliminary results

We found canonical uses of mesmo, in different syntactic contexts, belonging to diverse parts of speech categories. Major problems, affecting referential chains, are related to the pronominal functioning of mesmo(s)/mesmas(s) in textual / discourse units.

We propose four categories to describe non-canonical uses (as in A.11), in which the lack of agreement is agrammatical, and borderline uses (as in B.12-D.14), in which disfluent chains are due to supra-syntactic issues:

## A. Disfluency in antecedent retrieval due to lack of agreement

O planeta está a ser prejudicado semanalmente com crises climáticas, no entanto, os meios de comunicação não estão a dar grande destaque aos mesmos.

## B. Disfluency in antecedent retrieval

Existem duas perspetivas diferentes acerca da comunicação na construção do Homem e do mundo. Uma delas é que foi o único meio para a construção do Homem e do mundo, ou seja, um instrumento totalitário, e a outra é que foi apenas um instrumento no meio de muitos outros que ajudou na criação dos mesmos.

## C. Unnecessary filling of reference chain (it would be recoverable as a null subject)

(13) Apesar de o autor realçar o poder da comunicação, o mesmo expõe duas opiniões em relação ao assunto que divergem.
D. Adequate (it can be replaced by a pronoun)
(14) No que diz respeito a Portugal, durante a revolução de Abril o estado através da comunicação tentou representar a mesma como uma revolução cultural.

When mesmo(s) and mesma(s) uses are adequate, it can be replaced by different types of pronominal forms: personal (strong and null in subject positions, strong and clitic in object positions), demonstrative or possessive pronouns. In this case, its repetition throughout the text weakens the quality of referential cohesion mechanisms. Example (15) illustrates how borderline uses of mesmo(s) and mesma(s) affect text quality due to an overuse of mesma/mesmo and to the absence of the antecedent (the head of the chain) in the paragraph.

Quando a mesma fizera 15 anos, as cartas que havia escrito vieram [*] atona [*], e foram enviadas para todos os apaixonados através da sua irmã mais nova que queria que a mesma arranjasse alguém. E no mesmo espaço de tempo Larajin deparou com uma situação em que tinha de disfarçar ser a namorada de um dos seus apaixonados da infância, que já havia recebido a carta, para que o mesmo fizesse ciúmes [*] a ex-namorada, para que pudessem reatar, uma troca justa que fizeram para que o mesmo não revelasse a carta a seus colegas.

The non-canonical or borderline use of mesmo(s) and mesma(s) seems to be similar to the behavior of overt strong pronouns (following the terminology of Cardinaletti \& Starke 1999). Therefore, we may argue that the establishment of the referential dependency of these structures also occurs post-syntactically, as it was observed in children's acquisition of overt strong pronominal forms (Silva, 2015). In this case, we may consider there is a division of labor between syntax, semantic and/or pragmatic constraints and processing limitations when expressing coreference, related to the computation of alternative derivations at the interface level.

Silva (2015, p. 250) generalizes "that, in the pronominal system, the more pronouns are syntactically licensed, the less problematic their acquisition becomes.". Consequently, we may assume that the pronominal functioning of mesmo(s) and mesma(s) is of late acquisition and subject to diaphasic, discursive or stylistic variation. A writing pedagogy in higher education should pay specific attention to this phenomenon.

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The dialogues proposed here take up debates that might almost be called classical, but which continue to give rise to reflection. It concerns, on the one hand, the discussion about the boundaries to be considered (or not) between semantics and pragmatics (see, for instance, Kleiber, 1982; Fonseca, 1994; Oliveira, 2019; Coutinho, 2020); on the other hand, the issue of the proximity, or even eventual overlapping, between pragmatics and text linguistics, as disciplines focused on the construction (reconstruction, co-construction) of meaning in context. One of the reasons why this second question does not seem to be so often reiterated in the panorama of linguistic discussion has to do with two types of ambiguities around the areas (or subareas) considered (discussed in Coutinho, forthcoming): pragmatics as a component of grammar or as an analysis of meaning in context, and text linguistics as text grammar (transphrasal analysis) or text linguistics proper (in the perspective of Coseriu, 2007, p. 156; p. 305).

The problematic of implicit tends to occupy a prominent place within studies in pragmatics, due to unavoidable contributions like those of Grice (1975) and KerbratOrecchioni (1986). In the present context, it is also interesting to highlight more recent contributions, such as the one that articulates the problematic of the implicit with issues of textual genres (Gonçalves, 2019) or the one that repositions the question of the boundaries between semantics and pragmatics regarding, specifically, the implicit (Oliveira, 2019).

A more detailed explanation of the framework that has just been briefly set out will constitute the first part of the work proposed here. This presentation will make it possible to highlight the epistemological baselines which determine the possibilities of convergence or divergence between the perspectives considered. Although in a very schematic way, three major orientations can be highlighted here: (i) vericonditional and/or (strictly) formal approaches; (ii) methodological perspectives that refuse an exclusively immanentist description, as explicitly stated by Kerbrat-Orecchioni (1986, p.9); (iii) social conceptions of language, namely those in the continuity of Voloshinov (1929/1977). It is in function of this third orientation that the main goal of the paper is assumed: to rethink the questions posed from the last orientation pointed out - namely, the one that starts from a social conception of language. It is about trying to understand what is the place (or the meaning) of the "pragmatic enrichment" (Recanati, 2012), when the context, or the 'entornos' of the text (Coseriu, 1987; Bronckart, 2017) are
understood as starting points (or starting data). The working hypothesis therefore resists such "pragmatic enrichment" by countering it with the importance of linguistic formulation - to include implicit formulations - as a resource of appropriateness (in terms of social activity and text genre / genre exemplar).

A significant part of the proposed work is based on conceptual and theoretical reflection, according to the questions posed. In order to support (confirm or refute) the working hypothesis, we will resort to the analysis of texts of different genres (among others, the informal conversation and the poem). Methodologically, it is assumed the interest of using different textual/genre examples (instead of an eventual work with corpus), admitting the epistemological validity of exemplarity and singularity (Ouellet, 1989; Passeron \& Revel, 2005).

Keywords: text linguistics, implicit, social conception of language, meaning, linguistic formulation

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Preliminary phases revisited: the case of the structures estar para and ir a + Infinitive in European Portuguese

Luís Filipe Cunha

The existence of preliminary phases or pre-preparatory states associated to the basic structure of (some) eventualities has long been recognised in the literature on aspect (cf. e.g., Moens, 1987; Moens \& Steedman, 1988; Binnick, 1991; Kamp \& Reyle, 1993; Klein, 1994). However, little attention has been paid to the specific linguistic constructions that support this configuration in natural language.

Our main goal is, thus, to establish a comparison between two possible candidates to express the preliminary phases in European Portuguese, viz., the structure estar ('be') para + Infinitive and the construction ir ('go') a + Infinitive.

As we will argue, there are important similarities regarding the semantic behaviour exhibited by the two forms at stake, though some important differences will also be observed.

We will demonstrate that a purely topologic analysis based on the relation between time intervals, such as the one proposed by Klein (1994) for the prospective aspect, claiming that a preliminary phase results from a precedence relation between the Topic Time and the Situation Time ( $\mathrm{TT}<\mathrm{ST}$ ), is not adequate to describe a prepreparatory phase, since it does not account for the aspectual restrictions manifested by the structures under investigation, namely their incompatibility with stative predicates (cf. (1)-(2)).
(1) * A Joana está para ser médica.
«Joana is about to be a doctor.»
(2) * O João vai a ser presidente quando as eleições são anuladas. «João is about to be the president when the elections are annulled.»

So, in line with Moens (1987) and Moens \& Steedman (1988), we will argue for a treatment of the preliminary phases as taking part on the internal temporal configuration of the situations: in particular, they will be conceived as an optional state that precedes the nuclear phase structure of a given event, contributing, thus, to the characterisation of the aspectual network.

To support this statement, we will present several arguments in favour of the stative nature of these constructions (cf. Dowty, 1979). In effect, like lexical states, (i) they do not express habituality with the Presente do Indicativo (Pres) or the Pretérito Imperfeito (Imp); (ii) they do not combine with aspectualizers such as começar a ('begin') or parar de ('stop'); (iii) they establish a relation of inclusion with event predications, for instance in the context of when-clauses; and (iv) even when they apply to agentive predicates, they cannot occur as imperatives and typically reject the embedding under verbs of command like forçar ('force') or persuadir ('persuade').

The special nature of these preliminary states leads to relevant consequences regarding their interaction with temporal adverbials and their combinatorial possibilities with tense forms.

Since it describes a state, the structure estar para + Infinitive gives rise to a durative reading when combined with adverbials such as há $X$ tempo ('for $X$ time'), as illustrated in the following example:
(3) A Maria está para sair de casa há uma hora.
«Maria is about to leave home for an hour.»

Moreover, the length of the interval associated to the duration of this kind of preliminary states seems to be quite flexible, as suggested by (4):
(4) A Maria está para se casar há dois anos.
«Maria \{is about to get / has been getting\} married for two years.»

In contrast, and since it pertains to the complex nuclear structure of the eventuality with which it combines, the preliminary state associated with estar para is subject to some constraints concerning the distance between its occurrence and the coming about of the basic event; in particular, it seems to be only compatible with relatively short intervals in the presence of prospective adverbials like daqui a $X$ tempo (' X time from now'), as the divergence of acceptability in the following pair of examples suggests:
(5) O comboio está para chegar daqui a cinco minutos.
«The train is about to arrive in five minutes."
(6) ??/* O comboio está para chegar daqui a uma semana.
«The train is about to arrive in a week.»

The structure ir a + Infinitive is, in turn, much more restrictive as far as the combination with temporal adverbials is concerned. In fact, and disregarding the cases where ir ('go') behaves as a lexical verb, which will not be treated in this paper, neither the past durative há $X$ tempo ('for $X$ time') nor the prospective daqui a x tempo (' $X$ time from now') seem to be compatible with the construction at hand.
(7) ?? O carro vai a estacionar há cinco minutos, mas bate contra um poste. «The car is about to park for five minutes but it hits a pole."
(8) * O carro vai a estacionar daqui a cinco minutos, mas bate contra um poste.
«The car is about to park in five minutes, but it hits a pole.»

Another interesting question to be explored concerns the relationship established between the preliminary states and the different tenses with which they combine, since we observe fairly significant divergences at this level.

When a pre-preparatory phase appears with the Presente do Indicativo (simple present), it typically describes a state that, given the "normal" course of things, leads to the occurrence of the relevant event. To that extent, as Bravo Martín (2008) or Moreno Burgos (2013) claim, these constructions convey several prospective meanings, such as planning, imminence or inevitability. Notice, though, that, in EP, the use of the ir a + Infinitive structure assigning a preliminary state in the simple present is quite infrequent.

In contrast, when tenses pertaining to the past domain are applied, the interpretative conditions related to the constructions under analysis change considerably.

The co-occurrence with the Pretérito Imperfeito (past imperfective) very often gives rise to an inference of non-realization of the basic eventuality, as shown in (9)(10).
(9) E, quando estava para regressar a Portugal, tive um contrato para ir à Rodésia. (CetemPúblico, par=ext71709-clt-93b-1)
«And when I was about to return to Portugal, I had a contract to go to Rhodesia."
(10) Quando ia a sair do automóvel, a vítima viu-se cercada pelos três indivíduos encapuzados e armados de espingardas. (CetemPúblico, par=ext76875-soc-97b-2)
«As he was about to get out of the car, the victim found himself surrounded by three hooded individuals armed with shotguns.»

The combinatorial restrictions with the Pretérito Perfeito (the terminative past tense) are even stronger. In fact, the structure estar para in the PPerf only takes into account the pre-preparatory phase, leading to a compelling inference of the nonrealisation of the basic event; in this sense, they come close, to a certain extent, to the counterfactual meanings exhibited by some modal constructions.
(11) A série já esteve para estrear, mas depois foi retirada da programação à última hora. (CetemPúblico, par=ext34746-clt-93a-1) (= a série não estreou)
«The series was about to premiere, but was later dropped from the schedule at the last minute.»

This move towards a modal meaning has interesting consequences, since, unlike its equivalent in the present tense, the structure estar para in the PPerf may be combined with statives, as shown in (12):

Refira-se que De Rouvre provocou um «choque» em França ao escolher dois pilotos ingleses (Martin Brundle e Mark Blundell) para aquela que esteve para ser a equipa nacional francesa... (CetemPúblico, par=ext114246-des-93a-2)
«It should be noted that De Rouvre caused a «shock» in France by choosing two English drivers (Martin Brundle and Mark Blundell) for what was to be the French national team..."

On the other hand, the structure ir a + Infinitive only seems to be able to appear with the PPerf when ir maintains its basic lexical properties relatively unchanged (cf., e.g., Fleischman, 1982); the contexts in which the construction could express a preliminary phase are completely ruled out, as (13) demonstrates.
(13) * O carro foi a estacionar, mas bateu contra um poste.
«* The car was about-PPerf to park, but it hit a pole.»

In sum, the structures that convey preliminary states in EP show a linguistic behaviour that sharply contrasts with the one exhibited by other aspectual operators. Though they typically describe stative predicates leading to the realisation of a given event, they may, in appropriate conditions, suffer substantial changes concerning their semantic profile, notably due to the interference of certain temporal adverbials and to the constrains imposed by the tense forms with which they cooccur. In the most extreme cases, they may even fail to provide aspectual information and assume other meanings, in particular those related to modality.

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## A compositional analysis of superlative minimizers in Spanish

## Ulises Delgado

This paper deals with superlative minimizers (SMs henceforth) in Spanish. SMs are superlative DPs which work as polarity-sensitive minimizers, i.e., minimal-quantitydenoting expressions licensed only in downward-entailing contexts (cf. Fauconnier 1975, Bosque 1980, Tovena \& Jayez 1999):


Contrary to regular superlatives, SMs do not have a referential meaning (e.g., the superlative in (1a) cannot mean 'the smallest doubt in a contextually salient set'), but a quantity or existential meaning that can be paraphrased by an indefinite NPI, so (1a) amounts to say Nunca hubo ninguna duda 'There was never any doubt'. The nonreferential/quantity meaning of SMs allows them to appear in existential contexts (cf. (1a)), thus (at least apparently) violating Milsark's (1977) Definiteness Effect.

Fauconnier (1975) argued that this meaning is the result of the calculation of inferences on pragmatic scales, where the superlative occupies one of the boundaries and it is pragmatically implied by all other alternatives (see also Israel 1996, 2011). Then, by negating the predicate where the superlative is embedded, we reverse the inference direction and we deny all other alternatives, thus getting the quantity meaning (cf. (2b)):
(2)

```
            a. \lambdax.make(x,the_slightest_mistake)<...<\lambdax.make(x,the_big
gest_mistake)
    b. }\neg(\lambdax.make(x,the_slightest_mistake))>...>\neg(\lambdax.make(x,the_bigge
st_mistake))
```

However, the quantity meaning of SMs cannot be cancelled, as opposed to the existential meaning provided by other superlatives in the context of negation, what suggests that this meaning is not pragmatically derived for the former (contra Fauconnier), but rather semantically driven:
(3)
a. No cometió el más mínimo error, (\#pero cometió otros más graves)
not committed.3sg the more minimum mistake but committed other more serious
'He/she didn't make the slightest mistake, (\#but he/she made more serious ones)'
b. No resolvió el problema más simple, pero resolvió otros más complicados
not solved.3sg the problem more simple, but solve other more complicated
'He/she didn't solved the simplest problem, but he/she solved more complicated ones'

The main goal of this paper is to investigate how it is possible to achieve the meaning of SMs compositionally, taking into account some unnoticed properties of these expressions in Spanish. First, it is remarkable that the adjective of SMs (typically mínimo 'minimum', but also other smallness adjectives as leve 'light', ligero 'slight',
pequeño 'small' or the syncretic form menor 'least') occupies the prenominal position in Spanish, a marked position for superlative adjectives and modifiers in general (cf. (4)). Secondly, not every type of noun is licensed in an SM; while abstract nouns as error 'mistake' or interés 'interest' are admitted, concrete nouns as sandalia 'sandal' or agua 'water' are rejected (cf. (5)). Finally, SMs do not license superlative codas, namely those expressions restricting the frame of comparison (cf. (6)).
(4)

| *No había | la duda | más $\{$ mínima/ligera/leve $\}$ |
| :---: | :--- | :--- |
| not there was | the doubt | more $\{$ minimum/slight/light $\}$ |

'There wasn't the slightest doubt'
(5) *No había la más mínima \{sandalia/agua\}
not there.was the more minimum \{sandal/water\}
Intended: 'There wasn't the slightest \{sandal/water\}'
(6) No hubo el más mínimo problema (*del mundo)
not there.was the more minimum problem of-the world
'There wasn't the slightest problem (*of the world)'

I propose that SMs are a special type of Q(uantity)-superlatives (cf. Hackl 2009, Solt 2011, Wilson 2018). Specifically, I assume that smallness adjectives in SMs are Q-adjectives which only measure over an intensity scale (I will refer to them as I(ntensity)-modifiers). Intensive measurement can be distinguished from extensive measurement in that only the latter implies a measurement over space or time (cf. Tovena 2001, 2003). On the contrary, intensive measurement of a property points out at different degrees of the same property. Thus, I-modifiers have a double nature: on the one side, they are gradable adjectives, as the possibility of being quantified by the superlative shows; on the other side, they are scalar modifiers, in so far as they only modify gradable nouns, i.e., nouns that can be intensively measured.

This proposal straightforwardly explains why SMs only select for a very restricted type of noun: while interés 'interest', paciencia 'patience', error 'mistake' or duda 'doubt', among others, are gradable, coche 'car', árbol 'tree', petróleo 'oil' and agua 'water' are not. That quality-denoting nouns (e.g., interest, patience, respect...) are gradable has been previously proposed by several authors (cf. Tovena 2001, 2003; Francez \& Koontz-Garboden 2015, 2017; Hinterwimmer 2020). I propose that simple eventuality-denoting nouns (e.g. mistake, doubt, problem...) can be also analyzed as
gradable in so far as they can be modified by scalar modifiers (e.g., minimizers as in a slight \{mistake/*car\}, maximizers as in an absolute \{mistake/* car\}) and they have a RELATIVE EXISTENCE: the smaller a mistake is, the less of a mistake it is; on the contrary, however small a car might be, it will never be less of a car.

Since the superlative quantifies a Q-adjective, as a result we get a Qsuperlative. However, the quantity denoted by the $S M$ is not an extensive one (cardinality for count nouns or amounts of stuff for mass nouns), but an intensive quantity. In other words, the superlative in (1a) does not denote a minimal quantity of mistakes (this would be 'one mistake' in a cardinality scale), but 'a minimal degree of mistakenness'. This also explains why superlative codas are not admissible in SMs: these elements denote sets of individuals restricting the frame of comparison at the level of the NP (cf. Gutiérrez- Rexach 2010). However, in the case of SMs the superlative does not range over individuals, but over degrees. In other words, while in regular superlatives the comparison ranges over individuals, in SMs we compare degrees (of interest, patience, mistakenness, doubtness...).

The above proposal can be formalized as follows: I assume that I-modifiers (and their superlative shape) are merged in the specifier of a functional projection FP from where they access to the gradable property which defines the noun (e.g., mistakenness in the case of mistake):

> (7) [DP el [FP [DegP más [AP mínimo]] [F' F [NP N]]]]

So, I-modifiers do not modify a property of individuals, but a property of degrees of N -ness. Also, when the superlative quantifies the I -modifier, the comparison class is made up of degrees. Superlatives calculate their reference from the elements in the comparison class, so the reference of an SM is not an individual, but a degree, the unique degree of N -ness such that there is no other bigger degree. Thus, the quantity meaning of SMs is straightforwardly explained, since they denote degrees. Importantly, this quantity meaning is not extensive, but intensive, in the sense that we are not measuring amounts, but degrees of intensity or N-ness. Also, under this proposal the quantity meaning of SMs is not pragmatically derived as in Fauconnier's approach, but it is compositionally derived through the meanings of the elements composing the superlative.

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The discourse move of exclamatives revisited: a view from Japanese
Shun Ihara and Katsumasa ITO

## 1. Background.

This paper investigates the pragmatic aspect of exclamatives. In the literature, it is not uncontroversial what kind of speech act or discourse move exclamative sentences have. It is often claimed that exclamatives have their own speech act, though the implementations are different by authors (cf. Zanuttini \& Portner 2003, Castroviejo Miró 2010, Rett 2011, Balusu 2019, a.o.). Another approach is to assume that the speech act of exclamative sentences is assertion, as in Trotzke \& Giannakidou (2021). One of the reasons for this debate is the tricky behavior of exclamatives in discourse. It is often assumed that exclamatives cannot be used as an answer to a question as in (1) and that exclamatives cannot be challenged by the addressee as in (2).
(1) A: How tall is Tony's child?

B: \#How very tall he is!
(Zanuttini \& Portner 2003)
(2) A: (My,) What delicious desserts John bakes!

B: ?No (he doesn't), these are store-bought. John's actually a terrible cook.
(Rett 2011)

However, Trotzke \& Giannakidou (2021) present the data where an exclamative sentence is used as an answer to a question as in (3).
(3) A: Tell me, how did Eliud Kipchoge do in the race? B: My god! How fast he was!

Furthermore, Castroviejo Miró (2010) observes that the propositional content of exclamative sentences can be actually challenged by the addressee as in (4).
(4) A: How tall Bill is!

B: Come on, he's not that tall.

No explanation has yet been given for the above elusive behavior of exclamatives. In this study, taking the position that exclamatives have their own discourse move, we discuss the data of the exclamative construction in Japanese and show that our proposal provides further empirical advantages especially with regard to Japanese data.

## 2. Data.

We exclusively focus on exclamatives with nodaroo, one of the standard exclamative constructions in Japanese. In addition to the controversial data in (1)-(4), we motivate our analysis by showing that nodaroo-exclamatives interact with certain discourse expressions unique to Japanese.
2.1. Response to questions: Nodaroo-exclamatives share the property w.r.t. question-responding observed in (1) and (3). That is, while they cannot be used as answers to questions that ask for specific information about the propositional content $p$ (e.g., the height) (: (5)), they can be used to answer questions concerning the speaker's emotive attitude or impression towards $p$ (: (6)):
(5) A: How tall is Taro's child?

B: \# Taro-no kodomo-wa nante se-ga takai-nodaroo!
'How tall Taro's child is!'
(6) A: What do you think about Taro's race yesterday?

B: Taro-wa nante hayai-nodaroo!
'How fast Taro is!'
2.2. Challenging by addressee: In parallel with the English data in (4), the content of nodaroo- exclamatives can be challenged by the addressee, as shown in

B's response in (7). The attitude of surprise expressed by nodaroo-exclamatives, however, cannot be challenged, as indicated by $\mathrm{B}^{\dagger}$ 's response:
(7) A: Taro-wa nante ashi-ga hayai-nodaroo!
'How fast Taro is!'

B: lya, zenzen hayaku-nai yo.
No, he isn't fast at all.
|| Bt: \# lya, omae-wa zenzen odoroite-nai.
||'No, you're not surprised at all."
2.3. Intonational marking: Non-exclamative sentences with nodaroo can be followed by sentence-final rising (or questioning) intonation " ", as shown in (8). In contrast, the nodaroo-exclamative in (9) indicates that it disallows rising intonation.
(8) Taro-wa ashi-ga hayai-nodaroo

T-TOP foot-NOM fast-NODAROO
'Taro is fast, isn't he?'
(9) *Taro-wa nante ashi-ga havai-nodaroo $\nearrow$

T-TOP how foot-NOM fast-NODAROO
'[lit.] How fast Taro is! (Isn't he?)'
2.4. Compatibility with discourse particles: Japanese discourse particles are distinguished into two groups: (i) "notification" particles that provide emphasis or add a sense of urgency (e.g., yo) and (ii) "confirmation" particles that serve to indicate that the speaker is trying to get confirmation of the propo- sitional content from the addressee (e.g., ne) (McCready \& Davis 2020). As exemplified in (10), nodarooexclamatives are compatible only with the latter.

| (10) | Taro-wa | nante ashi-ga | hayai-nodaroo | \{*yol ne \} |
| :---: | :---: | :---: | :---: | :---: |
|  | T-TOP | how foot-NOM | fast-NODAROO | \{YO/ NE \} |
|  | 'How fas | ro is $\left\{{ }^{*} \mathrm{YONE}\right.$ ]!' |  |  |

2.5. CT-marking: Tomioka (2010, fn.5) reports that regardless of the fact that Japanese contrastive topic (CT) marker -wa can appear in almost any type of speech acts (e.g., assertions, questions, and imperatives), only exclamatives cannot host CTwa, as shown in (11).

$$
\begin{array}{ll}
\text { \# Kyooto-WACT } & \text { nante kirei-na-nodaroo }  \tag{11}\\
\text { Kyoto-CT } & \text { how pretty-COP-NODAROO } \\
\text { '[int.] How beautiful KYOTO is!!' }
\end{array}
$$

We use Farkas \& Bruce's (2010) model of discourse where a context $K$ is a tuple ( $A, T, D C_{x}, C G, P S$ ). $A$ is a set of discourse participants. The Discourse Commitment set $D C_{x}$ represents a set of propositions that the participant $x$ is publicly committed to. T, CG and PS correspond to Table, Common Ground, and Projected Set. Following Castroviejo Miró (2010) and Trotzke (2019), we assume the surprising operator for exclamative updates in (12). This operator takes a proposition and crucially returns the non-at-issue meaning that $p$ is an unexpected (i.e., surprising) fact (cf. Rett 2019).
[[surprising]] $=\lambda p$. [ $p$ is a fact\& $p$ is unexpected] : $\left(s^{a}, t^{c}\right)$
( $\sigma^{\text {a }}$ stands for an at-issue type and $\sigma^{c}$ a non-at-issue type including a Cl-type (Potts 2005).)

Given the ingredients, we propose the discourse move of nodaroo-exclamatives as follows.
(13) $\quad[[\operatorname{nodaroo}(p)]]$ takes an input context $K$ and returns an output $K^{t}$ such that:
a. $D C^{K t}=D C^{K} \cup$ surprising $(p)$
b. $P S^{K t}=\left\{C G^{K} \cup p\right\}$
c. $T^{K t}=T^{K} \cup\{p\}$
d. In all other respects, $K^{t}=K$

In (13), the nodaroo-exclamative modifies the $D C$ to include the non-at-issue information that $p$ is an unexpected fact; the speaker is not committing to $p$ itself but representing her attitudes toward $p$. The sentence also modifies the Table by adding $\{p\}$. The important point here is that what the sentence adds to $D C$ (namely surprising $(p)$ ) differs from what it adds to $T$ (namely $p$ ) (cf. Rett 2019). Intuitively, nodaroo(p) expresses the speaker's surprise and at the same time represents $p$ as 'atissue' in the conversation.

Let us show that the above proposal captures all the data set shown in the previous section.

First, given the assumption that a question in the discourse is resolved by the addition of the answer proposition to DC (Farkas \& Bruce 2010), we argue that nodaroo-exclamatives can be a felicitous answer to a question only if the question is concerned with the speaker's emotive attitude to $p$, because in our proposal, nodaroo(p) puts an illocutionary attitude 'surprising(p)' to $D C$. This line of analysis captures the contrast found in (5) and (6); while the nodaroo-exclamative in (5) is felicitous since it can answer to the given question by putting "the speaker is surprised at $p$ " to $D C$, in (6), the nodaroo-exclamative cannot be an answer to the question since the question requires an information of the content denoted by $p$, which is not added to $D C$.

Second, since nodaroo-exclamatives put $p$ to the Table $T$ (cf. (13b)), any discourse participant other than the speaker can make a challenge to the utterance if the challenge targets $p$ (cf. the utterance by B in (7)). In contrast, the 'surprising' meaning is not added to $T$ (and moreover the meaning is non-at-issue), thus cannot be challenged (cf. the utterance by $\mathrm{B}^{\mathrm{t}}$ in (7)). As for the data in (2) presented by Rett (2011), we argue that this is a case where the addressee challenges to the presupposition of the utterance, which leads to its oddness. That is, the exclamative in (2) presupposes that John baked 'something' (cf. Zanuttini \& Portner 2003), and thus it cannot be challenged by the utterance targeting this part (cf. the 'hey, wait a minute' test, von Fintel 2004).

Third, following Hara's (2018) analysis that rising intonation in Japanese conveys the speaker's uncer- tainty toward the proposition, we claim that the meaning of rising intonation in nodaroo-exclamatives is inconsistent with the semantics of
surprising. That is, since surprising(p) encodes the factivity of $p$ (cf. (12)), the truth of $p$ must not be uncertain, thereby inducing the oddness in (9).

Forth, according to Uegaki (2021), a sentence with yo 'yo(p)' presupposes that $p$ resolves the given (ei- ther implicit or explicit) question. In other words, given that a question is resolved by adding an answer $p$ to the speaker's $D C$, the speaker of $y o(p)$ must be committed to $p$ by virtue of the utterance. This correctly predicts that nodarooexclamatives, which put surprising $(p)$ (rather than $p$ ) to the $D C$, cannot be compatible with yo, since the utterance can never satisfy yo's presupposition that requires putting the $p$ to the $D C$. The particle ne, on the other hand, has no presupposition that conflicts with the discourse move of nodaroo-exclamatives (cf. McCready \& Davis 2020).

Finally, the data (11) is captured in much the same way as the explanation for the incompatibility with yo. According to Oshima (2021), an utterance with CT-wa 'wa(p)' plays a role as "facilitating the discourse" by resolving at least one of the questions in the QUD-tree (in Bu"ring's (2003) sense) with $p$. As we have already seen earlier, $\operatorname{nodaroo}(p)$ cannot provide a felicitous answer to questions that include $p$ as the possible answers. Hence, nodaroo-exclamatives can never satisfy the pragmatic requirement of CT-wa, which explains the incompatibility.

This analysis has suggested that the discourse move of exclamatives is similar to that of assertions but not identical (in the sense that elements added to the Table and $D C$ are different), con- tributing to provide a unified explanation to the set of data that has been controversial in the literature.

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# On semantics of the German wh-modifying particle alles 

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## 1. Introduction

In this paper, we deal with the German particle alles in questions and exclamatives. As observed by Reis (1992), Beck (1996), and Zimmermann (2007), this particle can modify a wh-phrase in questions.
(1) Wer ist alles gegangen?
who.nom is all gone
'Who all left?'
(Zimmermann 2007:634)

In (1) the addressee is required to give an exhaustive answer: the answer to must identify all the people who left. In addition, wh-alles shows a plurality effect as shown in (2): an answer that mentions only one individual is infelicitous, unless it is marked by nur 'only’ or als einzige 'alone’, as noted by Zimmermann (2007).
(2)
a. Q: Wer ist alles gegangen? 'Who all left?'
b. A1: Jenny und Sarah sind gegangen.
'Jenny and Sarah left.'
c. \#A2: Jenny ist gegangen.
'Jenny left.'
d. A3: Nur Jenny/Sarah ist als einzige gegangen.
'Only Jenny/Sarah alone left.'
(Zimmermann 2007:634

Roguska (2007) and d'Avis (2013) point out that alles can be used also in exclamative clauses as in (3).
(3) Wen du alles eingeladen hast!
who.ACC you all invited have
'The people who you invited!/You invited everyone!'

At first sight, the same plurality effect seems to be observed in exclamative clauses with alles. (4a) and (4b) indicate that an exclamative clause with alles is infelicitous if it expresses surprise at meeting one unexpected person.
(4)
a. Context 1: Peter went to a doctor. Surprisingly, the doctor was Georg, who was an acquaintance of Peter. Peter reports:

Wen ich (\#alles) getroffen habe! who.ACC I all met have
'The people I met!/I met everyone!'
b. Context 2: Peter went to a doctor. Surprisingly, the doctor was Georg, who was an acquaintance of Peter. Additionally, the receptionist was Maria, who was also an acquaintance of Peter. Peter reports:

| Wen | ich alles getroffen habe! |  |
| :--- | :--- | :--- | :--- |
| who. ACC | I all met | have |

'The people I met!/I met everyone!'

However, the plurality effect does not always hold in exclamative clauses. In (5), speaker $B$ seems to be surprised at the fact that $A$ is reading one very difficult book, but alles is felicitous.
(5)
a. A: Ich lese die „Kritik der reinen Vernunft".

I read the Critique of Pure Reason
'I'm reading the "Critique of Pure Reason".'
b. B: Was du alles liest!
‘The thing you read!/You read everything!'
(Roguska 2007:163)

Intuitively, speaker B in (5) infers that A must read other books when A reads such a difficult book, and the plurality requirement is fulfilled by this inference, but it is unclear why such an inference is impossible in the doctor's example (4a). The aim of this paper is to propose a unified semantics of alles that captures these variable plurality effects in questions and exclamatives.

## 2 Proposal

First, we assume that wh-phrases have a quantifier type and the scope of these phrases are lifted to a set of propositions (cf. Karttunen (1977)), and that the resulting wh-clauses denote a set of possible answers:
(6)
a. [cP weni [A $\lambda x_{i}$ lift ich tigetroffen habe ]]
b. [[wen]] ${ }^{w, c}=\lambda P<e,<s t, t \gg . \lambda p . \exists x[$ person $(x) \& P(x)(p)]$
c. $[[\mathrm{A}]]^{\mathrm{w}, \mathrm{c}}=\lambda x \cdot \lambda p \cdot p=\operatorname{met}(x)(\mathrm{I})$
d. $[[C P]]^{w, c}=\lambda p . p=\exists x[\operatorname{person}(x) \& \operatorname{met}(x)(I)]$

In addition, following d'Avis (2001), Zanuttini and Portner (2003), Castroviejo Miró (2010), and Balusu (2019), we assume that an exclamative clause denotes a set of propositions. We further assume that alles is a modifier of a wh-phrase and that whclauses (= CP in (7)) are combined with one of the force operators (ANS for questions and EXCL for exclamatives):
(7) $\left[\right.$ ANS/EXCL [CP wh allesi $\left.\left[\ldots t_{i} \ldots\right]\right]$

The evidence supporting the view that alles is a wh-modifying operator is the data in (8): alles can be adjacent to a wh-phrase.

> (8) Wen alles hat er gestern besucht? who.Acc all has he yesterday visited 'Who all did he visit yesterday?'

Based on these assumptions, we define alles as in (9a), where $R(P)$ is equivalent to a set of possible answers (= [[CP] $]^{\mathrm{w}, \mathrm{c}}$ in (6d)) and henceforth abbreviated as $S$ :
(9) [cp wen allesi [A $\lambda x_{i}$ lift ich $t_{i}$ getroffen habe ]]
a. [[alles]] ${ }^{w, c}$
$=\lambda R_{<e,<s t, t>,<s t, t \gg} \cdot \lambda P_{<e,<s t, t \gg} \cdot \lambda p_{<s, t>}: \exists q \in R(P)[p \geq s q \& p \neq$ $q] . p \in R(P) \& \forall p^{\prime} \in R(P)\left[p \geq_{s} p\right]$.
b. $[[C P]]^{w, c}=\lambda p: \exists q \in S\left[p \geq_{S} p \& p \neq q\right] . p \in S \& \forall p^{\prime} \in S\left[p \geq_{S} p^{\prime}\right]$, where $S=\{p: p=\exists x[\operatorname{person}(x) \& \operatorname{met}(x)(I)\}$

According to (9a) and (9b), alles imposes a restriction on a set of possible answers $S$ through a strength ranking $\geq_{s}$, which is based on either entailment or nonentailment scales: it introduces the presupposition that there should be a proposition $q$ in $S$ that is not as strong as $p$. In addition, wh-alles returns another set of propositions, each member of which is a possible answer (i.e. $p \in S$ ) and the strongest among the members of $S$. In what follows, we demonstrate that the variable plurality effects in questions and exclamatives can be derived from the strength ranking $\geq_{s}$ introduced by alles.

### 2.1. Analysis for alles in questions

We first see how our proposal works in questions. Following Dayal (1996), we assume that the ANS operator in (10) takes a set of propositions $Q$, which requires that $Q$ contains a maximally informative true answer (i.e. a true answer that entails all the other true answers).
[[ANs]] ${ }^{w, c}=\lambda Q_{<s t, t>}: \exists q \in Q[p=\operatorname{MAX}(Q, w)] \cdot \operatorname{MAx}(Q, w)$, where $\operatorname{MAX}(Q, w)=p$ iff $p(w) \& \forall q[q \in Q[q(w) \rightarrow p \subseteq q]$

A sample derivation is presented in (11).

> [ANS [cp Wer alles ist gegangen]]
a. [[CP]] w,c
$=\lambda p<s, t: \exists q \in S\left[p \geq_{S} q \& p \neq q\right] . p \in S \& \forall q^{\prime} \in S[p \geq S p]$,
where $S=\{p: p=\exists x[\operatorname{left}(x) \& \operatorname{person}(x)]\}$
b. $[[A N S]]^{w, c}\left([[C P]]^{w, c}\right)=\operatorname{Max}\left([[C P]]^{w, c}, w\right)$

Presuppositions
$\exists p \in[[C P]]^{\mathrm{w}, \mathrm{c}}\left[p=\operatorname{MAX}\left([[C P]]^{\mathrm{w}, \mathrm{c}}, w\right)\right] \& \exists q \in S\left[p \geq_{S} q \& p \neq q\right]$
Suppose that the strength ranking sis based on entailment. In that case, the presupposition induced by alles requires that the answer should entail another proposition in S. The answer like (2-A2) (= "Jenny left"), unlike the answer like (2-A1) (="Jenny and Sarah left"), cannot satisfy this requirement because it does not entail another proposition in $S$. This leads to a presupposition failure, and the plurality effect arises.

## Analysis for alles in exclamatives

We see then how our proposal works in exclamatives. Based on Zanuttini and Portner (2003) and Roberts and Sasaki (2021), we define excl operator for exclamatives as in (12).

$$
\begin{align*}
& {[[\mathrm{EXCL}]]^{w, c}}  \tag{12}\\
& =\lambda Q_{<s t, t\rangle}: \exists p \in Q_{c}+[p \in Q c \& p(w)] . w \in \cap\left\{p: p \in Q_{c}+\& p \notin\right.
\end{align*}
$$ $\left.Q_{c}\right\}$,

where $Q_{c+}$ is a widened context s.t. $Q_{c} \cap Q_{c+}=Q$ and $Q_{c+}-Q_{c} \neq$ $\varnothing$

The above operator takes a set of propositions $Q$, induces a presupposition that there should be a true proposition in a widened set of propositions $Q_{C}+$ (i.e. a set of
surprising / impressive propositions), and gives the truth condition that such a proposition is true. Under these assumptions, the derivation of an exclamative clause with alles proceeds as in (13).
[EXCL [cp Wen alles ich getroffen habe!]
a. $[[\mathrm{CP}]]^{w, c}$
$=\lambda p: \exists q \in S\left[p \geq_{s} p \& p \neq q\right] . p \in S \& \forall p^{\prime} \in S\left[p \geq_{S} p\right]$,
where $S=\{p: p=\exists x[\operatorname{person}(x) \& \operatorname{met}(x)(I)\}$
b. $[[E X C L]]^{w, c}\left([[C P]]^{w, c}\right)$
$=w \in \cap\left\{p: p \in Q_{c}+\& p \notin Q_{c}\right.$
$\& p \in S \&$ person $\left.(x)] \& \forall q^{\prime} \in S\left[p \geq_{S} p\right]\right\}$
Presuppositions
$\exists p \in Q_{c^{+}}\left[p \in Q_{c} \& p(w)\right] \& \exists q \in S[p \geq S q \& p \neq q]$

The semantics in (13) correctly predicts that an exclamative clause with alles is infelicitous in (4a) and felicitous in (4b) and (5). Suppose that in (4a) and (4b), the strength ranking $\geq_{s}$ is based on entailment. In this case, the presupposition introduced by alles can be satisfied only in (4b):

Suppose $a=$ Peter met Georg, $b=$ Peter met Maria and $c=$ Peter met John. In this case, $\left.\left.\left.\geq_{s}=\{<a b, a\rangle,<a b, b\right\rangle,<a c, a\right\rangle, \ldots\right\}$
a. Context 1 (= (4a))

If $S=\{a\}$, then $\exists q \in S\left[p \geq_{S} q \& p \neq q\right]$ is false because $S$ contains nothing that $a$ entails.
b. Context 2 (= (4b))

If $S=\{a, b, a b\}$, then $\exists q \in S\left[p \geq_{s} q \& p \neq q\right]$ is true because $S$ contains $a$ and $b$ that $a b$ entails.

Like this, if the strength ranking is based on entailment, the plurality effect arises in exclamative.

In the case of (5), on the other hand, the strength ranking is based on a nonentailment scale. We assume that such a scale is available if each alternative tells a gradable property (e.g. difficulty, impressiveness,etc.) about an individual (cf. Guerzoni and Lim (2007)). In (5), unlike (4a), we can infer the existence of a scale based on impressiveness (i.e., reading "Critique of Pure Reason" is more impressive than reading other books). As a result, the presupposition introduced by alles is satisfied as in (15):

Suppose that $a=I$ 'm reading the "Critique of Pure Reason", $b=1$ am reading "New York Times", $c=1$ am reading "Harry Potter". In this case, $S=\{\langle a, b\rangle,<a, c\rangle, \ldots\}$

If $S=\{a, b\}$ or $S=\{a, c\}$, then $\exists q \in S\left[p \geq_{S} q \& p \neq q\right]$ is true because
$S$ contains $b$ or $c$ and $a$ is more impressive than $b$ and $c$.
Thus, if the strength ranking is based on a non-entailment scale, the plurality effect does not arise in exclamatives.

## 3 Conclusion

In this paper, we propose a unified semantics for alles, which imposes on restrictions on a set of possible answers. We explain the seemingly optional plurality effects in questions and exclamatives by using the difference between entailment and non-entailment scales associated with the strength ranking $\geq_{s}$.

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Verbal answers as a cue to the interpretation of belief reports/ Respostas verbais como pista para a internretação de relatos de crença
Alice Jesus and Ana Lúcia Santos

Vários estudos mostram que as crianças têm dificuldade em interpretar relatos de crença como (1) (e.g. Dudley et al. 2015; Hacquard 2014; Lewis et al. 2017; Yang et al. 2021). Neste tipo de frases (da forma $x$ thinks $p$ ), a semântica do verbo de crença think leva a que a proposição $p$ seja avaliada em relação ao conjunto de crenças do attitude holder ( $x$ ) e não em relação ao mundo real: i.e., desde que $p$ seja verdade para $x$, a frase é verdadeira, ainda que $p$ possa ser falsa no mundo real. Crianças de até 4 e 5 anos, no entanto, tendem a cometer erros 'baseados na realidade' quando interpretam estas frases, julgando-as apenas com base no valor de verdade de $p$ (no mundo real). Contrariamente à ideia de que tais erros podem advir de dificuldades cognitivas, sintáticas ou semânticas, tem-se somado evidência a favor da Hipótese de Défice Pragmático (HDP) (Lewis et al. 2017; Hacquard e Lidz 2018). Note-se que, em contextos específicos, estes enunciados podem ser interpretados como asserções indiretas (2), em vez de verdadeiros relatos de crença. Em (2), a resposta de Paul é apenas apropriada se se tomar como contribuição principal o conteúdo de p (o paradeiro de John), e não as crenças de $x$. Em tais contextos, pode considerar-se que o falante opta por asserir indiretamente $p$, recorrendo ao estado de crença de $x$, que considera fidedigno. De acordo com a HDP, as crianças generalizam a interpretação de asserção indireta aos enunciados com verbos de crença (avaliando apenas a verdade de $p$ ) porque tendem a subestimar a relevância da crença no contexto discursivo. Lewis et al. (2017) testaram a interpretação de relatos de crença por crianças de 4 anos em diferentes contextos, manipulando a relevância da crença, e mostraram que, nos contextos em que esta é mais saliente (especificamente, quando estados de crença de diferentes indivíduos são contrastados), as crianças cometem menos erros 'baseados na realidade', o que é consistente com a HDP.

No presente trabalho, pretendemos contribuir para a discussão com dados de uma língua românica como o português europeu (PE), na qual a semântica dos verbos de crença interage com o sistema do modo verbal. Em PE, um grande conjunto de verbos de crença (como pensar e acreditar) admite ambos os modos indicativo e conjuntivo no seu complemento (3), sendo o conjuntivo selecionado, em traços gerais, quando o falante ou o sujeito expressam um menor grau de crença (ou de comprometimento com a verdade de p) (Marques 2009). Assim, em PE, embora estas estruturas também possam ser utilizadas no contexto de asserções indiretas (4a), tal
é admitido apenas quando é selecionado o indicativo, e não o conjuntivo (4b). Por este motivo, pode colocar-se a hipótese de que, em PE, o conjuntivo é, por si só, pista morfossintática para a interpretação destas estruturas como verdadeiros relatos de crença. Neste sentido, se as crianças forem sensíveis às condições semânticopragmáticas que regem a seleção do modo, o conjuntivo pode destacar a relevância da crença no contexto e bloquear interpretações de asserção indireta.

Neste estudo, procuramos validar a HDP para o PE através de uma metodologia alternativa, que consiste na provocação de respostas verbais (enquanto reações confirmativas a enunciados com verbos de crença), como em (5). Veja-se que, num contexto em que tanto a frase (5a) como a proposição encaixada (p) são verdadeiras, ambas as respostas $5 b$ e 5 c são admissíveis. No entanto, a escolha de um ou outro verbo parece refletir aquilo que o falante toma como informação mais relevante ('main point') do enunciado 5a: 5b, retomando o verbo mais alto, parece ser compatível com a leitura de relato de crença, enquanto 5 c , retomando o verbo mais baixo, é compatível com a leitura de asserção indireta de $p$. Dados da produção espontânea mostram que as crianças portuguesas tendem a responder com o verbo mais baixo a interrogativas globais com achar (6a), numa altura em que já selecionam categoricamente o verbo mais alto na resposta a interrogativas com querer (6b) (Santos 2009). Este comportamento está em linha com a HDP, sugerindo que as crianças tomam como relevante apenas o conteúdo de $p$ quando o verbo matriz expressa crença. O desenho experimental contempla ainda o modo da oração completiva como fator entre-sujeitos. Com o indicativo, são testados os verbos de crença achar, pensar e acreditar, e o verbo sonhar (como condição de controlo, em que se esperam apenas respostas com o verbo mais alto). Com o conjuntivo, são testados os verbos de crença pensar e acreditare, como condição de controlo, o verbo querer. Neste momento, está em curso a recolha de dados de cerca de 40 crianças, entre os 4 e os 6 anos, e de 40 adultos, que constituirão o grupo de controlo. Os dados permitirão avaliar se (i) as crianças, de um modo geral, dão mais respostas com o verbo mais baixo do que os adultos, (ii) o indicativo favorece repostas com o verbo mais baixo, ao contrário do conjuntivo, e (iii) há diferenças entre verbos.

Por último, estes dados poderão ainda contribuir para aprofundar o conhecimento do processo de aquisição do modo. Embora estudos anteriores, de produção, tenham mostrado que as crianças tendem a evitar o conjuntivo com verbos de crença (Dracos et al. 2019, Jesus et al. 2019), pouco se sabe ainda acerca da compreensão dos contrastes de modo nestes contextos.

## Exemplos

(1) Mary thinks John is out of town.
(2) Ana: Where is John?

Paul: Mary thinks John is out of town
(3) a. A Maria pensa que o João está.ınd em casa.
b. A Maria pensa que o João esteja.cons em casa.
(4) Ana: Onde está o João?

Paulo: a. A Maria pensa/acha que o João está em casa.
b. */?? A Maria pensa que o João esteja em casa.
(5) a. A: O Mickey acha que o Donald está atrás da casota do cão.
b. B: Pois acha.
c. B: Pois está.
(6) a. MJF: achas que ela já está a dormir?

INI: (es)tá. [Inês 2;2.1]
b. MAE: +> queres andar no cavalinho?

INM: qué [: quero]. [Inês M. 1;5.9] (Santos 2009, p. 145)

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## Alternative types and the semantics of exclusive intensifiers <br> Hsiu-Chen Daphne LIAO

Exclusive Intensifiers in many languages possess multiple semantic functions in their adverbial uses. For example, Mandarin exclusive adverbial ziji 'self' can convey the three meanings below:
(1) A: Did Lisi send the letter for Zhangsan?

B: Meiyou, Zhangsan ziji ji-le xin non-delegation reading No, Zhangsan ZIJI send-PERF letter 'No, Zhangsan sent the letter himself.'
(2) A: All the team members wrote the team assignments together.
$\left.\begin{array}{cl}\text { B: Cai bu-shi, } & \text { Zhangsan changchang } \\ \text { zuoye } & \text { ziji xie xiaozu } \\ \text { alone-like reading }\end{array}\right]$
$\begin{array}{cccc}\text { (3) Meiyou-ren re, } & \text { Zhangsan momingqimiaodi } & \text { ziji } & \text { ku } \\ \text { le } & & \text { anti-causative reading } \\ \text { No-one provoke, } & \text { Zhangsan inexplicably } & \text { ZIJI cry } \\ \text { PERF } & & & \end{array}$
'No one provoked him. Inexplicably, Zhangsan cried by himself.'

In addition to Mandarin ziji, the Hungarian reflexive marker magá 'self' and Indonesia sendiri 'self' also have the above three different uses, as pointed in Liao (2018) and Sipayung (2019) respectively. Furthermore, some intensifiers such as English $x$-self and German selbst'self' are also used to convey all the readings, except that they have to take a preposition, forming by $x$-self and von selbst respectively, for the anti-causative reading.

While these intensifiers manifest striking cross-linguistic similarities in the range of meanings they may express, they do vary. For example, for the alone-like uses, Mandarin ziji can convey the anti-collective reading (as in (2)) or the anti-companion
reading (as in (4)), but English x-self and Dutch zelf cannot have the latter use, illustrated in (5).
(4) A: What is Zhangsan doing?
anti-companion reading
B: Zhangsan ziji zai
da dian-wan
Zhangsan ZIJI PROG play electronic-game
'Zhangsan is playing video games alone.'
(5) \#Jan speelt zelf.

John plays self (Tellings 2019: 185)
On the other hand, Mandarin ziji lacks the only-like reading and the superlative reading of Indonesia sendiri 'self', namely the two readings presented in (6) and (7) (Sipayung 2019: 4-5).

| (6) Sendiri John memenangkan | loteri <br> Sendiri John win <br> lottery | only-like reading |
| :--- | :--- | :--- |
| 'Only John won the lottery.' |  |  |
|  |  |  |
| (7) John bahagia sendiri | superlative reading |  |
| John happy sendiri |  |  |
| 'John is the happiest one.' |  |  |

As argued in Liao (2018; 2021), the cross-linguistic similarities observed in the uses of intensifiers cannot be accidental. There must exist some mechanism working to derive the various surface meaning, while systematically allowing some variation among the intensifiers. The mechanism is unlikely to be the one suggested in Tellings (2019), which extends Moltmann's (2004) part-structure analysis of adverbial alone to exclusive intensifiers, and makes exclusive intensifiers take events with no subparts. Nevertheless, this minimal integrated whole analysis has no room for the nondelegation reading shown in (1), a meaning widely discussed for exclusive intensifiers (cf. Siemund (2000), among many others), let alone the other semantic functions observed above. Thus, to pursue a universal mechanism, the study will base its analysis on the simple semantic account in Liao (2018), where by variations in context and syntax, an alternatives-and-exhaustification mechanism works to derive the various surface meanings from one single core meaning of adverbial intensifiers: the
focused identify function (cf. Eckart (2001), Hole (2002; 2008), and Gast (2006) for such an approach for the semantics of intensifiers). But the study will revise Liao's analysis because of its big shortcoming. Liao's analysis empowers contexts to determine the reading of an intensifier, but it also stipulates that Mandarin ziji rejects the only-like reading. The shortcoming also emerges when one considers the syntaxsemantics correlation of Indonesia sendiri, which conveys an only-like reading in the sentence-initial position, but an alone-like reading in the post-VP position, and an anticausative reading in the postverbal position. Apparently, contexts play a role weaker than Liao (2018) has claimed. So, to better account for the cross-linguistic facts, the study will revise Liao's analysis by decreasing the role of contexts as follows.

Specifically, the study will argue that lexical properties of intensifiers determine what sorts of alternatives are activated, as illustrated in (8):
(8) Suppose that A is the prejacent, and B and C are contextually relevant individuals. The alternatives activated are:
a. Mandarin ziji: $\{A, B, C, A \oplus B, B \oplus C, A \oplus C, A \oplus B \oplus C\}$
b. English x-self/Dutch zelf: $\{A, B, C, \uparrow(A \oplus B), \uparrow(B \oplus C), \uparrow(A \oplus C)$, $\uparrow(A \oplus B \oplus C)\}$
c. Indonesia sendiri: two possible sorts of activation $\{A, B, C\}$ or $\{A$, $B, C, A \oplus B, B \oplus C, A \oplus C, A \oplus B \oplus C\}$

Explication: Mandarin ziji activates relevant singular individuals and their pluralities as alternatives; English $x$-self and Dutch zelf activate relevant singular individuals and their groups (cf. Link 1983; 1984 for pluralities and groups); Indonesia sendiri activates relevant singular individuals with or without their pluralities, and it uses syntax to signal what sort of alternatives is activated.

Then by applying a covert only-like exhaustification operator (namely O) over alternatives (cf. Chierchia 2004), as in (9a), Mandarin ziji not only excludes someone else as the agent but also rules out any cumulative agent, exemplified in (9b):
(9) Assuming that the relevant domain contains Zhangan and Bill
a. $\mathbf{O}$ ョe[*do homework(e) $\wedge$ *Agent(e, Zhangsan)]
b. ヨe[*do homework(e) $\wedge$ *Agent(e, Zhangsan)] $\wedge$
$\neg \exists \mathrm{e}\left[{ }^{*}\right.$ do homework(e) $\wedge$ *Agent(e, Bill)] $\wedge$

Crucially, the exclusion of cumulative alternatives may derive the anti-collective meaning or the anti-companion reading, depending on what sorts of integrated wholes are perceived by the lexical properties of VPs (cf. Moltmann 2004 for integrated wholes), but the exclusion of group alternatives like $\uparrow(A \oplus B)$ or $\uparrow(B \oplus C)$ necessarily derive the anti-collective reading, which explains the lack of anti- companion reading for English $x$-self and Dutch zelf. Furthermore, since Indonesia sendiri may activate only singular alternatives, two important consequences emerge. First, it becomes possible for predicates of personal properties, like be handsome, to take Indonesia sendiri but not the other intensifiers as a modifier to express the only-like reading. Second, it is also possible for such an intensifier to evaluate alternatives in terms of degrees of personal properties. For example, for the proposition "John is tall", Indonesia sendiri may come in to express that there is a degree of height, d, higher than the contextual threshold, and John's degree in height is bigger than d, and no other people in the context have such a degree in height, as illustrated in (10) (cf. Kennedy and McNally (2005) for the contextual threshold degree for implicit comparatives). This is the superlative meaning that John is the tallest.
a. $\mathbf{O} \exists \mathrm{d}[\mathrm{d}>\mathrm{SG} \wedge$ height(John) $\geq d]$
b. $\exists d[d>s G \wedge$ height(John) $\geq d] \wedge$ $\neg \exists d[d>s G \wedge$ height(Bill) $\geq d] \wedge$ $\neg \exists d[d>s G \wedge$ height(Harry) $\geq d] \wedge$

The study will also argue that the above mechanism with global exhaustification derives the correct semantics for the anti-companion reading, and thus a mechanism with local exhaustification as claimed in Gast (2006) cannot hold (cf. Chierchia (2004; 2006) for the two modes of exhaustification).

To sum up, the study accounts for complicated cross-linguistic data of exclusive intensifiers in a simple mechanism. It shall bring to us a clearer picture of how a universal semantic mechanism operates for the semantics of intensifiers.

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## Primary and Derived States in Bulgarian

## Svetlozara Leseva

This paper deals with derived stative predicates in Bulgarian (with a recourse to Russian and English where relevant), that is, stative verbs that have acquired their aspectual characteristics as the result of a reconsideration of the primary meaning of verbs belonging to other aspectual classes. I consider in parallel the source active verb senses and the resulting stative meanings. As an indispensable part of the analysis of the change in meaning I explore the thematic structure (using Frame Semantics conceptual frames, cf. Baker et al. 1998, Rupenhoffer et al. 2016, among others) and the syntactic expression of the resulting verbs as compared with their active counterparts. The goal is to provide as full as possible a systematisation of the verb classes involved, the conditions of aspectual derivation and the semantic, syntactic and - where needed - morphological properties of the resulting stative verbs.

To the best of my knowledge, the first to comment on the so-called habits was Vendler (1967), who noted that predicates denoting occupations, dispositions, abilities and the like are in fact states (1b), which have emerged as a result of the reconsideration of verb meanings originally belonging to other (dynamic) aspectual classes (1a), compare:
(1)
a. BG: Toy pushi nervno otvan.

EN: He is smoking nervously outside.
b. BG: Toy pushi tri kutii tsigari dnevno.

EN: He smokes 3 packs of cigarettes a day.

Not only activities (1a), but all Vendlerian aspectual classes have "habit-forming" potential (Vendler 1967), e.g., accomplishments (2a):
(2)
a. BG: Stivan King pishe nov roman.

EN: Stephen King is writing a new novel.
b. BG: Stivan King pishe romani na uzhasite.

Within the Slavic linguistic tradition, Paducheva $(1996,2004)$ has studied in detail the aspectual properties of predicates and the relationship between thematic (semantic) classes of verbs and their aspectual characterisation. The main distinction she outlines within the domain of stative predicates is the one between properties (permanent attributes) and states (which may in turn be temporary or permanent). In a similar vein to Vendler's proposal, she posits two additional subcategories within the category of stative verbs, called 'occupations' (teach, war) and 'behaviours' (gossip, philosophise), which share many of the properties of stative predicates but have been derived from other aspectual classes on the basis of their becoming habitual, characteristic of the subject over an extensive time interval.

Taking as a point of departure these and other similar observations in the existing literature, below I note on several classes of dynamic verbs systematically resulting in stative readings and sketch the semantic and syntactic changes involved to exemplify the approach to be followed in the study.

One of the classes where such shifts occur are dynamic verbs denoting change of location, such as presicham (cross), preminavam (pass), lakatusha (meander), which serve as the basis for derivation of morphologically identical stative verbs denoting spatial configuration or trajectory, also known as "geographic verbs" (Apresyan 1986: 25).

Let's consider the thematic structure of the source verbs. The Theme argument in (3a) is a self-moving, possibly animate entity that undergoes change of location, while in (3b) it is a form or structure with a particular spatial extension. (3b) expresses not a dynamic situation of movement but a static spatial relation. The semantic representation adopted below is based on the conceptual frames in FrameNet ${ }^{1}$ (Baker et al. 1998, Rupenhoffer et al. 2016) or a derivation of such frame posited by the author where a relevant one is not identified.
(3) [ ]THEME ___ [ ]AREA [ ]PATH (frame Traversing)
$>$ []PATH_SHAPE ___ []AREA (frame Path shape)
a. BG: [Turistite]THEME presichat [gorata] AREA [po zhivopisen pat] PATH.

[^0]EN: [The hikers] THEME are crossing [the forest] AREA [along a picturesque path] PATH.
b. BG: [Patyat] PATH_SHAPE presicha [gorata] AREA.

EN: [The path] PATH_SHAPE crosses [the forest] AREA.

As shown in the examples, a number of other changes, besides the dynamic > stative shift occur:
(1) the subject (Theme) argument of the three-place active predicate in (3a) is removed from the thematic structure (3b);
(2) the PP (Path) argument is promoted to the subject position; the Area argument remains in the direct object position;
(3) the imperfective aspect verb used in the sentence has only a stative reading as it denotes a property - form or configuration - of a geographical formation or a physical object; an inchoative reading of the sentence is hence impossible.

Similar observations may be offered with respect to other classes of verbs: dynamic creation verbs and their stative counterparts that denote a relationship between a whole and its part(s): obrazuvam, oformyam, formiram (form, make up), sazdavam (create), sastavyam (compose) (Example 4); verbs of causing a cognitive state and stative dispositions (Paducheva 2004: 269): obyasnyavam (explain), oprovergavam (disprove), ubezhdavam (convince), potvarzhdavam (confirm), predskazvam (predict) (Example 5):
(4) [ ]AGENT/CAUSER__ [ ]CREATED_OBJECT [ ] MATERIAL/COMPONENTS (frame Building)
> [] MATERIAL/COMPONENTS $\qquad$ [ ] CREATED_OBJECT
a. BG: [Detsata] AGENT oformyat [naves] CREATED_OBJECT [ot lista] MATERIAL.
EN: [The children] AGENT are making [a canopy] CREATED_OBJECT [out of leaves] MATERIAL.
b. BG: [Listata] MATERIAL oformyat [naves] CREATED_OBJECT.

EN: [The leaves] MATERIAL form [a canopy] CREATED_OBJECT.
$\qquad$ [ ]CONTENT [ ]MEDIUM (frame Evidence)
> [] MEDIUM $\qquad$ [] CONTENT
a. BG: [Toy] INSPECTOR podkrepi [razkaza si]CONTENT [s fakti] MEDIUM. EN: [He] INSPECTOR confirmed [his story] CONTENT [with facts] mEDIUM.
b. BG: [Faktite] MEDIUM podkrepyat [razkaza mu] CONTENT. EN: [The facts] MEDIUM confirm [his story] CONTENT.

In the observed classes, the source thematic structure is reduced by removing the subject participant (often an Agent/Causer) involved in the dynamic situation (i.e., the performer that carries out the activity or action), while the PP participant (usually an instrumental or means-like participant), to which the activity-derived property, disposition or the like is assigned, is promoted to the subject position. The thematic structure change is associated with an aspectual change whereby the resulting verbs come to denote a permanent attribute of an entity. As such they only have a stative interpretation and not an inchoative one.

A different case is presented by dynamic verbs that result in stative predicates denoting states (not properties). Relevant classes that display this process are verbs of putting, covering, wrapping, etc., which involve the movement (initiated and performed by an Agent/Causer) of a Theme with respect to a Goal and its coming to be in contact with it (filling it, wrapping it, etc.): pokrivam (cover), obgrazhdam (surround), skrivam (hide), zaslonyavam (shroud), zakrivam (block, conceal), zabulvam (veil), ukrasyavam (adorn), oseyvam (strew), among others.

Again, the Agent/Causer argument is removed, thus leading to statives denoting either a state of the Theme being in contact with a Location or an inchoative situation whereby a Theme comes to be in contact with a Goal (the distinction between Goal and Location accounts for the difference between movement and stationary configuration) (Example 6).
(6) [ ]AGENT/CAUSE $\qquad$ []goal []THEME > [] THEME $\qquad$ [ ]LOCATION/GOAL
a. BG: [Vyatarat]cause pokriva [moravata]goal [s otlomki]theme. EN: [The wind]cause is covering [the lawn]goal[with debris]theme.
b. BG: [Otlomkite]theme bavno pokrivat [moravata]goal. EN : [Debris]theme is slowly covering [the lawn]goal.
c. BG: Kakto obiknoveno, [vsyakakvi otlomki]theme pokrivat [moravata]location.
EN: As usual, [all kind of debris]theme covers [the lawn]Location.

The inchoative verbs denote an internally induced change of state. Their end state is denoted by the stative counterparts.

The further analysis will be directed to confirming and refining the preliminary observations and at outlining the types of semantic, syntactic and morphological changes that occur in the derivation of stative predicates. Not least, parallels will be drawn between the Bulgarian (Slavic) processes of thematic structure rearrangement and the alternations described for English (e.g., in Jackendoff 1990 and Levin 1993).

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## Can intonation contours introduce a QUD into discourse?

Jakob MACHÉ

As pointed out by Ginzburg (2012, pp. 69) and Krifka (2013), response particles such as yes or no serve as means to detect a QUD which was introduced into discourse with the latest move. Calling contours (CC) as previously discussed by Liberman (1975, pp. 30-32), Gibbon (1976, pp. 274-287), Ladd (1978, pp. 520-524), Pierrehumbert and Hirschberg (1990, pp. 293-294), Truckenbrodt (2012, pp. 20452048) and others provide an interesting case. In languages like German it is possible to respond to CC with a propositional anaphora, which occur due to their nature discourse initially:

```
(1) a. Mother: [fri:. də. 'ri:. kə]
L+H* !H-\%
```

b. Friederike: [ja:. a:]

L+H* ! $\mathrm{H}-\%$

Assuming Ginzburg's and Krifka's analysis, the question arises at this point to what exactly Friederike is referring to when she utters ja 'yes'. In previous work, Truckenbrodt (2012, pp. 2045-2048) assumes that these so-called routine calling contours (RCC) described above introduce a proposition salient from context with the content 'I am talking to you'. However, this cannot be the base for the QUD, as the addressee does not confirm the fact that the speaker is talking to them, when saying 'yes'.

Given the whole variety of utterance types this calling contour is observed with in (Viennese) German, it is more accurate to assume that the QUD could be rephrased as 'Are you ready to cooperate with respect to the content a certain message?'. Apart from isolated names and vocatives, RCC are attested with declarative clauses (2), well-wishing imperatives, (3) (cf. Condoravdi and Sunwoo (2017) and Condoravdi and Sunwoo (2018)), some wh-questions (4), even more restricted with polar questions (5)-(6) and finally with verb- less, non-sentential utterances as in hallo in (6) or (7) and (8).
(2) (das) Essen (ist) fertig! L+H* ! H-\%
'Food is ready!'
(3) Grüß mir die Oma!
$\mathrm{L}+\mathrm{H}^{*}!\mathrm{H}-\%$
'Send my regards to grandma!'
(4) Wer will noch Vanillekipferl?

L+H*! ${ }^{*}$-\%
'Who wants more vanilla-flavored crescent cookies!?'
(5) *Will wer noch Vanillekipferl?

L+H*! $\mathrm{H}-\%$
'Does anybody want more vanilla-flavored crescent cookies!?'
(6) Hallo! Ist da jemand!?
$\mathrm{L}+\mathrm{H}^{*}!\mathrm{H}-\% \mathrm{~L}+\mathrm{H}^{*} \quad$ ! $\mathrm{H}-\%$
'Hello! Is there anybody?'
(7) Vanillekipferl!

L+H*!H-\%
'(I have) vanilla-flavored crescent cookies (to share) !?'
(8) Ab ins Bett!

L+H*! ${ }^{*}-\%$
'(go) in your bed'

All of these utterances can be responded to with ja 'yes', thereby confirming the QUD paraphrases above. The only case in which such a response appears less
felicitous is the wh-question (4), apparently there is a clash between the QUD introduced by the question and the QUD that comes with the RCC.

As well known, RCCs impose further restriction on the discourse, they are only felicitous if (i) the addressee has not confirmed their engagement, (ii) there is some unresolved issue between hearer and speaker, and (iii) if there is some information which is either beneficial to the hearer or to the addressee.

These phenomena can most efficiently be accounted for with an analysis in Type Theory with Records/ Conversation oriented Semantics (KoS), as developed by Cooper (2005a) and Cooper (2005b), Cooper and Ginzburg (2015) and Ginzburg (2012). The analysis involves two components: First of all a conversational rule that licenses moves with calling contours, which could be pragmatically considered as attention requests (cf. Figure 1). This rule requires that the RCC has to be applied at the begin of the discourse (empty moves list, empty qud list) and that there is some unresolved issue from earlier discourse (eg. Friederike should come home before night). Secondly, it assumes in line with Autosegmental Metrical Phonology as developed by Ladd (2008) that utterances involve some representations which are prosodically fully spec- ified but underspecified with respect to their intonation and to their illocutions. RCC will be considered as phrasal signs that embed utterances which are (partially) underspecified with respect to intonation and illocution and they contributing the QUD with the meaning sketched above. It will be shown that a similar analysis can be applied to the stern and urgent calling contours discussed by Quiroz and $Z^{\prime}$ ygis (2017).


Figure 1: Conversational rule for $\mathrm{L}+\mathrm{H}^{*}!\mathrm{H}-\%$ 'routine' calls

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## Denominal verbs at the syntax-semantics interface

## Carolina Marescotti

Denominal verb formation has been tackled from different theoretical perspectives, with respect to a great variety of languages (cf. among many others, Kiparsky 1997; Hale \& Keyser 1993; Clark \& Clark 1979; Lieber 2004; Aikhenvald 2011; Bleotu 2018; Baeskow 2006; Harley 2005). The present paper focuses on Latin and Ancient Greek and has two main goals: 1) clarifying the patterns of acquiring syntactic-semantic properties by denominal verbs; 2) identifying which grammatical and semantic features of the lexical base project into the derived verb, affecting its actionality, argument structure, voice and degree of telicity.

In Latin and Ancient Greek, the suffix *-ye-/-yo- was usually added to either nouns, adjectives or adverbs to derive verbs (cf. Meillet 1908; Szemerényi 1984):

## Latin

1. NOUN arbiter, -is 'judge’ $\rightarrow$ arbitrōr 'I judge’;
2. ADJECTIVE novus, -a, -um 'new' $\rightarrow$ novō 'I renew';
3. ADVERB autem 'but' $\rightarrow$ autumō 'I argue'
[Mignot 1969]

## A. Greek

1. NOUN phúlaks, -os 'guard, watcher' $\rightarrow$ phulássō ‘I keep guard; I watch for'
2. ADJECTIVE atásthalos, -on 'presumptuous' $\rightarrow$ atasthállō 'I am presumptuous'
3. ADVERB pélas 'near’ $\rightarrow$ pelázō/pelázomai 'I come near/l bring near (caus.)'
[Fraenkel 1906; Barber 2013]

Since *-ye-/-yo- did not convey any specific semantic value (cf. Meillet 1908: 185), it is left to find out how a denominal verb acquires its syntactic-semantic properties. This study attempts to show that the actionality, argument structure, voice
and degree of telicity of a denominal verb are related to the following semantic and grammatical features of the lexical base:
a) $\pm$ mass/count (cf. Chierchia 2010; Rothstein 2010a, 2010b; Doetjes 2019: 29-56; Harley 2005; Bleotu 2018);
b) $\pm$ abstract/concrete (cf. Schmid 2000; Aikhenvald 2006);
c) degree of animacy (cf. Dahl 1996, 2000, 2008) and individuation (cf. Timberlake 1975, 1977; Silverstein 1976);
d) type of word class: i.e., noun, adjective, adverb (cf. Aikhenvald 2011: 221290).

To conduct the analysis, we apply the syntax-semantics interface framework (cf. Van Valin \& La Polla 1997; Van Valin 2005; Rappaport Hovav \& Levin 2016).

We test our hypothesis on two corpora:

1. Latin c.: 400 denominal verbs (3rd century A.C. - 1st century D.C.) collected from Mignot (1969), Flobert (1975) and by using the DELL and the TLL;
2. Ancient Greek c.: 400 denominal verbs ( $8^{\text {th }}$ century A.C. $-4^{\text {th }}$ century A.C.) collected from Fraenkel (1906), Barber (2013) and by using the DELG and the TLG.

Our results show that:

1. Latin and Ancient Greek possess nine main classes of denominal verbs, characterized by the thematic role of their lexical base: AGENT QUALITY, PRODUCT, SCOPE, SOURCE, LOCATUM, LOCATION, DURATION, DIRECTION (cf. Fillmore 1968; Clark \& Clark 1979 Aikhenvald 2011; Luján 2010, 2014);
2. there are no variations within class in actionality, argument structure, voice and degree of telicity;
3. the above-mentioned features of the lexical base ( $a, b, c, d$ ) govern the selection of the verb semantic class, thus constraining its actionality, argument structure, voice and telicity in an orderly way.

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# Análise linguística: a semântica aplicada ao ensino gramatical no 

 ensino médioRaquel Márcia Fontes MARtins and Ana Paula HUBACK

O presente estudo avalia a abordagem do eixo de ensino da análise linguística em duas coleções de livros didáticos de Língua Portuguesa do Ensino Médio no contexto educacional brasileiro. Especificamente, analisa-se, nessas coleções, se o ensino gramatical é vinculado a questões semânticas, visando à produção de sentidos nos textos. Tradicionalmente, os livros didáticos desse segmento apresentam um ensino de gramática descontextualizado da construção de sentido dentro do texto. O ensino de gramática, é, portanto, desvinculado do contexto semântico mais amplo inerente às palavras e aos sintagmas (llari, 2001; Cançado, 2008). Como, na construção de sentido, gramática e semântica são componentes intrínsecos e indissociáveis, faz- se necessário rever esta abordagem dicotômica. Como alerta Perini (1997), a produção de sentidos, em um texto, não se limita à análise da estrutura da língua apenas, mas demanda uma série de conhecimentos, inclusive, conhecimentos prévios que vão além da superfície textual.

As duas coleções aqui analisadas são: "Interação - Português", de Sette et al (2020), e "Práticas de Língua Portuguesa", de Faraco, Moura e Maruxo (2020). Essas duas coleções foram aprovadas pelo Programa Nacional do Livro e do Material Didático (PNLD), do governo federal brasileiro. Esse programa avalia obras didáticas e outros trabalhos de apoio à prática educativa, a fim de disponibilizar esses materiais, de forma gratuita, às escolas públicas de educação básica de todo o país. A escolha pelas duas coleções teve como principal critério o fato de seus autores terem maior experiência na produção de livros didáticos de língua portuguesa, tendo outras coleções aprovadas em edições anteriores do PNLD. Comparam-se exercícios propostos pelas duas coleções de livros didáticos, a fim de observar como a interconexão entre semântica e ensino da gramática é abordada nas duas perspectivas.

A discussão em torno do ensino da gramática, relacionada à análise linguística, ganha um contorno importante no Brasil, principalmente, com os estudos de Franchi (1987), Geraldi (1991), Travaglia (1995), Possenti (1996), Castilho (1998), Costa Val (2002), Moura Neves (2003) e Antunes (2003, 2014). Tais estudos destacam a importância do trabalho com a gramática em função da produção de sentidos e não o
estudo da gramática através do texto como pretexto para tal análise. Franchi (1987, p. 13) destaca a criatividade no uso da gramática: "... há uma atividade criativa mesmo quando a linguagem se sujeita a suas próprias regras e há criatividade na construção das expressões mais simples e diretas em cada um de nossos atos comunicativos". Dessa forma, o autor lança luz sobre a percepção das possibilidades de efeitos de sentido desencadeadas por diferentes arranjos dos recursos expressivos. Geraldi (1991) afirma haver, na interação linguística, "uma espécie de inevitabilidade de busca de sentido" (p. 19), ressaltando as ações que se fazem com a linguagem (atividades linguísticas), as ações que se fazem sobre a linguagem (atividades epilinguísticas) e as ações da linguagem (ações metalinguísticas). Geraldi (1991) também propõe que a reflexão epilinguística tenha prioridade sobre a metalinguagem no ensino. Travaglia (1995) pondera que o ensino de gramática deve ser baseado no uso, na reflexão, considerando a interação em uma situação específica de comunicação. O autor afirma, também, que "o que faz da sequência linguística um texto é exatamente a possibilidade de estabelecer um efeito de sentido, uma unidade de sentido para o texto como um todo" (p. 108). Possenti (1996) também destaca a importância da reflexão sobre a língua em uso no ensino de gramática, defendendo que a escola deve promover reflexões epilinguísticas e metalinguísticas que contribuam para o uso adequado da língua em diferentes situações comunicativas. Castilho (1998) e Moura Neves (2003) destacam a importância do ensino gramatical reflexivo não somente da língua escrita, mas também da língua falada. Costa Val (2002), nessa mesma abordagem, propõe uma inversão do tradicional caminho "teoria-exemplo-exercício", de maneira que se inicie da prática para chegar à teoria no ensino da gramática, que se parta do concreto para o abstrato, do que é conhecido pelo aluno para o desconhecido, a fim de que a produção de sentidos se efetive. Por fim, Antunes (2014) defende o ensino da gramática contextualizada, "a serviço dos sentidos e das intenções que se queira manifestar num evento verbal, com vistas a uma interação qualquer" (ANTUNES, 2014, p. 47). Além disso, o autor afirma que essa visão sobre gramática é uma "perspectiva de estudo dos fenômenos gramaticais, ou uma estratégia de exploração do componente gramatical do texto, tomando, como referência de seus valores e funções, os efeitos que esses fenômenos provocam nos diversos usos da fala e da escrita" (ANTUNES, 2014, p. 46).

É objetivo deste trabalho investigar em que medida as coleções de livros didáticos analisadas consideram os apontamentos dos estudos científicos aqui tratados. Os resultados apontam para a necessidade de o livro didático de língua portuguesa situar a análise linguística em função da produção de sentidos, seja na
fala ou na escrita. Como conclusão, este trabalho apresenta diretrizes que podem ajudar professores, consultores educacionais e elaboradores de materiais didáticos (ou de exames de avaliação em larga escala) a fazerem uma integração mais plena e produtiva entre aspectos gramaticais e semânticos, tanto na preparação de materiais de ensino quanto na avaliação de conteúdos aprendidos. Espera-se, por fim, que os estudantes sejam beneficiados com essa abordagem mais orgânica entre gramática e construção semântica.

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## English Light Nouns and the syntax-semantics interface

Roberta MAstrofini

The notion of Lightness has been largely discussed in literature since Jespersen's (1927, 117-118) definition of "an insignificant verb, to which the marks of person and tense are attached, before the really important idea". The idea of Lightness has, therefore, been longly associated to verbal structures formed by a semanticallybleached predicate (Szabolcsi 1986) and a nomen actionis (Nickel 1968), or, in keeping with a more recent definition, an event noun (Kiefer and Gross 1995). Instances of such patterns in English are to take a walk, to make a call, to give a suggestion, to have an argument. Studies on Light Verb Constructions (henceforth, LVCs) have profusely developed over the past four decades, in many languages, and following different approaches, ranging from morphology (Helbig 1979; 1984) to syntax (Cattell 1984; Grimshaw and Mester 1988), and semantics (Wierzbicka 1982; 1988; Stein 1991). More specifically, some contributions on the topic have included other constructions than the prototypical ones identified by Jespersen (1927), thus suggesting the existence of a gradient of Lightness, which shifts from 'Truly Light Verbs' (e.g., to make a call) to 'Vague Action Verbs’ (e.g., to make an inspection, to give a demonstration - see Kearns 2002), and 'Complex Predicate’ constructions (e.g., to fall in love, to take into account - see Butt 2010). Moreover, recent studies have highlighted the aspectual role played by the predicate in LVCs; in other words, although deprived of their semantic value, verbs entering a LVC may participate in licensing the aspectual configuration of the pattern, as in to breed resentment, to entertain a relationship (Mastrofini 2021). Since the beginning of the 21st century, the idea of Lightness has also been applied to nominal patterns (of the type 'N1 of N2'), thus assuming that this phenomenon involves a range of constructions placed along a scale between 'Nouniness' and 'Verbiness' (Sasse 2001; Simone 2006).

The notion of Light Nouns (henceforth, LNs) has been investigated so far only in few contributions, mainly focusing on languages other than English (especially, Italian and Basque). Simone and Masini (2008; 2014) carried out a research on Italian LNs (in comparison with other languages, such as French and English) based on morphosyntactic and aspectual-semantic features. According to the authors, Nouns can be distributed along a scale of 'Nouniness' (Lyons 1977; Sasse 2001; Simone 2006) where a [+Noun] extreme, which is mainly characterized by Referential Force, is opposed to other [-Noun] classes that exhibit a lower degree of Referentiality. The [-

Noun] subcategories include Classifiers (e.g., a spoonful of, a fistful of), Quantifiers (e.g., plenty of, a mountain of), Qualifiers (e.g., a type of, a quality of), Approximators (e.g., a kind of, a sort of), and Support Nouns (e.g., an attack of, a flow of). Simone and Masini's $(2008 ; 2014)$ LN gradient has also been the starting point of two more studies on the topic, carried out by Masini (2016) on Italian nouns, and by Zabala (2017) on Basque nominal constructions. The most interesting subcategory, and also the one that is more reminiscent of (or parallel to) the notion of verbal Lightness is that of Support Nouns (henceforth, SNs). Duly, unlike Classifiers, Quantifiers, Qualifiers, and Approximators, SNs show a higher degree of Referentiality, represent the syntactic and semantic Head of the pattern 'N1 of N2', and, moreover, play the role of Aspectualizers. In other words, I claim that a LN (in parallelism with a LV) has to play an aspectual function within the pattern 'N1 of N2' of which it occupies the N1 position. Therefore, unlike the other classes of Light Nouns, Support Nouns exhibit specific verbal features, and their status may be accounted for in a continuum between 'Nouniness' and 'Verbiness'.

My study aims at investigating English SN patterns from an aspectual-semantic perspective, also comparing their syntactic behaviour with other LN patterns, such as Classifiers, Quantifiers, Qualifiers, and Approximators. I therefore conducted a corpusbased analysis in the Sketchengine corpus enTenTen2020, in order to verify: 1) the level of cohesion between the two nominals within the construction; 2) the existence of a typological gradient of LN patterns based on the syntax-semantics interface.

Keywords: Lightness, light nouns, English, syntax-semantics interface, corpus analysis

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The anatomy of some wh-constructions
Jon Ander Mendia

## Introduction.

Some constructions seem to live a dual life in that a single surface form can nevertheless be interpreted as being nominal (DP) or propositional (CP). Chief among these are wh-constructions (WhCs), which may alternate between free relatives and questions, and definite relative clauses (i.e. of the form the NPCP), which can be often interpreted as definite descriptions or as concealed questions. For each of these two constructions, syntacticians and semanticists alike have tried to understand the connection between their nominal vs. propositional nature. My goal in this paper is to show that, rather than considering WhCs and definite relative clauses as separate constructions altogether, we should better think of them as representing different points along the same continuum.

## Background.

There is a close resemblance between free relatives and subordinate questions in English. The main differences between the two constructions amount to: (i) the feature specification of the $\mathrm{C}^{\circ}$ head and (ii) the type of operator that mediates between the CP and the rest of the clause. While subordinate questions require a [+Q] $\mathrm{C}^{\circ}$ that introduces the semantic nucleus (e.g. Karttunen 1977 a.o.), a free relative relies on simple abstraction. Given the common assumption that wh-words in free relatives and questions make the same semantic contribution (e.g. Caponigro 2004), the resulting denotation at the CP-level is similar in the two cases: a property of individuals for free relatives, and a property of propositions for subordinate questions. Since with these denotations they cannot compose further with the rest of the clause, the two constructions need a shift: a null definite determiner for free relatives (e.g. Camponigro 2004) and an ANSWERHOOD operator contributing Russell's i-operator (Dayal 1996) for subordinate questions. In contrast, definite relatives differ in that the semantic lowering is carried out overtly, and the wh-operator responsible for carrying the relativization/abstraction operation is null. Schematically:
a. Question: [CP ANS $\quad\left[\mathrm{CP}[\mathrm{WH}(\mathrm{NP})] i \quad\left[\mathrm{C}^{\circ}[+\mathrm{Q}] \quad \varnothing\right.\right.$ [TP . . . $\mathrm{t}_{i} .$. . ]]]]
b. Free Relative: [dp D ${ }_{\varnothing} \quad\left[\mathrm{cp}[\mathrm{wh}(\mathrm{NP})] i \quad\left[\mathrm{C}^{\circ}[+\mathrm{REL}] \varnothing\right.\right.$ [тР . . . $\mathrm{t}_{i}$. . . ]]]]
c. Restrictive RC: [DP D (that) [Tp . . .t. $\mathrm{t}_{i} .$. .]]]]

## Questions.

More interesting than their differences are the similarities between the constructions in (1): the three of them share an t-operator, a wh-operator and a $\mathrm{C}^{\circ}$ head with variable specification, varying mainly on the (c)overtness of these pieces. This state of affairs raises two main questions: (i) Why can't ANS/ $D_{\varnothing}$ be overt in Questions/Free Relatives as it is in (1c)? (ii) Why can't wh be covert in Questions and Free Relatives, as in $O p_{w h}$ ?

## Main claim.

My goal is to show that, even they may not resemble so on the surface, there are indeed cases where we find overt ans operators in Questions and overt determiners in free relatives; i.e. I claim that some of the missing links in the paradigm in (1) are in fact attested. Concretely, I argue that Spanish allows the following two syntactic configurations for Free Relatives and Questions respectively:
(2)
a. FR: [DPD [cP [Op $\quad$ Pred $] i \quad\left[\mathrm{C}^{\circ}[+\mathrm{REL}] \quad \varnothing \quad[\mathrm{TP}\right.$. $\left.\left.\left.\left.\ldots t_{i} ..\right]\right]\right]\right]$ cf. (1b)


$$
\left.\left.\left.\left[\operatorname{TP} \ldots \mathrm{t}_{i} \ldots\right]\right]\right]\right] \quad \text { cf. (1a) }
$$

## Case study I: (2a).

Spanish is well-known for not allowing ordinary free relatives with the wh-phrase what; instead, free relatives of this kind must be formed by combining a CP with the definite article lo.

> (3) Juan comió [Dp lo que quiso]
> Juan ate D.NT that wanted
> [Lit.: 'Juan ate the that wanted']
> 'Juan ate \{what/as much as\} he wanted'

Less known is the ability of Spanish to form Degree Neuter Relatives (e.g. Ojeda 1982, a.o.), an unusual construction involving a relative clause seemingly headed by a gradable predicate and the neuter determiner $l o$.
(4) Juan es [DP lo alto que era su padre]
Juan is D.NT tall that
'Juan is as tall his father was'
[Lit.: 'Juan is the tall that his father was']

I suggest that Degree Neuter Relatives should be regarded as sharing properties both with ordinary free relatives in (3) - the overt D-head - and free relatives with quantity wh-words like cuan below - the ability to pied-pipe a predicate.

> (5) Juan es cuan alto fue su padre
> Juan is how tall was his father
> 'Juan is as tall as his father was'
> [Lit.: 'Juan is how-much tall his father was']

The syntactic configuration that I suggest for (4) corresponds to that of (2a): like ordinary free relatives in (3), both constructions involve an overt definite determiner. Both also involve the movement of a wh-phrase to the specificer of $C P$, but in the case of Degree Neuter Relatives, the wh-phrase is headed by a null variant of a quantity$w h$-phrase and includes the gradable predicate, just like its overt variant in (5). Thus, on this analysis, the head of the Degree Neuter Relative is not in fact a gradable predicate as it appears, since the predicate is instead embedded within a complex whphrase. This provides an explanation for two puzzling facts. First, unlike ordinary restrictive relatives, Degree Neuter Relatives show a disrupted agreement pattern: the
definite article lo never agrees with what is seemingly the head of the relative clause (6a); in contrast, the gradable predicate always must agree with CP-internal material (6b).
(6)

| a. \{ $10 /$ D.NT | $\begin{aligned} & \text { */a\} } \\ & \text { D.FM.SG } \end{aligned}$ | alta <br> tall.FM.SG | que era su madre |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | that was | mother.FM.SG |
| b. lo | \{*alto/ alta\} |  | que era | su madre\} |
| D.NT | tall.Ms.sG tall | .FM.SG | that was | her mother.F |

Second, predicates of any syntactic category that are coercible into a gradable interpretation are grammatical. Given that predicates of different categories are otherwise extractable to differing degrees in Spanish, this flexibility is puzzling if the predicates themselves were undergoing movement. On the present analysis, however, this issue does not arise-all of the constructions in (7) involve movement of a whphrase. (The paper provides a full semantic analysis as well.)
(7)

| a. 10 | \{rápidamente/ *ayer\} | que llegó | ADVERBIAL |
| :---: | :---: | :---: | :---: |
|  | rapidly yesterday | that arrived |  |
|  | [how \{fast / yesterday\} she arrived] |  |  |
| b. $10\{$ | en punto/ *desde casa\} | que llegó | PREPOSITIONAL |
| D.NT | on point from home | that arrived |  |
| [\{pun | ly / from home\} she arris |  |  |

## Case study II: (2b).

Spanish allows a construction, known as Emphatic Relatives, that have the surface appearance of ordinary restrictive relatives, but differ in two crucial respects: (i) they may appear as a complements to clause-embedding predicates (sensu Lahiri 2002), and (ii) they are not interpreted as denoting individuals, but as questions.

```
(8) { Sé/ Me pregunto } las manzanas
    Juan
    know me ask the.FM.PL apple.FM.PL that brought
            Juan
    '{l know/l wonder} what apples Juan brought'
```

I show that the Emphatic Relatives do not share, despite appearances, the same syntactic distribution of DPs modified by restrictive relatives. I present some arguments here (more in the paper). First, Emphatic Relatives are grammatical under rogative predicates like wonder, unlike DPs interpreted as concealed questions (e.g. *I wonder the capital of Italy; same judgment in Spanish). Second, generally, DPs modified by relative clauses share the syntactic distribution of unmodified DPs. This is unlike Emphatic Relatives, for which the que-clause is obligatory.
(9)
a. $\begin{aligned} & \text { SSé / Me pregunto / Te dije }\} \text { las manzanas *(que trajo Juan) } \\ & \text { Xno que-clause }\end{aligned}$
b. Yo ví las manzanas (que trajo Juan)
Vno que-clause
I saw the.FM.PL apple.FM.PL that brought Juan
'I saw the apples (that Juan brought)'

Third, like questions and exclamatives, Emphatic Relatives show obligatory SVinversion. With restrictive relatives, however, SV inversion is optional (just like in declarative sentences).

| a. *\{Sé/ Me pregunto\} las | manzanasque Juan trajo <br> Xno inversión |
| :--- | :--- | :--- |
| Know wonder the.FM.PL | apple.FM.PL that Juan brought |

And fourth: animate objects in Spanish trigger DOM-marking, by means of the preposition a. Whereas DPs modified by restrictive relatives trigger DOM, surfaceidentical Emphatic Relatives do not.
a. Estudian
los
delegados
que enviarán XDOM
evaluate.3.PL the.MS.PL representative.MS.PL that send
'They are evaluating what representatives they will send.3.PL'
b. Estudian a los delegados que
enviarán $V$ DOM
evaluate.3.PL to the.MS.PL representative.MS.PL that send
'They are evaluating the (individual) representatives they will send.3.PL'

Thus, Emphatic Relatives cannot be subsumed under restrictive relatives. I propose that the syntactic structure of Emphatic Relatives involves a null wh-operator moves to [Spec, CP], checking a [wH] feature on $\mathrm{C}^{\circ}[+\mathrm{Q}]$, which hosts Karttunen [1977]'s question nucleus. Moreover, the definite article is a lexicalized variant of Dayal [1996]'s ANs-operator. Thus, Emphatic Relatives have underlyingly interrogative syntax and they denote a subordinate question. More specifically, they correspond to one of the cases missing in the paradigm of (1), as represented in (2b). (The full paper shows that their distribution is that of subordinate questions and provides a semantic analysis.)

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## Non-agreeing degree predicates

Jon Ander MENDIA and M. Teresa EsPINAL

## Introduction.

In languages where verbs agree on $\varphi$-features with their subjects, some predicates have nevertheless the ability to optionally disrupt this pattern. In turn, this alternation comes with important semantic consequences for the interpretation of the subject: while the subject four pizzas in (1) refers to particular existing pizzas of which being vegetarian is predicated, with the singular agreeing predicate is enough the subject does no longer pick out individual pizzas, but refers instead to an amount of four pizzas.
(1) Four pizzas \{are vegetarian / is enough food\}

Despite the cross-linguistic ubiquity of these Non-Agreeing Degree Predicates (NADPs), the literature contains no systematic discussion of the linguistic contexts that support them, nor of their precise semantic effects - cf. Brasoveanu [2009] and Rett [2014], for an account based on polysemy. Our main goals are thus twofold: (i) to provide a first systematic description of NADPs and to (ii) provide a first formal syntactic and semantic analysis, one where ordinary count nominals need not be polysemous.

## Data generalizations.

Predicates. What kind of predicates count as NADPs? We begin by observing that the predicates that allow this type of agreement alternation together with its accompanying semantic effects are subject to two important limitations: (i) predicates express some measurement or comparison; and (ii) they must do so in a copular structure. (Here and throughout we rely on data from Peninsular Spanish.)
a. En ajedrez [dos torres].PL es.SG más que una reina

Comparative
'In chess two towers is more than a queen'
b. [Tres juguetes].PL es.SG lo mejor que le puedes regalar

Superlative
'Three toys is the best that you can gift him'
c. [Cuatro pizzas pequeñas].PL es.SG lo mismo que dos grandes

Equative
'Four small pizzas is the same as two big ones'
d. [Tres libros].PL es.SG demasiada lectura

Excessive
'Three books is too much reading'
e. [Cuatro pizzas].PL es.SG suficiente comida

Assetive
'Four pizzas is enough food'

The examples in (3) below summarize the main restrictions on predicates forming NADPs: (3a) and (3b) show that (i) verbal predicates (such as pesar, "to weigh") and (ii) adjectives (such as pesado, "be heavy") lexicalizing some measurement or comparison are both ruled out as NADPs. Despite their ungrammaticality however, the intended interpretation of both (3a)/(3b) is perfectly sensible, as shown by the NADP in (3c).
(3)
a. [Tres libros].PL \{ *pesa.SG / pesan.PL \} demasiado
b. [Tres libros].PL \{ *es.SG demasiado pesado / son.PL demasiado pesados\}
c. [Tres libros].PL \{es.SG / *son.PL\} demasiado peso "Three books weigh too much'

Subjects. Not all DPs/QPs can be subjects of NADPs. Numerals of all kinds and nonfinite clauses provide the best results (4)/(5), but other types of QPs/DPs are not grammatical in the NADP configuration, (6):
(4) \{Más de / Menos de / Unos \} cuatro libros es demasiado \{More than / Less than / Some \} four books is demasiado
(5)
a. Leer y resumir un libro \{ *es.SG / son.PL \} dos cosas differentes 'Reading and summarizing a book are two different things'
b. Leer y resumir un libro \{ es.SG / *son.PL \} mucho trabajo 'Reading and summarizing a book is a lot of work'
(6)
a. *\{Varios / Pocos / Algunos / Muchos / Unos / Demasiados\} libros es demasiado \{A variety / Few / Some / Many / sm / too many\} books is too much
b. *\{La mayoría de / Ámbos / Los / Cada (uno de)\} libros es d emasiado
\{Most / Both / The / Each (one of the) \} books is demasiado

Under-specification. The main semantic difference between NADPs and ordinary agreeing predicates involves the contribution of the subject. In cases where the degree predicate is not overt, plural variants like (7a) are statements about books, whereas the singular NADP variant is heavily underspecified: depending on the context, three books could be too much work, too heavy, too expensive, etc.. Such underspecification can be limited by providing an overt abstract nominal, complement to the degree predicate, as in (8).
(7)
a. [Tres libros].PL son.SG demasiados
'Three books are too many'
b. [Tres libros].PL es.SG demasiado
'Three books is too much'
(8) [Tres libros].PL es.SG demasiado \{peso /dinero /trabajo /esfuerzo / ...\}
'Three books is too much \{weight /money /work /effort / ...\}

## Proposal.

We to analyze the NADP construction as involving the following ingredients: (i) a degree predicate comparison to some degree, albeit one that does not by itself determine any specific dimension (e.g. too much, enough, more). (Different degree predicates will establish different types of comparisons: in comparatives, one term of the comparison is provided by the standard; in assetives/excessives, by a conventionalized threshold, etc.); (ii) a (possibly covert) abstract noun providing the required dimension (e.g. weight, money, work, effort); and (iii) a subject that acts as a unit of measurement, providing the measure that must be interpreted on the scale built upon the dimension contributed by the nominal. With these ingredients, the semantic task of three books in below (9) is exactly the same as that of three kilos: to state that a three \{book, kilo\} unit exceeds some threshold of weight.
(9) [Tres $\{$ libros/kilos $\}]$.PL es.SG demasiado peso 'Three \{books/kilos\} is too much weight'

We first focus on (9) with libros and we propose a syntactic structure where the degree predicate heads its own projection, taking a measure phrase - here headed by a null measuring predicate - as its complement.
(10) [PredP [QP tres libros] [Pred ${ }^{\prime}\left[\mathrm{Pred}{ }^{0} \mathrm{BE}\right]\left[\mathrm{DegP}\left[\mathrm{Deg}^{0}\right.\right.$ demasiado ] [MeasP MEASURE peso ]]]]

The predicate MEASURE takes an ordinary predicate and turns it into a relation between degrees and individuals. This predicate provides the dimension of comparison by serving as the first argument to demasiado, which then states that such degree exceeds some contextually established threshold—as opposed to ordinary adjectives, which typically determine that a certain degree exceeds some standard of comparison (see Kennedy 1999 a.o.). This difference between comparison to a threshold and comparison to a standard captures the differences between e.g. es demasiado peso ("be too much weight") vs. es pesado ("be heavy").
a. 【MEASURE】 $={ }_{c} \lambda P_{(e t)} \cdot \lambda n_{d} \cdot \lambda x_{e} \cdot P(x) \wedge|x|=n$
b. $\llbracket d e m a s i a d o \rrbracket=\lambda G(d, e t) \cdot \lambda x_{e} \cdot \exists d\left[G(x)=d \wedge d>T H_{c}^{\max }(G) \rrbracket\right.$

In order to account for the disrupted agreement pattern and the "widened" interpretation of the subject, we suggest that subjects of NADPs cannot simply denote fully extensional objects, but instead they denote "nonparticulars," which we formalize as nominalized functions selected by a degree predicate: If $\beta$ is a $n$-place predicative expression, ${ }^{\downarrow} \beta$ is a singular term. This is a nominalization operator in its most general form - i.e. unlike " $\cap$ " in Chierchia [1998], $\downarrow f$ is defined for all $f \in D<\sigma$, ( (and not just for kinds; cf. McNally 1997). The nominalization of three books is the entity correlate of a property something holds when it is three books. Since that something is three books, that something shares all qualities of three-book individuals (and has none of non-three-book individuals). The resulting truth conditions of the libros variant in (9) are represented below.

$$
\begin{equation*}
\underset{\sim}{\text { 2) }} \underset{\left.\sim(9) \rrbracket^{c} \Leftrightarrow T H_{c}{ }^{\text {max }}(\mathrm{WEIGHT})\right]}{\Leftrightarrow} \exists d\left[\mu_{\text {WEIGHT }( }\left(\lambda x_{e} \quad . \quad \operatorname{books}(x) \quad \wedge \quad|x|=3\right) \quad=d \wedge\right. \tag{12}
\end{equation*}
$$

For comparison, a non NADP configuration like (7a) with plural agreement and an ordinary extensional subject would denote the following proposition:

$$
\begin{equation*}
\llbracket(7 \mathrm{a}) \rrbracket^{c} \Leftrightarrow \exists x\left[\operatorname{books}(x) \wedge|x|=3 \wedge 3>T H_{c}^{\max }(\text { WEIGHT })\right] \tag{13}
\end{equation*}
$$

These representations correctly capture that (i) while (7a) is a statement about books, (9) is not, it is a statement about weight - or, in the absence of the abstract nominal peso complement to demasiado, any other dimension accessible from context; consequently, only (7a) is existentially committed to some three-book individual. Moreover, (ii) an agreement disruption is expected in (9) given the singular referent of the subject selected by the degree predicate. We also gain further insight into two separate issues. First, we understand why adjectives don't form good NADPs: while adjectives place individuals on a scale by comparing them to a standard degree
along a lexically associated dimension, NADPs use individuals as units in relation to a threshold on a scale along the required dimension (provided either by context or some abstract nominal). Second, the analysis seamlessly extends to NADPs with nonfinite subjects - which have long been argued to have nominalized interpretations capturing the following truth-conditional equivalence (where DIM represents the contextually supplied nominal providing the relevant dimension):
a. Leer el Quijote es demasiado.
'To read El Quijote is too much'
b. La lectura del Quijote es demasiado.
'The reading of El Quijote is too much'
$\mu_{\text {DIM }}\left({ }^{( } \lambda \mathrm{e}_{\mathrm{V}} \cdot \operatorname{read}(e) \wedge \mathrm{Th}(e)=\mathrm{EQ}\right)=d \wedge d>\mathrm{TH}_{c}{ }^{\text {max }}(\mathrm{DIM})$

## Discussion.

Descriptively, NADPs are constructions where a non-conventional unit of measurement is used on a scale formed by a dimension that is directly supplied by either context or an abstract nominal. In turn, this imposes limitations on the type of constituents that may partake in NADPs, as accounted for by our analysis.

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## A unified analysis of Hungarian ugye-utterances

## Cecília Sarolta MolNÁR

Introduction. Hungarian ugye appears both in sentences encoding question acts (1a), and in sentences encoding assertions (1b). I refer to the former type of construction as ugye-Q, and to the latter type as ugye-A.
(1)
a. $\backslash \mathrm{Ott}$ magyarul beszéltek, ^ugye? ugye-Q there Hungarian.INspoke.3PL UGYE 'There you spoke Hungarian, didn't you?'
b. IOtt ugye magyarul beszéltek. ugye-A
there UGYE Hungarian.INspoke.3PL
'There, you know, they spoke Hungarian.'

Ugye is one of the most commonly used "discourse particles" in contemporary Hungarian spoken language. ugye-Qs represent the older use, ugye originating as a compound (consisting of the demonstrative adverb úgy 'so' and the interrogative particle -e meaning 'is that right?' (see Benkő 1967). Ugye-A is a more recent development appearing mainly in spoken language. In this latter type of construction, ugye marks basically that the information encoded by the sentence is part of the common knowledge of the discourse participants according to the speaker (see Gyuris 2009). The main research question is whether there is a common contribution of ugye in ugye-Qs and ugye- As, and if so, how we can account for this contribution in current formal discourse theories. The goal of the present talk is to give the outline of a comprehensive and unified analysis of Hungarian utterances containing ugye based on data from corpus studies, syntactic questionnaires, and pragmatic experiments.

## Background.

Most recent Hungarian descriptive works (e. g. Keszler 2000; Kenesei et al. 1998) focus on the ugye-Q construction, and tend to ignore the ugye-A construction. Kenesei et al. (1998) treats ugye as a question tag whose function is to mark leading
questions. In the descriptive tradition as well (e. g. H. Molnár 1968), ugye was sometimes treated as an interrogative marker: as opposed to the -e question particle which marks neutral polar questions (see Gyuris 2017), ugye is treated as the marker of biased questions. More recently, Gyuris (2009) convincingly argued that ugye cannot be an interrogative marker, as the sentence type of ugye-Qs seems to be noninterrogative. She also argues for a possible unified interpretation (Gyuris 2009), and provides one such account in Gyuris (2018). Recent corpus-based functional linguistic studies (e. g. Schirm 2009; Abuczki 2015) treat ugye as a discourse marker (or discourse particle), and illustrate its multi- functionality citing more and more different "shades" of its meaning (e. g. "rhetorical surplus", "emotional surcharge", "persuasive strategy", etc.).

## Data.

Word order in Hungarian is flexible; preverbal positions encode "discourse functions" (É. Kiss 2002). The position of ugye is not fixed either, it can appear in almost every position of the sentence both in ugye-Qs and ugye-As (2a-b).
(2)
a. (^Ugye) ott (^ugye) magyarul (*ugye) beszéltek?
b. <br>(Ugye) ott (ugye) magyarul (*ugye) beszéltek (ugye).

However, a prototypical ugye-Q (as in (1a)) contains a sentence final ugye; the sequence preceding it has a falling intonation contour (as in default declaratives; it is marked above by " "), and ugye constitutes an independent prosodic unit, it bears a rise-fall contour (which is the marker of polar interrogatives in Hungarian; it is marked above by " $\wedge$ "). A prototypical ugye-A (as in (1b)) contains a preverbal ugye, which does not constitute an independent prosodic unit, and the whole sequence has falling contour. If an ugye-Q contains a non-sentence-final ugye (2a), the particle does not constitute an independent prosodic unit, and the whole sequence has a rise-fall contour (as in default polar interrogatives in Hungarian).

## The structure of the talk.

The first part of the talk presents the formal (syntactic, prosodic), and functional (semantic, pragmatic) properties of ugye-utterances based on corpus studies and syntactic questionnaires. It is shown that the form of ugye-Qs and that of ugye-As are typically different, although this difference is not categorical, rather prototypical. It is argued that the sentence type of ugye-Qs is complex, contains a declarative anchor and a interrogative tag. Thus, in ugye-qs ugye is analyzed as an invariant question tag, and prototypical ugye-Qs can be described as tag questions (cf. Kiefer 1988; Kenesei et al. 1998; Gyuris 2009; Abuczki 2015; Molnár 2019). Formal characteristics of ugyeAs suggest that they should be treated as pure declaratives, although this analysis may cause troubles of a unified account of ugye-utterances (cf. Gyuris 2009; 2018). It is shown that a clear distinction between the two uses can be made on the level of speech acts.

The second part of the talk focuses on ugye-Qs as tag questions. Tag questions are non-neutral (or biased) questions, so they are not typically used for informationseeking purposes, their function is rather to ask for confirmation for the proposition expressed by the declarative anchor. I am following the tradition of work (Ladd 1981; Büring - Gunlogson 2000; Farkas - Bruce 2010; Northrup 2014, among others) according to which the choice among forms realizing question acts is based on contextually available information, more precisely, on the availability of contextual evidence (called as "current evidence" by Northrup 2014) and the speaker's beliefs, expectations (called as "prior evidence" by Northrup 2014). Hypotheses about the different "bias profiles" of different ugye-Q forms were formulated, and were tested in three pragmatic experiments, whose findings confirm that the availability of contextual evidence (current or prior) has an impact on the preference of one form over an other, but a clear-cut "division of labour" among tag question forms has not been confirmed.

The third and last part of the talk proposes a possible uniform interpretation of ugye-utterances based on the discourse model of Farkas - Roelofsen (2017). It is argued that ugye-sentences (either ugye-Qs or ugye-As) are uniformly declarative and denote the propositional content of the sentence without ugye. Thus, uttering an ugyesentence puts $\{p\}$ (and not $\{p, \neg p\}$ ) on the conversational TABLE. The function of ugye is to provide information about the credence level of the speaker concerning $p$, in other words, it informs the addressee about the strength of the speaker's commitment towards the truth of $p$. Intonation plays a distinctive role: (i) If ugye is pronounced with an independent rise-fall contour, the credence level of the speaker is low (in other
words: the speaker commitment is weak). In that case, the speaker seeks for confirmation from the partner in order to remove the issue raised by the utterance form the conversational TABLE (ideally by putting it to the COMMON GROUND). (ii) If ugye bears no independent intonation contour, the speaker's credence level is high or maximal (the speaker commitment is strong), that is, she takes the piece of information for granted. Uttering the latter type has the discourse effect that the propositional content of the sentence can be removed from the TABLE and can be put directly into the COMMON GROUND without the partner's explicit reaction.

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## The acquisition of telicity markers in L2 German

## Duarte Oliveira

In the last decades, telicity has been the focus of much theoretical research, however, the full extent of its role in grammar is still not fully understood. One of the fundamental properties of this aspectual category is its compositionality, i.e., the way telicity can be obtained through the combination of distinct and complex linguistic elements. Many researchers have made impeccable progress in the understanding of how telicity is obtained and how it relates to event structure, spanning from Dowty's (1979) aspect calculus to Verkuyl's (1993) theory of aspectuality and Krifka's (1998) mereological approach. These theories, however, are not without their shortcomings and more recent accounts attempt to provide formal semantic descriptions of telicity in terms of event individuation (Landman \& Rothstein, 2012; Rothstein, 2004) and maximalization (Filip, 2008). Some researchers have also studied telicity at the syntaxsemantics interface, but there is no consensus as to whether its behaviour can be described by a functional projection approach (e.g., Borer, 2005; Travis, 1992) or by a derivative lexical-syntactic approach (e.g., Harley, 2005), among others.

In language acquisition, the amount of research concerned with telicity is relatively scarce, compared to the numerous theoretical accounts dedicated to its description. Since semantic categories with very little or no grammaticalization are much harder to study empirically, experimental linguists tend to shy away from this endeavour. Most experimental studies on the acquisition of telicity target languages in which telicity is marked (e.g., German), either by means of resultative particles or secondary predicates, and focus primarily on L1 acquisition (e.g., Schulz, 2018; Schulz \& Penner, 2002; van Hout, 2008, 2018), with only a few studies focusing on telicity acquisition by L2 speakers (e.g., Slabakova, 2001, 2005).

Schulz (2018) argues that, although children seem to understand the differences between event types from an early age, they adhere to the production of the most transparent subevent of telic particle verbs, i.e., resultative particles (e.g., auf 'open'), before they start producing full particle verbs (e.g., aufmachen, 'open') or even simple inherently telic verbs (e.g., öffnen, 'open'). Several other studies (Schulz \& Ose, 2008; Schulz \& Penner, 2002; Schulz, Penner \& Wymann, 2002; van Hout, 2008, 2018) suggest that telic particles are strong telicity markers, since native speakers tend to be more reluctant in accepting cases of event cancellation when a particle verb is involved (cf. (1a)), while certain quantized DPs in derived predicates are classified as
weak telicity markers, as they allow this cancellation via conversational implicature (cf. (1b)).
(1)
c. Er hat auf-gegessen, (\# aber es ist noch was übrig).
he has up-eaten.PST.PTCP (\# but it is still some left)
'He ate up the apple, (\#but there is still something left).'
d. Er hat den Apfel gegessen, (aber es ist noch was übrig). he has the apple eaten.PST.PTCP (\# but it is still some left) 'He ate the apple, but there is still something left.'
(Schulz, 2018: 128; adapted)

Given these assumptions, the question arises of whether second language speakers display the same patterns as native speakers in their judgement of telic event cancellations. In other words, are L2 speakers sensitive to telic markers in determining whether a culmination point can be annulled?

The present study was conducted with 129 speakers ( $\mathrm{M}=33.9$; $\mathrm{SD}=10.5$ ) of German, divided into four groups according to their acquisitional contexts: (i) 46 Portuguese speakers of $L 2$ German ( $M=34.5, S D=11.7$ ), (ii) 28 HL speakers of German with Portuguese as their majority language ( $M=35.3$, $S D=12.5$ ), (iii) 34 HL speakers of Portuguese with German as their majority language ( $M=35.4$, $S D=8.5$ ) and (iv) 21 German native controls ( $\mathrm{M}=28.7$, $\mathrm{SD}=6.6$ ). The participants were asked to rate 40 sentences, such as those of (1a) and (1b), by means of a 4-point Likert-type acceptability scale (cf. Slabakova, 2001). The items were divided into four conditions: (A) resultative particles; (B) resultative adjectives; (C) quantized DPs and (D) atelic partitive PPs. An additional questionnaire (based on the LEAP-Q; Marian, Blumenfeld \& Kaushanskaya, 2007) provided information about the L2 speakers' sociolinguistic background. Proficiency of the L2 group was determined by means of a C-Test.

Statistical analysis was performed in the RStudio software. To check for effects of condition and group, a Bayesian ordinal regression model was conducted with prior predictive simulations and regularizing priors. Multiple model refits were conducted
with interactions and nested contrasts. The final model confirmed that there are statistically credible differences between the L2 speakers' acceptability of event cancellation with telic particles and resultative adjective, while no such differences arise for HL and L 1 speakers ( $\beta=-0.69,95 \% \mathrm{HDI}=-1.34,-0.08$ ). L 2 speakers seem to have more difficulty rejecting cancellations with telic particles than with resultative adjectives, which may be explained by effects of lexical transparency. Relative to particle verbs, verbs with quantized DPs are widely accepted in the L2 group ( $\beta=1.55$, $95 \% \mathrm{HDI}=0.85,2.17$ ) and the remaining groups follow the same pattern.

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## Pluractional auxiliaries in an event-based semantics

Natalia Jardón Pérez

A well-known observation about the present perfect in Portuguese is the fact that it denotes repeated events (Giorgi \& Pianesi 1997, Squartini 1998, Schmitt 2001, Laca 2010), hence the contrast between (1) and (2):

| (1) $O$ | João tem | saído | tarde |
| :---: | :--- | :--- | :--- |
| the | João aux-PRS.3P.SG | leave-PRF.PTCP <br> late |  |
| (2) \# O | João tem | morrido |  |
| the | João aux-PRS.3P.SG | die-PRF.PTCP |  |

As pointed out by Schmitt (2001), sentence (1) is necessarily iterative, meaning that 'João has left late many times' or that 'lately, João has been leaving late'. By contrast, a sentence in the present perfect denoting a necessarily unique event, like dying in (2), is semantically ill-formed. Similar examples have been reported in (i) Galician (Rojo 1974, Álvarez \& Xove 2002); (ii) Asturian (ALA 1998); and (iii) northwestern varieties of European Spanish, in areas of contact with Galician (Rojo 2005) and Asturian (Harre 1991).

From the point of view of formal syntax-semantics, these constructions have been analyzed in two ways: first, Giorgi \& Pianesi (1997) proposed that ter in the Portuguese perfect tense is a main verb, and derived the iterative reading from a hidden habitual operator Gen in the participial clause; later on, Schmitt (2001) gave a series of syntactic arguments against Giorgi \& Pianesi's claim that ter is a main verb in (1), analyzing it as an auxiliary instead; also, following de Swart (1998), she derived the iterative reading from a function ITER that is there to fix the mismatch between the bounded output of the Perfect and the selectional requirement on Tense to select states. Schmitt's analysis makes the crucial prediction that iterative readings of an event will only be required under present tense inflection: this seems to be true for European Portuguese only (in this respect, see Molsing 2006 on Brazilian Portuguese).

In this talk, I want to contribute to our current understanding of constructions of type (1) by presenting a semantic analysis that gives them a place in event-based
accounts of event plurality or pluractionality (Lasersohn 1995). In doing so, I contribute to the joint effort of analyzing pluractionality not merely as an aktionsart-changing device in the realm of derivational morphology (Newman 1980, Lasersohn 1995, Wood 2007, Henderson 2017), but as a more general phenomenon (Van Geenhoven 2004; Laca 2004, 2006).

To this end, I have investigated the syntactic and semantic properties of two constructions (3 and 4) in the Spanish spoken between the Eo and the Navia rivers in Asturias (Spain), an area of longstanding contact between Spanish and Galician:


The tener construction in (3) conveys the meaning that the speaker has been to Rome in more than one occasion, whereas the llevar construction in (4) conveys the meaning that the speaker has ordered six books, and crucially, that there has been more than one ordering event. In other words, a collective reading of (4) in which all the six books were ordered at once is not accepted. Moreover, sentence (4) does not necessarily convey a 1-to-1 distributive reading in which there has been 6 ordering events, one for each book, but rather, the books can be vaguely distributed across events ( 2 orderings of 3 books, 1 ordering of 4 and 1 of 2 , etc.). The constructions in (3) and (4) differ in some respects (see below), but both of them necessarily denote a plurality of events. Leaving aside the structural details of each construction, for which I take a compromise position between Minimalism and Cartography in the form of a Core Functional Hierarchy (Ramchand \& Svenonius, 2014), and focusing on the semantics that would give rise to the pluractional meanings that we observe empirically, I propose that in these constructions there is a pluractional head PLUR that combines with a predicate P over events and has the following semantic denotation, based on Lasersohn (1995):

```
[[PLUR]]= \lambdaP \lambdaX [Ve, e' \inX] [P(e) & P(e') & \neg \tau (e) }\mp@subsup{}{}{\circ}\tau(\mp@subsup{\textrm{e}}{}{\prime})&&\exists\textrm{t}[\mathrm{ between
(t,\tau(e),\tau(e')) & \neg \existse"'[P(e'') & t= \tau (e'>)]] & card (X) \geq2]
```

The pluractional head PLUR combines with a predicate $P$ over events to build a predicate over sets of events. The cardinality restriction card on the set $X$ means that $X$ must contain at least 2 events of the type denoted by $P$. These events have nonoverlapping running times ( $\mathrm{\tau})$, and there is a time $t$ at which an event of the appropriate type does not occur, between the running times of any two events e and e' in the set satisfying the pluractional head.

The llevar construction is a bit especial in that it seems to require the presence of a quantified object somewhere within the verb phrase, either a direct one like in (4) or an object within a selected prepositional phrase (e.g. Ilevan participado en varias competiciones 'they have participated in several competitions'). Llevar also accepts singular objects as long as they are part of a presupposed set: imagine a context where the doctor has prescribed a number of pills to his patient, named Susana, and after a few days he is asking her how effective they are. She replies (5), meaning 'Up until now I have only taken one (of the total number that were prescribed)'.

$$
\text { (5) Hastaahora sólo llevo } \quad \text { tomado } \quad \text { una }
$$

To account for the particular empirical picture shown by llevar, I assume the presence of a lexical presupposition: the idea is that, when used as an auxiliary, llevar introduces a certain condition that needs to be fulfilled so that the clause it appears in can have a truth value. The condition can be stated in the following terms:

For any predicate P over events selected by llevar, and set of events X of the P type:
(i) there exists some set A in the domain of individuals, which is the set of all the atomic individuals that participate in a particular selected relation $R$ for each $P$ event in the set $X$, and

$$
\begin{equation*}
\forall e, e^{\prime} \in X, \forall x, x^{\prime} \in P(A)\left[e \neq e^{\prime} \& R(e, x) \& R\left(e^{\prime}, x^{\prime}\right) \rightarrow x \neq x^{\prime}\right] \tag{ii}
\end{equation*}
$$

The condition in (ii) ensures that for each $R$, the individual(s) involved will be distinct. $P(A)$ is the power set of $A$ and it is there to guarantee that a one-to-one match is not required between atomic individuals and separate events, but that some events can have plural participants (predicting the vague distributivity illustrated in (4)).

The relevance of presupposed sets is manifested through different tests, and I give one of them here for illustration. Consider the contrast between (a) and (b) below:
(6) Tengo un examen mañana, pero... 'I have an exam tomorrow, but...'
a. */?

| Sólo llevo | leído | un libro |
| :--- | :--- | :--- |
| only llevar-PRES.1P.SG | read-PRF.PTCP | one book |
| 'I have only read one book' |  |  |

$\begin{array}{llll}\text { b. */? } & \text { Sólo llevo } & \text { leído } & \text { un capítulo } \\ & \text { only llevar-PRES.1P.SG } & \text { read-PRF.PTCP } & \text { one chapter } \\ & \text { 'I have only read one chapter' } & \end{array}$

If the condition on llevar was purely structural, we would not expect any contrast in acceptability between 'book' and 'chapter'. If, on the other hand, we regard (6a-b) as a difference in terms of presupposed sets, the contrast above follows straightforwardly from the fact that a chapter is much more likely to be taken as part of a set than a book.

Summing up, on the empirical side this talk presents new data that helps us understanding the (micro)variation that exists in these pluractional constructions across the Romance landscape, and on the theoretical side it puts forward a proposal that gives these constructions a place among event-based accounts of pluractionals more generally.

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## Grammar, schemas, and thematic relation assignment

Mário Perini

It is generally assumed that semantic roles are assigned to all eligible complements on the basis of the thematic grid of the main verb - that is, its valency. This conception is present, and predominant, in the literature, but it can be shown to be too simple to describe the great complexity of the assignment system. Among other situations, there are cases where the thematic relation of a complement is left blank by lexicogrammatical rules; the relation is assigned by default, that is, by direct reference to the schema evoked by the main verb in the clause, without the intermediation of a semantic role, or of any grammatical device. This assignment mechanism provides an answer to a problem of analysis thus expressed by Langacker: "[...] at the extreme, every verb defines a distinct set of participant roles that reflect its own unique semantic properties (e.g. the subject of bite is a slightly different kind of agent from the subject of chew)." [Langacker, 1991, p. 284-285]. The root of the problem is in the lack of distinction between two kinds of thematic relations: elaborate thematic relations (ETRs), which are cognitive relations present in the schema, and semantic roles, abstract relations that are made up of sets of ETRs, and participate in the statement of grammatical rules. Semantic roles are part of the structure of the language, but ETRs are not. For instance, there are rules that mention the Agent, but none that mention the "drinking person", or the "writer", or the "cooking person"; the latter are ETRs, and are understood, in the grammar of Portuguese or English, as elaborations of the semantic role Agent. Consequently, some complements lack semantic roles, but all must have ETRs - in some cases as elaborations of semantic roles, in others as thematic relations directly taken from the schema and integrated in the cognitive representation. This helps solve several problems of analysis, as for instance the difficulty in defining the Patient, which as traditionally defined does not occur in the sentence the Incas worshipped the sun, where the object does not undergo a change of state, and in fact does not directly interfere in the event: it cannot be a Patient in the sense that these walls is in the Incas built these walls. This assignment mechanism satisfies the basic objective of linguistic expression, which is to relate morphosyntactic (ultimately phonetic) forms and cognitive representations. This paper presents examples of the assignment of thematic relations to complements of sentences in Portuguese, showing that in some cases semantic roles are needed, but in others they can be dispensed with, because the relation is expressible by ETRs only. The data
come from the Valency dictionary of Brazilian Portuguese verbs, currently under construction.

Keywords: valency, semantic roles, thematic relations, grammar schemas

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## The grammaticalizational map of the Hungarian dative suffix

## Bence PomÁzı

The presentation deals with the secondary grammaticalization of the Hungarian dative suffix -nak/-nek. Grammaticalization is a process of language change, where a lexically independent linguistic element starts to possess more grammatical features and becomes more dependent grammatically to another linguistic element (Heine-Claudi-Hünnemeyer 1991, Bybee-Perkins-Pagliuca 1994). That is called primary grammaticalization. However, linguistic elements construing a more abstract meaning can also become more grammatical. By occurring with more nouns (Heine 2008: 463), a case suffix can fulfil more functions as well (König 2012), and its typical distribution can change (Bybee 2010: 110). That is what Diewald (2006) calls untypical context, when a linguistic element starts to occur in such contexts that it didn't use to.

The presentation connects to the eximination of the secondary grammaticalization as it eximines the meaning extension of the Hungarian dative suffix -nak/-nek in the theoretical frame of the functional cognitive linguistics (Langacker 1987, 2008, Lakoff 1987), and through corpus data. According to functional cognitive linguistics, the meaning expansion of a linguistic element is cognitively motivated (Lewandowska-Tomaszczyk 2007). The new meanings in the network arise from the central category element, which is in this case, the etymologically primary meaning. The presentation looks through how the new meanings and functions arise from the etymologically first meaning of the Hungarian dative suffix.

Hungarian is a language with an extensive case system, and like many other case suffixes, -nak/-nek originally construed a spatial relation (cf. Korompay 1991) with a lative orientation, which means, that in its first meaning, it answers to the question where to? (see (1)):
(1) hálókat vetett nekem ellenségem, valahova megyek vala, és én lábaimnak tőröket hajigált
nets.ACC cast.PAST.3sG me.DAT enemy.PX.1sG, anywhere.LAT go.1sG be.AUX.PAST, and I feet.PX.1sG-DAT daggers.ACC throw.PAST.3sG
'My enemy cast nets for me anywhere I was going, and he threw daggers at my feet'.

From here emerge one of the most extensive networks of a simple case suffix in Hungarian. For the examination I used the corpus of Hungarian Generative Historical Syntax (Old Hungarian Corpus) (cf. Simon 2014). I carried out several queries in the corpus, searching for nouns ending with -nak and -nek in the normalized part. Since these are texts from the Old Hungarian language, the texts are most likely to be from codices or biblical, religious texts. From the Old Hungarian Corpus my query resulted a total of 10106 tokens, and I selected a random sample of 400 tokens (which turned out to be representative of the whole sample). Out of those 400 hits, 389 were valuable. In addition to this, I also made some targeted search for personal pronouns in dative form (in the paradigm of neki 'to him/her') and queries in other available corpora, such as the Hungarian Historical Corpus (HHC), the Old and Middle Hungarian corpus of informal language use (OMHC), the Hungarian National (gigaword) Corpus (HNC v2.0.5).

I analysed the data of this random sample and examined what functions the nouns ending with -nak/-nek fulfil in their constructions they occur in. The presentation shows the 9 distinguished functions and describes their morphological and syntactic patterns.

The grammaticalizational changes are often referred to as chains or paths (cf. Heine-Claudi-Hünnemeyer 1991: 220-229), underlining their continuity. This presentation, however, rather offers a map for the grammaticalization of the suffix -nak/-nek. The novelty of the grammaticalization model is that it represents the extension of meaning in a more dynamic way than previous ones, which means that the process is not represented as a purely linear left-to- right process. While previous grammaticalization studies have mainly focused on the "left side" of the grammaticalization path, i.e. the source domains, the map presented here also illustrates the effects, the "feedback" of the newly emerging features on the existing system. It also places all the datable functions of the suffix on the map, which can thus also depict/represent the different forks in the path.

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HNC = Hungarian National Corpus (v2.0.5.). http://mnsz.nytud.hu/index_eng.html_HHC = Hungarian historical corpus. http://clara.nytud.hu/mtsz OMHC = Old and Middle Hungarian corpus of informal language use. http://tmk.nytud.hu/about.php
Old Hungarian corpus = Hungarian Generative Historical Syntax. http://omagyarkorpusz.nytud.hu/

# If you wanna be a psych, first you gotta be stative <br> María Eugenia Mangialavori RASIA and Rafael MARIN 

Psych verbs have been extensively studied for the unusual properties they present. In fact, the aspectual value of experiencer psych verbs (OEPVs) is still a matter of intense debate. Arad (1998) i.a. proposes 3 possible predications: (1a) stative reading (Economy concerns Mary), an individual level state; (1b) eventive reading, where a change-of-state arises in the experiencer with no intentional agent (The noise bothered Mary), and (1c) agentive reading, where an agent intentionally causes a change of state in the experiencer (John frightened Mary deliberately). Yet, the existence of two distinct subtypes of OEPVs (Marín 2011), molestar- 'bother' and preocupar- 'worry' verbs (2), is central to any analysis insofar as dramatically distinct patterns obtain (3). Both types (molestar-verbs only with inanimate subjects; preocupar-type with both (in)animate subjects) allow the expression of inchoative (psych) states (Marín \& McNally, 2011). Yet, this does not mean that psych denotation is part of the verb meaning in all cases. Namely, with agentive subjects, molestar-type verbs yield activities without any psych implication (and no special 'psych' syntactic properties), thus contrasting even with the proposed predication in (1c). The radical question remains what really is a psych verb?
a. El ruido le molesta mucho.
'The noise bothers her a lot'
b. El ruido molestó a Uma./El ruido la molestó.
'The noise bothered Uma'
c. Uma molestó a Quentin deliberadamente / para que se fuera. 'Uma bothered Quentin deliberately/to make him go away'
(2)
a. molestar-type (accepts agentive subjects): agobiar 'overwhelm', animar 'encourage', consolar 'comfort', fastidiar 'annoy', importunar 'importune', motivar 'motivate'.
b. preocupar-type (do not take agentive subjects): aburrir 'bore', apasionar 'impassion', disgustar 'disgust', fascinar 'fascinate', indignar 'outrage, obsesionar 'obsess'.
(3)
a. Uma molestó / \#preocupó a Quentin deliberadamente / para que se fuera.
'Uma bothered / worried Quentin deliberately / to make him go away’
b. Uma fue molestada / \#preocupada por Quentin.
‘Uma was bothered / worried by Quentin'

On the one hand, agentive molestar-verbs (bother-verbs) pass major dynamicity tests. They allow progressives (4a), serve as infinitival complements of perception verbs (4b), and yield habitual reading in the present (4c). On the other hand, agentive molestar-verbs resist telicity: they allow for x time (but not in x time) adverbials (5a), they cannot serve as complements of acabar/terminar 'finish' (5b), and fail to appear in absolute clauses (5c).
(4)
a. Uma está molestando a Quentin.
'Uma is bothering Quentin'
b. Vi a Uma molestar a Quentin.
'I saw Uma bother Quentin'
c. Uma molesta a Quentin habitualmente / cada semana.
'Uma bothers Q often/each week'
(5)
a. Uma molestó a Quentin \#en/durante dos horas.
'Uma bothered Q in/for 2 hours'
b. \#Uma acabó/terminó de molestar a Quentin.
'Uma finished bothering Quentin'
c. \#Una vez molestado Quentin, ...
'With Quentin bothered...'

More importantly, bother-verbs yield dynamic agent-controlled events with defeasible (cancellable) root-named states (6) (Koenig \& Davis 2001). This explains the availability of Failed Attempt readings and should modals (Martin 2015) yielding deontic/epistemic [D|E] reading correlated with $\pm$ animacy, with $\mathbf{D}$ marking an activity that Quentin must perform.
(6) Quentin ha molestado a Uma durante horas, pero ella no se molesta/no se molestó.
'Quentin bothered Uma for hours, but she isn't bothered / she didn't bother.'
(7)
a. Quentin debería molestar a Uma.
'Quentin should bother Uma.' ( ${ }^{\mathrm{OK}} \mathbf{D} /$ ?? $\left.\mathbf{E}\right)$
b. El muro debería molestar a Uma.
'The wall should bother Uma' (\#D/OKE).

Based on similar semantic outputs, Martin (2015) posit that some verbs (accomplishments), if agentive, yield a nonculminating reading also present in Romance OEPVs. Yet, (6) may not show the cancellation of molestar endpoint/result (which, as an activity does not have any culmination to cancel), but rather a zero-Cos predication, as data above suggests.

## Proposal.

Facts could be readily explained by pursuing a fair workload division balancing a nonradical constructional account, where predications decompose into distinct vP configurations, while preserving (grammatically-relevant) lexical-based properties yielding distinct root types associated with distinct OEPVs traditionally subsumed together. Psych roots like preocup- would be realized through 'psych' state roots (Beavers \& Koontz-Garboden, 2020, i.a.). For this type, only the stative construction with the psych state as core (nondefeasible) part of the verb's denotation would be
available. For the molest- type, instead, both constructions are available, as these verbs in their agentive reading would denote an act performed with intention of triggering a certain state, but where the state is not part of the core denotation. From here, defeasibility follows: a result (a mental state) does not have to truthfully occur for the predication to hold. This would uncover key criteria to tell apart 'regular' verbs eligible for psych state expression vs. core psych verbs that, accordingly, find no event/argument structure alternative but pure psych state denotation. While preocuparverbs and non-agentive molestar could both yield (inchoative) states, only molestarverbs could denote noncausative, nonresultative activities. The structures (8)-(9) should capture these facts.
(8) Quentin preocupa a Uma.
'Quentin worries Uma'.
[Init', ResRHEMEㄹ]
(9) Quentin molesta a Uma. 'Quentin bothers Uma' [Init', Proci]

In (8), the external argument is introduced by InitP (or VoiceP, depending on the specific approach). As ProcP is merged, the verb behaves as a regular manner verb: the external argument is interpreted as a volitional actor and the internal one is the target of the controlled, intentional behavior of Quentin. As in other activity verbs on this account, the referent of the external- argument-introducing head and the specifier of ProcP (the dynamic heart of the predicate) correspond by default to the same participant (=actor). This layout dovetails with the aspectual properties of originally unergative activity verbs, and dismisses the need to include other components (e.g. ResP) in the configuration which are not inherent part of the verbal predicate - or participants, like a RESULTEE, cf. Ramchand 2008: 214). Hence, Uma here is interpreted as the target of a directed/intentional action (the dispositional behavior of the subject). In (9) the construction is, by contrast, fully stative (no true causer, no true undergoer/patient, no change of state). We speculate that this is due to $\sqrt{ }$ sitting in complement position of a stative predicate (SC) headed by Res but not introduced by Proc. Since Res is a mere flanking, eventless (default stative) eventuality, it would be the semantics nuance of Res that creates the entailment of an apparent result.

Importantly, under this approach the original (dynamic) denotation of the verb in its default configuration is not a problem. The proposed structure would make the eventive (manner) entailments of the verb irrelevant so long the root can refer, by lexical content and conceptual compatibility, to a psych experience, hence allowing the verb to occur in the guise (9). This complies with the manner/result complementarity - a topic where psych verbs remain underexplored. This possibility would follow from conceptual conditions linking the root's denotation to a mental state. As many facts show (cf. Alexiadou et al. 2017 on resultatives), that this content can be deployed in a distinct grammatical configuration does not imply that it is codified as part of the verb's basic meaning.

## Result.

Based on data below we contend that (i) core psych uses are always stative, the state cannot be cancelled; (ii) agentivity plays a key role only for some verbs, (iii) two classes (stative|agentive [eventive]) are relevant and sufficiently different. This follows from a key observation on which our central claim builds: the criteria taken by Arad i.a. to operate the differentiation between possible constructions (whether there is an agent deliberately doing something to bring about a mental state in the experiencer; whether there exists a change of (mental) state in the experiencer) are in OEPVs in complementary distribution and fail to coexist as core part of the predication. Of course other analyses are possible. Yet, what is clear is that if verbs like molestar involved a result (psych) state as part of their denotation, telic/resultative predications should be possible, contrary to fact.

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## Spatio-temporal prepositions, progressive uses and egocentric

frames of reference
Maria Eugenia Mangialavori RASIA \& Guillermina M Goñi RASIA

We explore a generally disregarded but interesting phenomenon concerning space, time, and prepositional deployment to richer denotations.

## Problem.

Spatio-temporal prepositions (P) like hasta 'up to' find an alternative but coherent use across progressive Spanish varieties. This option, unavailable in 'conservative' Spanish varieties, alternates nontrivially with standard P choices in more progressive ones like Central American Spanish (CAM). The possibility of distinct, systematic, coherent denotations challenges the received view dismissing these data as mere anomalies/coercion (Lope Blanch 2008), pointing instead to a grammarspecific capacity.
hasta shows deviant behavior in two particular instances:
(i) stative locative verbs, to express the location of an object (trajector) relative to a designated landmark. This use is unavailable in IS and extends to verbs of spatial location in nondynamic predications like (2).
(ii) temporal location, also unexpected for nondurative-happenings (copula, inceptive, terminative) (4)-(5).

In this use, P merely locates the eventuality named by the verb, without rendering extent readings, just as (1) does not yield extent reading of the location (=extend up to). This creates a striking contrast both with IS interpretation and English literal glosses illustrated in (3), (6).
(1) El semáforo está (20 metros) hasta la esquina.

The light isloc 20 meters up-to the corner
'The light is (20 meters) [from here] on the corner'
(2) Sigue el obvio camino que queda hasta la salida.
follow the obvious path that stays up to the exit 'Follow the clear path that lies at the exit'
(3) La clases son/empiezan hasta la noche.

The lessons are/begin until the night
'The lessons are/begin at night' cf. 'The lessons are/begin until night (IS reading)'
(4) El proceso inicia/comienza hasta la primaria. the process begins/starts until the primary
'The process begins/starts in elementary school
(5) Esto acaba recién hasta que se cuenten todos los votos.

This ends only until that se count all the votes
'This ends once all votes are counted'
(6) Estará abierta hasta las 4.
beLOC.FUT open until 4.
'It will be open by 4 '
cf. 'It will be open until 4 (IS reading)'
Both patterns apparently violate general principles regulating the occurrence of directional/projective boundary Ps in the expression of location. Being a right path/interval boundary $P$, hasta does not operate bounding a path of motion in (2) (ir hasta la esquina 'go up to the corner') or on verb-denoted event extension (extenderse hasta la esquina 'extend up to the corner'), and temporal uses do not invite a durative reading or an iterative semelfactive reading (repeated punctual events) creating an interval P can impose a boundary to, as expected under standard conditions(cf. las clases empezaron hasta 2020 'lessons started until 2020').

General intuition: location (of object/event) is far away from the speaker. Measure does not apply to the verb-described event, but something else (perspective).

Hypothesis: Preserving the same (right-boundary) semantics, CAM would deploy Ps like hasta to impose a condition (final point on the path) on a fictive interval from which the relative position of the object is estimated. In temporal uses, the same function applies, establishing a perspectival time interval $(0,1)$ from a 0 point in time set by the speaker and 1 at the location of the event described by the verb. Importantly, the idea is strictly amenable to the abstract preparatory phase long argued for IS cases amenable to (6) (Brucart 2012: 23). A well-known condition on directional P uses (7) subsumes both circumstances.
(7) ENDPOINT CONDITION Directional Ps are allowed in such situations if the described location is understood as the endpoint of a hypothetical journey - a line of sight, a walking distance, or a route - from an implicit point of view (Cresswell 1978, Zwarts 2005:742) ((7)a) (a fictive path).
(7) dovetails with hasta being associated with a distinct predication benefitting from its projective nature iff this introduces a contextually-determined point of view from which location is estimated. Crucially, the semantics of locative constructions exploiting the directional P (cf. (9) transparently mirrors the additional variable introduced by the from adverbial in (7)a-b at the same time that conforms to the 'distance' flavor reported both in early studies (Dominicy 1982 i.a.) and by native speakers in experimental tasks (Author 2021). The entailment is grammatically evident; notably, it is strong enough to render the adjunct redundant (9), allowing it only if P (hasta) is dropped. Moreover, the fictive path can be modified by measure phrases as in (1).
(8)
a. The house is behind/outside/across the woods (from here)
(Zwarts 2005(3))
b. The car is one mile from the garage/to the east.
(9) La casa está (hasta) detrás del lote (*?desde aquí).
'The house is behind of the lot (from here)'

In temporal uses, hasta can be dropped but not without a cost: losing this preparatory phase or 'waiting time' flavor noted in the descriptive literature available, if
not expressing an opposite relation. This would account for an important set of data not captured by elided negation or coercion solutions in existing accounts. Namely, in (10), adding a negative operator yields the opposite meaning (cf. hasta ahora [no] logré entender/ desocuparme 'until now I didn't understand you/get free'); whereas the addition of yet another repair component fails just as well (hasta ahora [no] logré [sino] entenderte 'Until now I only got to understand you') with an additional problem: the natural and quite telling systematic combination with the adverb recién 'just now' (cf. Méndez 2003).
(10) (recién) hasta ahora te entiendo / logré desocuparme.
just-now until now DAT understand I-achieved free-me
'Only now I understand you/l got free'

## Proposal.

In progressive varieties spatiotemporal Ps could be made sensitive to complex ontological types of predication in ways which, although puzzling to conservative varieties, are particularly economic in terms of grammatical realization of a richer, more complex sense of location (notably, introduce perspective, skipping the addition of from here adjuncts), and, importantly, without requiring ad-hoc solutions proposed in the literature (multiple lexical entries, P ambiguity, elided NEG operators, coercion). By incorporating an extra value into the locative function (a zero-point defined by the observer's position), location becomes twice-relative: the object is located in space/time relative to the (region defined by the) Landmark $L$ (the corner in (1)), which is in turn relative to a zero-point $x$ from which location is calculated; i.e., the viewpoint of the speaker. This would be a crucial step forward in the analysis, as it incorporates the premise that directional/projective Ps express directions on an interval/axis that can be defined either by inherent properties of the ground (allocentric view) or by the relative position of an observer (egocentric view) (Herskovits 1986 i.a.).

From here, the proposed analysis falls out: in both IS and CAM the use of hasta is equally accommodated by a birelational function AT-END-OF (Jackendoff 1990) where P imposes its distinctive locative condition (right boundary) on a path (interval). Yet, CAM differs in allowing this right boundary to be set on an abstract interval with its endpoint at $L$, which sets the origo relative to which the object is situated. $L$, in turn, is situated from a perspectival point out of the conceptual space of the landmark $S(L)$

- i.e., the region where the object is located - defined here as $x$ (the zero-point of the perspectival interval) that instantiates the 'from here' flavor. Polar coordinates (Zwarts \& Gärdenfors 2016), defined in the figure (11), efficiently capture the need for a convex hull so that all the intermediate points $i$ are correctly contained within the relevant space $S$; hence, all $i(i \in[0,1]) \subset S$, convexity is satisfied.

For temporal uses, hasta would be used to define a right boundary on an abstract path ('waiting time') ending at $L$ (the point in time introduced by P). Happenings would be seen as objects located on temporal conceptual space under equal conditions. That $\mathrm{P}=$ right boundary on a perspectival path explains: (i)eventuality is not being interpreted as having any duration (lack of iterative repair in (2), (5), (10)); (ii) P not computed in relation to the interval described by V , but to a prefix interval ending at the reference time introduced by $P$ (=prefix perspectival path). SOLUTION: intersect the P's traditional definition (terminus on time/places/quantities, DRAE 2020), with perspectival egocentric frames of reference under EPC.
(11)


With $x$ at $I 0]$ and $\Pi 1]$ at $L, I$ determines a function on the $[0,1]$ interval within a convex conceptual space $S$. That $L$ is found at $I[1]$ and not $\lceil[0]$, or at any intermediate value $i$ so $[0<i<1]$, directly follows from the denotational properties of P: right boundary $=b$ at the maximal value of the interval $\lceil[1]=L$. $I(S(L))$. $\mathrm{r}_{L}$ estimates the relevant region containing $b$, so that r $(I(0))>\mathrm{r}_{L}$ and $\mathrm{r}(I(1))=0$. (11) allows for the possibility that the fictive path could ultimately be a directed spatial curve to accommodate cases where the trajectory can be shaped in nonoptimal ways, subject to the perception of the speaker/observer.

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## Electrophysiological correlates of aspectual coercion: the combination of telic and atelic Italian predicates with in/for X-time expressions

Stefano Rastelli, Giada Antonicelli and Paolo Canal

## 1. Topic, background and purpose.

Among Dowty's (1979) most cited collections of aspectual diagnostics, the forlin x-time test discriminating between telic vs. atelic predicates has informed a huge literature (e.g., Filip 2012). According to the test, in sentences (1)-(2), the (a)telicity of walk (atelic) and paint a picture (telic) would be surfaced by their (in)compatibility respectively - with prepositions in and for:
(1) John walked for/*in an hour
(2) John painted a picture in/?for one hour

Many agree that (a) the test is asymmetric (it does not affect telic and atelic predicates evenly), (b) telicity is not computed on V, but at VP level and beyond and most importantly - (c) speakers can resolve aspectual conflicts through the mechanism of aspectual coercion (De Swart 1998; Verkuyl 1993). Recent ERP studies identified the sustained anterior negativity as the best candidate for reflecting the cognitive activity involved in aspectual coercion (e.g., Baggio et al., 2008). In our experiment, Italian native speakers read a set of sentences containing verbs that are classified a priori as being telic or atelic following the aspectual literature. In the stimuli, such predicates are combined with either XP 'in x-time' or 'for x-time' expressions. The aim of the study is to isolate the signatures of aspectual coercion and the associated processing costs (as they can be revealed by the analysis of ERP components) following participants' attempts to accommodate VP with allegedly (in)compatible time expressions.

## 2. Rationale and predictions: diagnostics vs reagent.

Italian prepositions in and per which - given their frequency, skewed distribution, polysemy, entropy and semantic flexibility - do not just act as elements whose (in)compatibility with a given verb reveals whether that verb is telic or atelic. In contrast, they represent a reagent, that is, what forces a given verb to be interpreted as telic or atelic by speakers, that is, the place where telicity is composed and assembled in real time, rather than being the place where telicity is checked. We therefore do not expect the typical signatures of semantic violations (e.g. N400), but the correlates of an interpretive mechanism which integrates the linguistic input in the ongoing discourse representation (Paczynski et al., 2014).

## 3. Research questions.

(1) do brain responses show native speakers' attempt to accomodate telic vs atelic predicate and time expressions? (2) Are there differences (onset, amplitude, duration) in ERP components with telic and atelic predicates? (3) Do frequency and distribution of prepositions modulate ERP effects?

## 4. Method and materials.

We tested n. 28 right-handed Italian native speaker (Mean Age=24.46, Range=20-37) with ERPs. Sentence stimuli adapted from the Dowty's test had identical structure. Corpus analysis (ItTenTen20, 12b words) show that - for our sample verbs - such rule holds more for atelic than telic verbs, with the latter showing no clear preference toward either preposition. The raw EEG acquired from 59 active electrodes placed on the scalp was pre-processed with BrainVision Analyzer 2 (filter: $0.15-35 \mathrm{~Hz}$; ICA correction of ocular artifacts; semi-automatic artifact rejection $(9.17 \%)$ ). The effects of the experimental factors [Acceptability and Telicity] and one topographical factor [Longitude (Frontal, Central and Parietal)] were tested at two word positions - prepositions and noun - with linear mixed models in R.

## 5. Results.

We analyzed voltage amplitude in a time window spanning from 400 to 700 ms to capture sustained anterior negativities. No effects were found either at the verb or
at time- expressions. In contrast, a significant effect was found at the prepositions. A three way interaction between Telicity, Acceptability (compatibility between verb and time expressions) and Longitude emerged $[\mathrm{F}=7.79, \mathrm{p}<.001]$, showing that the effect of compatibility in frontal electrodes for atelic sentences (see distribution in Figure 1) surfaces the form of a larger negativity for allegedly incompatible ones $[-0.78 \mu \mathrm{~V}$, $t=-$ $2.03, \mathrm{p}=.04]$, while the effect was not robust for telic sentences.

## 6. Discussion.

On the one hand our results are compatible with the those already found in the ERP literature concerning coercion. On the other hand, our study introduces frequency and distribution of prepositions (the ratio of their temporal uses) as novel factors which enter the aspectual calculus. Indeed, at the preposition, incompatible combinations with preposition in elicited a sustained negativity with atelic but not with telic verbs, possibly confirming that (1) the test is asymmetric (as suggested in the literature) and (2) the amplitude of the effect linked to coercion is modulated by the distribution of temporal uses of the prepositions in the Italian input. The results are commented in the light of recent debate concerning the relationship between the impact of statistical processing on semantic representations.

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Figure 1: Scalp distribution of the difference between Acceptable and Unacceptable sentences for atelic (on the left) and telic (on the right) sentences.

## Italian causative active accomplishments and locational PPs in RRG

## framework

## Anna Riccio

The analysis focuses on Italian causative accomplishment constructions involving the motion of all the event participants through space from one location to another. See examples in (1), taken from the Italian Web corpus (itTenTen) available through the Sketch Engine corpus manager:
(1)
a. Gli agenti hanno accompagnato la donna presso gli uffici della caserma.
'The agents accompanied the woman at the police offices.'
b. La polizia ha pressato la folla sull'altro lato della strada.
'The police shoved the crowd to the other side of the street.'
c. L'automobilista che ha trasportato i ragazzi fino al porto barese.
'The driver who transported the boys to the port of Bari.'

Examples above illustrate constructions belonging to different lexical fields: accompany, pushing, and transporting verbs, respectively (Levin 1993, 2000; Ibáñez Moreno/Ortigosa Pastor 2004; Levin/Rappaport-Hovav 2005; Goldberg 2010). All of them share the same basic schematic construction "to cause someone to move", and a basic background frame that presupposes a previous different place from which all the participants move. The verbs accompagnare 'to accompany', pressare 'to press', and trasportare 'carry' in (1) predicate a change along a certain dimension or scale (of one of the arguments), but not the ending of the action. To complete the measuringout semantics for these verbs, it is required to add to the meaning of non-delimited activity a sense of translative motion (a linear path or distance) plus a locational terminus (cf. Tenny 1995; Jackendoff 1996). At an abstract level, each construction includes the specification of temporal boundedness through some potential measuring-
scale associatable with an indirect object (locative) that imposes a result condition on a (dynamic) component of the event denoted by the verb. Indeed, the syntactic configuration [NP-V-NP-locational PP] profiles a telic state of affairs that goes from the original point of all participants to the endpoint.

The data are examined within the functional theoretical framework proposed by the model of Role and Reference Grammar [RRG] (Van Valin 2005). RRG recognizes bounded activities in (1) as a distinct Aktionsart category, labeling them "(active) accomplishments" (Van Valin 2005; 2018). The bounded (telic) causative actions are incremental processes which are 'measured out' by the incremental path that is simultaneously (' $\wedge$ ’) the distance covered (the PROCess component) by both the Actor and Undergoer. The role of the locational PP is to characterize the termination and result state of both the Macroroles.

We will show how RRG can be useful for describing and analyzing the semantic (from logical structures to decompositional frames) and syntactic structures of such Italian constructions, in order to capture the ambiguities of these constructional schemata through the mapping of semantic relations onto the syntactic ones (and vice versa). The analysis results instantiate a particular type of clause linkage constructions in which the locational PP and the verb jointly trigger a nuclear juncture containing a predicating elements (cf. Riccio 2018).

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# Understanding conjunctive generic and quantified sentences <br> Magdalena Roszkowski, Gyorgy Gergely and Ernö TÉglás 

## In a nutshell:

Our study is concerned with the question of how children interpret generic sentences that contain a conjunction of two predicates such as Wugs are green and have stripes. In particular, we tested (i) whether such sentences allow for non-maximal interpretations, i.e., are compatible with a certain number of counterexamples, and (ii) whether they allow for cumulative interpretations where none of the respective individuals has both properties expressed by the predicates. Our results suggest that while conjunctive generics pattern with conjunctive 'most'-quantified sentences in that they allow for non- maximal interpretations, they differ from quantified sentences wrt. their requirements on the distribution of properties as only generics seem to be compatible with cumulative scenarios under certain conditions.

## Background:

Most formal and experimental work on generics has concentrated on simple generic sentences such as (1) and the question of how many instances of a category are sufficient to make a generic statement true ( $[7,4,6,3,1,5,8]$ a.o., but see [9]).
(1) Elephants have long trunks.

However, generic knowledge does comprise more than a single fact and categories may often be described with sentences that involve more than one property ascription as in (2).
(2) Elephants have large ears and long trunks.

Our study looks at how children interpret such sentences in terms of the distribution of the expressed properties: Do they expect both properties to be possessed by each member of a category? And does the distribution of properties
interfere with the well- known tolerance for counterexamples of generics? By comparing the range of possible interpretations for conjunctive generic and quantified sentences we hope to gain further insights about the underlying form of generics, in particular, the nature of the covert generic operator assumed by many theories (e.g. [2, 4, 8]).

## Methods:

The study is conducted in Hungarian and involves a sentence-picture matching task with scenario type (cumulative, distributive, mixed, small distributive) as withinsubjects factor, sentence type (plural, 'most'-quantified, 'every'-quantified) as betweensubjects factor and acceptability rate as dependent measure. Preschoolers are presented with general statements about novel animal categories containing a conjunction of two compatible predicates (3), i.e. predicates that can hold simultaneously of an individual.
a. Wugs are green and have stripes.
b. Most wugs are green and have stripes.
c. Every wug is green and has stripes.

In the cumulative condition, the accompanying picture shows a scenario in which some of the depicted category members have one property, others exhibit the second property, and some have none of these properties. In the distributive condition, the majority of instances has both properties, whereas some of the depicted animals have none of the expressed properties. In the mixed condition, a cumulative scenario is shown in which, however, a minority of category members has both properties. The small distributive condition involves scenarios in which a minority of instances exhibits both properties, while the majority lacks them.

## Results:

Our preliminary data suggest that acceptability rate for generic and quantified sentences in distributive scenarios is ceiling, while in cumulative scenarios such
sentences are mostly rejected. As expected, 'most'-quantified sentences also show a high rejection rate in the small distributive condition, which indicates that children appreciate that 'most' imposes a lower boundary. The moderate results with generic plurals in the small distributive condition confirm the previously observed high tolerance for counterexamples. So far, plural generics, though mostly rejected in cumulative scenario, seem to yield a considerable acceptability rate in the mixed condition (Fig. 1 \& Fig. 2).

## Discussion:

There is little evidence for conjunctive plural generics being compatible with cumulative scenarios in which none of the category members has each expressed property. Quantified sentences with 'most' and generics pattern alike in that they are not affected by a small number of counterexamples and acceptable in distributive scenarios. Interestingly, a special type of cumulative scenario, namely the scenario with some overlap of properties, seems to be highly compatible with generics, but not with quantified sentences, which not only suggests that a plurality representation is involved, but also raises some questions about the mechanism that is responsible for the asymmetry between purely cumulative and mixed cases.

Figures:


Figura 1: Mean \% of yes-responses for 'most'


Figura 2: Mean \% of yes-responses for generics

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## Deferred Reference across Categories

## Eddy Ruys

The literature on demonstratives - the semantic literature in particular - focuses mainly on DP demonstratives (demonstrative pronouns and determiners), which denote in the entity domain. Nonetheless, it is well known that demonstratives exist across syntactic categories, and denote in other domains as well, although not every language offers distinct lexical items for every category. The small sample in (1) illustrates these facts.

| (1) | proximal | medial | distal |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| manner | kō | sō | a | Japanese |
| thing | this | that |  |  |
| locative | here | there |  |  |
| allative | hither | thither |  |  |
| ablative | hence | thence |  |  |
| time | then |  |  |  |
| degree | yay |  |  |  |
| person | der |  |  | tiek |
| amount | takoj |  |  | Lithuanian |
| quality |  |  |  | Russian |

The puzzle addressed in this paper is how to account for the common deictic semantics that these diverse elements share, while at the same time allowing them to function across syntactic and ontological categories. We propose that the key to the solution lies in the phenomenon of deferred ostension or deferred reference. Rather than an exceptional phenomenon sometimes found in non-standard uses of demonstratives, referential deferment lies at the core of most uses of demonstratives. What is commonly known as deferred reference follows as a side effect of the way standard demonstrative reference is organized. In the present paper, we focus exclusively on the "exophoric" use of demonstratives, leaving anaphoric uses to another occasion.

Deferred ostension across categories We start by illustrating the familiar concept of deferred reference (Nunberg 1993):
(2) [pointing at a stable, to refer to the horse usually kept there]

That horse didn't do too well in the race

We cannot suppose that the speaker is "really" just gesturing at the horse here. We need to acknowledge a role both for the index (the constituent of the utterance context that is being gestured at, henceforth the demonstratum $\delta_{c}$ ), and the ultimate referent of the demonstrative expression since, as Nunberg observes, while features like proximal and distal attach to the index, features like number and gender apply to the referent. This is clear from his example in (3):
(3) [pointing first at a plate close to the speaker, then at a plate further away:]
These are over at the warehouse, but those I have in stock here.

Hence, there is a level of indirection between the demonstratum and the referent: deferred reference. The indirection is mediated by a relation between index and referent (e.g., between a barn and the horse that is stabled there) that the hearer needs to reconstruct from the context.

With few exceptions, examples of deferred reference in the literature are of DP demonstratives. However, other categories equally allow deferment. Consider first locatives:
(4) [pointing first at a proximal, then at a distal spot in an architectural mock-up:]
We should build the bus stop here, not there

Note again, that the proximal and distal features attach to the locations in the mock-up, not to the locations that the demonstratives ultimately denote. (5) is a similar example with a temporal demonstrative:
(5) [pointing first at one, then another date on a calendar:]

Then I was in Portugal, but by then I was back home

Lacking proximal and distal variants, we must rely on the earlier examples to reject the notion that the gesture is already somehow directed at the date itself. But given the shifting reference of two occurrences of then we conclude that an anaphoric analysis is implausible: the speaker gestures at a location or entity on the calendar to refer to the date by way of deferred reference.

I return to manner demonstratives below, but (6) shows the now familiar pattern, which can also be illustrated for degree demonstratives:
(6) [pointing at a near, then a far pair of ballet shoes worn in a particular pattern:]
In China, they dance like this, but here, they dance like that

However, as Nunberg (1993) observes, not every expression whose interpretation depends on context allows deferred reference. E.g., the pronominal it, and contextual local, do not, indicating that the demonstratives in (2) through (6) must have a particular element to their semantic make up that facilitates deferred reference. I argue that this same element is necessary for demonstratives to function across categories at all.

## Demonstratives across categories

Consider the Japanese manner demonstratives as used in (7) (König \& Umbach 2018, attributed to Yoko Nishina, p.c.):
(7)
a. Hanako-wa koo (+gesture) odor-u. Hanako-TOP like this dance-PRS
'Hanako dances like this. '(speaker is dancing)
b. Hanako-wa soo (+gesture) odor-u.

Hanako-TOP like that dances-PRS
'Hanako dances like that.' (hearer is dancing)
c. Hanako-wa aa (+gesture) odor-u.

Hanako-TOP like that dances-PRS
'Hanako dances like that.' (a third person is dancing)
Both König \& Umbach (2018) and Umbach \& Gust (2014) assume that the index in these examples is the dancing event in the utterance context. The manner demonstrative then denotes the set of events that are similar, in a specific sense, to this event. Umbach \& Gust liken the relation between index and denotation to the type of deferred reference discussed in Nunberg (2004); but this is different from the deferred reference under discussion here, in that the deferment is not arbitrary and recovered from context, but fixed by the definition of similarity.

Why must we assume that the demonstratum in these examples is the dancing event? Without further evidence, one might as well assume that the speaker is gesturing at some abstract object that is a manner. This would immediately facilitate a cross-categorial semantics for demonstratives: the speaker gestures at a manner, or a degree, etc., and the demonstrative simply refers directly to the demonstratum $\delta_{C}$.

The crucial evidence that this will not work comes from the demonstrative feature values.

In several languages, including Japanese, manner demonstratives come with a proximal, medial or distal value, which triggers a presupposition as to the distance between the speaker and the demonstratum. This presupposition cannot apply to the referent directly, since manners are not the kinds of things that can be located in space. We therefore need a level of indirection between the index, which can be spatially defined as close to, or far from, the speaker, and the ultimate denotation, which cannot. Note that the feature values do not relate to an abstract or metaphorical space where manners might be located: in (7) it is the physical spatial distance between the dancer and the speaker that the proximal, medial and distal features apply to, and likewise in (8) below.

We conclude that König \& Umbach (2018) and Umbach \& Gust (2014) are correct that there is a level of indirection between index and referent. However, the index does not need to be an event, and the relation between index and referent is not fixed by similarity, but recovered from context arbitrarily. This is clear from cases such as (6) above: the speaker is not pointing at an event, but at a pair of shoes that suggest a manner of dancing. The shoes must be the demonstratum, as the spatial relation between shoes and speaker determines the use of the proximal or distal value. Likewise in (8):
(8) [pointing first at some paint spots on the floor, then at a tarp:] If you're going to paint like this I don't want you in my living room; like that is ok

We will argue that locative and degree demonstratives support similar arguments.

## Proposal

We propose that the demonstratives in (1) generally have the syntax in (9), based on Elbourne (2008):
(9)
a:

that:


We assume that the DEMonstrative feature always denotes the demonstratum $\delta_{c}$; the feature value acts as a presupposition on $\delta_{C}$. DEM is selected by a functional head $R$, a free variable responsible for deferment:
a. $\llbracket$ DEM[DISTAL] $\rrbracket^{g, c}=\left(\lambda x: f a r \_\right.$from_speaker $\left.(x) \cdot x\right)\left(\delta_{C}\right)$

$$
\equiv \delta_{\mathrm{C}}\left[\mathrm{w} / \text { presupposition } \delta_{\mathrm{C}} \text { is distal }\right]
$$

b. $\llbracket R$ DEM[DISTAL] $\rrbracket^{g, c} \quad=g(R)\left(\delta_{C}\right)$

R's output type and properties are constrained by categorial and other features of the determiner or adverbial head, as in (11)/(12). This is why gender, etc., apply to the referent, not the index.

For that, RP combines with an abstract Det the in (11a), yielding (11b). If no contextual value is salient, $R$ defaults to IDENT, $\lambda x \cdot \lambda y \cdot y=x$. If $R$ is contextually determined, ostension is deferred.
a. $\llbracket$ Det INANIMATE $\rrbracket^{g, c}=\lambda P . I x:$ inanimate $(x) \cdot P(x)$
[I the presuppositional determiner meaning]
b. $\llbracket$ Det INANIMATE [ R DEM[DISTAL]] $\rrbracket^{g, c}=\lambda P . I x: i n a n i m a t e(x) \cdot P(x)$ $\left(g(R)\left(\delta_{C}\right)\right)$

$$
\equiv \operatorname{Ix}\left[g(R)\left(\delta_{C}\right)(x)\right]
$$

"the unique inanimate object that has the salient relation R with the demonstratum". When R defaults to IDENT, $\equiv \operatorname{Ix}\left[\left(\lambda y \cdot y=\delta_{C}\right)(x)\right] \equiv \delta_{C}$

For $a$, because the presuppositional MANNER feature on the adverbial head restricts the output of $R, R$ is forced to map the demonstratum $\delta_{c}$ to the required denotation type. This solves the cross-categoriality problem:
a. $\llbracket[$ Adv MANNER $] \rrbracket^{g, c}=\lambda x_{<v, t>}:$ manner $(x) \cdot x$
[ $v$ for events]
b. 【[Adv MANNER ] [ R DEM[DISTAL]] $\rrbracket^{\mathrm{g}, \mathrm{c}}=(\lambda \mathrm{x}: \operatorname{manner}(\mathrm{x}) \cdot \mathrm{x})\left(\mathrm{g}(\mathrm{R})\left(\delta_{\mathrm{C}}\right)\right)$ $\equiv g(R)\left(\delta_{C}\right)$ [ $\mathrm{w} /$ presupposition that value of R applied to $\delta_{c}$ yields a manner]

In sum, if the demonstratum must be spatially located so as to satisfy the proximity feature values, then manner demonstratives, etc. can only exist if demonstrative reference is mediated by a function $R$ that maps $\delta$ to the required domain. Traditional deferred reference falls out as a special case.

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# An exploration of the underlying semantic features of masculine generics in German 

Dominic Schmitz, Viktoria Schneider and Janina Esser

Masculine generics in German have long been considered to be sex- or genderneutral (Doleschal, 2002). Take, for example, the grammatically masculine role noun Anwalt 'lawyer', which can be used to refer to lawyers of any sex or gender. However, despite their usage, research of the last decades has repeatedly shown that masculine generics apparently are not neutral but biased towards a masculine reading (e.g. Gygax et al., 2008; Irmen \& Kurovskaja, 2010; Koch, 2021; Misersky et al., 2019; Stahlberg \& Sczesny, 2001). Thus, while Anwalt is used to refer to lawyers of any sex or gender, its masculine bias leads to a predominantly male interpretation. But what semantic features of masculine generics lead to this masculine bias?

We explored this question in an approach novel to this area of research, which thus far has mostly seen behavioural methods: linear discriminative learning (LDL; e.g. Baayen et al., 2019). LDL follows a discriminative perspective on language, arguing that the relation between form and meaning is fundamentally discriminative (cf. Rescorla \& Wagner, 1972; Wagner \& Rescorla, 1972). Thus, a word's semantics emerges by its resonance with the entire lexicon. For our implementation of LDL, semantic vectors created on a corpus of German news websites with 7,511 dimensions computed via naive discriminative learning (e.g. Baayen \& Ramscar, 2015) were used.

To account for influences of what is potentially not contained within the lexicon, target items for the present paper were taken from a study by Gabriel et al. (2008). In their study, the authors elicited stereotypicality ratings for German role nouns, allowing the present analysis to control for potentially confounding effects of stereotypicality. For each role noun, a so-called target item paradigm was considered. Each paradigm consisted of a word's masculine generic form in the singular and the plural (e.g. Anwalt 'lawyer' and Anwälte 'lawyers'), and a word's masculine and feminine explicit form in the singular and the plural (e.g. Anwalt 'male lawyer' and Anwälte 'male lawyers'; Anwältin 'female lawyer' and Anwältinnen 'female lawyers').

Using measures extracted from the LDL implementation as well as the stereotypicality ratings, a multinomial regression analysis was conducted. The type of paradigm member (e.g. singular masculine generic) was used as dependent variable, while stereotypicality ratings and principal components derived from the highly
correlated LDL measures were incorporated as predictor variables. For stereotypicality, no significant effect was found. The LDL measures, however, showed significant effects. Masculine forms, i.e. masculine generics and explicits, come with significantly higher comprehension quality and denser semantic neighborhoods. Feminine forms, on the other hand, showed significantly higher levels of semantic activation diversity in the singular and significantly lower levels of semantic activation diversity in the plural. Overall, masculine and feminine forms are significantly different in their semantic features, while masculine generics and explicits are highly similar.

Our results indicate that the masculine bias of the masculine generic is due to its underlying semantic features which are shared with masculine explicit forms. A role noun's stereotypicality, in contrast, does not account for its bias. Thus, even though the use of masculine generics might be intended as semantically generic, their resonance with the lexicon, that is more specifically their semantic similarity with masculine explicits, results in an overall biased reading towards the masculine.

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Nominalizations with the suffixes -ee and -ation - A distributional semantic analysis
Viktoria Schneider and Ingo Plag

Nominalizations with derivational suffixes can give rise to interpretations as eventualities, for example, processes or states, like articulation, levitation. Alternatively, nominalizations may also refer to participants in eventualities, like employee, nominee. The derivatives which denote such eventuality-related interpretations are clearly semantically related to the eventuality denoted by their base word (see, e.g., Barker 1998; Plag et al. 2018; Kawaletz 2021; Schneider 2022). With verbs as bases, such eventuality- related nominalizations are straightforward, as verbs ontologically denote eventualities themselves. With nouns, on the other hand, eventuality-related nominalizations are less straightforward due to their ontology, as they standardly refer to entities, not eventualities (see, e.g., Van Valin \& LaPolla 2002; Haspelmath 2001; Szabó 2015). For nominal bases, more semantic decomposition of the base, or inferencing, is needed to identify the relevant eventuality that can be used for the interpretation of the nominalization (e.g., Schneider 2022). Examples of denominal eventuality-related nominalizations are sedimentation, ozonation, biographee, and debtee. The exact nature of the semantics of such denominal eventuality-related nominalizations is largely unclear, since the research on eventuality-related nominalizations focused almost entirely on those with verbal bases.

Based on results emerging from studies of eventuality-related nominalizations, two hypotheses can be formulated. First, deverbal derivatives and their verbal bases should be highly similar in their meaning as they operate on the same eventuality. Second, denominal derivatives and their nominal bases, in contrast, should be less semantically similar to each other, since the pertinent eventuality is not as easily accessible for the word formation process in the first place. These two hypotheses are investigated in the present study.

Distributional semantics has been shown to be a fruitful approach to test semantic similarities and dissimilarities of derivatives (see, e.g., Lapesa et al. 2018; Wauquier et al. 2018; Huyghe \& Wauquier 2020). For the present study, to use such a distributional semantic approach, word vectors were computed using fastText (Bojanowski et al. 2016; Mikolov et al. 2018). Vectors of eventuality-related derivatives with the suffix -ee and -ation and their pertinent bases were then compared using
cosine similarity. As these vectors represent a word's semantics, these cosine similarities, in turn, represent the semantic similarities between words.

We used the cosine similarities to measure the strength of the semantic relation between base and derivative by word class. This strength of relation may, however, also be influenced by at least two other factors. First, there is the relative frequency of a base and its derivative. Higher relative frequency is said to lead to a better segmentability of the resulting derivative (see, e.g., Hay \& Baayen 2003). This effect should lead to an overall higher similarity of base and derivative because the connection of the two words is more clearly identifiable. Second, the polysemy of the base word also influences the cosine similarity. Derivatives usually instantiate one specific reading of the base word. A multitude of readings of a base word leads to a semantic vector for that word that aggregates over all readings. The similarity between a highly polysemous base word and its derivative should therefore be smaller than between a less polysemous base word and its derivative.

A multivariate statistical procedure is needed to take all three things into account at the same time. As the cosine similarities in this study are distributed over an interval between 0 and 1, beta regression is the model of choice. Word class of the base, relative frequency, and polysemy of the base showed high correlation coefficients for the set of -ation bases and derivatives (|rrhoo| > 0.5). To address this potential collinearity problem, we devised a principal component analysis for these three variables. (see, e.g., Baayen 2008; Tomaschek et al. 2018). For the set of -ee derivatives and their bases, no high correlation coefficients were found. Thus, for -ee, the three variables entered the modelling process directly.

The results show significant differences in cosine similarity for denominal and deverbal derivatives and their bases. For derivatives with the suffix -ee, denominal derivatives and their nominal bases are significantly more similar to each other than deverbal derivatives and their verbal bases are. In contrast, for derivatives with the suffix -ation, deverbal derivatives and their verbal bases are more similar to each other than denominal derivatives and their nominal bases. Relative frequency decreases the cosine similarity of derivatives and bases for both suffixes. This is opposite to the prediction. Polysemy of the base decreases the cosine similarity of derivative and base, as expected, but only significantly so for nominalizations with the suffix -ation.

Our results show that eventuality-related nominalizations with the suffix -ation show the expected similarities of derivatives and bases: The deverbal derivatives and their verbal bases are more similar to each other than the denominal derivatives and
their nominal bases. The nominalizations in -ee did not show the expected pattern. We interpret this difference as emerging from a difference in the semantic output category of the suffixes. Derivatives with the suffix -ee create a participant reading, and such a reading is ontologically more closely related to nouns (see, e.g., Barker 1998; Plag 2004; Bauer et al. 2013; Plag et al. 2018; Schneider 2022). Derivatives with -ation, on the other hand, describe mostly processes (see, e.g., Bauer et al. 2013; Plag 2018) which are ontologically more related to verbs (see, e.g., Van Valin \& LaPolla 2002; Haspelmath 2001; Szabó 2015). These findings show that not only the type of base influences the semantic similarity of derivatives and bases, but the meaning of the morphological category in question itself also plays a role.

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## Mass Definite Generics

## Aviv Schoenfeld

## Introduction.

Languages with definiteness and the count-mass distinction differ in whether the definite generic article is forbidden, optional or obligatory in (simplex) mass NPs, (1) (English, German, Spanish).
(1)
a. (\#The) gold is getting more expensive.
(the gold can refer to a kind of gold)
b. (Das) Gold steigt im Preis.
(Dayal 2004:ex.86b)
c. \#(El) agua se encuentra por todas partes.
(Borik \& Espinal 2015:ex.31b)
the water refl found for all parts
'Water is found everywhere.'

Although generic the is forbidden in the simplex mass NPs in (1a) and (2), it is optional in the complex ones in (3), with five sorts of modification. Pesto and pesto sauce are synonyms, so it is modification rather than meaning which licenses the in (3a) and (3b-e) by extension.
(2) (\#The) \{pesto, hating, tuberculosis, tape, wine\} is widespread.
unmodified
(3)
a. (The) pesto sauce is widespread.

1st noun in $\mathrm{N}-\mathrm{N}$ compound
b. (The) electrician's tape is widespread.
modificational genitive
c. (The) hating of minorities is widespread.
d. (The) pulmonary tuberculosis is widespread.
e. (The) French wine is widespread.
classificative ethnic adjective

We take the licensing by modification in (2-3) to be insightful about modification in general, and we attribute the optionality of the in (3) to modifiers having kind-level denotations.

As for (1), the analyses of Dayal (2004) and Borik \& Espinal (2015) have different implications for how languages vary, and we give a new argument for the former from diachrony.

## Background.

Under Dayal (2004:§3.2), properties can shift to kinds via the type-shifts in (4).
(4)
a. AP. $\cap \mathrm{P}$ ( $\cap \mathrm{P}$ defined only if every extension of $P$ has a maximal element)
'The function from property $P$ to its kind-correlate.'
b. $\lambda$ P.ı( $\lambda k$. $\left.P_{\text {taxonomic }}(\mathrm{k})\right)$
'The function from property $P$ to the maximal element in the set of (proper and improper) kinds of P.'
(4a) is covert in English while (4b) is vocalized as the, and (4b) is applicable only if (4a) is not. To illustrate, (4a) is applicable to GOLD; in every situation with gold, the sum of all gold is gold. This applicability blocks (4b) (vocalized as the) from applying to GOLD, explaining the being forbidden in (5a). By contrast, (4a) is inapplicable to LION; in situations with multiple lions, the sum of all lions is not a (singular) lion. This allows (4b) vocalized as the to apply to LION, explaining the being obligatory in (5b).
(5)
a. Widespread ( $\cap$ GOLD) (4b) blocked (\#The) gold is widespread.
b. กLION undefined WIDESPREAD ( $(\lambda \mathbf{k}$.LIONtaxonomic $(\mathbf{k})$ ) \#(The) lion is widespread.

Modification. In Polish, the position of an adjective corresponds to a kind- or instance-level use.
(6)
a. czarny dzięcioł 'woodpecker who is black' (Wągiel 2014:ex.10)
black woodpecker
instance-level use
b. dzięcioł czarny 'specimen of the species Dryocopus martius' woodpecker black
kind-level use

We posit that the sorts of modifiers in (3) have the dual-use in (6), but without affecting word order in English. In support, pesto has a kind-level use in Pesto Genovese is a (widespread) pesto. Also, there is theoretical intuition that modificational genitives like electrician's in (3c) involve reference to kinds (Munn 1995). Lastly, McNally \& Boleda (2004) analyze pulmonary in (7a) as having the kind-level denotation in (8a), which we extend to the modifiers in ( $7 \mathrm{~b}-\mathrm{c}$ ) via $(8 \mathrm{~b}-\mathrm{c})$.
(7)
a. Tuberculosis can be pulmonary.
(McNally \& Boleda 2004:ex.33)
b. Hating can be of minorities.
genitive argument
c. This kind of wine is French.
（8）
a．$\llbracket p u l m o n a r y \rrbracket=\lambda \mathbf{k}$. PULMONARY（k）
（McNally \＆Boleda 2004：ex．35b）
＇The set of kinds which verify the kind－level predicate PULMONARY．
b．$\llbracket$ of minorities $\rrbracket=\lambda \mathbf{k} . \forall \mathrm{w} \forall \mathrm{e}\left[\mathrm{R}_{\mathrm{w}}(\mathrm{e}, \mathbf{k}) \rightarrow{ }^{*} \operatorname{MINORITY}_{\mathrm{w}}(\mathrm{TH}(\mathrm{e}))\right]$
＇The set of kinds s．t．every possible event（e）which they realize（R） has a plurality of minorities（＊MINORITY）as its theme（TH）．＇
c．$\llbracket$ French $\rrbracket=\lambda \mathbf{k}$. ORIGIN（k，France $)$
（Arsenijević et al．2014：ex．17）
＇The set of kinds which come into existence within the spatial domain of France．＇
（9）implements the dual－use assumption on pesto as a modifier（as in pesto sauce）．
a．【inst pesto】 $=\lambda s \lambda x \cdot \operatorname{PESTO}(\mathrm{x})<\mathrm{s},<\mathrm{e}, \mathrm{t} \gg$
instance－level property
＇The function from situations $s$ to the set of sums of pesto in s．＇
b．【subkind pesto】 $\left.=\lambda \mathbf{J} \lambda \mathbf{k} \cdot \mathbf{J}(\mathbf{k}) \wedge \operatorname{PESTO}(\mathbf{k}) \ll \mathrm{e}^{\mathrm{k}}, \mathrm{t}\right\rangle,<\mathrm{e}^{\mathrm{k}}, \mathrm{t} \gg$
kind－level modifier
＇The function from sets of kinds to their intersection with the set of kinds of pesto．＇

We propose that the（non－）occurrence of the in（3）corresponds to two derivations of equivalent propositions．The bare version of（3a）utilizes（9a），whose property－intersection（ $\Omega_{p}$ ）with SAUCE undergoes $n$ ；it is covert in English，hence（10a） has bare pesto sauce．By contrast，the definite version of（3a）utilizes（9b），which prompts SAUCE to shift to SAUCE（the set of kinds of sauce），and the maximal element of the resulting set is picked out by i denoted by the，（10b）．In both cases，the argument of WIDESPREAD is pesto sauce as a kind．
(10)
a. WIDESPREAD ( $\left.\cap \lambda w \lambda x . \operatorname{PESTO}_{w}(x) \quad \cap_{p} \lambda w \lambda x . \operatorname{SAUCE}_{w}(x)\right)$

WIDESPREAD ( $\cap \lambda w \lambda x . P E S T O w(x) \wedge \operatorname{SAUCE}_{w}(x)$ )
Pesto sauce is widespread.
b. WIDESPREAD (। $\lambda \mathbf{J} \lambda \mathbf{k} \cdot \mathbf{J}(\mathbf{k}) \wedge$ PESTO(k) SAUCE WIDESPREAD ( $\lambda k . \operatorname{SAUCE}(k) \wedge \operatorname{PESTO}(k) \quad)$ The pesto sauce is widespread.

We extend analysis (10) to Polish, which lacks a definite article but the use of adjectives manifests in word order, (11) (Wągiel p.c.).
a. Pszenica zwyczajna jest rozpowszechniona w Europie. wheat common is widespread in Europe.LOC 'Common wheat (Triticum aestivum) is widespread in Europe.'
b. Zwyczajna pszenica jest rozpowszechniona w Europie. common wheat is widespread in Europe.LOC 'Wheat which is ordinary for wheat is widespread in Europe.'

In our analysis, post-nominal zwyczajna 'common' in (11a) denotes a kind-level modifier which applies to WHEAT and returns a set whose maximal element is Triticum aestivum. This kind is picked out by I as in (10b), except । is covert in Polish. By contrast, pre-nominal zwyczajna in (11b) denotes an instance-level property which combined with WHEAT returns the property of instances of wheat which are ordinary for wheat. This property shifts to a kind via $\cap$, as in (10a).

Why does modification license mass definite generics in English? In our analysis, it is due to changing the locality facts. When PESTO is most local to the kindlevel predicate, the mismatch is repairable via the highly-ranked $n$, which blocks lowerranked type-shifts like (4b). By contrast, when PESTO is most local to the denotation of the modifier, the mismatch is unrepairable with $\cap$, which allows lower-ranked shifts like $\cap p$ in (10a) or the shift from SAUCE to SAUCE in (10b). The latter needs i denoted by the to achieve reference to kinds, hence modification licenses the definite generic article in mass NPs in English.

## Cross-linguistic.

(12) is Borik \& Espinal's (2015:ex.63) account of the definite article being forbidden in (1a) and obligatory in (1c).
a. Basic intension of noun English instance-level property Spanish kind-level predicate
b. Is $\cap$ in the language? yes no

Following (12), the basic intension of gold is a property to which $n$ is applicable, hence the is forbidden in (1a). By contrast, the basic intension of agua 'water' is a set of kinds whose maximal element is water as a kind. The only way to refer to this kind is via i denoted by el, hence it is obligatory in (1c). (12) could extend to account for the optionality in (1b) by positing that German has covert $n$ and Gold is ambiguous between a property and a kind-level predicate, i.e. the bare version of (1b) results from covert $n$ applying to the property-denotation of Gold, and the definite version results from denoted by das applying to the kind-predicate denotation. However, it is unclear why languages should vary in the two ways in (12).
(13) is Dayal's (2004) account of (1), which assumes that । is a canonical function of the definite article while $n$ is non-canonical. (13a) has the denotations of the definite articles, and it follows from (13b) that although the German definite article can denote ${ }^{n}$, this does not block covert ${ }^{n}$. Thus, bare and definite (1b) result respectively from covert $\cap$ and $\cap$ denoted by das.

English
Spanish
a. The definite article lexicalizes ।
b. A covert type-shift is blocked if it is equivalent to any a canonical any function of an overt determiner.

Unlike (12), diachrony offers an answer to why languages vary as in (13). English, German and Spanish represent consecutive stages in a diachronic progression where the definite article expands in use (Mainz 2020), which we formalize as acquiring $\cap$ in addition to $ו$. We further assume that there is a delay between acquiring $\cap$ and the universal Blocking Principle in (14) taking effect to block covert $\cap$. Thus, the optionality in (1b) is due to German residing in the delay, while the obligatoriness in (1c) is due to (14) "catching up" after the Spanish definite article has acquired $n$. Thus, we argue for (13) over (12) as an account of (1).

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## Quando causalidade e modalidade se combinam

## Augusto Soares SILVA

Causalidade e modalidade são categorias conceptuais distintas e complexas, com expressões lexicais e gramaticais diversas e produtivas nas línguas e uma longa tradição na literatura filosófica e linguística. Apesar de serem noções bem diferenciadas uma da outra, não raramente se combinam. Este estudo procura responder às seguintes questões: (i) como se combinam as categorias de causalidade e modalidade, (ii) porque se combinam estas duas categorias semânticas e (iii) a relação entre ambas as categorias é simétrica ou assimétrica.

Analisaremos dois domínios de combinação de causalidade e modalidade: os verbos modais (Oliveira \& Mendes 2013), quer os verbos semiauxiliares modais (poder, dever, ter (de), haver (de)) quer alguns verbos plenos modais, designadamente os verbos permissivos e os verbos impeditivos, e uma subcategoria da voz média em português, designada como "média caracterizadora" (Duarte 2013) e que as gramáticas de referência do português tomam como preenchendo a totalidade da voz média na língua portuguesa (Silva \& Afonso 2021, com posição diferente).

Os verbos modais exprimem também dois padrões de causalidade ou causação. Por um lado, a causação coerciva de tipo 'fazer' exprime-se ora no mundo social nos modais deônticos de obrigação (dever, ter de, obrigar) ora no mundo mental nos modais epistémicos de necessidade (dever, ter de, precisar de). Por outro lado, a causação negativa de tipo 'deixar’ (Silva 1999, 2007) instancia-se ora no mundo social nos modais deônticos de permissão (poder, permitir, autorizar) ora no mundo mental nos modais epistémicos de possibilidade (poder, permitir, possibilitar). Esta semelhança de padrões entre a obrigação e a necessidade epistémica e entre a permissão e a possibilidade epistémica motiva a polissemia regular dos verbos modais em português e em muitas outras línguas, em que um mesmo verbo apresenta sistematicamente usos deônticos e usos epistémicos.

A construção média caracterizadora, porque denota uma propriedade inerente do referente designado pelo sujeito gramatical, ou potencial, na medida em que essa propriedade inerente do sujeito permite que determinado evento possa vir a ocorrer, como em X lê-se/bebe-se/lava-se bem/mal, exprime modalidade do padrão da possibilidade epistémica e causalidade do tipo ‘deixar’ (ver Davidse \& Heyvaert 2007
e Palma Gutiérrez 2022 sobre a construção média em inglês). A modalidade da possibilidade e a causalidade do tipo 'deixar' são agora expressos, não por um verbo modal, mas por uma construção de se.

Causalidade e modalidade combinam-se nestes dois casos porque estas duas categorias partilham o modelo cognitivo comum de dinâmica de forças (Talmy 2000), isto é uma oposição de forças e contraforças. Mais especificamente, uma oposição de forças entre uma entidade que exerce força (Agonista) e que apresenta uma tendência intrínseca de força ora para o movimento ou para o repouso e uma entidade que exerce uma contraforça (Antagonista); e o resultado desta interação de forças é ora a ação ora a inação do Agonista. As forças e as barreiras, ubíquas no mundo físico, são metaforicamente projetadas no mundo social e moral das relações interpessoais e das normas sociais e no mundo mental do raciocínio e das inferências. Assim, a força coerciva está na base da causalidade do tipo 'fazer' e da modalidade da obrigação e da necessidade epistémica, ao passo que a força não impeditiva está na base da causalidade do tipo 'deixar', da modalidade da permissão e da possibilidade epistémica e da construção média caracterizadora ou potencial.

Sobre a relação entre as duas categorias, verifica-se uma assimetria relativa: é a modalidade que mais natural e frequentemente se combina com a causalidade e esta assimetria modalidade > causalidade resulta do facto de a modalidade dizer respeito à realidade potencial (Langacker 2008: 306) e não à realidade factual nem à realidade projetada. No entanto, o desenvolvimento diacrónico do verbo causativo deixar (Silva 1999) mostra uma evolução semântica da causalidade para a modalidade.

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The study presents role of spatial metaphor in semantics of pronouns. Spatial metaphor is engaged mainly in expressing various, mainly social, attitudes, and as this source domain is experience-based domain it is widely used for conveying meaning. The distance and proximity can express grammatical and metal distance, plays role in expressing attitude and tabu. Also, in case of plural personal pronouns, space metaphor is used to expressing exclusivity and inclusivity, or such virtual use that conveys more complex meaning as identification with a group or conveys participation in the action scenario. As our language activity, grammatical and lexical choices are governed by the way we perceive our world, and for this study specifically social world, thus the choice of specific pronoun is not only a grammatical choice, but takes part in construing. Distance and proximity expresses positive or negative attitude, solidarity, inclusivity and exclusivity and mental distance, providing also a way to refer to tabu. The above mentioned usage can be observed both in Polish and Hungarian on material originating from the researcher's corpora and others, active in field researchers. (Laczkó-Tátrai 2012, Domonkosi 2010, Tátrai 2012).

Use of language is considered to be a social cognitive process, which is facilitated by cooperative human nature, intentionality and social cognitive abilities (Croft 2004, Tomasello 2002, Verschueren 1999, and Tátrai 2011). Therefore social relations and attitudes to others will appear also in the usage of pronouns, mainly through spatial metaphors. Pronouns are grounding (Langacker 2008) elements and thus basic cognitive processes (perception, categorization, attention, schematization (Maruszewski 2011), will have an impact on our linguistic choices also during socialcognitive activity (Kossakowska-Kofta 2009). To process and understand the social context, we need to mobilize knowledge about the social world which is organized in schemas (see also: Bartlett 1932, Bruner 1957, Neisser 1976). The schemes contain general, abstract knowledge that is applied to specific implementations (Fiske and Tylor 1991). The language symbols used are interpreted by the recipient based on his/her mental state, his/her background knowledge related to the referenced scene and the language symbol schemes related to the reference scene, and on this basis, he/she also interprets the interpersonal relationship offered by the speaker.

Space - as an experience-based domain - is a rich metaphor source for expressing an attitude, politeness, mental distance and tabu and can be expressed
also by pronouns. Although the work presents the function and employment of space in Hungarian pronouns, as the metaphor itself is as universal as the human experience of space, the findings can be applied to other languages. The use of space, the expression of physical distance, is closely related to the expression of attitude, as it processes the behaviour in which a positive attitude is expressed by a decrease in spatial distance and distance is associated with dislike or fear (Pease 2011, see also Hall 1982).

In this sense, the use of $\mathrm{V} / \mathrm{T}$ forms can be considered not only as a courtesy formula but also by expressing trust and intimacy in the case of T forms, the distance evoked by V forms. It is no coincidence, then, that in addressing systems, T forms evoke closeness, intimacy, trust, and identification, V forms - through the metaphor of space (Tolcsvai Nagy 1999) - evoke distance, and in this connection a relationship of subordination.

The plural personal pronoun forms, and in this case primarily the 1st plural forms appear in few functions expressing solidarity, power, modesty, identification with a group (see also Jobst 2007, Börthen 2010, Łysiakowski 2005), in empathic use or even virtual use signalling participation in action scenario (Veres-Guśpiel 2017). From this point of view, the plural personal pronouns and the inflectional morphemes are capable to express various attitudes, manipulative use, and community formation. Moreover, the use of 1 st plural forms can affect the way the recipient interprets the utterance.

Proximity pronouns can be used to express a negative attitude in applications where the proximity pronoun (this, these) replaces the personal pronoun (he, they) and thus objectifies them. Building mental distance appears also when talking about tabus. Tabu notions can be described by not naming directly metaphorical lexical elements, but also one can refer to them with demonstrative pronouns, which are denoting something that is perceived as shameful, or that (in utterer's opinion) shouldn't be named.

Keywords: space metaphor, personal pronouns, demonstrative pronouns, attitude, proximity, distance, cognitive linguistics, pragmatics

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## Towards a domain-neutral prepositional semantics

## Andreas Widoff

The domain of space enjoys a privileged status in semantics, especially in prepositional semantics, where spatial uses of prepositions are often the centrepiece of investigation. Coupled with this focus on space is often the proposition that spatial language forms the basis for non-spatial language. Localism, as the proposition is called, is espoused by various schools of semantics, most strongly so by cognitive linguistics (e.g. Lakoff 1987, Talmy 2000, Tyler \& Evans 2003). Important support also comes from conceptual semantics (Jackendoff 1983, 1991). Formal semantics is less clear on the matter (e.g. Zwarts 2005, Zwarts 2017, Kracht 2020), though the preferential treatment given to space may be seen as a weak support for localism.

Our paper argues that there is a feasible but underdeveloped alternative to localism: domain- neutral prepositional semantics. This approach investigates possible generalisations that are overlooked in spatial semantics. Its basic thesis is that the semantics of many prepositions encode abstract, domain-neutral features. These features carry no domain-specific information but provide general schemas that are interpreted by specialised systems. For instance, a pre- position like to - often taken to be a goal path preposition - would contain no information with respect to paths in space. The spatial interpretation arises through interaction with a spatial system.

We illustrate this approach with two Swedish prepositions, the ablative från ('from') and the lative till ('to'), starting out in the spatial domain in order to show how spatial uses afford generalisations that transcend the spatial domain. The procedure begins by circumscribing the minimal spatial content of the prepositions.

Previous work in spatial semantics suggests that dynamic prepositions, such as English to, from, into and onto, are correlated with static prepositions. The latter denote configurations that occur at some point of the paths denoted by the former: from and to correspond to at while into and onto correspond to in and on. Such correspondences are generally taken to be cross- linguistic (Bennett 1975, Jackendoff 1983, 1991, Asher \& Sablayrolles 1995, Kracht 2002, Zwarts 2005, Pantcheva 2011). What to make of the proposed correspondence depends on the understanding of at. According to Zwarts \& Winter (2000), at denotes a space external to an object, as opposed to in, which denotes a space internal to an object. According to Bennett (1975), at is neutral in this regard and a hypernym of both on and in.

For Swedish från and till, the correspondence yields the correct predictions only under Bennett's description. Both prepositions are neutral to the distinction between proximal (near) and direct localisation (in, on). We shall call this configuration coincidence. In a context, either interpretation may be strongly favoured. For (1a), the favoured interpretation is proximal, and for (1b), it is direct. Pragmatic factors account for the variation.
a. De åkte till butiken.
'They drove to the store.'
b. De åkte till Danmark.
'They drove to Denmark.'

In sentences with a motion verb, such as (1), paths are clearly an important aspect. But there are reasons to believe that paths are not encoded by the prepositions as such. In some spatial uses, paths are not salient, if at all present. In (2), the path, though inferable, is of little im- portance due to the saccadic nature of gaze shifts and the inconspicuousness of any such path. (2) more importantly tells us that the gaze went from the state of being at the scene to the state of not being at the scene.
(2) Han vände blicken från scenen.
'He turned his gaze from the scene.'

It is also revealing to consider phrases in isolation from any verbal context. (3) shows three noun phrases denoting a part and a whole. Some situations permit either of the three expressions. The difference then lies in which aspect of the relationship is highlighted. Från highlights the origin of the part and till highlights the purpose, the intended place of the part. Av is neutral and simply expresses the parthood relationship. Unlike av, från and till express an order, but there is no path.
(3)
a. en del till bilen

> 'a part for the car'
> b. en del från bilen
> 'a part from the car'
> c. en del av bilen
> 'a part of the car'

Spatial non-motion events provide similar evidence. In (4), the light is first in the state of being red, then in the state of being green. The event is spatial, but there can be no path because there is no motion. Localist accounts, however, see such uses as derived from motion (e.g. Talmy 2000). We submit this runs counter to good theoretical practice, as it purports to derive the simpler concept (change) from the more complex concept (motion). The former is inherent in the latter.
(4) Ljuset växlade från rött till grönt.
'The light shifted from red to green.'

These examples suggest a minimal specification for från and till. The prepositions do not encode paths. They encode sequences of two conditions. If the configuration as previously suggested is coincidence, then från encodes a coincidence (c) that precedes a non-coincidence $(\sim \mathrm{c})$ and till a coincidence that succeeds a noncoincidence. As expected, one is the converse of the other:
(5) $\llbracket f r a ̊ n \rrbracket=(c, \sim c)$
$\llbracket t i l l \rrbracket=(\sim \mathrm{c}, \mathrm{c})$

By removing the notion of paths from the meaning of the prepositions, we are able to formulate a semantic characterisation schematic enough to afford non-spatial interpretations without assuming localism. Coincidence is then understood as a domain-neutral condition of agreement or correspondence for which the prepositions encode converse orders of satisfaction. This configuration naturally has different realisations corresponding to ontological differences be- tween domains. For spatial
uses, coincidence means to be in a particular place (i.e., the thing coincides with the place). For temporal uses as in (6a), coincidence means to occur at a particular time. In (6b) and (6c), where we assume the book to be an abstract object, coincidence is interpreted as being in the immediate context of the whole book as opposed to some distal, detached context. This distinction is largely a matter of praxis with no particular spatial manifestation. For a change of state as in (6d), coincidence means agreement between two categorisations, and in (6e), it means the presence of a property in a thing.
(6)
a. Han arbetar från morgon till kväll.
'He works from morning to evening.'
b. ett kapitel till boken
'a chapter for the book'
c. ett kapitel från boken
'a chapter from the book'
d. Huset förvandlades från ruckel till drömhus.
'The house was transformed from a shack to a dream house.'
e. Han gick från ledsen till glad på ett ögonblick.
'He went from sad to happy in an instance.'

Evidence for a domain-neutral description comes from the parallelism and agreement between such varied uses. There are indications that also some of the inferences needed for domain- specific interpretations have domain-neutral properties. For instance, the inference of a path in some spatial expressions seems analogous to the inference of an amount of time passed in (6a) and the inference of a gradual transformation in (6d). In (6e), on the other hand, there is no gradation, and (4) above is vague on the matter, telling in favour of a neutral analysis. Localist accounts see similarities of this sort as evidence for conceptualisation of non-space in terms of space (e.g. Jackendoff 1983, Talmy 2000). But an explanation in terms of abstraction is equally possible: here we posit a domain-neutral distinction between continuous and
discrete sequence. Our analysis requires no domain-specific properties to be encoded in från and till, thus providing an alternative to the domain specific analyses more common in contemporary semantics. Though this approach may require reformulations of some notions in spatial semantics, it is geared towards integrating previous analyses into the mechanisms responsible for domain-specific interpretations. Its contention is not that spatial semantics is wrong but that it is limited. The benefit of this line of research is that it clears the way for possible generalisations that could provide insights into semantic patterns that are inaccessible from a purely spatial point of view.

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