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Conjectural Future in Catalan/Spanish Bilingual Speakers: Evidentiality and Bilingualism

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In our presentation, we will introduce the results of a study on the use and mastery of the future tense to express conjecture by Catalan/Spanish bilinguals when using each of these two languages.

In Romance languages, both the simple future (hereafter, S-FUT) and the compound future (C-FUT) can receive conjectural interpretations, which are linked to inferential evidentiality (Squartini 2001, Escandell-Vidal 2014): S-FUT and C-FUT refer to situations whose reality the speaker cannot ascertain within the discourse situation, and whose source of information is the speaker's own inference. However, the conjectural interpretations of S-FUT (and less markedly, that of C-FUT) are subject to different cross-linguistic restrictions. While in Catalan such interpretations are rare (indeed, some linguists consider them ungrammatical) and are found with stative verbs only (Aramon i Serra 1957, Badia i Margarit 1962, Pérez Saldanya 2008), in Spanish they are favoured by but not limited to states. In fact, in most varieties of Spanish (Escandell Vidal 2010, Lara Bermejo 2021), conjectural interpretations of S-FUT and C-FUT are more frequent than purely chronological ones. Moreover, cases of conjectural future in Spanish can appear in concessive constructions, while concessive constructions with S-FUT and C-FUT are rare in Catalan. In (1) and (2) below, we give two examples of conjectural and concessive future, respectively (i.e. two cases of conjectural future, one of them in a concessive construction) in Spanish. These same uses would be possible in Catalan, but infrequent in spontaneous language use:

- (1) Lllaman a la Puerta. ¿Será el cartero?
There's a knock at the door. Will it be the postman?
- (2) Será muy guapo, pero es muy antipático.
He will be very handsome, but he is very unfriendly.

Thus, by comparing the use of the future of conjecture by Catalan/Spanish bilinguals, we address the variation in evidentiality strategies in Romance languages, analysing the differences in the knowledge and use of such strategies shown by bilingual speakers of two Romance languages in contact (namely, Catalan and Spanish). In our experimental study, 100 bilingual speakers from the Balearic Islands, with different degrees of Catalan/Spanish linguistic dominance, perform two tasks: in the first task, participants have to choose between S-FUT and two other ways of expressing conjecture in a series of utterances; in the second task, participants have to decide whether a set of constructions involving the use of S-FUT and C-FUT to express conjecture (with different aspectual configurations affecting the grammaticality of the construction) are acceptable. The responses of bilingual speakers are compared with those of a group of 30 monolingual speakers of Spanish.

The results of earlier work (Authors 2023) indicated that bilinguals and monolinguals were generally able to distinguish grammatical and ungrammatical uses in each language they master. However, more variability (in both Catalan and Spanish) was found in the bilinguals than in the monolingual Spanish group. Moreover, the use of conjectural S-FUT and C-FUT in Spanish was scarce in the bilingual group compared to the monolinguals. Even so, among the bilinguals, no clear impact of linguistic dominance was detected. We conclude that this could

be related to the fact that the conjectural future is rare in the Balearic Islands, not only in Catalan but also in Spanish (unlike in the varieties of the monolingual regions of peninsular Spain). Thus, as a result of the language contact situation, the restrictions on the conjectural future are stricter in the Spanish spoken in the Balearic Islands than in the peninsular variety.

In this context, we will now focus mainly on the linguistic history of the participants and its relation to their grammaticality judgments in each language. Other variables, such as frequency of use of each language and linguistic attitudes, will also be considered. Our group and individual analyses will provide information on the possible effects of individual language experiences on the degree and types of language competence developed, and on individual preferences and choices in using and interpreting utterances with conjectural future in the two languages. Finally, our results will be related to the possible convergence of evidentiality-related structures in the two languages. This convergence, in turn, can lead to internal linguistic change accelerated by language contact and also by transfer from the dominant language.

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Après après... au tour de *ensuite*. De l'émergence d'un nouveau marqueur pragmatique

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Notre étude s'inscrit dans la continuité de Le Draoulec (2017) et Le Draoulec & Rebeyrolle (2018), qui examinaient un emploi méconnu de l'adverbial *après* : un emploi où *après*, placé en tête de phrase, perd sa dimension temporelle pour introduire une distanciation, une rupture énonciative par rapport à l'énoncé qui précède (cf. (1)). Cet emploi pragmatique¹ s'avère très proche de celui de *maintenant* (placé, également, en tête de phrase) (cf. (2)).

- (1) Les zadistes, pour moi c'est une bande de jean-foutre mais **après** chacun pense ce qu'il veut (France Inter, micro-trottoir, 18/01/2018)
- (2) J'avais bien compris et c'est contre ça que je te mettais en garde. **Maintenant**, tu n'es pas obligé de me croire. (audiofanzine.com)

La rupture énonciative marquée par l'adverbe *maintenant* a fait l'objet de nombreuses études. Elle a d'abord été mise en évidence par Nef (1980), selon qui *maintenant* « opère sur les implications (en un certain sens intuitif) de l'acte de langage véhiculé par la phrase précédente » (p. 156), en jetant sur ces implications un doute, en les atténuant, les suspendant, voire les annulant. Par la suite, d'autres auteurs ont continué d'explorer le fonctionnement pragmatique de *maintenant*, parmi lesquels on mentionnera Nyan (1991), Achard (1992), Bertin (2001), Jollin-Bertocchi (2003), De Mulder (2006), De Mulder et Vettters (2008), Saussure (2008), Mellet (2008).

Pour *après* pragmatique en revanche les études sont peu nombreuses, alors que celui-ci est aujourd'hui massivement utilisé à l'oral, où il est même surreprésenté par rapport à *maintenant*. Cette surreprésentation à l'oral correspond à une différence de style – plus contrôlé pour *maintenant*, plus relâché pour *après* (cf. Le Draoulec (2017)). D'autres différences fines de fonctionnement peuvent cependant être mises au jour, héritées des propriétés associées à leurs emplois temporels – déictiques pour *maintenant*, anaphoriques pour *après*. Le même résultat (l'expression d'une rupture) est ainsi atteint en suivant des instructions différentes : alors que dans le cas de *maintenant*, la rupture avec le contexte précédent coïncide avec un retour au contexte d'énonciation (cf. De Mulder et Vettters (2008)), dans le cas de *après* en revanche, la rupture est associée, du fait de son caractère anaphorique, à une forme de continuité du discours (cf. Le Draoulec & Rebeyrolle (2018)).

Dans la présente étude, nous nous proposons d'explorer le fonctionnement d'un nouveau candidat (anaphorique) au marquage de la rupture : *ensuite* nous semble aujourd'hui apte (du moins à l'oral, et plus particulièrement chez les jeunes locuteurs) à prendre la suite de *après*, dans des exemples du type de :

- (3) D'accord je t'ai réveillée, mais bon **ensuite** ça partait d'une bonne intention
- (4) J'ai eu 14. Pas terrible. Non mais **ensuite** ça va parce que la meilleure note c'est 17,5

Ces deux occurrences, qui sont l'œuvre de la même personne (une petite fille de douze ans), donnent à voir un usage étonnant, pour nous peu familier, de *ensuite*. Il n'est pour autant pas isolé, puisqu'on le relève également chez des locuteurs adultes, comme en (5) :

- (5) Je pense que parmi les dirigeants de l'Église de France et à Rome, il y a une volonté de faire la lumière. **Ensuite**, on est de nouveau encore une fois en présence d'un système de pouvoir masculin, y a des résistances [...] (France Culture, *Les matins*, 12/11/2018)

¹ Dont Saussure et Morency (2013) signalaient l'existence (p. 349).

On le retrouve aussi sur le web (et plus particulièrement sur des blogs, des forums, où l'écrit se confond à peu près avec l'oral), dans des exemples du type de :

- (5) Vu comme le siège conducteur à l'air ravagé et le cuir du volant bien luisant, je pense que tu peux facilement lui rajouter 250000 bornes. Bon **ensuite**, c'est pas moi qui achète, libre à toi de jouer à la roulette russe. (autotitre.com/forum)

Il s'agit en particulier de configurations où *ensuite* est étayé, dans sa fonction de marqueur de rupture, par d'autres marqueurs (tels que *mais*, *bon*, *enfin*) allant dans un sens similaire, ou encore par des constructions clivées mettant en scène la prise de distance subjective du locuteur².

Nous examinerons les diverses facettes de ce phénomène émergent, en nous efforçant de mettre au jour la singularité du fonctionnement pragmatique de *ensuite* au regard de celui de *après*. Pour ce faire, nous nous appuyerons sur Saussure et Morency (2013), qui montrent que *ensuite* est à l'origine un adverbe sériel plutôt que temporel. Nous défendrons l'hypothèse selon laquelle l'usage pragmatique de *ensuite* doit se comprendre à partir de cette valeur originellement sérielle – ce qui permettrait d'expliquer, au-delà du partage de propriétés anaphoriques, ses différences de fonctionnement avec *après*.

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² Comme c'est le cas pour *après* (cf. Le Draoulec (2017)).

Tense, finiteness and discourse coherence: Lessons from Abaza oral narratives

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It is generally accepted that finiteness as a cluster of properties of verbal forms heading independent clauses (Koptjevskaja-Tamm 1999; Nikolaeva 2010) correlates with discourse foregrounding of events expressed by these clauses (Hopper & Thompson 1984: 736-744; Wårvik 2004). At the same time, it is known that sequential events in the main narrative line, being typically foregrounded, are often encoded by converbs or “medial verbs” rather than finite verbal forms (Haspelmath 1995; Givón 2001: Ch. 18; Kibrik 2013; Chamoreau 2016). We report a case-study from Abaza, a polysynthetic Northwest Caucasian minority language of Russia, where the status of events in narrative chains is non-trivially reflected in their hybrid morphological encoding sharing features of both finiteness and non-finiteness. Our data comes from the recordings of the “Pear stories” (Chafe ed. 1980) obtained from four native speakers in 2021 as well as from a small corpus of spontaneous oral narratives recorded in 2017–2018.

Abaza shows a fairly consistent distinction between finite and non-finite verbal forms. The former have dedicated suffixes, e.g. the Declarative *-d*, occurring in the Present, Neutral Future and the otherwise unmarked Aorist (past perfective), as well as the Retrospective suffix *-n*, occurring e.g. in the Imperfective Past. Non-finite verbal forms are either unmarked or feature one of the numerous dedicated affixes, e.g., the Adverbial suffix *-ta*.

The tense forms most commonly found in narrative chains are the Aorist in *-d* and its retrospective counterpart (Retro-aorist) in *-n* (1), which, while formally finite, shows some properties of medial verbs, e.g. only rarely occurs independently. Both forms are past perfectives, but differ in their discourse status; while Aorist is typically found in the end of an episode, the Retro-aorist tends to encode chain-medial events linked by causal relationship (1) or belonging to the same dynamic scenario (2) (Schank & Abelson 1977; Kibrik 2013).

- (1) *háq^wə-k* *d-a-qa-pá-n* <...> *a-qə-št-d*
stone-INDF 3SG.H.ABS-3SG.N.IO-LOC-jump-RS 3SG.N.IO-LOC.ELAT-fall.ELAT-DCL
‘He stumbled on a stone and (everything) fell down.’
- (2) *d-á-k^w-ča-n* *də-žə-k^w-lə-χ-d*
3SG.H.ABS-3SG.N.IO-LOC-sit-RS 3SG.H.ABS-LOC.ELAT-LOC-go_out-RE-DCL
‘He sat (on the bicycle) and drove away.’

Abaza speakers often employ the historical present strategy in narratives, encoding the main line events by Present forms in *-əj-d*. Remarkably, under conditions similar to the occurrence of the Retro-aorist in past-tense narratives, in present-tense narratives forms with the Adverbial suffix *-ta* attached to the declarative Present marker are found (3).

- (3) *χ-čá-k* *ʃa-qə-j-χ-əj-d-ta*
three-apple-NUM CSL-LOC.ELAT-3SG.M.ERG-take-PRS-DCL-ADV
a-sabáj-k^{wa} *j-ʃa-rə-j-t-əj-d*
DEF-child-PL 3PL.ABS-CSL-3PL.IO-3SG.M.ERG-give-PRS-DCL
‘He takes three apples and gives them to the children.’

Both the Retro-aorist and the Adverbial Present forms share finite and non-finite features, which iconically reflects their functional duality as expressing events that are, on the one hand, foregrounded and, on the other, integrated into larger discourse units. Moreover, the adverbial suffix can attach to some other finite forms as well, as e.g. the Modal Future in *-p* (4), and the narrative texts that we have analysed suggest that all such hybrid forms show parallel discourse properties encoding foregrounded events belonging to the same coherent microepisode.

- (4) *sará aráj a-televízor-g'áj na-s-áχ^w-p̣-ta*
 1SG PROX DEF-tv_set-ADD TRL-1SG.ERG-take-NPST.DCL-ADV
j-h^wa-t s-qə-s-p̣
 3SG.ERG-say-DCL 1SG.ABS-LOC-pass-NPST.DCL
 'I'll take this tv-set, he said, and shall cross [the river].'

By contrast, the genuinely non-finite adverbial forms in which the suffix *-ta* attaches to the verbal stem without any tense markers encode backgrounded situations simultaneous to the event expressed in the main clause (5).

- (5) *č'k^wán-χ^wác-k d-śa-mś^wájs-əj-d*
 boy-little-INDF 3SG.H.ABS-CSL-travel-PRS-DCL
velasipéd-k d-á-k^w-č^wa-ta
 bicycle-INDF 3SG.H.ABS-3SG.N.IO-LOC-sit-ADV
 'A little boy is approaching riding [lit. sitting on] a bicycle.'

Thus the Abaza data shows that a careful analysis of narrative structure is essential for the understanding of the functions of verbal forms and of the motivations behind their apparently paradoxical formal properties. It also supports the view of (non)finiteness as a gradual phenomenon (Nikolaeva 2013) and shows that variable degrees of (non)finiteness reflected in verbal morphology can signal subtle differences in discourse status of events and be employed by speakers to manage narrative coherence.

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Verba dicendi et scribendi, future perfect and pluractionality: a case study.

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This paper addresses the question of the functions of future perfect in Ancient Greek. In particular, the connection between future perfect, the perfect (Brugmann 1916; Wackernagel 1928; Sihler 1995; Giannakis 1997; 2014; Willi 2018) and pluractionality (Cusic 1981; Bertinetto/Lenci 2012) is investigated.

The derivation of the future perfect from the perfect and its resultative function are extensively discussed and not all authors agree on the perfective origin of the future perfect. Some authors (Magnien 1912; Chantraine 1942; 1945) suggest that the future perfect descends from the old desiderative category, which is well attested in Sanskrit. According to this origin, the future perfect encodes desiderative values and has no difference in meaning with the non-reduplicated future.

This study analyses the themes and the endings of the future perfect that are attested from Homer to the Hellenistic era to test the hypothesis that this category developed in the perfect paradigm during the alignment of the perfect with the present-aorist system (Niepokuj 1997; Drinka 2003).

This alignment between future perfect and perfect suggests that the future perfect can be considered a resultative category too. Regarding this issue, the occurrences of the future perfect are examined with particular attention to the phrases and adverbials that combine with this category. Moreover, the possible connection between the resultative meaning of the future perfect and the pluractional value of reduplication (Magni 2017; Lazzeroni/Magni 2018) is investigated.

The corpus of the present study suggests that the future perfect of the *verba dicendi et scribendi* in the treatise texts (e.g., philosophical or medical texts) has resultative functions and that these forms codify the strong commitment of speaker towards the realization of the action (Orlandini/Pocetti 2017). Consequently, these forms are often used as discourse markers to indicate internal references within the text. This function seems to be also linked to the expression of external pluractionality and of a repeated event, since these forms often occur with iterative adverbials (e.g., αὔθις ‘again’, ἐφεξῆς ‘thereafter’, πλέον μέτ’ ὀλίγον ‘more in a second moment’).

To sum up, this kind of verbs shows that the future perfect is a resultative construction and not an anterior tense (Comrie 1985; Perel’muter 1988) and that this category is compatible with durative expressions (Nedjalkov/Jaxontov 1988).

Keywords: future-discourse markers-speaker commitment

Talk in-person.

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Aspects for Default Present Tense: Evidence from English aux-drop construction

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Keywords auxiliary drop, tense recovery, stativity, habitual aspect, present tense

Introduction Aux-drop is a phenomenon in spoken English where the fronted auxiliary in a question may be left unpronounced (Fitzpatrick, 2006). I focus on the three constructions in (1). Among these, only (1a) gets the past tense reading as *did* (in bold) while the rest gets the present tense reading on its dropped auxiliary.

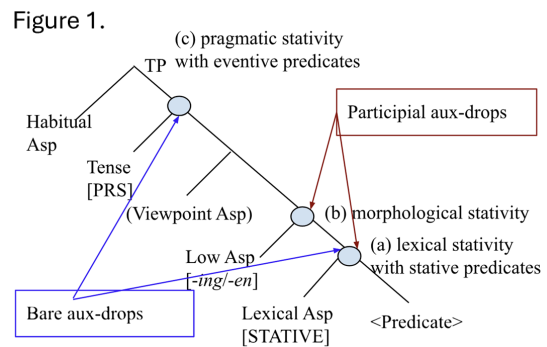
- (1) **Bare infinitive aux-drop sentences** (*'Do' drop + bare infinitives*)
- a. You sell your car? (=Did you sell your car?) c. He like cats? (=Does he like cats?)
 - b. You sell cars? (=Do you sell cars?) d. He like my cat? (=Does he like my cat?)
- Past participial aux-drop sentences** (*'Have' drop + past participle*)
- e. Anybody seen John? (=Has anybody seen John?)
- Present participial aux-drop sentences** (*'Be' drop + present participle*)
- f. Anybody going home? (=Is anybody going home?)

I aim to account for how the tenses in both bare and participial aux-drop sentences are determined. **Previous studies** (Fitzpatrick, 2006 and Déchaine, 1991) suggest that the tense of aux-drop sentences is solely computed from the lexical aspect of the predicate depending on the specificity of the object by the so-called *'factative effect'* (Déchaine, 1991): In this 'tense by lexical aspect' approach, lexically stative aux-drop predicates are claimed to get present tense, lexically eventive aux-drop predicates with a specific object past tense; and modality is not considered as a possible option. Fitzpatrick (2006) assumes that participial aux-drop constructions, namely, progressives and perfects, always get the present tense because they are considered 'stative'. **Counterexamples** However, I report counterexamples where lexically eventive predicates with a specific object can get present tense as in (2a), and even modal reading (i.e., present tense of the modal *woll*) as in (2b). Also, stative predicates can get past reading when linguistic TT is provided as in (2c), or contextual TT as in (2d).

- (2) **Eventive bare aux-drops with present and modal reading**
- a. He eat his soup cold? (=Does he eat his soup cold?) present reading
 - b. Add fries with that? (=Would/Will you add fries with that?) modal reading
- Stative bare aux-drops with past reading**
- c. You enjoy the party last night? (=Did you enjoy the party last night?) past reading
[Context: You have a cat for an adoption. A person who is interested in your cat visited your house when you were not there. Your roommate instead greeted the visitor. You came back from school and ask your roommate.]
 - d. He like my cat? (=Did he like my cat?) past reading

This clearly shows that lexical stativity alone cannot account for the present tense recovery in English aux-drop constructions. While it is true that participial aux-drop constructions get present tense in most cases, they also can get past tense when either linguistically or contextually specified TT with such temporality is provided, e.g., *'last night'*. Therefore, this 'lexical stativity' in the previous studies does not suffice to explain the tense recovery of aux-drop constructions. **Analysis** Since tense reflects the relation between TT and UT (Klein, 1994), and UT is always fixed as present, we only need TT to determine the tense of aux-drop sentences. In the light of linguistically or contextually specified TT, I suggest examining aux-drops into two groups: Group 1, aux-drops with a linguistically or contextually specified TT, and Group 2, aux-drops *without* any specified TT. For Group 1, TT is provided directly from linguistic items that can refer to the temporality of the predicate (e.g., adverbials, etc.) as *last night* in (2c), or from the context without any linguistic items as in (2d). For Group 2, I propose a 'Principle of

Present Tense Recovery (PPTR) where the recovered tense is *present tense by default* when there is not any linguistically or contextually specified TT. If we recall the role of tense as anchoring, if the tense is elided, it is natural to assume that no displacement from UT may be needed. According to this reasoning, I argue that TT is not different from UT (TT=UT) in Group 2; thus the tense is present. In fact, TT is always specified either linguistically or contextually when the tense is other than present. This also supports that the default is present due to its cognitive availability. **Claim** I claim that this is how aux-drop sentences, i.e., example (1a) to (1f), get their tense. However, as demonstrated in (1a), not all aux-drops of Group 2 can recover present tense even if it is default. This is because of the peculiar stativity requirement of English present tense (Michaelis, 2020); Present tense is known to make the eventive predicate stative by coercion. And to be compatible with present tense, the predicate needs to *be able to* have stativity. I show that stativity arises in other places too, not only at the level of lexical stativity. I identify such stativity points in English; from lowest to highest, (a) lexical stativity point by lexical aspect, (b) morphological stativity point by low aspects (i.e., participial morphemes, ‘-ing’ or ‘-en’), and (c) pragmatic stativity point by habitual aspect judged by world knowledge (Figure 1). Thus, bare aux-drops have two chances to express stativity; at (a) for lexically stative predicates, or at (c) for lexically eventive but habitual/generic predicates to be compatible with PPTR; and this is why (1b) and (2a) receive present tense. Participial aux-drops have also two chances to do so; at (a) for lexically stative predicates, or at (b) for any predicates that are stativized by the two dedicated stativizers in English (-ing/-en) (Michaelis, 2020) as in examples (1e) and (1f). I claim that only the aux-drop predicates which can express stativity at least at one of the relevant points during composition are compatible with default present tense interpretation. In sum, the example (1a) ‘*You sell your car?*’ is of Group 2, and it does not have lexical stativity nor morphological stativity since it is an eventive and bare aux-drop sentence. So, it should be able to express pragmatic stativity, (i.e. habituality or genericity) to be compatible with the default present tense at the highest stativity point (c). However, it does not have pluractionality eligible for habituality; nor is felicitous for generic meaning in the context, i.e., ‘*Is selling one’s car normally what people do?*’. Thus, it recovers past tense as a result, not because it is merely lexically eventive with a specific object. As such, I claim that even if PPTR is the principle of the tense recovery of Group 2 aux-drop sentences, if the aux-drop predicate fails to express stativity by the highest point, the tense deviates to past tense. Further, I propose that pragmatic stativity (habituality) is not predictable by any grammatical means unlike the other two points when there are no lexical aids, e.g., *usually, used to*, etc., and should be judged by the listener’s world knowledge in accordance with the speaker’s intention. **Conclusion** I claim that the key factor of the tense recovery of both bare and participial aux-drop sentences *without* specified TT is the Principle of Present Tense Recovery (PPTR) and the stativity compatibility of the predicate, not the lexical aspect of the predicate. My analysis illustrates an evident case where a pragmatic principle (i.e., PPTR) and semantic coercion (i.e. due to the stativity requirement of present tense) shape a syntactic requirement (i.e., tense). **References** Déchaine, R. M. (1991). Bare sentences. In *SALT 1*.//Fitzpatrick, J. M. (2006). Deletion through movement. In *NLLT 24(2)*.//Klein, W. (1994). *Time in language*.// Michaelis, L. A. (2020). Tense in English. In *The Handbook of English Linguistics*.



"Narrative" tenses: on how the (Historical) Present may shed light on the Past(s)

THE INITIAL OBSERVATION: In a small, manually extracted and annotated parallel corpus of text segments in the Historical Present (HP) Mode (translations of J. Cercas' *Anatomía de un instante* into French, Italian, Portuguese and English), the Spanish Simple Past in the original is systematically rendered by a Past or Present Perfect in French and Italian (1a-c), while the Simple Past is maintained in Portuguese and English (1d-e).¹

- (1) a. lo añoran en la Casa Real, donde durante años **tuvo.SP** un aliado fiel en el general Alfonso Armada [SPAN]
b. Fr. on le regrette au Palais royal où pendant des années il **avait eu.PASTPERF** un allié fidèle en la personne du général Alfonso Armada [FRENCH]
c. It. sentono la sua nostalgia nella casa reale, dove per anni **ha avuto.PRESPERF** un fedele alleato nel generale Alfonso Armada [ITAL]
d. sentem falta dele na Casa Real, onde **teve.SP** durante anos um aliado fiel no general Alfonso Armada [PORT]
e. they miss him in the Royal Household, where for years he **had.SP** a loyal ally in General Alfonso Armada [ENGL]

The languages that apparently exclude the Simple Past for the expression of anteriority in the HP-mode (see Zucchi 2005 for an explicit statement of this constraint in Italian) are those that have completed the 'aoristic drift' of the Present Perfect (Type A languages) (Squartini & Bertinetto 2000). Those that do not (Type B languages) show few or no symptoms that their Present Perfect may spell out an unrestricted PAST-PFV semantic tense. This raises the question as to what in the semantics of the HP and what in the semantics of the Simple Past in Type A languages accounts for their incompatibility. Following a recent suggestion by Anand & Toosarvandani (2023), I will argue that it is actually **their semantic similarity** that makes them incompatible. Unlike the Simple Past in Type B languages, that of Type A languages does not convey an anteriority presupposition regarding Reference Time, but regarding the location of the time of evaluation.

"NARRATIVE" TENSES AND INDEXICALITY: "Free" tenses (those appearing outside attitude contexts) are standardly described as indexical, insofar as the reference of the temporal pronoun they contribute is restricted by a presupposition constraining its relation to Utterance Time. This is guaranteed by equating t° , the time of evaluation, with $Utt-T$. Thus, the standard semantic definitions of a PRESENT and a PAST Tense in a referential approach to Tense are as in (2a-b):

$$(2a) \llbracket \text{PRESENT} \rrbracket^{g,t^{\circ},w^{\circ}} = \lambda t: \underline{t = t^{\circ}}. t \quad (2b) \llbracket \text{PAST} \rrbracket^{g,t^{\circ},w^{\circ}} = \lambda t: \underline{t < t^{\circ}}. t \quad (2c) t^{\circ} = UttT$$

Obviously, the HP cannot be captured by (2a+2c): its defining property is that the eventuality in an HP sentence is understood to occur before the "real" $UttT$. Less obviously, the Simple Past in Type A languages might not correspond to (2b+2c) either. Strong hints at that possibility are scattered in the descriptive literature on French and Italian, which points to the reluctance of the form to cooccur with indexical past adverbials such as 'yesterday', 'a week ago' (GGF IX.2.3.1, Labeau 2022), to the widespread intuition, formulated in many different

¹ For simplicity, the label Simple Past is used for the morphologically simple form and the label Present Perfect for the morphologically compound form whose auxiliary is in the Present Tense, with no implications as to their semantics. Labels in small capitals refer to semantic tenses.

guises, that the time referred to is "dissociated" from or has "no direct link" to Utt-T (GGF IX.2.3.1, Labeau 2022), and to the obligatoriness of explicit temporal specification in out of the blue occurrences in spoken contexts (for Type A languages in which the Simple Past form has not simply disappeared from the spoken language, cf. Giorgi & Pianesi 1998, 110 on Italian, Kratzer 1998 on German, Dickey 2001 on German and Dutch).

THE BICONTEXTUAL APPROACH TO THE HP AND ITS EXTENSION TO THE SIMPLE PAST IN TYPE A LANGUAGES: Anand & Toosarvandani (2017, 2018, 2023) develop a bicontextual approach to the HP that preserves the gist of the semantic definition (2a) while making it non indexical. They hold that t° (their Assessment Time) is an interval that is canonically equated to Utt-T, but may be -by a pragmatic convention- set to an interval preceding it. In the latter case, we obtain the HP-mode tenses. A uniform semantics for the Present thus accounts both for the canonical Present and for HP according to the setting of t° (3a-b). At the same time, there are two ways for a tense to be Past: by conveying an anteriority presupposition on Reference Time (4a), and as a narrative, "remote" Past, in which Reference Time is included in an evaluation time which is itself anterior to Utt-T (4b). (4b) would be the only denotation available for the Simple Past in Type A languages. It partly mirrors the semantics of the Present, but the condition on the anteriority of t° with regard to Utt-T is hardwired to its semantics.

- (3) a. $[[\text{PRESENT}]]^{g,t^\circ,w^\circ,u} = \lambda t: t \subseteq t^\circ. t \mid [t^\circ = \text{Utt-T}]$ (Canonical Present)
 b. $[[\text{PRESENT}]]^{g,t^\circ,w^\circ,u} = \lambda t: t \subseteq t^\circ. t \mid [t^\circ < \text{Utt-T}]$ (Historical Present)
- (4) a. $[[\text{PAST}]]^{g,t^\circ,w^\circ,u} = \lambda t: t < t^\circ. t$
 b. $[[\text{REMOTE PAST}]]^{g,t^\circ,w^\circ,u} = \lambda t: t \subseteq t^\circ \ \& \ t^\circ < \text{Utt-T}. t$ (Remote Past)

TEMPORAL INVERSION: The HP shares another important property with the Simple Past in Type A languages: both prevent backtracking. Given a sequence of sentences S1+S2, the eventuality in S2 cannot strictly precede that in S1 (Anand&Toosarvandani 2018, de Saussure 1997) (5a-b). This property is not shared by the Simple Past in Type B languages (5c).

- (5) a. (At that moment) John falls._{ev1} Max pushes him._{ev2} (*ev2 < ev1) HP
 b. Jean tomba_{ev1}. Max le poussa._{ev2} (*ev2 < ev1) Simple Past Type A
 c. John fell_{ev1}. Max pushed him_{ev2} (^{OK}ev2 < ev1) Simple Past Type B

Both the impossibility of temporal inversion and the distribution in (1a-e) are accounted for if we assume that, like the HP, the remote past of Type A languages requires Reference Time to be included in (not anterior to) the time of evaluation.

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***Ayer sentí que el tiempo ha pasado muy rápidamente.* The Spanish compound past embedded under verbs of perception marked for perfective past**

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We analyze combinations of (physical) perception verbs marked for perfective past (pretérito perfecto simple, PPS) with direct object clauses in which the verb is marked for compound past (pretérito perfecto compuesto, PPC) in Spanish. Standard grammars exclude this kind of structure due to the sequence of tenses (“consecution temporum”) (Rojo 1976; RAE & ASALE 2009: §24.7t–w, 24.8c; but also Kowal 2005: 111). The reasoning according to RAE & ASALE (2009: §24.7b) is that the temporal reference of an embedded clause is detached from the speech moment and “re-routed” onto the main verb’s reference. Crucially however, we do find them in corpora like CORPES XXI. A major possible licensing factor is the – detached (in the sense of double access, see, e.g., von Stechow 1995) – hodiernal reference of the embedded clause. We exclude cases with an explicit mark of such a reference (typical indicators are *ya*, ‘already’, *hoy*, ‘today’, *esta semana*, ‘this week’, etc.; see Alarcos Llorach 1947) from the analysis. The remaining set of examples is highly interesting. Our analysis focuses on the following issues: (a) How can we classify and explain the data in terms of tense(-aspect?) choice? Here, we apply the classification system presented in Azpiazu (2019; 2023). An important question deals with possible contextually restricted alternatives. In addition, linguistic variation is taken into account. (b) What are the discursive effects of the PPC? More specifically, how is the clause including the PPC embedded in the context and what kind of (temporally determined) content may be conveyed? With the following examples, we show in what ways the data are of interest for TAM research.

First, the embedded clause may express or imply a kind of “actual relevance”. The concept is frequently used, but not defined precisely in the literature. However, based on our data, we can advance its refinement. Two central notions are the relevance of a result state (1) and an experiential reading (2). Both cases are well described in the grammars, though not with respect to the structures at hand.

- (1) *[T]ambién vi que la niña ha estado expuesta a dosis elevadas de radiactividad y que se está muriendo.* (CORPES XXI, Spain: Montero, Rosa: *El peso del corazón*. Seix Barral: Barcelona, 2015.)

‘I also saw that the girl has been exposed to high doses of radioactivity and is dying.’

- (2) *El especialista en el estudio de la evolución de la tectónica [...] notó que procesos de ese tipo han ocurrido también en México [...].* (CORPES XXI, Mexico: «Los Andes, sitio perfecto para estudiar la Tierra». *Informador.mx*. Guadalajara: informador.mx, 2015-01-07.)

‘The specialist in the study of the evolution of tectonics noted that such processes have also occurred in Mexico.’

Second, our data set also shows the recurrent case where the notion of ongoingness does not come about naturally (as in the post-state reading of (1) or the potential repetition in (2), both related to the verbs’ *Aktionsart*), but is – if given – forced by the use of the PPC itself. Example (3) disrupts the sequence of tenses. The main verb refers to a past time point with an explicit marker of non-hodiernality (*ayer*, ‘yesterday’). By contrast, the embedded clause is temporally anchored to the ego narrator’s origo. She thus assesses her current state of mind and not yesterday’s, which on the other hand would correspond to the main clause.

(3) *Mi papá se murió el diecinueve de diciembre de 1923. Tres años. Ayer **sentí** que el tiempo ha pasado muy rápidamente. Que el dolor de pensar en él no parece tan viejo.* (CORPES XXI, Colombia: Mallarino Flórez, Gonzalo: *Delante de ellas*. Bogotá: Alfaguara, 2005.)

‘My dad died on December 19, 1923. Three years ago. Yesterday I felt that time has passed very quickly. Just the pain of thinking about him doesn’t seem so old.’

As mentioned, we take linguistic variation into account. Importantly, in some Latin-American varieties, certain uses are not expected to occur. For instance, hodiernality is a generally acknowledged factor for many peninsular but not for Latin-American varieties. Experiential readings, by contrast, are also relevant for the latter (see Azpiazu 2019). Interestingly, however, we find different uses including those of the second type across many varieties.

While the PPS forms in our examples have a specific temporal reference, we determine the temporal reference of the PPC as underspecified, as it expresses temporal indetermination (see Schwenter & Torres-Cacoullous 2008; Azpiazu 2019, 2023). Its use allows the speaker to shift the temporal reference from the determined past of the perception event to one anchored to the speech moment. This is licensed by the use of verbs (in PPC), which are lexically less precise in terms of temporality. A potential consequence of the use is that it easily allows for a properly anchored present tense as in the final sentence of example (3).

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Corpus

Real Academia Española: Banco de datos (CORPES XXI) [en línea]. *Corpus del Español del Siglo XXI (CORPES)*. <<http://www.rae.es>>

Keywords

Temporal subordination; Spanish present perfect; temporal discourse structure

Layers of shifted, transpositional and original uses of perfective present in Slavic languages

Characteristic of all Slavic languages is an opposition of perfective vs imperfective (pfv., ipfv.) aspect, which is based on stem derivation (Wiemer & Seržant 2017). Interaction with tense is particularly remarkable in the non-past domain: while South Slavic languages consistently distinguish present and future for stems of either aspect (see 1), future auxiliaries in North Slavic only combine with ipfv. stems, whereas the future meaning (i.e. reference to a single event posterior to the speech act) of pfv. stems amounts to a default interpretation of their present tense forms (PFV.PRS); see (2a-b). This conventionalized shift can be subsumed under hypanalysis (Croft 2000), but it also has been characterized as ‘prospective strategy’ (De Wit 2017) to overcome the Present Perfective Paradox (Malchukov 2009). However, despite this shift, in all North Slavic languages non-future uses of PFV.PRS continue to be widely attested (see below), their PFV.PRS simply does not distinguish present and future, and non-future uses belong to its original “functional inventory”, which is largely shared with South Slavic.

Strikingly, we also observe two usage domains of PFV.PRS, which differ in their rigidity, but which both divide the Slavic-speaking territory in a west-east direction. They thereby cut the just mentioned North-South split in an orthogonal fashion. The first domain concerns uses related to external pluractionality, such as habitual or gnomic usage, which in South Slavic distributes over PFV.PRS and pfv. future (e.g., Koneski 1990, Tomić 2006). Restrictions to such usage increase from west to east, however even Russian (= northeastern periphery of Slavic) quite freely uses PFV.PRS to denote habitual or gnomic situations (see 3), the restrictions are thus not very strict. This cline is a well-known part of Dickey’s (2000) differentiation of Slavic aspect systems.

Croatian (South Slavic)

- (1) *Sigurno će^{FUT.3SG} te posjećiva-ti^{IPFV.INF} / posjeti-ti^{PFV.INF} u bolnici.*
‘Sure, she **will visit** you (ipfv.: repeatedly / : pfv.: once) in the hospital.’ (pers. knowledge)

Russian (North Slavic)

- (2a) *Ona tebja točno bud-et^{FUT.3SG} navešča-t’^{IPFV.INF} / *navesti-t’^{PFV.INF} v bol’nice.*
(2b) *Ona tebja točno navest-it’^{PFV.PRS.3SG} v bol’nice.*
‘Sure, she **will visit** you (ipfv.: repeatedly / : pfv.: once) in the hospital.’ (pers. knowledge)
- (3) *Vanja umnyj, on rešit’^{PFV.PRS.3SG} ljuboe uravnenie.*
‘Vanja is smart, he **solves** [= is able to solve] any equation.’ (pers. knowledge)

By contrast, another west-east division concerns the use of PFV.PRS in narrative discourse (which describes chains of single events). Among contemporary Slavic, only the languages at the western “edges” allow for narrative PFV.PRS, namely Slovene, Czech, and Slovak, to some extent also SerBoCroatian, but apparently no “residuals” of such use have survived in the remainder of Slavic. This holds true also of related uses like the scenic present (Dickey 2000: 155-170, Wiemer 2021). This division is much stricter and more abrupt than the west>east cline concerning restrictions on PFV.PRS to denote pluractional situations.

We thus get three distinct groups of usage types of PFV.PRS: (i) narrative, (ii) reference to unlimited repetition of situation types (external pluractionality), and (iii) future as default meaning of PFV.PRS. These usage domains yield different areal patterns within Slavic (see above). I claim that these patterns, apart from reflecting differences in the history of future marking, are first of all indicative of different cognitive underpinnings. Thus, in a strict sense,

narrative discourse cancels the relation to the time of utterance (TU) and it refers to sequences of single (episodic) events (Fleischman 1990: §4, Wiemer 1997). By contrast, meanings of external pluractionality do not cancel the relation to TU, but downplay it since there is no single reference interval for any of the related events, and no sequence of events is required. The lack of specific reference intervals also explains why habitual reference easily evokes non-deontic modal readings (see 3) and the suspension (i.e. non-verifiability) of propositional content (Tatevosov 2004, Shluinsky 2006). Narrative discourse does quite the opposite: it presents singular events as uniquely located in the time of some world, and even if this world is fictional, the events are as though real.

In my talk, I will elaborate on these underpinnings of temporal semantics, and of their communicative consequences. My synthesis relies on a systematic, critical rehearsal of a large body of research reports, primarily, but not exclusively, dedicated to Slavic languages and on a couple of partially yet unpublished case studies. The differences between the usage types in (i-iii) will be captured, as far as possible, with notions from Klein (1994), amended by a distinction between type and token reference and ‘in virtue of’-generalizations known from nominal reference (Greenberg 2003). On this basis I will argue for the following basic division of PFV.PRS uses: (i) original (→ habitual, gnomic, with non-deontic modal implicatures), (ii) shifted (→ hypoanalysis), (iii) transpositional (→ narrative). This threefold distinction should be further employed as a ground for classifications of PFV.PRS uses, in particular, and of present tense uses, in general, e.g. in larger cross-linguistic comparisons.

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Functional overlaps of tense distinctions in the non-past domain

As all Slavic languages, Russian and Bulgarian are characterized by a stem-based distinction of perfective vs imperfective (pfv., ipfv.) aspect, which permeates the entire system of finite and non-finite verb forms (Wiemer & Seržant 2017). However, the verbal systems of the two languages also differ in many respects, including the non-past domain. Here Bulgarian (as other South Slavic languages) shows a morphological distinction between present and future tenses for both ipfv. and pfv. stems, since its future auxiliaries can combine with stems of either aspect, see (1). By contrast, in Russian (as in other North Slavic languages) the future auxiliary can only combine with ipfv. stems, while for pfv. stems the future reading has become the default meaning of their non-past tense forms glossed as PFV.PRS; see (2a-b). As “future” we propose to define reference (by a regular form of a predicate) to a single (‘episodic’) situation located in time after the relevant reference interval (either the speech interval, in deictic tense use, or some other anchor, e.g. in past-tense narratives).

- (1) Bulg. *Šte se srešta-me / se sreštne-me.*
 FUT REFL meet[IPFV]-PRS.1PL REFL meet[PFV]-PRS.1PL
- (2a) Russ. *My bud-em vstreča-t’-sja / *vstreti-t’-sja.*
 1PL.NOM FUT-1PL meet[IPFV]-INF-REFL meet[PFV]-INF-REFL
- (2b) *My vstret-im-sja.*
 1PL.NOM meet[PFV]-PRS.1PL-REFL
 ‘We will meet (ipfv: repeatedly / pfv: once).’

However, as in other North Slavic languages, PFV.PRS in Russian shows considerable “residuals” of non-future uses, such as habitual or “gnomic” readings (3), which are closely associated with dispositional or other non-deontic modal contexts (4).

- (3) Russ. *I s ego točki zrenija, novyj den’ – èto novoe čudo. On ne speša **prosnetsja**^{PFV.PRS},
 plavno **primet**^{PFV.PRS} vannu, vdumčivo **vyp’et**^{PFV.PRS} kofe (...). (RNC)*
 ‘And from his point of view, a new day is a new miracle. He slowly **wakes up**,
takes a gentle bath, thoughtfully **drinks** coffee (...).’
- (4) *On takoj nelovkij. **Spotknetsja**^{PFV.PRS} daže na rovnom meste. (pers. knowledge)*
 ‘He’s so awkward. He **stumbles** even out of the blue.’

Such uses are often believed to be remnants of an older system, where PFV.PRS was employed more freely in habitual contexts, as e.g. still in Czech and Slovene (Stunová 1993, Dickey 2003). Many of these residual meanings are characteristic of PFV.PRS in Bulgarian as well. However, Bulgarian PFV.FUT, which is neither formally nor functionally identical to PFV.PRS, also shows usage that cannot be considered future in a strict sense. Bulgarian PFV.FUT quite commonly also refers to habitual or gnomic situations (5). In this respect, Bulgarian resembles, e.g., English (Ziegeler 2006), despite the different aspect systems.

- (5) Bulg. *Vse se slučva njakoi ajsbergi ot Antarktida da bādat otneseni ot vjatāra i vālnite
 v onazi čast na okeana, kādeto **šte popadnat**^{PFV.FUT} v peruanskoto tečenie. (BNC)*
 ‘It still happens that some icebergs from Antarctica are carried by the wind and
 waves to that part of the ocean where they **fall** into the Peruvian Current.’

There are, thus, systematic overlaps between habitual and modal uses of the present and the future tense, regardless of whether the morphological present-future distinction is restricted by aspect (Russian, North Slavic) or not (→ Bulgarian, South Slavic); cf. Wiemer (2022).

Although the conceptual link between habitual, dispositional and epistemic readings, and their relevance for future reference, has already been captured well (Tatevosov 2004, Shluinsky

2006, Sonnenhauser 2008, among others), and although non-future readings of PFV.PRS have also been treated with some scrutiny, e.g., in Russian (cf. Stojnova 2017, Kosheleva & Janda 2022, among others), we still lack a clear understanding of at least two issues: (a) the factors that favor (or disfavor) future vs habitual and/or dispositional readings of PFV.PRS, let alone their interplay or relative weight; (b) the proportions between future and non-future uses in different types of discourse, including uses that show “oscillation” between different readings: preliminary observations on corpus samples show that a certain number of PFV.PRS-tokens in Russian cannot be clearly characterized as ‘future’, ‘habitual’ or ‘modal’, and the same applies to PFV.FUT forms in Bulgarian.

We approach these issues from a usage-based perspective. We will present results concerning the aforementioned issues drawn from corpus samples for three periods in Russian (RNC; 1790-1820, 1880-1910, 1990-2020) and two in Bulgarian (BNC via SketchEngine; second half of 19th c. until 1914, 1946-2011). Our annotational schema consists of 10 criteria including syntactic features (e.g., clause type), illocution, polarity, and semantic features; among the latter we try to tell apart habitual, modal and properly future readings as defined above. Another variable is the different periods and, for Bulgarian, the morphological contrast between present and future of pfv. stems. All data was thoroughly double-checked by two annotators and subsequently submitted to multivariate modeling (logistic regression, conditional inference trees, random forests). Preliminary results indicate that, despite a clear split between future and habitual readings, the number of cases oscillating between both (and between factors that seem to favor the one or the other) is considerable.

The same approach can be applied to other Slavic languages in order to obtain a finer-grained perspective of the cross-linguistic variation in the domain of future and related functions.

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Corpora: BNC: Bulgarian National Corpus:

https://app.sketchengine.eu/#dashboard?corpname=preloaded%2FbulgarianNC_web

RNC: Russian National Corpus: <https://ruscorpora.ru/>

Temporal and aspectual mismatches are pragmatically motivated

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Keywords: Tense, aspect, semantic mismatches, pragmatics

A classical puzzle in the semantics and pragmatics of tense and aspect concerns how to account for the numerous cases where there's an apparent internal contradiction between the indications provided by the aspectual and temporal markers in the sentence or between what these indicators are supposed to produce and the actual message.

In this talk, I consider typical cases of mismatches i) involving lexical and grammatical aspect such as (1) below; ii) involving the referential times indicated by the tense and by the adverb as in (2); iii) between lexical aspect and an aspectual AdvP as in (3); iv) between the temporal reference of the sentence and the salient temporality in focus, as in (4); between the lexical aspect and the conversational topic (5):

- (1) I'm loving it (fast-food restaurant advert) (dynamic tense and state)
- (2) I'm leaving tomorrow (present tense and future adverb, 'futurate present')
- (3) Fred played the sonata for one day / for one minute / for one year (Dölling, 2014) (atelic AdvP and telic VP)
- (4) [Doorbell rings]: That'll be the postman (future tense but relevance in the present - 'epistemic future')
- (5) John sings (about the characterization of John, not about his current activity).

Drawing upon previous works in this direction (Escandell-Vidal & Leonetti, 2011; Dölling, 2014; Author, year), I propose to reconsider the semantic line of analysis of temporal and aspectual mismatches, which crucially involves the notion of *coercion* (since the seminal works of Moens & Steedman 1988). Coercion is assumed to be a compositional process where some semantic elements bear a constraint, or a set of constraints, that imposes a modulation (i.e. a change of meaning) to another one so as to resolve the inconsistency. The question I raise here is whether the compositional-logical solution to mismatches is plausible one from a cognitive and theoretical perspective. I will focus on two dimensions of coercion: (i) it is strictly compositional; and (ii) it involves a form of 'reanalysis', i.e. a form of garden-path, post-processing.

Semanticists such as Dölling (2014) have already insisted, with convincing arguments, that the determination of aspect should be regarded as 'context-driven enrichments' (2014:139). I review such cases and suggest that cognition makes sense of such linguistic complexities in a completely inferential way, without anything like a semantic problem-solving process. In other words, I consider that the linguistic code remains intact and that interlocutors spontaneously make sense of these situations inferentially without even considering anything like 'mismatches' nor compositional modulations.

Following fundamental theoretical insights by Escandell-Vidal & Leonetti (2011), and along the lines posited in Author (year), I claim that the management of such apparent 'mismatches' is merely a manifestation of how the mind deals with conceptual-representational information, on the one hand, which is highly modifiable ('flexible' in Escandell-Vidal & Leonetti's 2011

terms), and procedural-grammatical information, which is not (it has ‘rigid’ meaning, *ibid.*) (on the *conceptual-procedural* distinction, see Blakemore (1987) and the developments in Escandell-Vidal & al. Eds (2011).

We suggest that the following general principles which are at work in natural language interpretation are enough to explain how such situations can occur:

- Procedural meaning forces conceptual compliance: conceptual representations are modulated so that they are made consistent with the requirement of grammatical information; this explains why lexical aspect is modulated into other aspectual representations under the pressure of a tense, as with *I’m loving it* or *Pierre connut Marie à Paris* (in French), which reads as an event corresponding to the inchoative phase, and not as a state as the verb indicates;
- More informative (or: more ‘specific’) linguistic evidence is more relevant. For example a temporal adverb is more specific than a tense, so that the tensed representation is adapted to the adverb meaning (as with futurate presents, opposite telicity in AdvP and the VP, etc.) ;
- Highly salient contextual information is preserved: this explains why an utterance like *That’ll be the postman* right after the doorbell rings cannot but be interpreted as concerning the present environment.

Once the question of how these mechanisms work, we observe the motivations of such linguistic formats in communicative interaction. In line with previous studies (Author, year), I try to show that the import of such combinations can’t be reduced to a non-mismatching ‘equivalent’: what is conveyed by such utterances is more complex and involves various inferences, some of them having already been discussed in the literature, such as planification with the futurate present; others bring about modality (epistemic future) or attitudes (‘I’m leaving tomorrow’ conveys an attitude relevant in the present, which nature depends upon circumstantial factors).

The proposed explanation also helps understand why some kinds of ‘mismatches’ are not likely to occur, as they won’t bring in pragmatic import or at least not in a relevant way.

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Diatopic, temporal and modal variation in horoscopes in French and English

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Horoscopes are an inescapable feature of contemporary entertainment magazines. They appeared in their current form less than a century ago (24th August 1930), when the astrologer Richard Naylor published in the *Sunday Express* the birth chart of Princess Margaret, predicting – quite accurately – that she would lead a turbulent life (Farnell 2020). The piece proved popular, and Naylor continued publishing articles. A few weeks later, he wrote that an English aircraft would be in danger between the 8th and the 15th October. A crash indeed happened near Paris (albeit on 5th October), which sealed the astrologer's reputation. Naylor got a weekly column of popular predictions, that was later refined and associated to astrological signs.

Yet, do horoscopes tell us about our future? A couple of papers (Bardin 1977, Constantin de Chaney 2005) mentioned in passing the paucity of future forms in a cursory study of an isolated article. Recent research on the use of tenses in weekly and yearly horoscopes published in European French-medium magazines (Labeau, under revision) has revisited the horoscopes genre more systematically and highlighted noteworthy features. First, future tenses represent less than a quarter of finite forms. Then, the distribution between synthetic (*saura*) and analytic (*va savoir*) future forms drastically differs from what is found in other genres, as the synthetic future dominates (ratio of 10:1), particularly in horoscopes for the coming year (ratio of 20:1). Finally, the prediction is coupled with a jussive dimension, calling the readership to action, rather than submission to fate. Horoscopes may thus belong to the genre of programmatic discourse (Basso Fossali 2021)

In this poster, we built on this survey by expanding the corpus in two ways. On the one hand, we consider North American French that has consistently been shown to favour the analytic future, particularly in spoken language, to see whether it displays a higher frequency of analytic future forms. On the other hand, we consider horoscopes in European and North American varieties of English where two future tenses also exist (*will* + infinitive and *to be going to* + INF) but convey clearer values of modality or immediacy. The aim of this study is thus to observe the variation between two languages (French and English) and their geographical varieties regarding the way they express the future, but also to study the hybrid nature of the future, between tense and modality.

A pilot study of the use of tenses in horoscopes in the French, Québécois, English, American and Canadian English editions of the women magazine *Elle* has revealed intriguing trends. While the synthetic future is – as expected – less frequent in Québécois French (5,75% of verbal forms vs 11,11% in the French edition), the trend does not result in a wider use of the periphrastic future (no occurrence in *Elle Québec*), but in over two and a half times as many imperative forms (33,33%) than in the French edition (12,96%). Both editions contain a little more than 40% of verbal forms in simple present, and many of these predicates refer to an event that is meant to happen during the ongoing week or month. Likewise, the American and

Canadian horoscopes are overwhelmingly jussive while the British English edition displays a higher proportion of modals (*will, would, can, could, may, might, should*). Those trends may reflect different cultural perspectives such as directness or agency on one's circumstances.

Our study on a corpus of horoscopes published in the last week of December 23 – replicating Labeau's (under revision) methodology, which allows to collect horoscopes published at the same time but bearing on the coming week and on the coming year, therefore testing the influence of the remoteness on the use of tenses. The corpus has been collected through the Pressreader website. It includes 37 titles spanning over entertainment (people press, television) and woman magazines. 17 are published in Northern America (USA and Canada) and 20 in Europe (UK, France, Switzerland). Twenty publications (USA [9], Canada [2] and UK [9]) are written in English, against 17 (France [10], Switzerland [1] and Québec [6]).

Through the analysis of this balanced multilingual and multicultural corpus, we will be able to shed new light on the way future events are conveyed in a genre across languages and through space. The poster presents the results of the analysis to date (about a quarter of the data) and suggests that the horoscopes, as programmatic texts, rely on modality rather than time.

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On the Tense-Aspect system of Koḍa
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Keywords: Koḍa, Tense-Aspect, Graded Tense, TRMs. (Preference in virtual mode)

Introduction: A language’s tense system might diverge from the familiar three-way distinction between past-present-future. It has been reported that there are languages whose tense systems can show further distinction concerning past and future (Comrie, 1985) (Dahl, 1985); (Hayashi, 2011)). Such languages are often said to have a ‘graded tense system’, which tracks how remote the event is in time: whether it just happened, happened recently, or a long time ago, etc. Instead of tenses, these are referred to as ‘Temporal Remoteness Morphemes’(TRMs), which introduce presuppositions that concern the event time directly rather than the topic time. Koḍa, a Munda language from the Austro-Asiatic language family, exhibits such a pattern in the ‘past’ realm. The paper’s main objective is to account for the formal approach in the Tense-Aspect (TA) system. It tries to provide a formal semantic analysis of the TA system and how TRMs introduce partial identity functions over events and restrict the location of event time.

Methodology: Koḍa data presented here is typically based on fieldwork. Data were collected from the native speakers of Koḍa, who are also fluent in Bangla. Bengali version of the Swadesh list and a questionnaire are used. The TMA questionnaire (TMAQ), discussed by (Dahl, 1985) is followed for the concerned area. This paper presupposes familiarity with various key works in the syntax and semantics of tense-aspect systems (Reichenbach, 1947); (Partee, 1984); (Klein, 1994); (Kratzer, 1998)). It adopts the notion of the syntax and semantics of tense aspect systems, that tense and aspect together locate events in time by coordinating three distinct temporal parameters: utterance time (UT), event time (ET), and topic time (TT) (Reichenbach, 1947), (Klein, 1994). It follows the approach of semantic parallels between tense and pronouns (Partee, 1984); (Heim, 1994); (Kratzer, 1998); (Schlenker, 2004) and syntax and semantics of the graded tense system (Cable, 2013).

Data & Discussion: Two kinds of templates are noticed in Koḍa depending on the grammatical aspects- ROOT-TRAN/OBJ-TA-IND/FIN=SBJ (Imperfective), ROOT-TA-TRAN/OBJ-IND/FIN=SBJ (Perfective/ Perfect).

In Example 1, 2 & 3 I provide examples for each aspectual category.

1. Imperfective:

a. ram haku saʔa-ku-**ṭan**-a=ɪ
 ram fish catch-3PL.OBJ-
 PRS.IMP=3SG.SBJ
 ‘Ram is catching fish.’

b. ram haku saʔa-ku-**kan**-a=ɪ
 ram fish catch-3PL.OBJ-PST.IMP=3SG.SBJ
 ‘Ram was catching fish.’

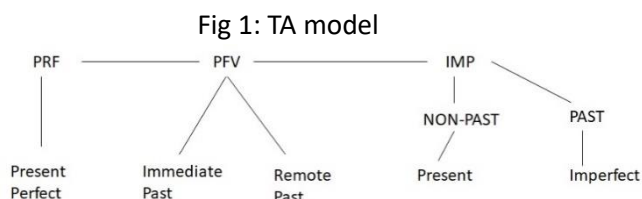
2. Perfective:

a. ram hapa-ṭa saʔa-**ṭa**-a=e
 Ram stick.CLF hold-NRP.PST.PRV-
 IND/FIN=3SG.SBJ
 ‘Ram held (recently) the stick.’

b. ram hapa-ṭa saʔa-**la**-a=e
 Ram stick.CLF hold-REM.PST.PRV-
 IND/FIN=3SG.SBJ
 ‘Ram held (some time ago, not recently) the stick.’

3. Perfect:

a. ram hapa-ṭa saʔa-**ka**-a=e
 Ram stick.CLF hold-PRS.PERF-
 IND/FIN=3SG.SBJ
 ‘Ram has held the stick.’



Assuming this distinction, the Tense-Aspect system of Koḍa can be modeled as in Fig 1. According to the informant's viewpoint, when the stick was held recently before the speech time, 'saʔaʔæ' is used (2.a); when the stick was held in farther past like before days, months, or years, then 'saʔalaɛ' is used (2.b). The judgment depends on the occurrence of the event from the viewpoint of the speaker's utterance time. So, 'ʔa' & 'la' are considered as TRMs. Unlike true tenses, these TRMs do not modify the 'topic time' of the sentence; instead, they directly restrict the location of the 'event time'. The current past (CUR) form is used to describe events occurring within the 'day' surrounding the moment of speech. The Remote past (REM) describes events that did not occur 'recently'.

The paper embraced this syntactic structure for Koḍa transitive sentences in Fig 2 and followed these semantics. All the markers (e.g., -ʔan (, -kan, -ka, -ʔa, -la) are pronounced at the PF level.

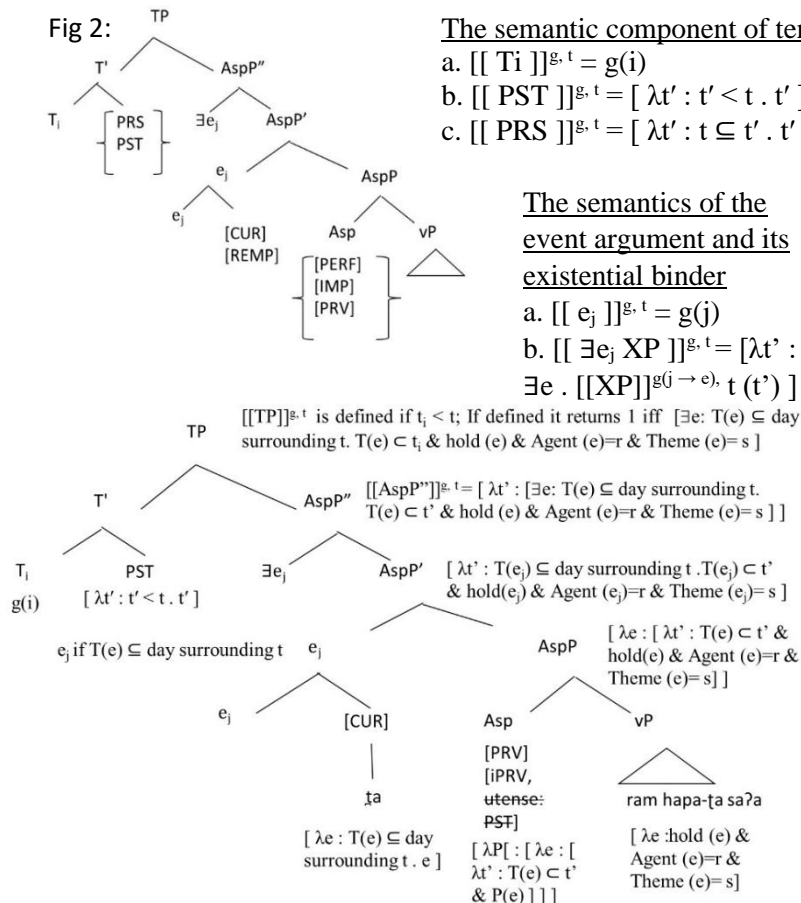


Fig 3 provides the semantic compositions of Ex. 2.a. The paper proposes analogous syntax and semantics adhering to the above semantic interpretation for other sentences.

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Elvis is dead: lifetime-tense congruence effects for the past, present (perfect), and future

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Background Referent lifetime can establish temporal constraints with which temporal verb morphology must agree, similar to temporal adverbs or discourse context. This ‘Lifetime Effect’ can trigger temporal discord between referent-lifetime and verb tense in the case of a familiar referent (ex. 1). The Lifetime Effect is typically discussed in terms of the simple past and present tenses when used with individual-level predicates (ex. 1; e.g., Thomas, 2012), but extends to the English present perfect when describing past, repeatable experiences in the absence of a past reference time. In such cases, the present perfect is felicitous with the living, but not the dead, while the simple past is felicitous with the dead, but potentially odd with the living in out-of-the-blue contexts (ex. 2 and 3; e.g., Mittwoch, 2008).

(1) Elvis #is / was from Memphis.

(2) Elvis released / #has released / #will release many albums.

(3) Beyoncé #released / has released / will release many albums.

The case of lifetime-tense congruence is perhaps starker for the simple future (ex. 3 and 4): dead referents certainly cannot perform on stages in the future, but whether living referents do so remains to be seen as future-marked verbs are modal in nature, bearing no truth-value that can be assessed at speech time (e.g., Macfarlane, 2003). With this backdrop, we addressed the following questions across three reading experiments: (1) (how) does lifetime-tense congruence influence incremental processing (measured via eye-tracking and self-paced reading) and metalinguistic awareness (measured via naturalness judgements)?, and (2) how do such lifetime congruence effects compare between the present perfect, simple past, and simple future?

Experiments In three reading experiments, participants read lifetime context sentences establishing a famous referent and defining their lifetime status (ex. 4 and 5). This was followed by a critical sentence describing an accomplishment of the cultural figure in the present perfect (Experiments 1-3), simple future (Experiments 1-2), or simple past (Experiment 3), similar to ex. 2 and 3 above.

(4) Elvis was an American performer. He died in Tennessee.

(5) Beyoncé is an American performer. She lives in California.

We collected eye-tracking reading measures at the verb region (Experiment 1: first-pass reading time, regression path duration, total reading time) and self-paced reading times in critical and post-critical verb regions (Experiments 2 and 3), as well as post-trial naturalness judgements (Experiment 1: 7-point Likert scale; Experiments 2 and 3: binary acceptance task) in order to tap into incremental processing and metalinguistic awareness, respectively.

Analyses Linear mixed models were fit to log-transformed gaze times at the verb (Experiment 1) and BoxCox-transformed self-paced reading times from the verb onward (Experiments 2 and 3). A cumulative link mixed model (Experiment 1) and logistic mixed models (Experiments 2 and 3) were fit to naturalness ratings and binary responses respectively.

Results In Experiment 1, main effects of congruence (longer reading for incongruent than congruent conditions) emerged in first-pass reading times at the verb region (Fig. 1; $t = 3$, $p < .05$). In total reading times, the present perfect elicited longer reading times in the incongruent (dead) versus congruent (living) condition at the verb region ($t = 5.4$, $p < .001$). In the simple future, no congruence effects emerged in total times at the verb region but naturalness ratings were lower in the incongruent than congruent condition ($z = -12$, $p < .001$)

with the same effect in the present perfect ratings (Fig. 2A; $z = -2.9, p < .01$). Experiment 2 replicated this pattern in self-paced reading times (Fig. 1B) and binary naturalness judgements (Fig. 2B). However, reading times revealed an effect in the opposite direction for the simple future in post-verb regions: *shorter* self-paced reading times were elicited in incongruent (versus congruent) conditions (Fig. 2b), taken to reflect detection of the violation and a readiness to reject the sentence. Experiment 3 (Fig. 2B) again replicated the pattern of results for the present perfect, and revealed congruence effects in the newly added simple past condition: Longer reading times and fewer acceptances ($z = -5.52, p < .001$) were elicited by incongruent (living) conditions compared to congruent (dead) condition in the past simple.

Conclusion

Lifetime-tense congruence effects emerged across experiments, with differences in the latency and direction of effects between the tenses. These findings suggest that (1) referent-lifetime information is rapidly available during processing, available at the first pass of the verb lasting into (post-trial) metalinguistic awareness and (2) how lifetime information informs tense processing differs between the simple future (incongruent < congruent reading times) and the present perfect and simple past (incongruent > congruent reading times). These findings provide evidence of the differential influence referent-lifetime congruence has on the processing across tenses, with implications for theories pertaining to lifetime effects as well as the dissociation of future reference compared to the past and present.

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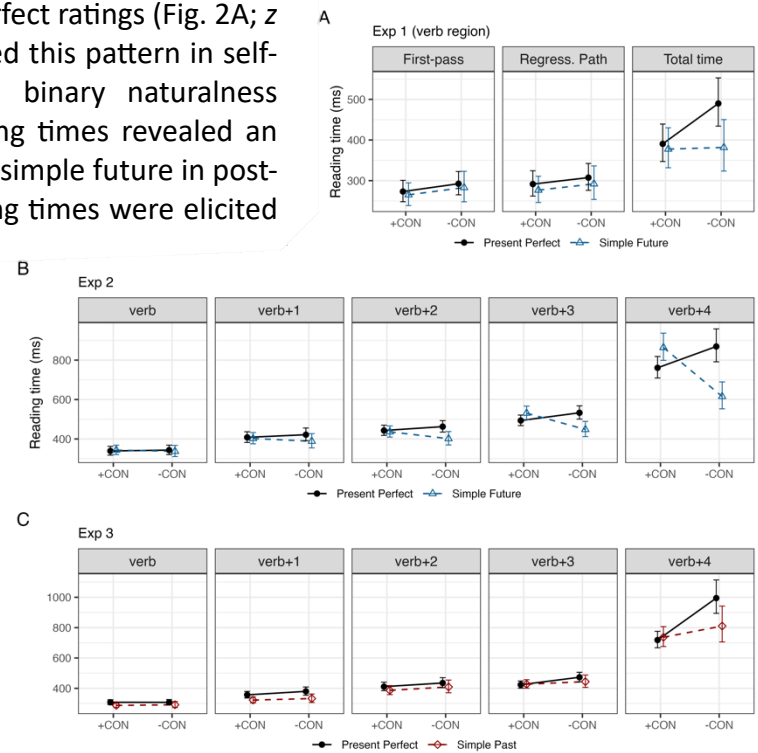


Figure 1 Back-transformed predicted reading times (A: Experiment 1 eye-tracking reading measures at the verb region; B: Experiment 2 self-paced reading times; C: Experiment 3 self-paced reading times). X-axis: lifetime-tense

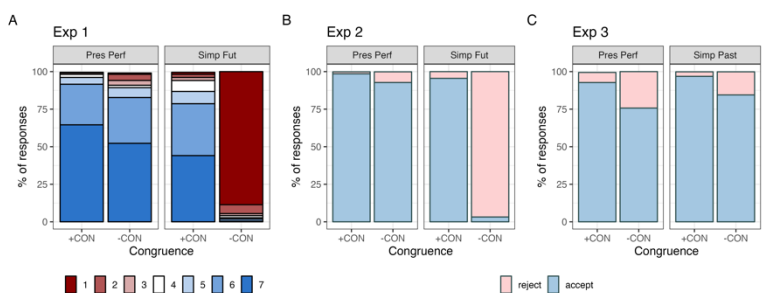


Figure 2 Distribution of naturalness judgement responses (A: Experiment 1 (7-point Likert scale; 1 = ‘definitely wrong’, 7 = ‘perfectly fine’); B: Experiment 2 (binary accept/reject); C: Experiment 3 (binary accept/reject)).

Tense, aspect, and definiteness: the case of the Russian factual imperfective

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Intro: Recent studies (Chen et al. 2020, Bertrand et al. 2022, Zhao 2023a, 2023b) suggest that definiteness distinctions are present in the temporal domain: tense forms within and across languages can differ in whether they have the semantics of pronouns, definite descriptions, or indefinites. In this paper, I aim to apply this idea to the Russian factual imperfective (Grønn 2003). The factual imperfective (FI from now on) is used to describe single completed events, when one would rather expect a perfective to be used. I will propose a novel account of the so-called existential FI (Grønn 2003), according to which the Russian past tense can be interpreted either as an existential quantifier or as a definite description (Zhao 2023b), and the existential FI is licensed by the existential past tense (cf. Dickey 2000, Mehlig 2011, Alvestad 2013, and Mueller-Reichau 2016; cf. also Chen et al. 2020 and Bertrand et al. 2022 on experientials).

Background: It is well known that Russian does not have the (im)perfective inflectional morphology. Instead, verbal stems are classified as perfective or imperfective. Cross-linguistically, the imperfective is used in sentences describing ongoing states and events, as well as in habitual and generic sentences (Comrie 1976, Arregui et al. 2014, a.o.). The Russian imperfective has a wider distribution: imperfective verbs in the past tense can be used to describe completed single events (FI; Grønn 2003, and many others). This can be seen most clearly with achievement imperfective verbs such as *prixodit'* 'come(IPFV)', which do not allow ongoing event interpretations. To describe a situation of there being just one Petja's coming event, the speaker may use either the past tense form of *prixodit'* 'come(IPFV)' or the past tense of the corresponding perfective verb *prijti* 'come(PFV)' (1). Note that such examples are restricted to the past tense: when the tense is present or future, achievement imperfective verbs like *prixodit'* only allow a habitual interpretation (but see the discussion in Grønn 2015).

- (1) Petja ^{OK} prišel / ^{OK} prixodil ko mne včera.
Petja come(PFV).PST come(IPFV).PST to me yesterday
'Petja came to me yesterday.'

Observations: Given the similarity between FI and the past perfective (1), of our interest are the features which help to distinguish them. I will focus on the so-called existential FI uses (Grønn 2003). The relevant observations are the following: **(i)** in the narrative progression, FI is ruled out (2) (Altshuler 2011 and others); **(ii)** FI is typically blocked when the described event is weakly (but not strongly) familiar (in terms of Roberts 2003) (3); **(iii)** FI is required in questions containing the indefinite temporal adverb *kogda-nibud'* 'ever', the past perfective is ungrammatical in this case (4) (Mehlig 2011); **(iv)** the use FI often implies that the result state of the described event does not hold at the utterance time (5) (Grønn 2003 and others).

- (2) Ko mne prišel Petja i ^{OK} ostalsja / # ostavalsja nadolgo.
to me come(PFV).PST Petja and stay(PFV).PST stay(IPFV).PST for.long.time
'Petja came to me and stayed for a long time.'

- (3) Ja roždalsja v Sankt-Peterburge.
I be.born(IPFV).PST in Saint.Petersburg
'I was born in Saint Petersburg.'

context: people are born only once.

OK context: Buddha talking about his past incarnations.

- (4) Ty kogda-nibud' *poproboval / ^{OK} proboval suši?
you ever try(PFV).PST try(IPFV).PST sushi
'Have you ever tried sushi?'

- (5) Petja prixodil ko mne segodnja.
Petja come(IPFV).PST to me today
'Petja came to me today.'

context: Petja is still at my house.

Proposal: I believe that the data discussed above can be explained under the assumption that the existential FI is licensed by the existential past tense (cf. Dickey 2000, Mehlig 2011, Alvestad 2013, and Mueller-Reichau 2016). To explicate this idea, I will assume the clause architecture sketched in (6) (Grønn & von Stechow 2016) and adopt the claim that the morphological aspect of the verbal stem does not necessarily signal the presence of the corresponding semantic aspect in the structure (Tatevosov 2013).

(6) [TP T [AspP {PFV, IPFV} Asp VP]]

Following Zhao's (2023a, 2023b) idea that tenses can have the semantics of definite descriptions, I propose that there are two past tenses in Russian: the definite past PAST_{DEF} and the existential past PAST_{INDF} (cf. Grønn & von Stechow 2016). PAST_{INDF} introduces existential quantification over times (7a), while PAST_{DEF} denotes the unique time interval satisfying a suitable temporal property (7b). A suitable temporal property can be a property of being identical to a familiar time interval (8a), a property of being the runtime of the unique event satisfying a salient property of events (8b), or a property of being the runtime of the unique event which gave rise to some currently relevant state (8c). PAST_{DEF} and PAST_{INDF} are subject to *Maximize Presupposition* (see Bade 2021 for a recent discussion).

(7) a. $[[\text{PAST}_{\text{INDF}}]]^{g,c} = \lambda Q. \exists t [t < t_c \wedge Q(t)]$

b. $[[\text{PAST}_{\text{DEF}}]]^{g,c} = \iota t [t < t_c \wedge P(t)]$, where P is a suitable temporal property

(8) Suitable temporal properties

a. $\lambda t.t = g(i)$, where $g(i)$ is a familiar time interval in the context c

b. $\lambda t.t = \tau(\iota e[R(e)])$, where R is a salient property of events in the context c

c. $\lambda t.t = \tau(\iota e[\text{Result}(e) = s \wedge \tau(s) \circ t_c])$, where s is a currently relevant state in c

Finally, I propose that PAST_{INDF} can license imperfective morphology even in the absence of the semantic imperfective aspect in the structure. Existential FI examples are thus supposed to have the structure in (9), with the indefinite past tense and the perfective semantic aspect.

(9) [TP PAST_{INDF} [AspP PFV VP]]

Now, we can explain the observed data as follows. If the semantic aspect is perfective, whenever the presuppositions of PAST_{DEF} are satisfied, PAST_{DEF} will be used due to *Maximize Presupposition*, and the structure will be spelled out by the past perfective. Otherwise, we will have PAST_{INDF}, and the structure will be spelled out by the past imperfective. The data in (3–6) are explained by the (un)availability of PAST_{DEF} in the given context, and the ‘cancelled result’ inference of FI (5) can be derived as an antipresupposition of PAST_{INDF}.

Discussion: While the proposed analysis seems successful in accounting for the data discussed above, it still faces serious challenges. Firstly, it only applies to the existential FI and says nothing about what Grønn (2003) terms the presuppositional FI (FI used to describe events the existence of which is presupposed; in such cases, the event is often strongly familiar in terms of Roberts 2003). I suggest that the presuppositional FI requires a separate treatment, presumably with reference to event anaphora (Alvestad 2013; see also Grønn 2003 and Altshuler 2011). Secondly, it predicts that the existential FI is only licensed by the past tense (as e.g. Arregui et al. 2014), a prediction which is rather too strong (see especially Alvestad 2013 and Grønn 2015).

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Mirativity as continuative evidentiality

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Mirativity is a grammatical category which expresses a speaker's surprise and novelty of information. It was first suggested as a cross-linguistic category by Scott DeLancey. In his view, many verb forms or particles which were previously considered indirect evidentials should be treated as miratives (DeLancey 1997). The reasoning behind the separation of mirativity is that these allegedly evidential forms are also attested in contexts where the speaker directly observes the event, so their use cannot be explained as indirect evidential. For example, the Turkish Perfect can be used in contexts like (1).

(1) Turkish < Turkic (Slobin & Aksu 1982: 197)

Kız-ınız çok iyi piyano çal-ıyor-muş!
girl-POSS.2PL very well piano play-PRS-PRF
‘[As I see,] your daughter **plays** the piano very well!’

I suggest a different analysis of mirativity. It originates in the long-established observation that direct “pure mirative” contexts often use imperfective / stative predicates or present tense, whereas inferential contexts (to which the former are contrasted) often use perfective / dynamic predicates or past tense, which was sporadically noted for specific languages by many authors (DeLancey 1997: 39; Aikhenvald 2004: 201; Tatevosov 2007: 380; Hengeveld & Olbertz 2012: 500). In my opinion, it is tense that plays a crucial role in this dichotomy, and mirativity can often be viewed as a sort of present-tense evidentiality, or rather “**continuative**” **evidentiality**. I point out two arguments in favor of this analysis.

Firstly, while it is usually believed that in “pure mirative” contexts the speaker directly observes the reported event, it can be shown that **the observed and the reported events are not identical**. For example, in (1) the speaker observes a single act of playing the piano but they infer that the girl has a habitual property of being able to play the piano well. This is characteristic of habitual “mirative” examples, which are widespread in the literature. Secondly, as I have noticed, in these “pure mirative” contexts **the beginning of the reported event precedes the beginning of the observation**. This can be clearly shown for non-habitual examples (e.g. Hare examples in DeLancey 1997: 39), which can be analyzed as follows: the speaker infers that the reported event has been happening for some time before they noticed it; i.e. the two events have different time reference. As Victor Friedman (2003: 200) put it in the discussion of present-tense contexts with Balkan Slavic “admirative” forms, “there is always some sort of past reference <...> Apparent present meaning is restricted to the discovery of pre-existing states”.

To assess the validity of this analysis for a specific language, it might be fruitful to check the restrictions of the allegedly “mirative” form in contexts where the speaker witnesses the beginning of the event and no past reference can be found. I elicited such a context with several consultants of Shughni (Eastern Iranian) and Tajik (Western Iranian), two languages which have evidentially marked tense forms. In Shughni, there are two past tense verb forms, Preterite and Perfect, which basically function as direct and indirect evidential, respectively. At the same time, the Perfect form of the verb *vidow* ‘be’ can be used in contexts with present tense reference (2) (see Melenchenko 2023). Tajik has developed a large system of indirect past tenses, one of which is the Perfect. Perfect forms of verbs

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budan ‘be’ and *doštan* ‘have’ are reported to have a mirative meaning as they can be used with present tense reference (Perry 2005: 217–236).

(2) Shughni < Eastern Iranian (Melenchenko 2023)

Tu yulā virod bašānd vuđj, tu=t gandā.
PRON.2SG old brother good be.PRF.M PRON.2SG=2SG bad
‘[It turns out] your older brother is nice, and you’re bad.’

I have attempted to construct an example (3) in which there is no past reference. The Shughni Perfect form *vuđj* is prohibited here. According to my consultants, it could be uttered if the man “had been ginger” for some time. (Note the same restriction exists for the Russian expression *оказывается*.) Instead, the null copula is used here. For Tajik, similar results were obtained; the use of the Perfect form was considered incorrect.

(3) Shughni (elicitation)

*Tu=t ajab zīrd (*vuđj)!*
PRON.2SG=2SG so ginger be.PRF.M

[The husband has dyed his hair without informing his wife beforehand. When she sees him, she exclaims in surprise:] ‘You are so ginger!’

Therefore, in Shughni and Tajik “mirative” uses of the Perfect form of the verb ‘to be’ can be explained as “continuative” inferentivity. In my opinion, it is likely that this analysis may be useful for description of similar verb forms in other languages as well. It is possible that tests similar to this context will yield different results for different languages, which would mean that this analysis may be applied to some languages and inapplicable to others. It is also possible that this analysis will turn out to be useful for the majority of languages for which the “mirative” meaning has been suggested, which would question the necessity of the separation of evidentiality and mirativity in the first place.

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Nukuoro demonstratives in the temporal domain

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Nukuoro, an underdocumented Polynesian outlier language spoken by around 1,200 people, has a set of demonstratives that appear post-nominally and describe the position of an entity with respect to the position of different interlocutors. See *nei* ‘this (near me)’ (1a) and *naa* ‘that (near you)’ (1b).

- (1) a. Au ne noho i de hagahala **nei**.
1SG PFV sit PREP DET sleeping.mat **PROX**
‘I sat on **this** sleeping mat (by me).’
b. Gaa-mai de hagahala **naa**.
give-DIR DEF sleeping.mat **MED**
‘Give me **that** sleeping mat (by you).’ (JR-20230414)

Interestingly, the same demonstratives may appear after verbs, as in (2a) and (2b). Post-verbally, the two demonstratives function roughly as tense markers – *nei* as the present tense, *naa* as the future tense or irrealis mood. Nukuoro exhibits properties of a tenseless language; it has a suite of pre-verbal aspect markers (the imperfective *e* in these examples, for instance) but no preverbal tense markers. However, in these contexts the post-verbal demonstratives (PVDs) are able to function like tense, restricting the event time in (2) with respect to the utterance time. Notice that in (2a), *nei* cannot cooccur with the temporal adverbs *anaahi* ‘yesterday’ and *daiao* ‘tomorrow’.

- (2) a. Au e tilo **nei** gi dahi ada o dahi daane absasa (*anaahi) (*daiao).
1SG IPFV look PROX to one picture GEN.O one man U.S yesterday tomorrow.
‘I’m looking at a picture of an American man.’ (JR-20190705)
b. D-agu maanadu Dehuemalaedoli e dangidangi **naa** aboo, hidinga e buliaamou
DET-1SG.GEN think Dehuemalaedoli IPFV cry.RED MED tonight because IPFV long.for
naa donu i gimaau ma Leibua.
MED truly LOC 1DU and Leibua
‘I think Dehuemalaedoli will be crying tonight, because he will miss me and Leibua.’ (Taalanga o Vave - Gininga)

From these examples, it seems like demonstratives in Nukuoro are able to indicate deictic relationships in both space, with the speaker at the deictic center (1), and time, with the present moment at the deictic center (2). A natural question is whether these PVDs actually instantiate syntactic or semantic tense, like tense markers in uncontroversially tensed languages like English.

I argue that PVDs do not express tense syntactically or semantically, although the functions of PVDs and tense overlap. I discuss three main pieces of evidence against a tense analysis. First, the linear position of PVDs - following both an aspect marker and a verb - suggests that their structural position is low, possibly within the verbal projections. This is difficult to account for within a tense analysis, as tense has been shown to occur structurally higher than both aspect markers and verbs.

Second, Nukuoro lacks properties attested in structurally tensed languages. Previous studies on superficially tenseless languages (i.e. languages without morphological tense marking) such as Mandarin have identified certain properties, like obligatory expletive subjects, as indirect evidence for the presence of tense in these languages [1], [2]. Other research has determined properties of structural tense itself: obligatoriness, contrastiveness, uniqueness, etc. [3]. Nukuoro has none of these properties: it lacks expletive subjects, and PVDs are not obligatory, contrastive or unique.

Finally, Nukuoro PVDs behave semantically unlike English-type tenses in several respects. For one thing, they do not form a simple tense paradigm as might be expected (e.g. a past, present, future triad); instead, *nei* (roughly) indicates a present tense, while *naa* functions as an irrealis marker. Further, none are “true” tense markers, in that they index only the relationship between the utterance time and the situation time of the event. For example, *nei*, which asserts that the time of a situation’s occurrence must overlap with the present (like a traditional present tense), conveys an additional restriction that the event must take place

within the speaker’s perceptual field. Perhaps most importantly, no PVDs are allowed to anaphorically reference a previously established time (3), as English-type tenses have been shown to do [4], [5].

- (3) Au ga gidee naa goe, gai koe e goobai (***nei**).
 1SG PRSP see MED 2SG so 2SG IPFV hat PROX
 ‘Whenever I see you, you’re wearing a hat.’ (JR-20230912)

In (3), the present tense in the embedded English translation refers to the anaphorically established habitual time in the previous clause, not the deictic present [4]. In contrast, *nei* is not available in the Nukuoro embedded clause, suggesting that *nei* may only index the deictic present. That is, PVDs are purely deictic (like demonstratives).

I argue that Nukuoro PVDs are structurally and semantically phrasal modifiers, just like demonstratives in the nominal domain. I suggest that the templatic symmetry of the nominal and verbal domains in Nukuoro (as shown in (4)), as well as the common metaphorical extension from spatial deixis to temporal deixis, allows demonstratives to modify either nouns or verbs.

- (4) a. determiner - N - [adjectives / numerals] - **demonstratives** - emphatics (*donu*)
 b. aspect - V - directional particles - **demonstratives** - emphatics (*loo, donu*)

Further, preliminary evidence suggests that PVDs in nominalizations instantiate a more systematic temporal distinction than we see in main clauses, as in (5). Here, rather than indicating tense or realis, choice of PVD seems to index the temporal distance of the arrival, suggesting that nominalization environments may be an important middle ground between the nominal and the verbal.

- (5) De longo o dono dae mai **nei/naa/laa** ne hagalelemouli.
 DET news of 3SG.GEN.O arrive DIR PROX/MED/DIST PFV surprising
 ‘The news of his (recent/less recent/long ago) arrival was surprising.’ (JR-20231114)

This study analyzes demonstratives in Nukuoro and argues that they maintain the same function in the nominal and verbal domains, i.e., they are phrasal modifiers encoding spatial and temporal deictic relations. PVDs are fairly common throughout Polynesian languages [6]–[8], but to my knowledge they have never undergone serious investigation. The use of PVDs to encode temporal deictic relations is a novel strategy employed by a grammatically tenseless language to mark the relationship between utterance time and event time in a principled manner (like tense), even though the language clearly lacks recognizable grammatical tense.

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This presentation aims:

1. To describe the diachronic evolution of two TAME markers in Vedic Sanskrit (1500-1000 BC): the *-syá-* formation and the desiderative.
2. To use the evidence from Vedic Sanskrit in order to propose a more nuanced method of understanding the categories of ‘tense’ and ‘mood’, where ‘tense’ and ‘mood’ are understood in terms of gradience rather than as a dichotomy.

In both cases, the present contribution differs from previous studies in terms of the theoretical approach adopted and of the conclusions drawn.

The *-syá-* formation and the so-called ‘desiderative’ appear to have very similar semantics in Vedic (in fact, on historical grounds, I argue that their function may originally have been the same; e.g. the *-syá-* formation *vakṣyási* and the desiderative *vívakṣasi* both originally meant something along the lines of ‘you desire to speak’). However, in the later stages of the language, they undergo different developments. By the time we reach post-Vedic (so-called Classical) Sanskrit, *-sya-* has become a future marker, whereas the desiderative has apparently kept its original semantics. In my presentation, I discuss what factors may have prompted Vedic speakers to choose the *-syá-* formation and not the desiderative as their standard future tense. This question has never been asked directly before. In answering it, I compare the semantics and distribution of these two formations at various stages of Vedic (from the earliest Vedic texts, the *Ṛgveda* and *Atharvaveda*, to a selection of the later Vedic prose texts) and I offer a novel account that improves on standard discussions in the literature in various ways (especially the influential Tichy 2006). Tichy (2006) assumes that the *-syá-* formation undergoes no functional change in the whole of the Vedic corpus. I argue, instead, that the semantics of *-syá-* does change (already even between the earliest texts of the *Ṛgveda* and *Atharvaveda*) and that its development matches the different stages of one of the future grams identified by Bybee et al. (1994). What makes the Vedic *-syá-* an interesting case compared to other examples of this gram is the role that subordination plays in triggering this grammaticalization path. Scholars like Bybee et al. primarily associate futures with main clauses (Bybee et al. 1994: 274, ‘Since the focal use of futures is to make predictions ... futures tend to occur in main clauses’). Directly drawing on the textual evidence, I argue, however, that *-syá-* first started its development towards a future meaning in subordinate clauses, before its new functional meanings were extended to main clauses. These conclusions contribute new insights to the study of Vedic, by offering an explanation of the factors behind the different developments of the *-syá-* and desiderative formations, and raise important methodological questions on the role of subordination in grammaticalization.

The observations and conclusions arising from the analysis of the *-syá-* and desiderative formations have wider consequences besides the study of TAME markers in Vedic, raising questions of larger theoretical scope. In Vedic, both the desiderative and the *-syá-* formation appear to stand between moods and tenses. The desiderative is particularly

interesting. It is sufficiently far from a mood per se insofar as it is found in the imperative, subjunctive and optative, and it is therefore traditionally classified as a present tense formation. However, what is taken to be its fundamental meaning (*vīvakṣasi* ‘you desire to speak’) is a modal meaning. The Vedic desiderative thus poses a challenge to the traditional dichotomy between ‘mood’ and ‘tense’: is a ‘desiderative’ truly a tense formation? Should it count as a mood? But if it is a mood, what do we make of its morphology? Traditional accounts of what moods and tenses are are insufficient to capture both the desiderative and other aspects of Vedic morphology. The notions of ‘mood’ and ‘tense’ have been amply described in the literature and scholars have formulated handy definitions for both of them (e.g. Comrie 1985 and Hewson 2012 on tense, Palmer 2001 on mood, Timberlake 2007 on both). But what do we make of languages such as Vedic, where some formations show an overlap between modality and time reference? In the literature, the future is a famous case in which tense interacts with modal values (e.g. Dahl 1985: 103). But are these interactions truly limited to the future? In answer to these questions, I suggest an alternative approach to moods and tenses that better accounts for the Vedic evidence and that is also potentially better suited to typology. In this model, moods and tenses are treated as being part of a gradient, rather than two clearly separate notions. In the literature, there have been occasional attempts in this direction (most radically Jaszczolt 2009). My account, however, differs from these both in the details of its approach (e.g. unlike Jaszczolt 2009, I do not consider tense as being fundamentally modal, but rather think of both mood and tense as forming a mood-tense spectrum) and in bringing in evidence from Vedic.

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Tense as a Morpho-semantic Category in Dravidian: A Parallel Corpus-Based Study on Tamil

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Keywords: *Dravidian TA systems, Parallel corpus methodology, Agglutinative TA morphology*

Introduction Tamil is a Dravidian language spoken primarily in the southern Indian subcontinent on which there is relatively little theoretical literature in the domains of tense and aspect. There are a few descriptive grammars from the late 20th century (eg. Lehmann, 1989) and some etymological discussions (Rajam, 1985; Steever, 1989), but rigorous semantic or syntactic discussions are rare. Consequently, there is a lack of consensus on a number of questions about the language’s tense-aspect system. A key point of contention regards whether or not Tamil has a distinct tense system, with Amritavalli (2014) having argued that Dravidian languages do not employ tense, but rather aspect to convey temporal meaning. Her account is supported by evidence from Kannada, another Dravidian language. For Tamil however, it is not clear that this analysis holds, as in descriptive literature (eg. Lehmann, 1989) Tamil is argued to have three distinct tense morphemes, *-t*, *-kir*, and *-v*. Importantly though, the distribution of labour between the so-called ‘present’ (*-kir*) and ‘future’ (*-v*) forms does not appear to be exclusively in terms of temporal meaning, an observation which would be consistent with arguments that even if it has ‘tense’ as a separate category, semantically Tamil only has a two-way past-non-past tense distinction (Steever, 1989).

Research Question Previous accounts of Tamil have however relied largely on exemplar-based arguments and hypotheses are not tested against sufficiently large data sets. The present research does precisely this using a parallel-corpus approach. Broadly, the two research questions addressed in this work are “Does Tamil have a tense system analogous to what is found in better researched language families (Germanic or Romance)?” and if so, “Does Tamil have a three-way distinction between past, present, and future, or only a two-way distinction between past and non-past?”

Method I adopt the *Translation Mining* (Le Bruyn et al., 2022) approach developed at Utrecht University using a parallel corpus of chapters 1, 16, and 17 from J. K. Rowling’s *Harry Potter and the Philosopher’s Stone* collated for the *Time in Translation* ([Time in Translation \(uu.nl\)](http://TimeinTranslation.uu.nl)) project, with the original English version and translations into German, French, and Spanish, as well as Tamil. Each finite verb form in each language receives a language-internal label for tense and aspect in the language itself, such as *Passé Composé* for French, or *Perfekt* for German. For Tamil, in the absence of easily available grammars written in Tamil itself, I use purely form based labels for morphemes (*-t*, *-kir*, *-v*, *-iru*, etc.). As Tamil has highly agglutinative morphology and allows numerous combinations of the ‘tense’ and ‘aspect’ morphemes, each finite verb in the corpus can have up to six different labels corresponding to different sequences of morphemes, and a final label is generated by concatenating the labels for the individual morpheme sequences. Additionally, all contexts in the corpus are classified as either dialogue or narration. Each context is finally associated with a tuple with the language-internal labels for each translated verb.

Results A total of 1262 Tamil verbs were annotated, of which, 631 appeared in dialogue, and 631 in narration. The first finding is summarised in the table below.

Tuple: <English, German, Spanish, French, Tamil>	% of total number of occurrences of bare Tamil morpheme
<simple past, Präteritum/Perfekt, pretérito indefinido/ pretérito imperfecto, passé simple/imparfait/ passé composé, -t>	73% (-t)
<simple present/present continuous, Präsens, presente, présent, -kir>	67% (-kir)
<simple present, Präsens, presente, présent, -v>	45% (-v)

<simple future, Futur I/Präsens, futuro imperfecto, futur simple, -v>	18% (-v)
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The figures in the table provide strong evidence for the association of the Tamil morphemes *-t* and *-kir* with past and present temporal meaning respectively, in line with descriptive accounts. It should be noted that the occurrence of *-v* with present forms is largely accounted for by the use of this forms with mental verbs (*know, like, etc.*) which in Tamil obtain a generic reading when inflected for this form. This provides evidence for the fact that the division of labour between the ‘present’ and ‘future’ morphemes is not easily explained exclusively in terms of temporality.

A second finding is that the patterns of tense use with regards to the distinction between narrative discourse and dialogue, are in line with what has been previously found for this corpus in other languages. In particular, Tellings et al. (2022) find that cross-linguistically, tense use is far more restricted in narrative discourse, where past tense forms dominate, while non-past tense forms appear almost exclusively in dialogue. They take this to be evidence for Partee’s (1973) hypotheses on the anaphoric nature of the past tense and the indexical nature of non-past tenses. In dialogue, non-past forms are temporally interpreted with relation to the time interpretation of verbs like *said* or *asked* which embed them in the narrative, but they cannot appear in narrative discourse itself which has a quality of temporal ‘otherness’ and almost always refers to events that have already taken place. I find the same asymmetry in the Tamil data between the occurrence of past and non-past forms. While the ‘past’ form *-t* appears in both registers, there are only 16 occurrences of *-kir* and *-v* in narrative discourse. All of these 16 uses are accounted for by generic statements and Tamil’s lack of sequence of tenses. This result suggests that the ‘past’ and ‘non-past’ forms in Tamil share the anaphoric and indexical properties of their Romance and Germanic *tense* counterparts.

Conclusion These findings show first that Tamil morphemes traditionally analysed as ‘tense’, do indeed have the properties of deictic tense forms when compared with languages that are argued to have a distinct tense category. Second, while there are three distinct morphological forms, the two non-past forms do not distribute exclusively along temporal lines, with the *-v* form having at least one major non-indexical use in generic statements, a role usually assigned to present tense forms in other languages. As a language that is so typologically distinct from others that have been studied until now, the results of this line of research contribute towards identifying those aspects of the semantics of tense and aspect that may be considered core and those which are subject to cross-linguistic variation. On a more methodological level, I show how cross linguistic comparative work, even when it involves languages which are typologically distant, can yield valuable insights into under-researched languages. Given the lack of consensus on the nature of the Tamil tense system, owing partly to the blind application of terminology coined for typologically unrelated languages, I demonstrate that it is still possible to take advantage of the abundance of research on those unrelated languages by abstracting away from labels and adopting a more data driven approach.

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Mongolian *-lee* suffix in the TAME domain

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1. Introduction. The study of the verbal system, and especially the TAME domain, in Mongolian has been the focus of much debate. The focus of this research is the *-lee* (*-laa*, *-loo*, *-löö*) morpheme, for which there is no consensus in the literature. Some authors argue that *-lee* is a past tense marker, as seen in (1) (Tserenchunt & Luethy 2000); others argue that it is a present perfect marker that describes an event that started in the past but is still unfinished, as seen in (2) (Wu, 1995); and others argue that *-lee* is an evidential marker, where (1)–(2) would be used only in the context where the speaker has firsthand knowledge of the event (Binnick, 2012).

- | | |
|--|---|
| <p>(1) Bat döngöj saya ir-lee.
 Bat barely just.now come-lee
 ‘Bat came just now.’</p> | <p>(2) Ter xün ir-lee.
 that person come-lee
 ‘That person is about to come.’</p> |
|--|---|

The main **research questions** for this project are following: (i) Is *-lee* a tense marker? (ii) If not, what properties does it have? (iii) Overall, how do TAME markers interact in Mongolian. In this study, I argue that *-lee* is an aspectual operator that carries an evidential presupposition. In terms of **methodology**, *-lee* was tested based on the relevant existing diagnostics that have been informed by understudied languages such as Javanese and Atayal (Chen et al., 2021), Cuzco Quechua (Faller, 2002), and St’at’imcets (Matthewson et al., 2007). The initial grammaticality judgements and data elicitations were based on my judgements as a native Mongolian speaker, but they were further tested with other native speakers.

2. *-lee* is not tense. Grammatical elements that convey some notion of anteriority can be classified into (i) pronominal past tense, (ii) existential past tense, and (iii) perfect aspect (Chen et al. 2021). Pronominal past tenses have anaphoric, deictic, and bound interpretations, whereas existential past tenses have scope interactions, no anaphoric, deictic, or bound uses, and are felicitous in out-of-the-blue contexts. I have applied the aforementioned diagnostics to *-lee* and the results of the diagnostics show that *-lee* is inconsistent with both pronominal and existential past tenses, providing evidence that *-lee* is not a past tense marker.

In addition, the *-lee* marker cannot be a present tense marker since *-lee* does not allow for a present interpretation, as seen in (3) where the event is instead understood as one that is about to happen. Even though examples (3) and (4) have future interpretations, *-lee* cannot be analyzed as future tense either since *-lee* can have a past interpretation, as seen in (1). These observations provide evidence against classifying *-lee* as tense.

- | | |
|---|---|
| <p>(3) Odoo eej aav ir-lee.
 now mom dad come-lee
 ≠ ‘Now, mom and dad are coming.’
 = ‘Mom and dad are about to come.’</p> | <p>(4) Udahgui boroo or-loo.
 soon rain get-lee
 ‘Soon, it is going to rain.’</p> |
|---|---|

3. *-lee* as aspect. I argue that *-lee* is an aspect marker that indicates the boundary of an event. In (3), *-lee* marks the left boundary of event without including the utterance time (UT), i.e., the event of *mom and dad coming* starts from the UT and continues to the future (Fig.1). As for (1), *-lee* marks the right boundary of an event without including the UT, i.e., the event of *Bat coming* started in the past and ended before the UT (Fig. 2).

Figure 1

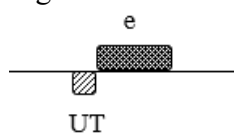
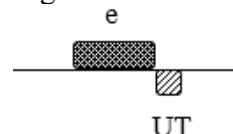


Figure 2



This analysis raises an important question: if *-lee* is an aspect marker, why is it incompatible with tense morphology, as seen in (5) below. I argue that, unlike English aspect where the tense locates the event time, *-lee* is obligatorily anchored to the UT. In other words, *-lee* only describes an event that happened before or after the UT, so the event time cannot be shifted by tense. This analysis explains (i) why tense is incompatible with *-lee*. Furthermore, it explains why *-lee* has recency effects since the event time must be close to the UT.

- (5) *Bat nom unsh-laa-san.
 Bat book read-lee-PST
 ‘Bat had read a book.’

4. *-lee* as evidentiality. In addition to an aspectual component, I argue that *-lee* has an evidential component. Specifically, *-lee* is an indirect inferring evidential of results, which is used when the speaker infers the situation from observable/direct evidence, since (4) can only be used in a context where you see dark clouds in the sky and infer that it is about to rain. In the context where the speaker heard from someone that it is going to rain or in the context where the speaker is unaware of the weather, sentence (4) would be infelicitous.

To further analyze the evidential component of *-lee*, I consider whether the evidential is part of the main assertion. In (6), we see that the evidence requirement cannot be negated, indicating that the evidential cannot be part of the main assertion.

- (6) End us baih-gui bai-laa.
 Here water be-NEG be-lee
 = ‘[I have evidence that] there is no water.’
 ≠ ‘I don’t have evidence that there is no water.’

In addition, sentence (7) presupposes that Tuyaa has evidence in her belief world, thus giving further support to analyzing *-lee* as a presupposition due to its projection.

- (7) Context: *Tuyaa is in the basement and hallucinating about the weather.*
 Tuyaa boroo or-loo gedegt itel-tei bai-na.
 Tuyaa rain enter-lee that belief-with be-PRES
 ‘Tuyaa believes that it is going to rain.’

5. Conclusion. I argued that *-lee* cannot be tense, but it has aspectual and evidential components. More specifically, *-lee* marks the boundary of an event in relation to the UT and presupposes that there is an indirect inferring evidential of results.

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Resultatives grammaticalizing into perfects and past tense forms in Udmurt

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The talk focuses on predicative participles formed with the suffix *-(e)myn* in Udmurt (Uralic; Russia). Participles in *-(e)myn* can stand in predicative position in main clauses (without any copula/auxiliary and number/person agreement morphemes), cf. (2)–(5). The suffix *-(e)myn* itself consists of the suffix of the perfect participle and the inessive case suffix. I present a novel analysis of these participles, arguing that they are undergoing a typologically common grammaticalization process, namely, *resultative* > *perfect* > *past tense* (cf. Bybee et al. 1994).

The participial construction in *-(e)myn* has been analysed as a resultative construction by Leinonen & Vilkkuna (2000) (among others), and as a passive by Asztalos (2011) and F. Gulyás & Speshilova (2014). Asztalos (2011) argues that the range of verbs that can occur in the construction is limited, i.e., intransitives are restricted to unaccusatives. In a later work, however, Asztalos (2022) points out that certain unergative verbs can also appear in the construction, cf. (3)–(5). A resultative reading is not available in these cases.

The main question of the research was whether an analysis of *-(e)myn* constructions as resultatives holds legitimacy. More specifically, the following questions were addressed:

- 1) How can the verbs that are licensed in the construction be characterized in terms of telicity?
- 2) What kind of temporal adverbs can be combined with *-(e)myn*-predicates?
- 3) Do transitive verbs necessarily undergo valency change in the construction?
- 4) Can a unified semantic and syntactic characterization be provided for *-(e)myn*-constructions?

The research was carried out by means of a qualitative and quantitative analysis of the first available (folklore) texts in Udmurt (from the end of the 19th century), and of texts retrieved from the Udmurt corpus. The analysis of written texts was completed by consultations with native speakers about the grammaticality and the interpretation of constructed sentences.

The data suggests that instances of *-(e)myn* constructions cannot be classified in a homogeneous way.

The majority of the examples examined does display the characteristics of resultative constructions (as defined by Bybee et al. 1994: 54), as i) they describe the result of a previous event, ii) they are formed of telic (mostly change-of-state) verbs, iii) they are compatible with a temporal adverb meaning ‘still’, and iv) transitive verbs undergo an object-to-subject valency change in the construction, cf. (1). I analyse the related examples as resultative constructions.

Other instances, however, show different properties: i) they do not describe a result but rather emphasize the relevance of a previous event at speech time (2)–(4), ii) they are formed of atelic verbs (2)–(4), iii) they are compatible with a temporal adverb meaning ‘already’, cf. (2), and iv) a transitive verb does not undergo valency change in these cases (2). I propose that *-(e)myn*-participles have the semantic and syntactic properties of perfects/anteriors (in the sense of Bybee et al. 1994: 54) in these examples.

In some further, otherwise sporadic examples, *-(e)myn*-participles combine with a temporal adverb referring to a specific time in the past (5), and a current relevance of the previous event is not in every case straightforward. In these cases *-(e)myn*-participles remind past tense forms.

I propose that the data are a reflection of an ongoing *resultative* > *perfect* > *past tense* grammaticalization process, which eventually might lead to the reanalysis of the originally nominal predicates (with zero copula) as finite, verbal predicates.

The grammaticalization happens by a gradual broadening of the contexts in which *-(e)myn*-participles can be used. I propose that initially, *-(e)myn*-participles could only be formed of telic verbs, mostly denoting a change of state (“resultative phase”), cf. (1). In a later stage, *-(e)myn*-participles became available with human subjects and atelic verbs like ‘to study’, ‘to work’,

which, despite not expressing a direct change in the state of their subjects, denote typical life experiences that may play a substantial role in one’s self-identification. These events are presented as relevant at speech time (e.g., in texts which introduce a person), cf. (3). In a subsequent phase, the use of *-(e)myn* extends to other verbs in the past, the motivation for the use of the participle being solely the relevance of the previous event at speech time (“perfect use”), cf. (4). Finally, *-(e)myn* forms become compatible with temporal adverbials with specific time reference in the past (“past tense use”), cf. (5).

The questions of how the grammaticalization process might affect the otherwise well-developed past tense system of Udmurt, and whether the influence of Russian might play a role in the presumed grammaticalization process will also be addressed in the talk.

- (1) *Lavka ušt-em-ijn na bere, so-ze no ta-ze*
shop[NOM] open-PTCP.PRF-INE still as that-DET.ACC ADD this-DET.ACC
baštj-nj vu-o-d na.
buy-INF arrive-FUT-2SG still (Udmurt corpus; Udmurt duńńe 26.03.2013)
‘As the shop is still open, you will still manage to buy some things.’
- (2) *So ulon-az tros ma-je adž-em-ijn ni.*
3SG[NOM] life-INE.3SG lot what-ACC see-PTCP.PRF-INE already
‘He has already seen a lot during his life.’ (Udmurt corpus; marjamoll.blogspot.ru)
- (3) *Ta pešaj 25 ar čože traktor-en uža-m-ijn. Tuž vižmo, tros*
this grandma 25 year for tractor-INS work-PTCP.PRF-INE very clever lot
tod-e.
know-3SG (Udmurt corpus; Udmurt duńńe 21.10.2010)
‘This old lady worked a tractorist for 25 years. She’s very clever, she knows a lot.’
- (4) Context: A blogpost about the possible origin of an Estonian folk tradition. Estonians claim it is of German origin.
Zem no, eston-jos kōña=ke daur čože nıemec-jos uljn
true ADD Estonian-PL how_many=PCL century for German-PL under
ul-em-ijn uk!
live-PTCP.PRF-INE EMP (Udmurt corpus; Udmurt duńńe 17.06.2008)
‘Indeed, Estonians lived under Germans for some centuries!’
- (5) The preceding context is telling about an event dedicated to Vera Bogdanovska.
Ta – Rossi-įś nırišeti-os-įz pōl-įś nılkjšno ximik, ul-em-ijn
this Russia-ELA first-PL-DET among-ELA woman chemist live-PTCP.PRF-INE
1867-ti – 1896-ti ar-jos-j. (Udmurt corpus; Udmurt duńńe 23.04.2014)
1867-ORD 1896-ORD year-PL-ILL
‘She is one of the first women chemists from Russia, she lived between 1867 and 1896.’

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From expressing the past to expressing the future: the diachrony of the GO + infinitive periphrase in Occitan

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There is a well-known grammaticalization path involving movement verbs, which readily turn into future markers (see Bybee & Pagliuca 1987, as well as Bybee, Pagliuca & Perkins 1991 for the examination of a balanced sample of languages, showing the movement verbs are one of the two main sources of future markers, together with desideratives). Such grammaticalization has occurred repeatedly in the languages of the world, including the English *go to* + *INFINITIVE* construction and a similar construction present in most Romance languages such as French *aller* + *INF* or Spanish *andar a* + *INF*.

Equally well-known is the main exception to this straightforward grammaticalization path, which sees Catalan expressing perfective past by using this same periphrase. Recent studies have shown that Catalan probably took it from Occitan, or at least that it grammaticalized quicker in Occitan and to a larger extent in 14th c. (Wheeler 2018). Wheeler (2018) suggests that the *go* past was a common feature of early medieval Gallo-Romance on a whole, based on a handful of examples with past interpretation found in the *Chanson de Roland*. I adduce a parallel corpus study of an early 15th century text for which two Occitan versions and one Catalan version are preserved, which demonstrates that the Occitan version makes more use of the periphrastic past than the Catalan version.

The *go* past has been preserved in a small number of mostly peripheral varieties of Occitan (Guardia Piemontese and Pyrenean Gascon, see Jacobs & Kunert 2014; for Gascon varieties in general, including some lexicalized examples in the Aspe Valley, see Marquèze-Pouey 1955). But otherwise, all other varieties of Occitan now present a future meaning for this periphrase (see Bras & Sibille 2020 for a corpus study of modern usage). The main question is thus to understand how a construction with a past perfective meaning comes to express futurity, and the path of change that this implies, including various possible factors such as contact with French.

To answer this question, I present a diachronic corpus study which centres on the period that has not yet been studied for Occitan (16th-19th century), which should include the period of change as in the middle ages examples show a consistent past interpretation (Wheeler 2018), and in modern Occitan texts it seems that only a future interpretation obtains (Bras & Sibille 2020). This period also corresponds to a time where there is less linguistic evidence available, as Occitan stops being a language used in the public sphere towards the start of the 16th century, and is only used for sporadic literary attempts in the language before a vast movement of collection of oral texts begins towards the middle of the 19th century. I rely on methods used in Esher (2022) and Bach (2023), which propose a sampling of texts from a relatively homogenous dialectal area (either Lengadocian or Provençau) chosen for being long enough to be possibly exhibiting the linguistic features under consideration. Texts are divided into four dialectal areas (north Lengadocian, south Lengadocian, Provençau Rodanenc, Provençau Maritim) and grouped by half centuries based on the probable date of

writing or, when available, the date of publication. As there is no digitized corpus available, texts have to be analysed manually to extract the relevant data.

The study shows how, even in the late middle ages, some uses of the construction could be taken to express futurity or at least posteriority (see Paoli & Wolfe 2021), and how such usage develops throughout the early modern period. In Modern Occitan, only fossilized uses of the construction to denote a past meaning can be found (such as in traditional songs).

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Typological studies examining the process of grammaticalization provided a list of the lexical sources out of which future tense morphemes can develop (Bybee/Perkins/Pagliuca 1994; Kuteva *et al.* 2019). Although these are not a few, most of the studies dealing with the diachrony of future morphology focuses on the three lexical sources which are considered as the most frequent cross-linguistically, i.e., verbs or constructions expressing: 1. volition, 2. movement, and 3. obligation (Bybee 2015; Napoli 2019).

While accepting the evidence of the frequency of these three grammaticalization paths, investigating paths of change emerging less frequently may contribute to the comprehension of the nature of the category of future. Moreover, analysing languages which have been absent in previous studies, such as some Semitic languages, may contribute to the same goal.

Based on ongoing research, this study proposes an enlargement of the sample of languages hitherto investigated in the main diachronic typology studies, especially through the analysis of the future morphology of Classical Arabic (CA) and some modern Arabic varieties. Data from these languages allow us to explore a path of grammaticalization quite underrepresented in literature: the development of a future morpheme out of a temporal adverb. The origin of CA future marker *sawfa/sa-* can be traced to a reconstructed adverb *sawfa* meaning ‘in the end’ (Wright 1896; Cohen 1924; Rubin 2005). Four modern Arabic varieties (Baghdad Jewish Arabic, Tunisian Arabic, Libyan Arabic, and Moroccan Arabic) show future morphemes developed out of adverbs meaning ‘now’ (Taine-Cheikh 2004; 2009; Mion 2018; Pereira/Benmoftah 2019; Comolli 2021).

While some of these elements have been the subject of several descriptions concerning their functions and (possible) temporal and/or modal nuances, Moroccan Arabic *dāba* has only recently been described as a grammaticalized element having the function of expressing futurity (Comolli 2021). In particular, it has been described from a pragmatic perspective, attributing to it the function of expressing a “remediation future”, and from a temporal one, with the function of expressing an “immediate future”. In this study, instead, it will be proposed that the modal nuance expressed by this element is the relevant one for its selection by speakers.

After an overview of the above elements, some examples of *dāba* uses taken from the corpus of the present study will be presented. First results of the analysis suggest that *dāba* is employed to express strong intentionality and/or certainty of the speaker towards the realization of the event described by the verb. A comparison of the semantics of all the elements presented will also be proposed.

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Embedded tense and adverbial modification: the view from Romance

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Overview: This talk investigates the temporal interpretation of attitude reports (AttR) modified by temporal adverbs (TA), with a focus on the restrictions imposed on tense-adverb combinations in Romance languages. Consider the contrast below in Italian:

- (1) Dopodomani Luca dirà che Sara è **partita** *{domani} / {il giorno prima}.
(‘The day after tomorrow Luca will say that Sara left tomorrow/{the day before}.’)
- (2) Ieri Luca ha detto che Sara **partirà** {domani} / *{dopo due giorni}.
(‘Yesterday Luca said that Sara will leave tomorrow/{after two days}.’)

If Sara departs tomorrow, an embedded past tense can only be modified by an anaphoric adverbial (e.g., (1)), while an embedded future only allows a deictic adverbial (e.g., (2)). Building on Keshet (2010), we argue that combinatorial options between AttRs and TAs are driven by an economy principle whereby deictic and anaphoric TAs can only occur with tense forms evaluated with respect to the utterance time (UT) and the local evaluation time (EvalT), respectively.

Background: Despite limited attention in semantics literature, a notable syntactic proposal dates back to Giorgi (2010). Her analysis hinges on the following tenets: (a) non-imperfective indicative forms all yield double access readings (DAR) and are, thus, relativized to both UT and EvalT (in AttR the attitude time (AT)); (b) deictic/anaphoric TAs require that EvalT be equal/not equal to UT. While this analysis correctly explains the availability of deictic TAs in most future/past-tensed embeddings, it leaves several puzzles unresolved: (i) it cannot elucidate why anaphoric adverbials can occur with the analytic perfect (*Passato Prossimo*) but not with the simple future; (ii) it involves stipulations regarding indicative forms treated as non-DAR; (iii) it struggles to convincingly account for the exclusion of deictic *tomorrow* from past-under-future reports.

Proposal: Contrary to Giorgi (2010) and in agreement with Ogihara & Sharvit (2012), we contend that the only forms involving a *de Re* construal are the present tense and the future, with the former being deictic and the latter historically derived from the present. By contrast, the past tense may exhibit both a *de Re* and a *de Dicto* construal, contingent on the context. Furthermore, we take both tenses (see (3)) and TAs (see (4)) to denote predicates of times that necessitate a reference time (RT) and an evaluation time (EvalT). While EvalT is locally bound, RT is existentially closed (cf. Grønn & Von Stechow 2016, p. 361) - setting aside here the contribution of aspect. We also argue that TAs adjoin to T, thus resulting in an intersective interpretation that restricts the reference time provided by the tense. Additionally, in alignment with Giorgi’s proposal, we also posit that deictic adverbials such as *domani* require that the EvalT be a time overlapping with UT, as illustrated in (4-a). In contrast, anaphoric adverbials such as *dopo due giorni* exclude UT as the EvalT, as given in (4-b).

$$(3) \quad \llbracket \text{PAST} \rrbracket = \lambda t_i . \lambda p_{(i,t)} . \lambda t'_i . t' < t \ \& \ p(t') = 1; \llbracket \text{PRES} \rrbracket = \lambda t_i : t \circ t^* . \lambda p_{(i,t)} . \lambda t'_i . t' \circ t \ \& \ p(t') = 1$$

$$\llbracket \text{FUT} \rrbracket = \lambda t_i : t \circ t^* . \lambda p_{(i,t)} . \lambda t'_i . t' > t \ \& \ p(t') = 1$$

$$(4) \quad a. \quad \llbracket \text{domani} \rrbracket = \lambda t_i : t \circ t^* . \lambda p_{(i,t)} . \lambda t'_i . t' - t = 1 \text{ day} \ \& \ p(t')$$

$$b. \quad \llbracket \text{dopo} \rrbracket (\llbracket \text{due giorni} \rrbracket) = [\lambda m_i . \lambda t_i : \neg(t \circ t^*) . \lambda p_{(i,t)} . \lambda t'_i . t' - t = m \ \& \ p(t')] (2 \text{ days})$$

$$(5) \quad \text{LF: } [_{CP} t^* [\dots \lambda t_2 [\exists [_{TP} [_{T} [\text{PAST/PRES } t_2/t_0]] [_{PP} \text{Adv } t_2/t_0]]] [_{VP} p]]]] \quad (t^* \circ \text{UT})$$

Against this backdrop, we propose that the ultimate determinant of the observed patterns lies in the impossibility for tenses and TAs to receive conflicting temporal evaluations, as dictated by Keshet (2010, p. 3)’s Intersective Predicate Generalization illustrated in (6).

- (6) **Intersective Predicate Generalization (IPG):** *Two predicates interpreted intersectively may not be evaluated at different times or worlds from one another.*

A crucial implication of IPG is that, in ATTRs, embedded deictic and anaphoric adverbials “impose” a *de Re* and *de Dicto* interpretation, respectively, on the tense they modify. It follows

that deictic tense forms, like present and future, only align with deictic adverbials, while temporally dependent forms strictly pair with anaphoric adverbials. In (1), the resulting LF involves an embedded past with a *de Dicto* interpretation relative to the future AT (Luca’s speech time). Combining the past tense with a deictic adverbial like *domani*, which is relativized to UT, leads to an IPG violation (illustrated in (7)). An alternative IPG-compliant LF ((8) (due to space constraints, full-fledged derivations are omitted from the abstract) leads to presupposition failure due to the presuppositional restriction carried by *domani* that projects up to the binder λt_2 and, consequently, to the attitude time t'' , located after UT via the matrix FUT.

(7) $[t^* [\lambda t_0 [\exists [_{TP} [T \text{ FUT}_{t_0} \text{ dopododmani}_{t_0}] [_{VP} \text{ Luca} [\dots \text{dic-} [\lambda t_2 [\exists [_{TP} [T [\text{PAST } \#t_2] [_{PP} \text{ domani } \#t_0]]] [_{VP} \text{ Sara} [\text{partire}]]]]]]]]]]]]]]]: \text{EvalT}(\text{PAST}) \neq \text{EvalT}(\text{domani})$

(8) $[\dots [\text{FUT}_{t_0} [\forall \langle w'', t'' \rangle \in \text{Say}(\text{Luca}, t, @) [\lambda t_2 [\exists [_{TP} [T [\text{PAST } t_2] [_{PP} \text{ dom. } t_2]] [_{VP} \dots]]]]]]]]]]$

Note that if the anaphoric adverbial *il giorno prima* is inserted in (1) instead, neither an IPG violation nor a presupposition failure arises. In fact, we derive the correct interpretation:

(9) $[t^* [\lambda t_0 [\exists t''' [_{TP} [T \text{ FUT}_{t_0} \text{ dopododmani}_{t_0}] [_{VP} \text{ Luca} [\dots \text{dic-} \forall \langle w'', t'' \rangle [\lambda t_2 [\exists t' [_{TP} [T [\text{PAST } t_2] [_{PP} \{\text{il giorno prima}\} t_2]]] [_{VP} \text{ Sara} [\text{partire}]]]]]]]]]]]]]]]$

(10) $[[(9)] \text{ defined iff } t^* \circ t^* \ \& \ \neg(t'' \circ t^*)$ When defined:
 $[[(9)] = 1 \text{ iff } \exists t''' [t''' > t^* \ \& \ t''' - t^* = 2 \text{ days} \ \& \ \forall \langle w'', t'' \rangle \in \text{Say}(\text{Luca}, t''', @), \exists t' [t' < t'' \ \& \ t' - t'' = -1 \text{ day} \ \& \ \text{Sara leaves in } w'' \text{ at } t']]]]$

For (2), we adopt a *de Re* analysis of the embedded future relying on concept generators (Charlow & Sharvit 2014). The embedded tense is assumed to be an argument of a concept generator G_7 , which provides a suitable time-concept (that is, a description of how the attitude holder is acquainted with a certain time). Since the embedded tense is rigidly anchored to UT, it is raised out of the scope of the attitude verb, leaving a co-indexed trace behind (for formal details, refer to Sharvit (2018)). With this generated LF as shown in (11), we correctly predict the oddness of the sentence in the case where the anaphoric adverbial *dopo due giorni* adjoins to T: since the adverbial is pied-piped with the embedded future, the only suitable EvalT is t^* , which overlaps UT. This leads once more to either presupposition failure (for t_0) or a violation of IPG (for t_2).

(11) $[t^* [\lambda t_0 [\exists t''' [_{TP} [T \text{ FUT}_{t_0} [_{PP} \{\text{dopo due giorni}\} t_0 / \#t_2]]] [\lambda t_4 [\exists t' [[T [\text{PAST}_{t_0} \text{ ieri}_{t_0}]]] [_{VP} \text{ Luca} [\dots \text{dic-} [\lambda t_7 [\lambda t_2 [\exists t' [_{TP} [T [G_7 t_4] t_2]] [_{VP} \text{ Sara} [\text{partire}]]]]]]]]]]]]]]]]]]]]]$

Conversely, when in (2) the embedded *de Re* future combines with the deictic *domani*, all presuppositions are met and the sentence’s truth-conditions are regularly computed:

(12) $[t^* [\lambda t_0 [\exists t''' [_{TP} [T \text{ FUT}_{t_0} [_{PP} \text{ domani } t_0]]] [\lambda t_4 [\exists t' [[T [\text{PAST}_{t_0} \text{ ieri}_{t_0}]]] [_{VP} \text{ Luca} [\dots \text{dic-} [\lambda t_7 [\lambda t_2 [\exists t' [_{TP} [T [G_7 t_4] t_2]] [_{VP} \text{ Sara} [\text{partire}]]]]]]]]]]]]]]]]]]]]]$

(13) $[[(12)] \text{ defined iff } t^* \circ t^*$ When defined:
 $[[(12)] = 1 \text{ iff } \exists t''' [t''' > t^* \ \& \ t''' - t^* = 1 \text{ day} \ \& \ \exists t' [t' < t^* \ \& \ t' - t^* = -1 \text{ day} \ \& \ \exists G \text{ suitable for Luca in } @ \text{ at } t' \ \& \ [\forall \langle w'', t'' \rangle \in \text{Say}(\text{Luca}, t', @), \text{ Sara leaves in } w'' \text{ at } G(t''')(t'')(w'')]]]]]$

Outlook: This proposal extends the observed restrictions on the interpretation of intersective predicates beyond DPs (Keshet & Schwarz 2019). The analysis, applied here to Italian, may be extended to French and Spanish (data omitted in the interest of space). This analysis additionally offers a straightforward solution to Ogihara & Sharvit (2012, p. 664)’s puzzle (fn 6), wherein, in relative present languages like Hebrew, a deictic distal adverb akin to *then* may modify a *de Re* past but not a *de Dicto* present. Finally, a potential issue arises with anaphoric adverbials referring to an external time interval, which typically involve a post-nominal preposition (e.g., *two days after/later*) and a distribution similar to referential adverbials, suggesting a possible elided structure (e.g., *two days after <his birthday>*). Interestingly, these adverbials do not impose IPG-related restrictions on T, suggesting they may attach higher, at TP-level.

Approximation and immediate proximity

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The Italian particle *appena* admits various interpretations and enters different syntactic configurations. This word can be traced back to vulgar Latin expression *ad poena* (to pain), with the meaning of *barely, hardly* (1). *Appena* can also be translated as *just*, both with quantitative (2) and a temporal (3) interpretations, in the former case also with an exclusive flavour. Finally, it can be used as a temporal complementiser, like *as soon as* (4). We aim to show that in all these meanings, the particle positions an asserted element, say B—namely Alice’s walking in (1) and Alice’s cooking in (4)—in the next proximity of a reference value a_1 taken in an entity/structure, say A, that is of various nature, namely an evaluative scale for the event predicate ‘walk’ in (1) and time for Luisa’s leaving event in (4).

- (1) Alice cammina appena. ‘Alice barely walks’
- (2) Alice ha mangiato appena una fetta di torta. ‘Alice ate just/only a slice of cake’
- (3) Alice è appena arrivata. ‘Alice has just arrived’
- (4) Alice cucina appena Luisa esce di casa. ‘Alice starts cooking as soon as Luisa leaves the house’

Background Tovena & Schaden (2009) discussed a rich range of readings and properties of *appena*, noting first of all that it expresses a temporal relation of immediate anteriority, with a verb in the perfect form, and draw an analogy with German *gerade*. The perfect form provides the (point) a_1 as reference point and the direction of the line, via the constraint that a_1 precedes the event that is to be located. The verbal predicate contributes the property of events. Moreover, these authors detail that *appena* can be a degree modifier, also considering spatial gradation, and combines with expletive negation. They hypothesise that *appena* works like an approximator by excess, in the sense that a_1 provides a reference value that qualifies as a minimal degree of a gradable property or a point in time, and allows B to be positioned in any position higher and close to it within a range of indiscernible values (an equivalence class), and in accordance with the direction considered. Tovena & Schaden’s equivalence class, defined with respect to a contextual threshold (Jayez and Tovena 2008), is not so far removed from the idea of interpreting vagueness via granularity put forth in (Krifka 2007, Sauerland & Stateva 2011). A granularity function is a contextual parameter of interpretation that maps each point on a scale to an interval that contains it. Such a function would help to model the so-called emphatic reading of German *gerade* that they analysed in (Schaden & Tovena 2009) using a contextual measure function, and has actually been used for English *just* in (Thomas and Deo 2020). However, the emphatic reading, which would be an instance of approximating a high value, is not available for *appena*, which only approximates a minimum value.

Proposal We endorse much of Tovena & Schaden’s work, but we propose to reverse their perspective of approximating the reference value ‘from above’. Under our view, *appena* works as a particle that connects an element under discussion (B) with the first minimal complete instantiation a_1 of a broader reference (A). The position of B is *in defect* to the potential entirety of A, rather than being in the proximity of a_1 by excess, so the general perspective is forward looking from a_1 . Next, it is the difference in the nature of A, and therefore B, that leads to the different interpretations and syntactic configurations, i.e. *barely, just/only, as soon as*. *Appena* seems to perform a categorisation task, like an approximator, when A is a partial order structure. In this case, B instantiates the minimal degree or unit a_1 in A. But when A provides a temporal parameter, the order is total, and *appena* sets up a binary relation with the temporal parameter of B. A form of approximation is realised in terms of placing B in the immediate vicinity (posteriority) of a_1 in A. The level of granularity relevant to assessing the actual distance considered between B and a_1 depends on the lexical content of the description of B and on the context. Let us consider the impact of each type of A in turn.

A provides a partial order structure via a qualitative scale or a mereological structure When A is a partial order structure, *appena* seems to perform a categorisation task, because B is taken to instantiate the minimal degree or unit a_1 in A. This situation can be reworded as a binary relation between B and a position a_1 on A. The first case to examine is (1), exhibiting a reading close to English *barely*, where B is the event asserted by the sentence. *Appena* behaves like a modifier of the intension of *camminare* (walk), and it connects B with the evaluative scale of walking A associated

with such predicate of events. The connection is established by stating that event B barely instantiates the essence of an event type A of ‘putting one foot in front of the other’ that could be characterised in many ways (different speed, quality, quantity). At the interface with syntax, *appena* is positioned after the predicate, like manner adverbials e.g. *bene* (well). This low position allows the semantic operation of predicate modification, and is congruent with the fact that the adverb merges with the predicate before reaching the projections of aspect and time. The second case is the reading close to English *just, only* shown in (2). The event described in (2) has an incremental theme. The partitive DP object refers to a discrete quantity a_1 that belongs to a whole A, and the mereological structure of the event is homomorphic to that of the theme (Krifka 1998). Such a homomorphism matters for the interpretation of *appena*, whose core semantics does not change. To be in the proximity of the discrete quantity *una fetta* (a slice) expressing the contextually minimal unit a_1 of the theme, means to realise an event that correspond to that exact quantity. The seeming meaning change from *barely* to *only* is constrained by the reference itself, given that to *barely* eat a slice is to eat a single slice and nothing more, cf. the inference that higher alternatives are negated that is usually associated with scalar readings. As for syntax, *appena* behaves like a qualitative adverb and occurs between the verbal form—in either simple or complex forms—and its object acting as a reference.

A provides a total order structure, via a temporal parameter When A is the flow of time, hence a total order, the reading of *appena* is temporal, and two cases can be distinguished. The first case to consider is when the temporal information is a temporal index associated with the verbal form. It is the contextual parameter of speech time in (3). The reference a_1 on the timeline is the time of the event of arrival by Alice. The entity A to which a_1 belongs is the flow of time, and is available and evoked each time we refer to a point in time. This aligns smoothly with our forward perspective. The time corresponding to B is located right after a_1 , hence at speech time, which here coincides with reference time. In this case, *appena* works as a time-adverbial expression that combines with compound tenses, and its syntactic position is between the auxiliary and the past participle, as per Cinque’s (1999) adverbial hierarchy for Italian. This yields an interpretation close to temporal *just*, since the reference is a point in time and *appena* expresses a proximity in the subsequent time. It may be the case that the event is not punctual, but the perfective ensures that its internal structure is not visible and that the reference is identified with the final time, see (5).

- (5) Alice ha appena corso nel parco. ‘Alice has just finished running in the park’

Next, consider example (4) that illustrates the case in which the index is given by the temporal location of an event. Here *appena* behaves like a temporal connective, and is used to connect the time of two different eventualities overtly provided by the main clause and the subordinate one, with a_1 that sets the temporal reference relevant for B. Here, it is worth paying attention to the possible different aspectual characterisations of the event described in the clause hosting *appena*. Indeed, if it is a punctual event, as illustrated by (4), a_1 coincides with the time of the whole eventuality. Conversely, when the sentence describes a durative event, a_1 coincides with the time of the event’s onset (Landman 2008), as is (6), which yields an inchoative interpretation. Interestingly, when the sentence describes a telic durative event, a_1 can also coincide with the time of the event’s onset, see (7).

- (6) Alice cucina appena Luisa cucina. ‘Alice starts cooking as soon as Luisa is cooking/starts cooking’

- (7) Alice cucina appena Luisa fa un cruciverba. ‘Alice starts cooking as soon as Luisa does a crossword’

In short, the behaviour of *appena* has been represented as a pattern where the element under discussion B is positioned in the proximity of the first minimal complete instantiation a_1 of a larger reference A. This pattern is able to capture all its interpretations, and is compatible with a unified formalisation.

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Étude longitudinale et comparative de l'utilisation de la morphologie verbale dans des récits oraux et écrits par deux apprenantes syriennes de français L2

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Les recherches sur l'expression de la temporalité en langue seconde (L2) ont permis d'identifier des stades acquisitionnels de développement de la morphologie verbale (Bartning & Schlyter, 2004; Bhadwaj et al., 1988; Dietrich et al., 1995; Klein et al., 1993; Noyau, 1998; Starren, 2001). Ces travaux suggèrent une évolution d'un stade où les formes verbales sont dépourvues de morphologie flexionnelle (variété de base (Klein & Perdue, 1997)) à des stades avancés où les formes flexionnelles sont fonctionnelles et stabilisées. Si ces résultats attestent d'une évolution linéaire possible des moyens exprimant la temporalité (Granget, 2023), l'emploi des formes verbales chez l'apprenant d'une L2 se caractérise surtout par une forte variation même aux stades avancés (Howard, 2002), des contextes d'emploi restreints (cf. l'emploi de l'imparfait (Izquierdo & Kihlstedt, 2019)) et d'une mise en place assez tardive des correspondances formes-fonctions. D'ailleurs, l'émergence des premières formes morphologiques dans l'interlangue ne reflète pas nécessairement la maîtrise de leurs différentes fonctions (Myles, 2004), et l'absence de marques morphologiques dans le discours oral de l'apprenant n'indique pas nécessairement l'absence d'indications fonctionnelles ; comme le montrent les travaux menés sur les premiers stades d'acquisition (Perdue, 1993a, 1993b; Véronique, 2021). En effet, l'apprenant débutant peut s'appuyer sur des principes discursifs et des moyens pragmatiques et lexicaux pour exprimer la temporalité (Klein, 1997; Klein et al., 1993; Véronique, 2000). Par ailleurs, l'étude des premières formes verbales produites à l'oral en français L2 par des arabophones marocains montre que même au stade basique où les verbes ne contiennent pas de morphologie flexionnelle (Klein & Perdue, 1997), l'emploi des différentes formes suit une logique particulière et montre des systématismes dans les différents contextes discursifs (Noyau et al., 1995; Véronique, 2000).

Pour examiner les formes verbales employées à l'oral par l'apprenant d'une L2, le chercheur est donc confronté à la difficulté de comprendre et d'interpréter ce qui motive les choix des différentes formes employées dans le discours, surtout lorsqu'elles sont polysémiques (ex. la terminaison verbale en /e/). En effet, comme le souligne Starren (2001, p. 81), comprendre ce que l'apprenant tente d'exprimer n'est pas une tâche aisée étant donné que les perspectives du locuteur et du chercheur ne sont jamais nécessairement semblables. De même, comme le montre Leclercq (2020), l'interprétation des formes s'appuie souvent sur la connaissance intime du système d'écriture par le transcripteur et l'hypothèse que cette connaissance est partagée par les apprenants.

Dans cette étude, nous postulons que les représentations orthographiques des formes employées peuvent fournir un éclairage supplémentaire sur l'appropriation de la morphologie verbale en milieu guidé. Ainsi, nous étudions le développement des constructions verbales employées par deux apprenantes syriennes du français L2 (FAY, 51 ans, niveau débutant (A1)) et MAY (28 ans, niveau intermédiaire (B1)) évoluant dans un contexte à la fois immersif et guidé à partir de leurs récits personnels produits à l'oral et à l'écrit sur une période d'environ 6 mois. Nous analysons des données¹ orales issues d'entretiens semi-guidés et des récits personnels rédigés lors d'ateliers d'écriture. A notre connaissance, depuis le projet EALA (Véronique, 2021), il n'y a pas eu d'études longitudinales menées auprès d'apprenants arabophones du français et aucune étude n'a examiné le développement de la temporalité chez les arabophones au-delà de la variété de base. En effet, pour la plupart des travailleurs marocains suivis dans le cadre du projet EALA, l'emploi des formes morphologiques était tardif et les correspondances formes -fonctions étaient difficiles à établir (Noyau, 1998, ; Noyau et al., 1995; Véronique, 2000). Par ailleurs, les études qui se sont intéressées aux deux modalités écrite et orale pour examiner l'expression de la temporalité en L2 (comme par ex. Labeau (2002)) sont rares.

¹ Les données analysées proviennent du corpus SOFRA (*Approche SOcioculturelle et Psychologique de l'acquisition du FRANçais langue seconde par des demandeurs d'asile syriens* (2019-2022)) récolté auprès de 33 demandeurs d'asile et réfugiés syriens à 3 reprises sur une période d'environ 10 mois.

L'objectif de cette étude est double : d'une part, il s'agit d'étudier les moyens morphologiques employés par deux apprenantes syriennes en situation de réinstallation en France de niveau débutant et intermédiaire en FrL2 pour raconter les événements passés et non-passés. D'autre part, nous souhaitons investiguer le développement des formes verbales aussi bien à l'oral qu'à l'écrit, ce qui pourrait fournir un éclairage supplémentaire sur l'appropriation de la morphologie verbale par nos deux apprenantes.

Les données orales et écrites ont été traitées (transcrites et codées) sur CLAN (MacWhinney, 2000). Nous avons distingué, en nous basant sur les adverbiaux temporels employés, entre les contextes où les apprenantes faisaient référence à un intervalle temporel antérieur au moment de la parole (contexte passé) et les contextes où la référence était simultanée ou postérieure au moment de la parole (non-passé). Nous avons aussi procédé à un étiquetage *ad-hoc* de toutes les constructions verbales employées (Benazzo & Starren, 2007; Granget, 2019; Starren, 2001). Nous avons pris en compte aussi bien les formes contenant une morphologie fonctionnelle (et correspondant à des formes attestées dans la langue cible) que les formes verbales non attestées et ne correspondant pas à des formes temporelles dans la langue cible.

Nos résultats montrent que dans le contexte passé, les distinctions aspectuelles (passé composé vs imparfait) sont présentes et stabilisées dans les récits de MAY à l'oral et à l'écrit, tandis qu'elles ne se manifestent qu'à l'écrit dans les productions de FAY. Par ailleurs, nous relevons, chez les deux apprenantes des constructions sans verbes et des formes non-finies mais ces formes ambiguës sont moins fréquentes au dernier temps de collecte surtout chez FAY. L'écrit révèle une conscience morphologique plus développée comparé à l'oral et l'analyse des deux modalités donne une idée plus exhaustive du répertoire morphologique de l'apprenant et montre que l'acquisition de la morphologie verbale du français est un processus complexe qui nécessite de maîtriser les variations non seulement morphologiques mais aussi phonologiques.

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OVERVIEW Cross-linguistically the present tense is incompatible with *then*. We argue that *then* and the present are evaluated under the same *perspectival* parameter, and have contradictory presuppositions. We further show that in Greek the puzzle arises with the shifted present, but not with deleted past, and the difference is captured with the assumption that deleted past is not perspective-sensitive.

THE THEN-PRESENT PUZZLE *Then* is incompatible with the present, not only in matrix environments, but also whenever the present is shifted. Languages with a shifted present exhibiting this pattern are Hebrew, Russian, Japanese, and Greek (Ogihara and Sharvit, 2012; Tsilia, 2021).

- (1) To 2000, o Yanis **ipe** oti i Maria **ine** egkios (***tote**).
 The 2000, the Yanis **say.PST** that the Maria **be.PRES** pregnant (***then**)
 ‘In 2000, Yanis said that Maria was (lit.: is) pregnant (***then**).’

In this Greek example, the present is not relative to the time of the utterance, but to the ‘now’ of the attitude holder; it is *shifted*. The paradigm reproduces in Hebrew, Russian, and Japanese. In Japanese, where the present can also shift in relative clauses, the puzzle arises there too:

- (2) ninenn mae, Yusuke-wa (***tooji**) seifu de hatarai-te-**iru** hito to
 2-year before Yusuke-TOP (***then**) government LOC work.PROG.**PRES** person with
 renkei o hakat-te-**ita**.
 collaboration OBJ plan.IMPFV.**PAST**.
 ‘Two years ago, Yusuke collaborated with a man who works for the government.’

The puzzle also holds under future, where the present shifts in both attitude reports and relative clauses. We illustrate this with Russian attitude reports, but it holds for all languages mentioned.

- (3) V 2030, Ivan **skazhet**, čto on (***togda**) sidit v tjur’me.
 In 2030, Ivan **say.FUT**, that he (***then**) sit.IMPFV in jail
 ‘In 2030, Ivan will say that he is in jail (***then**).’
- (4) V 2030 godu, Ivan budet ženat na tom, kto (***togda**) sidit v
 In 2030 year, Ivan **be.FUT** marry.Pfv.Pass to someone, who (***then**) sit.impfv in
 tjur’me.
 jail
 ‘In 2030, Ivan will be married to someone who is (***then**) in jail.’

We conclude that *then* is incompatible with the present whenever it can be shifted.

SHIFTED PRESENT VS. DELETED PAST Interestingly, in Greek, which has both a shifted present and a deleted past (Sharvit (2018); Tsilia (2021)), the puzzle does not arise with the latter:

- (5) To 2000, o Yanis **ipe** oti i Maria **itan** egkios (**tote**).
 The 2000, the Yanis **say.PST** that the Maria **be.PST** pregnant (**then**)
 ‘In 2000, Yanis said that Maria was pregnant (then).’

The embedded past is *deleted* (Abusch, 1994, 1997), just like in English, being interpreted as a *present* from the point of view of the attitude holder. The asymmetry between (1) and (5) shows us that, contrary to what is assumed in the literature (Ogihara and Sharvit, 2012), the shifted present cannot be semantically equivalent to the deleted past.

ANALYSIS Our solution to the *then*-present puzzle assumes that *then* and **PRES** are sensitive to temporal perspectives; **PRES** indicates a time *overlapping* with the perspective, *then* a time *disjoint* from it. Thus when sharing the same perspective, *then* cannot be used to frame **PRES**. Moreover, tense shift is the result of perspective shift, and the perspectives for **PRES** and *then* always **shift together**

within the same minimal domain. Following the account of indexical shift together by (Anand and Nevins, 2004; Anand, 2006), we propose to treat the perspective as an interpretation parameter. Anand’s system (following Anand and Nevins 2004) features an interpretation function $\llbracket \cdot \rrbracket^{c,i,g}$ that is relative to the speech context c , an evaluation index i . Indexicals draw references from c , while attitude verbs quantifies over i ’s where their complements are evaluated. The perspective π is treated as an additional parameter π , modeled as homologous to c and i as a quadruple of speaker/author (π_s), addressee (π_a), time (π_t) and world (π_w). On this basis, the present and *then* are analyzed as pronouns (Partee, 1973) with *perspectival* presuppositions (‘ \circ ’ is read as ‘overlaps with’):

$$(6) \quad \llbracket \text{PRES}_n \rrbracket^{c,\pi,i,g} = g(n) \text{ only if } \boxed{g(n) \circ \pi_t}, \text{ otherwise undefined.}$$

$$(7) \quad \llbracket \text{then}_n \rrbracket^{c,\pi,i,g} = g(n) \text{ only if } \boxed{\neg(g(n) \circ \pi_t)}, \text{ otherwise undefined.}$$

The incompatibility between *then* and **PRES** follows directly from their conflicting presuppositions. Tense shift is delivered by a shifting operator, \mathbf{OP}_π :

$$(8) \quad \llbracket \mathbf{OP}_\pi \varphi \rrbracket^{c,\pi,i,g} = \llbracket \varphi \rrbracket^{c,i,i,g}$$

Basically, \mathbf{OP}_π overwrites π with i so that the former is effectively bound by whatever binds i . To see why the ‘*then*’-present puzzle persists with shifted **PRES**, consider the following LF of (1):

$$(9) \quad \llbracket \text{Yanis say-PAST}_k \llbracket \mathbf{OP}_\pi \text{ Maria be-PRES}_n \text{ pregnant DURING then}_m \rrbracket \rrbracket^{c,\pi,i,g}$$

$$\text{i. } \llbracket \text{say} \rrbracket^{c,\pi,g,i} = \lambda t. \lambda x. \forall i' \in \mathbf{SAY}(t)(x)(i_w). \llbracket \varphi \rrbracket^{c,i',g} = 1$$

$$\text{ii. presupposition: } g(k) < \pi_t \wedge \forall i' \in \mathbf{SAY}(g(k))(\mathbf{N})(i_w). \boxed{g(n) \circ i'_t \wedge \neg(g(m) \circ i'_t)}$$

$$\text{iii. assertion: } \forall i' \in \mathbf{SAY}(g(k))(\mathbf{N})(i_w). \mathbf{ANGRY}(g(n))(\mathbf{E})(i'_w) \wedge \boxed{g(n) \subseteq g(m)}$$

Here *say* universally quantifies over i' ; \mathbf{OP}_π applies to the embedded proposition, shifting the perspectives of **PRES** and *then* together, resulting in the contradiction between the presupposition and assertion. The same applies to shifted **PRES** RCs in (2, 4), once we treat *will* (10) as composed of **PRES** and an intensional operator **WOLL** (Ogihara and Sharvit, 2012) and Japanese past tense (11) as a higher-order entity that binds i_t (cf. Ogihara, 2022), in the LF sketched in (12):

$$(10) \quad \llbracket \mathbf{WOLL-PRES}_k \varphi \rrbracket^{c,\pi,i,g} = \forall i' \in \mathbf{acc}(g(k))(i_w). i'_t > g(k) \wedge \llbracket \varphi \rrbracket^{c,\pi,i',g}(i'_t) = 1$$

$$(11) \quad \llbracket \text{PAST}_{\text{JAP}}-t_k \varphi \rrbracket^{c,\pi,i,g} = \llbracket \varphi \rrbracket^{c,\pi,i[i_t \rightarrow g(k)],g}(g(k))$$

$$(12) \quad \mathbf{WOLL-PRES}_k / \text{PAST}_{\text{JAP}}-t_k \lambda_1 [\text{someone } \lambda_2 [\mathbf{OP}_\pi x_2 \text{ be-PRES}_n \text{ in jail then}_m] \lambda_3 [\text{John/Yusuke marry-}t_1 x_3]]$$

Finally, deleted past differs from shifted present in that it lacks any perspective sensitivity:

$$(13) \quad \llbracket \text{PAST}_n \rrbracket^{c,\pi,i,g} = g(n)$$

A coherent reading of (5) can be derived from the LF in (14). **PAST**_n is deleted and may be bound by the time t_1 of Yanis’s speech, while without \mathbf{OP}_π , *then*_m is anchored to the speech time distinct from t_1 , and therefore can be used to denote a time containing t_1 .

$$(14) \quad \text{Yanis say-PAST}_1 \lambda_1 [\text{Maria be-PAST}_n \text{ pregnant then}_m]$$

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Why so-called Australian imperfectives are not (just) general imperfectives

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The present talk will focus on the so-called ‘past imperfective’ (PIPFV) tense in Iwaidja, a non-Pama-Nyungan Australian originating in the Cape Coburg peninsula. According to (Mailhammer & Caudal 2019; Caudal & Mailhammer 2022), the Iwaidja PIPFV contrasts with an anterior tense (ANT), an aspectually underspecified tense semantically akin to the English simple past. We will here demonstrate that the PIPFV substantially differs from both Romance and Slavic imperfectives, and should therefore be regarded as a novel, separate type of tense distinct from a general imperfective (Deo 2009; Altshuler 2014). The research we are reporting here is primarily based on long-term fieldwork comprising (i) experimental elicitation using videoclips (with speakers describing in Iwaidja what they see on screen), (ii) contextual elicitation from verbal and non-verbal input (using complex scenarios described in English, and/or using storyboards, toys, etc.) and (iii) semantic judgement tasks (speakers were asked to judge whether certain Iwaidja utterances could be uttered in very specific contexts).

During our multiple fieldwork sessions, we found the PIPFV to be routinely used to convey both single ongoing past events, habitual events, and of course pluractional/iterative events – very much like *bona fide* general imperfectives known from e.g., Romance. Its most obvious feature is that it semantically overlaps with (a) morphological reduplication patterns (RED) (which commonly receive a pluractional/iterative reading), (b) special serial verb constructions expressing durative single event readings or durative iterative readings, as well as (c) a special type of intonational marker, used to convey a markedly durative and/or a protracted iterative reading, here noted ::. Following (Mailhammer & Caudal 2019; Caudal & Mailhammer 2022), we will refer to the latter as *linear lengthening intonation* (or LLI).

When prompted to comment on the use of ANT vs. IPFV forms, speakers systematically highlighted the mono-actional function of ANT (1a) vs. pluractional function of PIPFV (1b) – the latter being often, though not always, reinforced by its combination with RED marking (as in 1b) and/or LLI, sometimes with striking effects on the quantificational interpretation of internal argument NP, cf. (1b) (‘too many’), as well as some posture serial verb constructions (see below). ANT was found to contrast with PIPFV in that it does not have any inherent pluractional reading, although it can take on one in combination with RED and/or LLI, cf. (1c).

- (1) [context: informant is asked about ANT vs. IPFV forms of ‘cut’ in the context of tree cutting]
- a. *rildalkuny* that means one
3Masc>3sg.ANT-cut-ANT
‘he cut a tree’
- b. *rildalkukungung* that mean [sic]...too many
3Masc>3sg.IMPF-RED.cut-IMPF
‘he cut/was cutting lots of trees’
- c. *rildalkuny::* *barda* *kartbuniny*
3Masc>3sg.ANT-cut-ANT then 3sg.ANT-fall-ANT
‘he kept on cutting the tree [= chipping at the tree with an axe], then it fell down.’

Even more interestingly, and somewhat problematically for the idea that PIPFV should be viewed as a general imperfective, it turned out that PIPFV can be used in sequence-of-event contexts. We routinely elicited such readings with either RED, LLI or durative posture serial verb constructions (SVC), cf. *aringan::* (‘he stood’) in (2a) (which combines LLI marking and a postural serial verb construction); this construction is a clear instance of so-called ‘associated posture’ (Enfield 2002), as the ‘stand’ verb does not have its usual lexical meaning here. Crucially, a second speaker (RM) rephrased (2a) (i.e., an instance of posture SVC combining an PIPFV-marked posture verb (*aringan*) with an ANT-marked main verb (*kardbirruny*), further marked with LLI) as (2c), i.e., using a reduplicated IPFV verb form (*kardbirrukung*).

(2a), (2c) and (3) are strikingly *emphatic* for their duration and iteration, as they combine multiple iterative/durative markers (PIPFV, LLI, RED and/or adverbials (*artbung*)). But it is even more striking to observe that they denote *bounded events*. This follows from the fact that (Caudal & Mailhammer 2022) established that LLI conveys event boundedness, through a complex intonation pattern involving two subsequent intonational units – a lengthened syllable with a rising intonation in the first unit (2a) contributes a marked durative/iterated event, and is followed by a falling intonation on the next intonation unit (2b), conveying that the previous event (i.e. (2a)) is bounded (see also the ‘event bounding’ effect of *bartuwa* (‘finished’) in (3)). We are therefore confronted with perfective-like interpretations of the so-called PIPFV in such examples. Last but not least, in addition to these pluractional/iterative bounded event readings, the Iwaidja PIPFV can also convey *single durative bounded events* – as exemplified in (4), where full lexical reduplication of an PIPFV-marked verb is used to convey a bounded durative, single event of standing (with a contextually inferred goal for the standing event).

- (2) [Context: bounded, past iteration of an event, followed by another past event]
- a. JC: *nanguj* *aringan::* *kardbirruny::*
 yesterday 3sg.IPFV-stand-IPFV 3sg.ANT-throw-ANT::
- b. *ya-wurryildi-ny* *manyij*
 3DIST.ANT-go.down-ANT sun
 ‘Yesterday he kept on throwing [the stone] until the sun went down’
- c. RM: *kardbirrukung*
 3sg.IPFV-throw.RED-IPFV ‘He kept on throwing the stone’
- (3) *rildalkungung* *artbung:: bartuwa*
 3m.sg>3sg.IPFV-cut-IPFV again:: finished
 ‘He kept on cutting it again and again... then he finished’.
- (4) *ari-ngan* *ari-ngan* *ari-ngan,* *arlarrarr.*
 3sgANT-stand-ANT 3sgANT-stand-ANT 3sgANT-stand-ANT in.vain/nothing.
 ‘He stood [waiting] there for ages, but to no avail.’

Given the above facts, it is clear that the Iwaidja PIPFV behaves neither like e.g. Romance nor like Slavic imperfectives. Indeed, while Romance imperfectives can have perfective-like readings, cf. the so-called ‘narrative’ uses of the French *imparfait* or *imperfetto*, these (i) involve single bounded events (pluractional/iterative readings seem to be either rare or problematic) and (ii) require complex discourse structural parameters to occur (Caudal 2023). As for Slavic imperfectives, while some also involve a strong pluractional flavor not unlike that of the Iwaidja PIPFV, their so-called ‘factual’ uses (Dickey 1995) (which have been described as perfective or perfect-like, depending on authors, (Altshuler 2014)) are known to involve strong presuppositional contexts (Klimek-Jankowska 2020) – unlike in our Iwaidja data. We will conclude our investigations by observing that multiple other so-called ‘imperfectives’ found across other Australian languages seem to behave like the Iwaidja PIPFV, and will propose that those constitute a special type of *durative tense*, covering both usual ‘general imperfective’ readings, and perfective, bounded durative/iterative readings (while Romance (‘narrative’) and Slavic (‘factual’) imperfectives can have non-durative bounded readings).

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Tense in epistemic and counterfactual modals: evidence from Bulgarian

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I. Background. The interactions between tense and non-root (epistemic) modals have been subject to great interest especially since Condoravdi’s 2001 seminal work. Drawing on data mainly from English, Condoravdi argues that past tense can project either higher or lower than the modal, giving rise to epistemic and counterfactual (‘CF’) readings, respectively:

- (1) Mary **might have** (a. already/b. still) won the race.
a. epistemic: modal > past (I wonder if she actually did)
b. counterfactual: past > modal (But she didn’t.)
c. logically **impossible**: past > modal > past

Condoravdi’s theory predicts that it is **LF-impossible** for tense to appear in **both** positions (1c). While much cross-linguistic work has been done since (see Laca, 2012; Karawani, 2014; Xie, 2015; Qin, 2019; Fălăuş and Laca, 2020), this prediction has not been verified to date.

II. Research question. I test Condoravdi’s prediction on tense in Bulgarian – a language that has **overtly** tensed modals as well as **no** infinitives, which means that its temporal morphology is fully transparent, unlike English and most languages. This makes it ideally suited for determining the position wrt the modal at which tense is interpreted.

III. Novel data. Example (2) demonstrates that (1a) is borne out: a low perfect under a modal tensed for present indeed gives rise to epistemic readings only and cannot be CF.

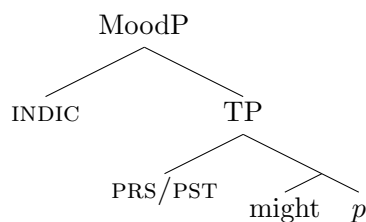
- (2) Može da e pristignal.
might.PRES SUBJ aux.PRES.3SG arrive.PP
‘He might have arrived.’ (✓epistemic: given what is known presently; #CF: if he hadn’t missed the train)

However, when the modal is tensed for past and the main verb is present, (3), the string is **ambiguous** between a CF and an epistemic reading, as opposed to only CF in Condoravdi’s (2001) model. Note also that while in both readings the orientation of the main verb is future with regards to the modal, the anchoring of the modal is present **or** past on the CF reading and **past** on the epistemic one, itself an understudied phenomenon.

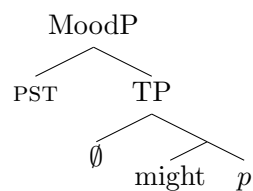
- (3) Može-she da pristigne.
might-PST SUBJ arrive.PRES.3SG
‘He might have arrived.’ (✓epistemic: given what was known at some past time (but before the time of the potential arrival); ✓CF: if he hadn’t missed the train)

IV. Formal syntax-semantics account. I propose that the tense on the modal can be interpreted at one of two syntactic positions that are each **higher** than the modal: at TP for epistemic readings, yielding a **real tense** interpretation (4)a, and at MoodP for the CF readings, (4)b, giving rise to a **fake past** interpretation in the sense of Iatridou (2000):

(4) a. ex. (2) and (3-epi)



b. ex. (3)-CF



(5) $[[PST]] = T(x)$ excludes $C(x)$ (where T =Topic and C =centered to speaker)

a. at TP: C interpreted wrt times (the *now* of the speaker)

b. at MoodP: C interpreted wrt worlds (the world $w_{@}$ of the speaker)

Importantly, in this proposal epistemic modals are **always** in the scope of tense, even when the perspective is present, as in (2) (i.e. (2) has a real present feature at TP, as in (4a)), not only unifying the availability of temporal expression on modals in root clauses but also tying it explanatorily to their flavor. In Condoravdi’s model tense can only be interpreted **either** below or above the modal, i.e. when below, the modal itself is not tensed, unable to explain why the perspective is temporally interpreted.

This model also explains (i) why we don’t see a CF interpretation in (2): CF needs past morphology (there is no fake present!); (ii) the dissociation between morphological past and the temporally ambiguous interpretation of CF as in (2): since the modal can get only one temporal marking, tense morphology is necessarily interpreted either at TP or at MoodP, and in the latter case the temporal interpretation is entirely context dependent.

V. Predictions and more data. My proposal predicts that since the CF/Epist interpretation of the modal is independent from the tense on the main verb, (i) a combination of past perspective and past orientation is logically possible, contrary to Condoravdi’s prediction in (1c); (ii) it should allow both the epistemic and the CF readings, as the high past in (3). Both predictions are borne out:

(6) Može-she da e pristignal.

might-PST SUBJ aux.3SG arrive.PP

‘He might have arrived.’

a. ✓epist: we had incomplete information in the past t about his arrival at $t_1 < t$

b. ✓counterfactual: if he hadn’t missed the train...

VI. The role of the low perfect. The final ingredient in the account is what happens with the main verb. I propose that the Bulgarian *da*-subjunctive is not temporally finite despite having surface present tense morphology (see Haug et al., 2019) but is only aspectual and the present perfect on the main verb gives a past interpretation due to its (standard) aspectual encoding of precedence (as in (6)a); similarly, present main verb morphology, e.g. in (3), contributes only aspect (simultaneity for imperfective and posteriority for perfective). This idea builds on Smirnova (2010) and is further supported by the lack of morphologically past tenses after *da* (e.g. **pristigna* ‘arrived.AOR’ in (6) instead of the low perfect), which is not explained if the main verb has full-fledged tense. Structurally, it means that below the modal verb there is no TP projection but only AspP, i.e. there is no tense in the scope of a modal.

Conclusion. The novel findings reported here demonstrate finer-grained temporal interpretations of modals and CF than previously thought possible. I propose an explicit formal

syntax-semantics model in which the distinction between the CF and the epistemic reading is determined entirely above the modal. This has intriguing consequences for the understanding of modality, counterfactuality, and their interaction with tense and finiteness.

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Avertives, proximatives and beyond: A typological perspective on the semantics of irresultativity

This paper aims to explore the semantic structure of the following categories associated with irresultativity and approximation towards the culmination of an event: avertive (‘X almost V-ed/was on the verge of V-ing but did not V’), proximative (‘X BE about to V’), and partial/frustrated completion (‘X almost finished V-ing’), with respect to the typological variation within their patterns of grammaticalization and morphosyntactic properties:

(1) Buriat (Altaic > Mongolic > Northern Mongolic)

- a. *Darima xaltir-ža una-n ald-aa.*
 Darima.NOM slip-CVB.IPFV fall-CVB.MOD lose/miss/AVERAUX-PST2.3SG
 ‘Darima slipped and almost fell.’
- b. *Sahan boli-xoo baj-na.*
 snow.NOM [stop-CVB.PURP COP-PRS]^{PROX}
 ‘It is about to stop snowing.’
- c. *Darima axa-daa bešeg*
 Darima.NOM elder.brother-DAT/LOC.REFLPOSS letter.NOM
beše-že düürge-be šaxuu.
 write-CVB.IPFV complete-PST[3SG] FRUSTCPL
 ‘Darima has almost written up a letter to her elder brother. [Tomorrow it will be ready.]’

(2) Japanese (Japonic)

- a. 私は腐ったリンゴを食べそうになった。
Watashi wa kusat-ta ringo o tabe-sō ni nat-ta.
 I TOP rot-PST apple ACC eat-EVD:likely/IMM DAT become-PST
 ‘I almost ate a rotten apple.’ [I was about to eat a rotten apple by mistake but did not.]
- b. コップが今にも落ちそうだ。
Koppu ga ima ni mo ochi-sō da.
 glass/cup NOM just.now/IMM DAT EMPH fall-EVD:likely.IMM COP.NADDR.NPST
 ‘The glass is about to fall.’
- c. アキはその花をほとんど描き終えた。
Aki wa sono hana o hotondo kak-i oe-ta.
 Aki TOP that flower ACC almost draw-CVB finish-PST
 ‘Aki almost finished drawing the flower.’

In Buriat, all the three functions receive distinct markings. The avertive meaning is encoded by the auxiliary verb *ald-* ‘lose, miss’, the proximative is a combination of the copula and the ‘purposive’ converb in *-xAA*, and partial/frustrated completion is conveyed by a complex construction (adv. *šaxuu* + a completive phasal construction). By contrast, in Japanese, the proximative and avertive functions are covered by a single construction, combining imminent semantics with evidentiality, with the two interpretations depending on temporality, while partial/frustrated completion is marked by a distinct adverbial strategy.

In this study, both lexical and morphosyntactic strategies, occurring in comparable contexts, are treated together to account for the redundancy, compositionality, and polysemy patterns emerging crosslinguistically, in that numerous gradient phenomena exist comprising, for instance, combinations of adverbs and auxiliary verbs. One of the issues specifically related to the avertive, initially raised by Kuteva (1998; 2001), is the coexistence of competing morphosyntactic and lexical strategies within the same language, as well as their redundant co-occurrence. We argue that these phenomena are not unique to the avertive, being widely spread in the proximative, progressive, and partial/frustrated completion domains and

concentrated in several convergence areas, characterized by extensive contact and massive multidirectional pattern borrowing. The analysis is based on first-hand data, collected for a convenience sample of languages of the extended Europe, North, Central and South-East Asia via translational questionnaires, comprising Japanese, Mandarin, Vietnamese, Tagalog, Basque, Turkic, Mongolic, Uralic, and Indo-European (Germanic, Balto-Slavic, Romance, Armenian, Greek, Iranian).

Since Kuteva (1998; 2001; Kuteva et al. 2019) the grams under discussion are thought to represent semantically complex TAM categories, involving temporality, event structure, viewpoint aspect, and modality. The avertive combines pastness, counterfactuality, and imminence, whereas the proximative, which is not inherently counterfactual, is equally compatible with past and nonpast orientation. Both avertive and proximative are restricted to [-durative] verbs, with those [+durative] coerced into the inchoative interpretation. Finally, partial/frustrated completion is associated with approximation toward the culmination of accomplishments ([+durativity] and [+telicity]). The contrast between avertivity and proximativity can be structured as a viewpoint-aspectual opposition. Thus, in the past domain, the same Spanish construction *estar a punto de V_{INF}* ‘be on the point of V-ing’ yields the PROX and AVER interpretations with the IPFV and PFV marking on the copula, respectively. However, this type of complete symmetry seems a relatively rare phenomenon. While avertives tend to be associated with PFV and proximatives with IPFV marking, imperfective-marked avertive auxiliaries are also found. By contrast, no instances of perfective-marked proximative auxiliaries are present in our data, while examples of nonpast proximative constructions consisting of present perfectives modified by imminent adverbs are attested. Furthermore, progressives yield the proximative interpretation with achievements in languages such as English or Italian, which, however, is not a universal pattern. English-style progressives compete with dedicated proximative markers for the expression of the proximative meaning. Conversely, some languages are characterized by a division of labor between specialized progressives and proximatives, with differential marking of the core progressive and proximative functions. Languages with grammaticalized proximatives without progressives also exist, and vice versa. These facts have consequences as far as the place of progressives within different TAM systems is concerned. For instance, the progressive with a verb such as ‘fall’ may yield the imminent/proximative (‘be about to fall’) rather than the core progressive (‘be (in the process of) falling’) interpretation as the only available one. This fact is known, but it has never been systematically explored based on first-hand data from a typological perspective and in relation to the expression of other irresultativity-related categories. The present study aims to fill some of these gaps.

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Quels temps verbaux pour (ra)conter en occitan ?

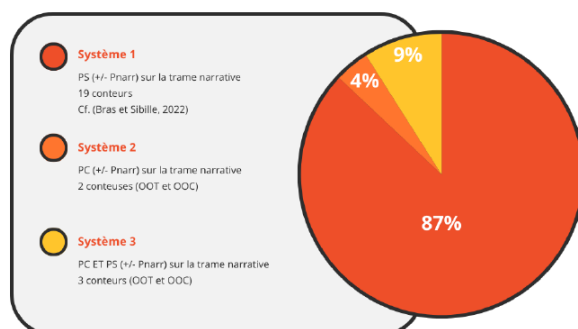
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Cette communication porte sur l'emploi des temps verbaux de l'occitan, langue romane dont la zone linguistique recouvre une large partie du sud de la France, auxquelles s'ajoutent plusieurs vallées du Piémont italien et le Val d'Aran en Espagne. Les parlers occitans sont organisés en six grands dialectes, selon Bec (1995) : gascon, languedocien, provençal, vivaro-alpin, auvergnat, limousin. Notre proposition s'inscrit dans la continuité de l'étude de Bras et Sibille (2022) sur les valeurs d'emploi du passé simple et du passé composé en occitan languedocien dans un corpus écrit et oral, et de celle de Carruthers et Vergez-Couret (2023) sur l'emploi des temps verbaux dans des contes traditionnels contemporains en occitan gascon et languedocien, lors de performances orales. Bras et Sibille (2022) ont montré, à partir d'une étude en corpus d'occitan languedocien contemporain écrit (issu de la base BaTelOc, Bras et Vergez-Couret 2016) et oral, recueilli auprès de locuteurs natifs (Sibille 2015), que le couple passé simple/passé composé de l'occitan portait des valeurs assez prototypiques de prétérit/parfait en distribution complémentaire sur l'ensemble des valeurs possibles. La comparaison des valeurs du passé composé de l'occitan avec celui des autres langues romanes dans le schéma d'évolution du parfait vers le prétérit (ou "aoristic drift") de Squartini et Bertinetto (2000) et l'utilisation des tests linguistiques proposés par Vet (2010) leur ont permis de mettre en évidence les différences significatives entre le français (où (presque) toutes les valeurs peuvent être portées par le passé composé) et l'occitan languedocien (où les valeurs sont réparties entre les deux temps). Ils ont formulé l'hypothèse que ces différences expliquent la difficulté des locuteurs natifs du français apprenant l'occitan à choisir entre les deux temps : soient ils calquent les formes occitanes sur les formes françaises, et emploient donc majoritairement le passé composé en occitan, soient ils utilisent le passé simple dans toutes ou presque toutes les situations. Par ailleurs, l'étude de l'occitan dans sa variété dialectale fait ressortir l'abandon du passé simple dans certaines zones : en occitan gascon dans le sud des Landes (Romieu et Bianchi, 2005, Lassalle 2017) et en occitan alpin du côté italien et du côté français (Sibille, cp.). Carruthers et Vergez-Couret (2023) ont analysé les emplois des temps verbaux dans un corpus des contes écrits et oraux en occitan (OcOr, Carruthers et Vergez-Couret, 2018). Ce corpus regroupe un sous-corpus de contes dits traditionnels (OOT), recueillis auprès de personnes les ayant eux-mêmes appris par transmissions orale, un sous-corpus de contes dits contemporains (OOC), enregistrés auprès de conteurs contemporains ayant une pratique scénique du conte, et un sous-corpus de contes collectés édités (OWT). Il permet de comparer les emplois du passé simple et du passé composé par des locuteurs nés entre 1944 et 1987 (OOC), avec ceux de locuteurs nés avant 1914 (OOT), et avec ceux de locuteurs plus anciens, nés au début du 19^{ème} siècle (OWT), dans un genre comparable.

Nous nous intéressons ici au sous-corpus OOC, composé d'une vingtaine de contes de sept conteurs (quatre femmes, trois hommes) dans deux dialectes, languedocien et gascon, dont les performances de cinq conteurs sur les sept ont été analysées par Carruthers et Vergez-Couret (2023). Les autrices y constatent une évolution des pratiques entre les conteurs traditionnels qui utilisent majoritairement le présent narratif en alternance avec le passé simple et une hétérogénéité de pratique chez les cinq conteurs contemporains étudiés, allant de l'emploi exclusif du passé simple à l'emploi exclusif du présent narratif en passant par des alternances entre ces deux temps ou bien des alternances laissant une part plus ou moins importante au passé composé. Nous analysons pour cette communication les performances des deux conteuses contemporaines restant à explorer pour compléter l'analyse de (Carruthers et Vergez-Couret, 2023). Nous étudions pour cela les emplois des passés simples et passés composés par les deux

conteuses : la première (A.) conte principalement au passé composé et au présent de narration, la seconde (B.) conte au passé simple avec quelques alternances au présent de narration. Nous affinons ensuite la comparaison entre les sous-corpus OOT et OOC à partir des choix des temps verbaux opérés par les locuteurs comme évoqué plus haut.



Nous expliquons l'existence de trois systèmes (cf. Fig. ci-dessus) en prenant en compte les facteurs de variation dans notre corpus d'étude -- variation diatopique (languedocien/gascon incluant zone de perte du PS), diachronique (locuteurs nés entre 1800 et 1987) et diamésique (influence des sources écrites ou orales à partir desquels les conteurs planifient leur propre performance), ainsi que et l'hypothèse de l'influence du contact de langues français/occitan sur l'emploi des temps verbaux en occitan. Nos analyses montrent que pour A., originaire de la zone du gascon maritime dans laquelle la perte du PS a été relevée, c'est probablement le facteur diatopique qui explique l'emploi majeur du passé composé avec une valeur temporelle narrative, que pour B., originaire de la zone languedocienne et bien plus âgée que A., c'est probablement le facteur diamésique qui explique l'emploi majoritaire du passé simple, alors que pour trois des autres conteuses de OOC, originaires d'autres zones, qui emploient aussi le passé composé dans la trame narrative mais en alternance avec le passé simple et le présent de narration, contrairement aux emplois relevés dans les deux autres corpus, c'est probablement l'influence du français qui explique l'emploi du passé composé dans la trame narrative.

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La conventionnalisation de l'avertif en roumain :

une approche empirique de la périphrase *a fi pe cale* litt. 'être en voie de'

Mots-clés : avertivité, approche empirique, diachronie et synchronie, langues romanes.

L'avertivité 'was on the verge of V-ing, but dit not' Kuteva (1998) est une catégorie grammaticale relativement peu étudiée à travers les langues. Après les années 2000, un intérêt croissant s'est manifesté pour l'étude des événements contrefactuels. Récemment, cette catégorie a été identifiée en *Standard Average European*, y compris dans les langues romanes, qui possèdent des marqueurs avertifs lexicalisés dont la plupart sont polyfonctionnels, exprimant également le sens proximatif 'be about to'. Ce dernier est défini comme une catégorie qui décrit la pré-phase de l'événement (Heine 1994), ayant une dimension purement aspectuelle. En revanche, l'avertif est une catégorie grammaticale complexe (Kuteva 1998, 2019) : (i) aspectuelle – englobant le sens proximatif (souvent conçu comme imminent) ; (ii) temporelle – l'événement est au passé ; (iii) modale – la situation est contrefactuelle. L'objectif de la présente étude est de proposer une approche intégrative de l'avertivité en roumain, basée sur des études de corpus en diachronie et en synchronie, mais également expérimentales de la périphrase *a fi pe cale*.

La perspective diachronique est basée sur un corpus de 1758 textes (233.126.081 tokens) fourni par l'Institut Roumain de Linguistique, allant du XVI^{ème} au XX^{ème} siècle. Le traitement des textes et l'extraction des données ont été faits via l'outil *TXM*. Nous avons identifié 976 occurrences aspectuelles respectant la forme (*auxiliaire*) + *pe cale* + *verbe/nom déverbal*, qui ont été annotées selon des paramètres morpho-syntaxiques (temps, mode, personne, nombre, voix, types de phrases, adverbes, etc.), sémantiques (télicité, scalarité, Aktionsart, emploi aspectuel) et pragmatiques (implicature annulée/renforcée). Les usages proximatifs de la périphrase remontent à la première moitié du XIX^{ème} siècle, tandis que les usages avertifs remontent à la seconde moitié du XIX^{ème} siècle. Le roumain confirme ainsi le chemin de grammaticalisation proximatif > avertif et montre que l'emploi avertif de *a fi pe cale* est le résultat d'un processus d'enrichissement sémantique, consistant en la conventionnalisation de l'implicature contrefactuelle (voir, p.ex. Traugott & Köning 1991), comme illustré également pour les périphrases à base de verbe *STARE* des langues ibéro-romanes (Schwellenbach 2019). Quant à la combinatoire de la périphrase avec les temps verbaux, on saisit une augmentation des temps passés lors du XX^{ème} siècle. Les temps perfectifs sont très faiblement représentés dans le corpus diachronique, à savoir 7% du nombre d'occurrences au passé, et complètement absents dans les données du XIX^{ème} siècle, alors que les temps imperfectifs sont plus fréquents (93%). La périphrase exprime toujours l'avertivité combinée avec la morphologie perfective, contrairement à la combinatoire avec l'imparfait, où les sens proximatif et avertif se chevauchent, et leur interprétation est contextuelle. Deuxièmement, l'inférence de la contrefactualité est liée au contexte syntaxique : l'avertif est moins fréquent dans les phrases monoclausales (4.4%) que dans les phrases subordonnées (12.9%). Dans les contextes de subordination, la phrase subordonnée (relative, temporelle, complétive, etc.) véhicule un événement conçu dans sa phase préparatoire, et la phrase racine indique explicitement la non-réalisation de l'événement en question. Ainsi, les données du XX^{ème} siècle indiquent que l'avertif est une implicature contextuelle.

L'analyse en synchronie est fondée sur le corpus *roTenTen16* (3.142.636.172 tokens), qui inclut des pages Internet en roumain. Au total, 635 occurrences ont été annotées selon les mêmes paramètres linguistiques pris en compte en diachronie. La poursuite de l'analyse dans le XXI^{ème} siècle nous a permis de saisir l'évolution des emplois aspectuels de la périphrase. Premièrement, la fréquence des emplois avertifs est plus élevée (70.5%) que celle des emplois proximatifs (29.5%). Deuxièmement, la construction est utilisée plus souvent avec un sens

contrefactuel à l'imparfait (62.2%) que proximatif (37.8%). On constate ainsi que le proximatif a perdu du terrain face à l'avertif dans les contextes imperfectifs. Troisièmement, on remarque une augmentation des emplois avertifs au perfectif en synchronie (32.6%) par rapport aux siècles précédents. Quant au contexte syntaxique, il y a une augmentation des emplois avertifs dans des phrases monoclausales, et cela avec les deux marquages temporels (1). Ce résultat est en faveur de la conventionnalisation de l'emploi avertif. De plus, nous avons testé expérimentalement l'hypothèse de la conventionnalisation du sens avertif de la construction *a fi pe cale* dans deux tâches à choix forcé, sous les conditions suivantes : dans des phrases monoclausales, à la fois avec un marquage perfectif et imperfectif, avec deux classes de verbes téliques (accomplissements et achèvements, cf. Vendler (1967)). Les pourcentages élevés des réponses avertives (plus de 90% avec les verbes d'achèvement, indépendamment du temps verbal, et plus de 84% avec les verbes d'accomplissement) standardisent nos résultats de corpus. La construction a conventionné l'emploi avertif au perfectif, tout en montrant, dans une large mesure, la possibilité d'exprimer la non-réalisation des événements avec l'imperfectif – ce comportement indique une conventionnalisation en cours. Ainsi, l'avertif roumain n'est pas restreint à la morphologie perfective (voir également la construction du roumain *era să* 'être.IMP.3SG + SBJV' (Coseriu 1976 : 104), qui apparaît uniquement à l'imparfait. Dans une perspective contrastive romane, on remarque que l'italien *stare per* + inf. exprime l'avertif avec un marquage imperfectif, alors que le français *faillir* + inf. apparaît exclusivement au perfectif. Quant aux langues ibéro-romanes (e.g. l'espagnol *estar por* + inf., *estar para* + inf., *estar a punto de* + inf.), l'inférence contrefactuelle est conventionnelle au perfectif et contextuelle à l'imperfectif (Schwellenbach 2019).

- (1) Un avion {era_{IMP} / a fost_{PERF} pe cale} să se prăbușească din cauza condițiilor meteo.
'Un avion a failli s'écraser à cause des conditions météorologiques.'

Cette étude des appariements formes/sens de la périphrase *a fi pe cale* contribue à mieux décrire la relation (im)perfectivité-télicité-avertivité dans les langues romanes. La non-réalisation des événements passés est associée aux situations qui possèdent un terminus (accomplissements et achèvements) et aux temps perfectifs, dont le contenu aspectuel est traditionnellement décrit comme une situation arrivée à sa complétion (Smith 1991). Cependant, la combinatoire des marqueurs avertifs avec l'imperfectif est préférée par certaines constructions des langues romanes. De plus, dans une perspective typologique plus large, incluant les langues australiennes (voir Caudal 2023), l'imperfectif est une des catégories majeures donnant naissance à l'avertivité.

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[*Aller* + INF] : naissance et grammaticalisation d'une construction

Une étude exploratoire sur corpus

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Un des changements critiques dans la transition du latin à l'ancien français est la restructuration du système des tiroirs verbaux et ce à tous les niveaux : morphologique, par le remplacement de formes synthétiques par des formes analytiques ; syntaxique, par la reconfiguration des structures d'actance et des phénomènes de transitivité ; sémantico-pragmatique, enfin, par la restriction ou l'élargissement des contextes d'emplois et des valeurs interprétatives. Après une seconde phase marquée par une relative stabilité, le passage de l'ancien français à la langue moderne (soit, la période du moyen français et du français préclassique) coïncide également avec des mutations importantes du système temporel qui prolongent les tendances évolutives de la période romane.

Nous nous intéresserons dans ce travail à l'une de ces évolutions, à savoir l'émergence du « futur périphrastique » fondé sur le verbe de déplacement *aller* (*je vais chanter*) qui, en se grammaticalisant, vient se substituer dans certains contextes au futur synthétique d'origine romane (*je chanterai*). Bien que la diachronie de [*aller* + INF] ait déjà été étudié dans de nombreux travaux (voir notamment Detges 1999, De Mulder et Vanderheyden 2008, Lière 2011, Lindschouw 2011, Bres et Labeau 2018 ; entre autres), sa grammaticalisation n'a jamais fait l'objet d'une enquête systématique sur corpus, ce que nous souhaitons mettre en œuvre.

L'enjeu de notre recherche est de deux ordres :

(i) Tout d'abord, il s'agit de documenter les premiers indices contextuels d'un mouvement vers une plus grande « grammaticalité », tant au niveau syntaxique (signes liminaires d'une auxiliarisation : acquisition d'un statut de « coverbe transparent », cf. Kronning 2003 ; ou de « coverbe non prédicatif », cf. Gosselin 2020) que sémantique (multiplication des contextes intentionnels et/ou imminentiels, cf. Detges 1999). D'après la littérature, cette phase est antérieure au 15^e siècle, période à partir de laquelle le verbe *aller* n'exprime plus systématiquement le mouvement :

(1) Il est bien temps de deviser

Les personnages et nommer.

Je vous les veulx nommer à tous

Je vous au monde *commencer*. (*Moralité de charité*, 1532-1550 cité par Detges 1999)

D'une part, nous examinerons dans un corpus d'ancien français les paramètres montrant une diminution de la prédicativité du verbe *aller* (nombre, nature et pronominalisation des actants) et un resserrement des liens syntagmatiques avec l'infinitif. D'autre part, nous étudierons les paramètres contextuels montrant le déprofilage du sens lexical de *aller* comme verbe de déplacement et la mise en saillance d'une valeur intentionnelle ou imminente/ultérieure. Le but est d'observer, dans le sillage de travaux comme ceux de Petré (2019), la multiplication de configurations contextuelles qui précèdent et précipitent l'émergence d'une nouvelle construction ou « constructionnalisation » (Traugott & Trousdale 2013).

(ii) Ensuite, nous poursuivons l'étude diachronique en élargissant l'empan au moyen français et au français classique, période où la dimension temporelle devient la seule interprétation possible dans certains contextes :

(2) Par deffaulte de patience,

Tu *vas perdre* ta conscience. (*Moralité de charité*, 1532-1550 cité par Detges 1999)

Nous nous intéresserons alors aux paramètres qui reflètent la sémanticisation d'un sens d'ultériorité et la grammaticalisation de la construction [*aller* + INF]. Il sera notamment interrogé les sélections lexématiques (animéité du sujet, agentivité du prédicat), les phénomènes de diathèse ainsi que la « fixation syntagmatique » et la « coalescence » de la construction (Lehmann [1983] 2002). Nous pourrons établir une chronologie en diachronie courte de la grammaticalisation en repérant les contextes de transition où le sens source et le sens cible de la construction coexistent, sans que l'on ne puisse trancher, et les contextes de passage où le sens d'intentionnalité puis d'ultériorité a pris le pas sur le sens de déplacement. (cf. Heine 2002).

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La spécificité des futurs par opposition au présent futur – étude contrastive français, allemand, italien, polonais

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État de la question

Le lien des futurs avec la modalité est évoqué dans différentes langues (Confais 1995 pour l'allemand et le français, Mari & Giannkidou 2023 pour l'italien), alors même que les futurs sont formés très différemment selon les langues et diffèrent également par leurs emplois. Le futur de l'allemand en particulier est depuis longtemps (Vater 1975) et de façon récurrente envisagé comme une forme modale.

À côté du futur, de nombreuses langues peuvent également utiliser le présent pour référer à l'avenir, mais le présent futur n'est habituellement pas considéré comme modal.

Y a-t-il une spécificité du renvoi à l'avenir à l'aide d'une forme dédiée ? On peut en effet supposer qu'un futur grammaticalisé réalise une assertion sur l'avenir, acte paradoxal puisque les événements à venir n'ont logiquement pas de valeur de vérité ; le présent futur en revanche serait un renvoi indirect à l'avenir, dont l'emploi prototypique est la planification, assertion d'un plan présent concernant l'avenir (Schrott 1997, Le Goffic & Lab 2001, Rebotier 2009).

L'étude

Dans un corpus parallèle français, allemand, italien et polonais (romans et théâtre seconde moitié du XX^e siècle-XXI^e siècle), tous les présents et futurs référant à l'avenir ont été relevés (soit 808 occurrences), avec plusieurs paramètres :

- présence d'un complément de temps, type de complément de temps
- présence d'une modalité explicite
- personne, type de sujet
- éloignement temporel
- polarité
- voix
- modalité énonciative (assertion / interrogation)
- type de proposition
- aspect lexical
- ponctuellement, acte de langage

L'allemand et l'italien possèdent chacun une forme de futur, le français (futur simple et futur périphrastique) et le polonais (futurs perfectif et imperfectif), deux.

À l'aide du logiciel Statview, la valeur p basée sur le χ^2 a été calculée pour les recherches de corrélation entre le temps utilisé et chacun des paramètres. On admet qu'il y a corrélation pour $p \leq 0,05$.

Résultats

L'étude confirme que la fréquence d'emploi des futurs est très différente selon les langues, la part de présent futur allant de 10,4% en polonais à 79,8% en allemand, l'italien (53,3%) et le français (36%) représentant des situations intermédiaires.

L'étude des paramètres montre que les futurs des quatre langues partagent largement les mêmes tendances. Une corrélation avérée, ou une simple affinité si $p > 0,05$ se trouve avec les facteurs suivants :

- présence d'une modalité, et en particulier d'un degré élevé de certitude,
- présence d'un complément de temps, en particulier ceux qui ne renvoient pas à un moment clairement identifiable (*bientôt, plus tard*),
- procès éloigné dans le temps ou non situable,
- troisième personne et sujet inanimé,

-
- négation,
 - télélicité,
 - les anticipations reposant sur la simple conviction du locuteur et les promesses.

Les futurs présentent en revanche des corrélations négatives avec la première personne, l'interrogation et les hypothétiques, les subordonnées en général sauf les complétives et les relatives, ainsi que les choix proposés à l'interlocuteur.

Certaines de ces corrélations avaient déjà été établies pour certaines langues (Hansen & Strudsholm 2006, Di Meola 2013, Gudmestad et al. 2020), notre étude les confirme, les complète et les synthétise pour la première fois sur quatre langues.

En français, c'est le futur simple, et en polonais le futur imperfectif qui correspondent le mieux à ces caractéristiques communes aux futurs. En effet, le futur périphrastique présente un lien avec le présent. Quant au futur perfectif, c'est morphologiquement un présent.

Interprétation

Les futurs grammaticalisés ont un profil commun, indépendamment de leur fréquence et de leur origine. Les paramètres suggèrent qu'ils ont effectivement un lien avec la modalité, et avec les procès dont la réalisation est problématique (éloignés dans le temps ou non situables). Dans les langues sans aspect, ils ont aussi un lien avec l'atélicité (d'où le parallélisme avec le futur imperfectif polonais).

Le type de modalité propre aux futurs semble être la conviction (modalités de certitude, assertions basées sur la conviction), et l'engagement du locuteur (corrélations négatives avec l'interrogation, le choix laissé à l'interlocuteur, positive avec la promesse). Dans un même mouvement, le locuteur reconnaît que l'événement à venir ne va pas de soi, souvent ne dépend pas de lui (troisième personne, inanimé), et s'engage malgré tout sur sa réalisation.

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The expression of habituality by habitual markers across different languages – different types of habituality ?

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Habituals are considered as a subtype of genericity, and are variable cross-linguistically (Bertinetto & Lenci 2010, Carlson 2012). Some forms, essentially imperfectives, are more likely to express habituality alongside other meanings, but Bybee et al (1994), Boneh & Jedrzejowski (2019) and others have noted that there is no language-independent encoding of habituality : some languages use a noun or a verb meaning ‘use’ or ‘custom’, others use copular verbs, others yet use modal verbs. For Comrie (1976), Boneh & Doron (2008), habitual sentences are intrinsically characterizing: they attribute a defining property to the intended referent(s) and/or to a whole period of time. Equally remarkable is the relation noted between modality and habituality. For Givón (1994), Cristofaro (2004) and others, habitual markers are a hybrid category, between *realis* and *irrealis*. One common point that emerges for all habitual markers is that they denote a situation that tends to be realized if circumstances allow for it, abstracted away from factuality/current reality, which in turns allows for the semantics of generalization over situations.

This talk builds on previous work (Corre 2020, 2021) dedicated to the study of two languages, Breton and Russian, that have a habitual form of the verb *be*; it was shown that both forms (respectively, *vez* and *byvat*) had uses other than strict habituality, including frequentativity, long duration, and irrealis. This study showed that ordinary tense-aspect constructions (imperfective verbs in Russian, the imperfect in Breton) normally encode the meaning of habituality and/or pluriactionality, but that the habitual markers give rise to an unexpected meaning ; *byvat*, *vez* may take on a quasi-polyphonous semantic function ; the situation is often presented as a time-honored one, emanating from a collective habitual experience (Anscombe 2005, Bottineau 2010), a meaning seldom noted in the literature on habituals.

The present talk proposes to add specific habitual markers from other languages ; after distinguishing the types of ‘repetitive’ aspect (i.e., iterative *vs.* frequentative *vs.* habitual), we look at specific habitual grams: Hungarian *szokott*, Spanish *solero*, Portuguese *costumar* (all three derived from a lexical verb meaning ‘be used to’) ; English *would* and *used to*, and Russian *byvat*. A parallel corpus was chosen (Marcel Proust’s first volume of *La Recherche du temps Perdu, Swann’s way*, which is fraught with habitual situations), with the aim of comparing the source text (French, which has no dedicated habitual marker) and the translations into all 5 languages ; each habitual marker was selected in each of the languages and was aligned with the translations in the other languages. This is an empirical and heuristic method, which aims to provide a first approximation of the meaning of habitual markers by using a parallel corpus.

The research questions are twofold : we determine the range of meanings covered by those markers (habituality, frequentativity, iteration, or other), and investigate if there are any systematic correspondence between the languages (e.g., does Hungarian *szokott* correspond to Spanish *solero*?). Preliminary results show that there is little correspondence between the languages in the use of the habitual markers ; the example of Proust’s incipit sentence illustrates : the frequentative situation « (pendant) longtemps se coucher de bonne heure » (‘for a long time go to bed early’) is translated by the habitual marker in Portuguese (2), English (3), by the lexical verb *privyknut*, « get used to » in Russian (4), while in the French original (1), in Spanish (5) and Hungarian (6), a normal tense-aspect construction (present perfect, and past tense verb) is used :

(1) Longtemps, je **me suis couché** de bonne heure.

(2) Durante muito tempo, **costumava** deitar-me cedo.

-
- (3) For a long time I **used to** go to bed early.
 - (4) Davno uže ja **privyk** ukladyvat'sja rano.
 - (5) Mucho tiempo **he estado acostándome** temprano.
 - (6) Sokáig korán **feküdtem le**.

A raw count of the number of occurrences of the habitual marker has English first (over 80 occurrences of *used to* alone, not counting *would*), suggesting that *used to* and *would* have become near obligatory markers of habituality and frequentativity, then Hungarian *szokott* (36), both having in common their semi-auxiliary (i.e. grammaticalized) status and the absence of a Romance-style imperfective tense-aspect; in contrast, Spanish *soler* (26) and Portuguese *costumar* (20) appear less frequently, suggesting a lesser degree of grammaticalization and the direct competition with the imperfect.

This talk is a first step towards a more in-depth study of each of those markers, with a more fine-grained analysis of the semantic and pragmatic contexts in which they appear.

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A corpus-based analysis of periphrastic prospective constructions in West-Germanic

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Prospective aspect is a subtype of relational aspect (Dik 1997), relating an individual's current state to an imminent future eventuality (e.g., Comrie 1976:64; Kuteva 2001:92). In the examples in (1), the subject referent is in a state preceding a possible future event of fleeing. There's been a recent upsurge in research interest on prospective aspect in a wide range of West-Germanic languages: German (Fleischhauer in press), Dutch (Bogaards 2023), Afrikaans (Wierenga & Breed submitted) and English (Hill in press).

- (1) a. *Er stand kurz davor zu fliehen.* [German]
he stood short in_front_of to flee
- b. *Er war kurz davor zu fliehen.* [German]
he was short in_front_of to flee
- c. *Hij stond op het punt om te vluchten.* [Dutch]
he stood on the point COMP to flee
- d. *Hy was op die punt om te vlug.* [Afrikaans]
he was on the point COMP to flee
- e. *Hy stond op die punt om te vlug.* [Afrikaans]
he stood on the point COMP to flee
- f. *He was on the verge/brink/cusp/point of fleeing.* [English]

The expression of prospectivity in these languages varies with respect to two variables: (i) the matrix verb (meaning 'stand' in German/Dutch/Afrikaans and meaning 'be' in Afrikaans/English/German); (ii) the metaphor that the prospective interpretation derives from ('in front of the situation' in German and 'on the point of the situation' in Dutch/Afrikaans/English). Dutch is thus sandwiched between German and Afrikaans/English. German and Afrikaans are special in having two almost identical constructions that differ only in the matrix verb (*stehen/staan* 'stand' vs. *sein/wees* 'be').

So far, comparative analyses of prospective aspect in Germanic have been restricted to two languages at a time (Bogaards & Fleischhauer in press; Wierenga & Bogaards in preparation). We widen the scope to all four Germanic languages illustrated under (1).

First, we examine the claim that prospective aspect does not include the notion 'close in time' as part of its semantics (Bogaards & Fleischhauer in press, contra Kuteva et al. 2019). Bogaards & Fleischhauer (in press)—based on a comparative corpus study of German and Dutch—show that the German construction in (1a) basically always combines with a modifier signifying closeness in time (e.g., *kurz* 'short(ly)'), whereas the Dutch construction in (1c) rarely ever does. They connect this to the type of spatial metaphor exploited by these languages (i.e., 'in front of' versus 'on the point of') and suggest that closeness-in-time is incorporated into the 'point-like' character of the latter (but not into the 'contiguity' of the former). If this is true, Afrikaans and English make for an ideal test case. Given that they share its 'point-like' metaphor, they should pattern with Dutch. Table 1 gives the relative frequency of modifiers combining with prospective constructions in German and Dutch. First results indicate that close-in-time modifiers are indeed infrequent in the two languages.

Second, we explore the idea that there are distinct subtypes of prospective aspect (Wierenga & Bogaards in preparation). Does the separability of spatial metaphor and close-time-modifier

in German—in light of their non-separability in Dutch (and potentially Afrikaans/English)—mean that we’re dealing with two different conceptual structures? And what about alternative prospective devices which follow neither of these strategies (e.g., English *be about to*)?

Table 1. Overview of the relevant prospective constructions in West-Germanic

	matrix verb	metaphor	close-in-time modifiers
German	‘stand’	in front of	very frequent (92.4%)
German	‘be’	in front of	very frequent (99.3%)
Dutch	‘stand’	point-like	infrequent (1.1%)
Afrikaans	‘be’	point-like	?
Afrikaans	‘stand’	point-like	?
English	‘be’	point-like	?

This talk explores microvariation in the periphrastic expression of prospective aspect in West-Germanic. The general claim is that the metaphor employed by the prospective expression causes subtle semantic differences, whereas the matrix verb is semantically innocent. These differences mirror Dik’s (1997) division between prospective aspect proper – exemplified by the German constructions – and imminent prospective aspect, as represented by the Dutch data. The English and Afrikaans construction seem to pattern with the Dutch construction having grammaticalized the notion of ‘imminence’. Our study contributes to the understanding of prospective aspect—a rather underrepresented aspectual category—both within the West-Germanic languages and also more generally.

For the comparative corpus study, we use the German Reference Corpus (DeReKo; Leibniz-Institut 2021) for German, the SoNaR corpus of contemporary Dutch (Oostdijk et al. 2013), the Language Commission Corpus (SAASA 2012) in Afrikaans and the TenTen corpus for English.

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Exploring the usage and the grammaticalization of the progressive *hålla på* construction in Swedish, including comparison with Dutch and German

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Keywords: progressive aspect, parallel corpus, acceptability judgment, Germanic languages

While English features a fully grammaticalized progressive marker, progressive constructions in other Germanic languages exhibit a lower degree of grammaticalization. This study focuses on the usage and possible grammaticalization of a particular construction in Swedish that conveys a progressive meaning, namely the *hålla på* ‘hold on’ construction. Using parallel corpora and an acceptability judgment task, the present study aims to investigate progressive constructions with varying degrees of grammaticalization in Swedish but also in comparison to two other Germanic languages, Dutch and German. Moreover, the study will also explore how native speakers of Swedish rate the acceptability of the *hålla på* construction when it is combined with various situation types.

In Swedish, the simple tense is typically used to refer to an ongoing situation at the moment of speaking, but there are also periphrastic constructions to encode progressivity (Hinchliffe & Holmes, 2008; Blensenius, 2015). These can, for instance, include serial verbs led by a motion or postural verb as an auxiliary (e.g., *sitta och läsa* ‘sit and read’, *gå och sjunga*, ‘go and sing’) or the *hålla på* construction (Kvist-Darnell, 2005). While the postural or motion verb in progressive constructions still retains its original meaning, the word *hålla* ‘hold’ seems to lose its lexical meaning in the *hålla på* construction. When comparing Swedish to other Germanic languages, prepositional progressive constructions, involving *aan het* ‘on the’ in Dutch and *am/beim* ‘at/in the’ in German, are believed to be used in “roughly the same way” as *hålla på* in Swedish (Ebert, 2000, p.607). Hence, in the present study, we set out to test this assumption based on the multilingual datasets from the Europarl spoken parallel corpus (Koehn, 2005).

Four keywords *hålla*, *håller*, *hållit*, and *höll* (all forms of the verb *hålla*) combined with *på* have been searched for to find all instances of the *hålla på* construction conveying progressive meaning. Our preliminary findings indicate that the Dutch *aan het* construction appears more frequently as the equivalent translation of the Swedish *hålla på* construction (around 440 attestations) than the prepositional progressive constructions in German (around 15 attestations). These findings are thus consistent with previous findings that the Dutch *aan het* construction has achieved relatively high grammatical status, whereas progressive constructions with *am/beim/dabei* in German are rare (Behrens et al., 2013). Additionally, 27 occurrences of the *hålla på* construction were attested to align with the *bezig te* ‘busy to do’ construction in Dutch.

In addition to examining the grammatical status of *hålla på* from a cross-linguistic perspective, this study also investigates the usage scope of the *hålla på* construction through a grammatical acceptability judgment task conducted with native Swedish speakers. The acceptability judgment task is adapted from Flecken (2011), who used it for exploring factors that attract and constrain the selection of the progressive prepositional construction in Dutch (i.e., *aan het X zĳjn*). In our study, native speakers of Swedish were asked to choose between two sentences, one including the *hålla på* construction and the other using a simple verb form. Since there are no right or wrong answers for each test item, the participants were instructed to base their

judgment on their linguistic intuitions. For each rejected option, participants were asked to rate its grammatical acceptability on a 5-point Likert scale (1 = unacceptable, 3 = neutral, 5 = acceptable). The whole task consists of 40 items that cover three main situation types including change in state with low and high dynamicity, no change in state and change in location (see Behrens et al., 2013, for a division of situation types). Each item starts with a description of a given context (e.g., ‘imagine you are cleaning the kitchen when suddenly someone calls you’), which is directly followed by a question (e.g., someone asks ‘What are you doing?’), which in Swedish can be formulated as either *Vad gör du?* or *Vad håller du på med?*). This question is expected to elicit an oral response that contains the ongoing activity. We will then be able to determine to what extent and for which situation types the *hålla på* construction is selected. We hypothesize that the participants will be more likely to select the *hålla på* option when the situation is in progress and has duration. In contrast, they will be less likely to select this option in situations involving a location change.

On the assumption that the *hålla på* construction is undergoing a process of grammaticalization, the study will consider in what contexts the *hålla på* construction is appropriate or not in expressing ongoing situations. While there are some studies on the *hålla på* construction from a semantic and theoretical perspective, empirical studies using elicitation and acceptability judgment are, to the best of our knowledge, scarce (but see Athanasopoulos & Bylund, 2013). In particular, there is a lack of evidence concerning the extent to which native speakers of Swedish combine the *hålla på* construction with different situation types (even though its usage tends to be optional in most contexts).

In conclusion, the anticipated findings will not only shed light on the degree of grammaticalization of an understudied progressive construction in Swedish after a comparative analysis of its counterparts in Dutch and German but also contribute to our understanding of the factors that influence the usage of progressive constructions.

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Référence temporelle et cognition : le cas du marquage de l'aspect grammatical en français dans la maladie d'Alzheimer

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Lorsque nous racontons nos expériences personnelles passées, nous faisons référence à des actions inscrites dans une temporalité spécifique. En français, cette temporalité peut être transmise via la flexion verbale, en particulier, grâce à l'accord en temps et en aspect grammatical. Alors que l'altération du marquage grammatical du temps a fait l'objet de plusieurs études auprès de personnes présentant des troubles du langage (ex. consécutif à un AVC ou dans le cadre d'une maladie neurodégénérative), celui de l'aspect demeure peu exploré. Pourtant, ce marquage est important car il permet l'expression du degré de complétude de l'action en indiquant son déroulement. En effet, une action « terminée » est marquée par l'emploi de l'aspect perfectif, alors qu'une action « en cours » l'est par l'emploi de l'aspect imperfectif (Vetters, 1996). À noter qu'en français, cette opposition perfectif-imperfectif est particulièrement saillante dans les temps du passé. Au-delà des habiletés morphosyntaxiques permettant la réalisation de cet accord, plusieurs études suggèrent aussi l'implication de compétences cognitives de haut niveau, notamment exécutives (Fyndanis, Arcara, et al., 2018). La maladie d'Alzheimer (MA) étant caractérisée par des difficultés mnésiques mais aussi exécutives (McKhann et al., 2011), l'étude du marquage grammatical de l'aspect auprès de cette population permettrait ainsi de mieux comprendre les processus cognitifs impliqués dans ce marquage. De manière intéressante, quelques études ont montré que, comparativement à l'accord en temps, celui en aspect serait particulièrement touché dans la MA (Fyndanis, Arfani, et al., 2018; Fyndanis et al., 2013; Manouilidou et al., 2020), suggérant une charge cognitive plus importante dans le traitement de l'aspect grammatical. Pourtant, à notre connaissance, il n'existe pas d'étude sur l'aspect grammatical en français auprès de personnes présentant une MA. L'objectif de cette étude est donc d'explorer les habiletés linguistiques et cognitives impliquées dans le marquage de l'aspect grammatical auprès de cette population.

21 participant.e.s francophones présentant une MA et 21 participant.e.s sans trouble cognitif appariés en âge, genre et niveau d'éducation ont pris part à cette étude. L'évaluation du marquage grammatical de l'aspect grammatical a été réalisée à l'aide de deux tâches informatisées de production de formes verbales fléchies au passé. Dans une première tâche, les participant.e.s devaient produire une forme verbale fléchie selon un cadre aspectuel véhiculé par des adverbiaux temporels (ex. Dans sa jeunesse, la fille ___ tout le temps (sourire) : réponse attendue = souriait). Dans la seconde tâche, la mise à jour du cadre aspectuel était également évaluée. Une première phrase posait un cadre aspectuel différent de celui proposé dans la phrase lacunaire (ex. Depuis cinq ans, la fille dessinait chaque jour. Lundi dernier, elle ___ pendant une heure (peindre) : réponse attendue = a peint). Les participant.e.s ont également pris part à une évaluation de leur profil cognitif.

Une série de modèles linéaires généralisés à effets mixtes (effets fixes et aléatoires) a été effectuée en insérant, pour chacune des tâches, les effets fixes de groupe (MA vs contrôles) et d'aspect (perfectif vs imperfectif). L'interaction entre le groupe et l'aspect a également été insérée dans le modèle. Enfin, nous avons exploré l'implication d'habiletés cognitives dans la réalisation des deux tâches d'aspect. Une analyse des erreurs a également été entreprise.

Concernant la tâche évaluant la production d'un verbe au passé selon un cadre aspectuel donné, les résultats montrent un effet significatif du groupe ($\chi^2(1) = 5.37, p < .05$) par de moins bonnes performances chez les participant.e.s MA, comparativement aux contrôles, mais pas d'effet d'aspect ($\chi^2(1) = 1.18, p = .27$), ni d'interaction entre le groupe et l'aspect ($\chi^2(2) = 0.82, p = 0.66$). Concernant la tâche nécessitant une mise à jour du cadre aspectuel, les résultats montrent également un effet significatif du groupe ($\chi^2(1) = 11.06, p < .01$), mais l'absence d'un effet significatif de l'aspect ($\chi^2(1) = 0.03, p = .86$) et de l'interaction entre le groupe et l'aspect ($\chi^2(1) = 2.99, p = .08$). Pour terminer, les compétences d'inhibition ($\chi^2(1) = 4.31, p < .05$) et de mémoire de travail ($\chi^2(1) = 12.61, p < .001$) de tous les participant.e.s contribuent significativement aux performances obtenues pour les deux tâches d'aspect. L'analyse des erreurs indique que, si les 2 groupes produisent principalement des erreurs d'aspect (perfectif pour imperfectif et inversement), les participant.e.s avec MA produisent également des erreurs de temps (présent pour passé).

Les résultats de cette étude mettent en évidence la présence de difficultés chez des participant.es. MA à produire le marquage grammatical de l'aspect en français, telles que rapportées dans de précédentes études (Fyndanis, Arfani, et al., 2018; Fyndanis et al., 2013; Manouilidou et al., 2020). De manière intéressante, aucune différence significative n'a été observée concernant l'opposition perfectif-imperfectif, suggérant une altération globale du marquage grammatical de l'aspect grammatical. En outre, cette étude montre qu'au-delà des compétences morphosyntaxiques, le marquage grammatical de l'aspect implique de compétences exécutives, telles que la mémoire de travail et l'inhibition. Cette étude offre ainsi un nouvel éclairage sur le traitement de l'aspect grammatical, mettant en évidence l'implication d'habiletés à la fois linguistiques et cognitives dans l'expression du déroulement d'une action dans le passé.

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On the aspectual compatibility between secondary non-selected predications and copular clauses: a view from Spanish

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Background and goal

This paper is devoted to the study of Spanish secondary non-selected predications (or depictives) in the domain of copular clauses and the so called “aspectual *consecutio*” phenomenon. Aspectual *consecutio* consists of two elements: first, the fact that only Stage-Level (SL) predications can allow for depictive secondary predicates, which on their turn can be only SL (1); second, the consequence that when Individual-Level (IL) predicates serve as depictives, they are coerced into a SL-reading (2) (cf. Hernanz, 1988; Rapoport, 1991, 1993).

Depictives have traditionally been studied as adjuncts of verbal predications, but some recent studies have observed that non-selected secondary predications are also found in copular clauses, and aspectual *consecutio* is still at play in this case (Silvagni, 2021). This phenomenon is clearly observed in Spanish, where the IL/SL contrast is overtly marked by two different copulas, namely, *ser* (IL) and *estar* (SL) (Fábregas, 2012; Fernández Leborans, 1999; Leonetti, 1994; RAE & ASALE, 2009; a.m.o.). It is observed that only *estar* can appear in depictive predication constructions (2)-(3).

Taking on recent developments in the study of the IL/SL contrast and Spanish copulas, in this paper we put forward an analysis of the aspectual *consecutio* phenomenon of depictive predication in the domain of copular clauses.

Theoretical assumptions

Following the idea that the IL/SL contrast is an inner aspectual distinction (Hoekstra, 1992; a.o.), we build our proposal on recent studies on Spanish, which suggest that SL-structures (*estar*Ps) are distinguished from IL-structures (*ser*Ps) by virtue of an AspP (Camacho, 2012; Fábregas, 2012; Silvagni, 2017). More specifically, we assume Silvagni's (2017) proposal that the inventory of aspectual elements in Spanish is as in (4) and that SL-predications are built by a syntactic agreement operation (in the sense of Zeijlstra, 2012, 2014) between an uninterpretable [Stage] feature located on the SL-predicate and its interpretable counterpart on the Asp head, which is overtly realized as *estar* (5a). Conversely, no formal aspectual features are found in the derivation of *ser*Ps, which are analysed as VPs, like typical IL-structures (5b).

Regarding non-verbal predications, we assume that they are mediated by a Pred head (Baker, 2003; Bowers, 1993), which has a PRO in its specifier (subject position) in the case of secondary predication (Casalicchio, 2016; Koizumi, 1994; Stowell, 1983; a.o.). As for the locus of adjunction of subject-oriented depictives, they are assumed to be adjoined to VP (Andrews 1982; Gallego 2010; Jiménez Fernández 2000; Roberts 1988), that is, the PredP projection in the case of copular clauses (cf. Baker 2003: 23-94).

Analysis

The aspectual *consecutio* is directly explained by the previous assumptions. We argue that SL-predicates can appear as depictives in a SL-predication (*estar*P) because their [uS] feature can be checked by the c-commanding [iS] feature on Asp(*estar*) (6). Conversely, SL-predicates are not allowed as depictives in IL-predications (*ser*P) because in that case their [uS] feature would remain unchecked (7). The same scenario also straightforwardly explains IL-to-SL coercion phenomena: when an IL-predicate appears as a depictive in a SL-predication, the [iS] feature on Asp(*estar*) acts as a suitable trigger for coercion (8) (in the sense of Escandell & Leonetti, 2002).

Data

- (1) Ana {cantó la canción_{SL} / *sabe ruso_{IL}} {enferma_{SL} / *estudiante_{IL}}.
 ‘Ana {sang the song / knows Russian} {ill / a student}.’
- (2) Ana dio la conferencia (estando) muy tranquila_{SL-reading}.
 ‘Ana gave the conference (being_{estar}) very calm.’
- (3) Ana {está en casa_{SL-CopP} / *es española_{IL-CopP}} {enferma_{SL} / *estudiante_{IL}}.
 ‘Ana {is at home / is Spanish} {ill / a student}.’
- (4) Asp (*estar*) [iS]
 SL-predicates [uS]
- (5) a. [TP [DP_i] ... [AspP t_i [Asp' [Asp estar_[iS]] [PredP t_i [Pred' Pred [A enferma_[uS]]]]]]]
 b. [TP DP [T' T [VP t [V' [V ser] [PredP t [Pred' Pred [AP tranquila]]]]]]]]
- (6) [TP [DP_i] ... [AspP t_i [Asp' [Asp estar_[iS]] [PredP [PredP t_i [Pred' Pred [A tumbada_[uS]]]] [PredP PRO_i [Pred' Pred [A enferma_[uS]]]]]]]]]
- (7) [TP [DP_i] ... [VP t_i [V' [V ser] [PredP [PredP t_i [Pred' Pred [A española]]] [PredP PRO_i [Pred' Pred [A enferma_[uS]]]]]]]]]
- (8) [TP [DP_i] ... [AspP t_i [Asp' [Asp estar_[iS]] [PredP [PredP t_i [Pred' Pred [PP sentada_[uS]]]] [PredP PRO_i [Pred' Pred [A tranquila]]]]]]]]

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Atelicity marking and scales: semantics of the Forest Nenets suffix *-(m)p'o-*

There is a large body of literature about telicity-marking strategies across languages. Telic interpretations are usually considered marked and associated with an additional amount of (event) structure in constructionalist models¹. I aim to show that a language may systematically mark atelicity instead.

The focus of my study is the verbal *-(m)p'o-* suffix in Forest Nenets² (< Samoyedic < Uralic, further FN), of which no previous accounts exist. Underived verbs in Samoyedic languages have been shown to belong to either the perfective or imperfective class. Perfective verbs in the Aorist receive a telic interpretation with past temporal reference, while imperfective verbs get a progressive reading. The verb's class membership can be changed by various derivational suffixes (Nikolaeva 2014).

-(M)p'o- is one such suffix. On the surface it looks like a typical progressive marker. It is incompatible with stative verbs (1) and is obligatory with accomplishments (2) and degree achievements (3) to describe an event in progress:

- (1) P'et'a Mas'a-η kæwxana-nta nu-ηa³/*p'i⁴.
P. M.-GEN near-POSS.3SG stand-GFS/MP'O[3SG]
'Petja is standing beside Masha.'
- (2) Mas'a pataλ tonλα-(ηa/p'i).
M. book.ACC read-GFS/MP'O/[3SG]
'Masha (has read / is reading) a book.'
- (3) d'eta-j d'anapomna w'i^h-kat pan-ηa/p'i.
bucket-POSS.1SG slowly water-ABL fill-GFS/MP'O[3SG]
'The bucket (has slowly filled up / is slowly filling up) with water.'

However, *-(m)p'o-*'s function cannot be traced to viewpoint aspect of Klein (1994). It is easily compatible with the perfective aspectual viewpoint too:

- (4) Sas'a čeη pæms'ams' kiči-ta mas-p'o-s'.
S. yesterday evening dish-ACC.POSS.3SG wash-MP'O-PST[3SG]
'Sasha was washing dishes all evening yesterday.'

Even more unexpectedly for a progressive, *-(m)p'o-* is systematically banned with activity verbs. They receive an atelic interpretation by default (5). Accomplishments which are shifted to activities by detransitivization show the same restrictions, cf. (2) and (6):

- (5) n'es'a-j ηaλka weλ-xana munu?-ηa/*p'i

¹ e.g. Rappaport Hovav, Levin (1998), Ramchand (2008), *inter alia*.

² FN is an understudied Uralic language spoken in the Yamalo-Nenets Autonomous Okrug in Russia. All examples were elicited in the course of my fieldwork in the village of Kharampur and the city of Tarko-Sale in summer, 2023.

³ Note that *-ηa* is a stem extender specific to finite verb forms. It disappears if any verbal derivational markers are present.

⁴ *-(M)p'o-* has a number of phonologically conditioned allomorphs.

-
- father-POSS.1SG big boss-LOC talk-GFS/**MP'O**[3SG]
 ‘Father is talking to the boss.’
- (6) Mas'a (*patal) tonla-ku-(***mp'i**).
 M. book.ACC read-DETR-**MP'O**[3SG]
 ‘Masha is reading.’
- (*M*)*p'o*- is also infelicitous with achievements and semelfactives (7):
- (7) xijiλ! w'era xaʔma-j-ʔ / *xaʔm(a/u)-**p'i**!
 look[IMP] W. jump-SFS-REFL.3SG / jump-**MP'O**[3SG]
 ‘Look! Wera jumped!’ / Intended with -(*m*)*p'o*-: ‘Look! Wera is making a jump!’

Given its Aktionsart restrictions, I argue that the suffix is best analyzed as an actional modifier with detelicizing semantics, not as a marker of progressive aspect.

Both accomplishments and degree achievements are durative and have a Theme argument which can be associated with a complex scale relativized to some property *P*, e.g. the volume of water in the bucket in (3) (Beavers 2013). This scale allows the set of event descriptions to be partially ordered. I propose that -(*m*)*p'o*- works as a mirror image of the *MAX_E* operator (Filip 2008) and picks out the *non-maximal* events from that set. *MAX_E* itself in FN is covert, which explains the default telic interpretations of “perfective verbs” in the Aorist.

In my talk I will present the analysis in greater detail and discuss -(*m*)*p'o*-’s interactions with other aspectual suffixes in FN. I also aim to show that telic and atelic interpretations can be independently derived with reference to the underlying scalar structure, and whichever form is overtly marked is the point of crosslinguistic variation (Hungarian, for instance, exclusively marks telicity (Kardos 2022), whereas Russian can mark either). At last, I will touch upon the purely actional uses of the progressive (Bertinetto 2000) and call into question whether they should be grouped together with aspectual and more peripheral uses under the same label.

Non-standard abbreviations

GFS — general finite stem; MP'O — -(*m*)*p'o*- suffix; REFL — reflexive conjugation; SFS — special finite stem.

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Visual Encoding of Event Structure in Sign Languages and Interpretation by Non-Signers

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Research shows cross-linguistic similarities in how sign languages visually encode event structure (telicity) in the articulator motion of verbs (Wilbur, 2008). Yet it remains unclear whether and how non-signers can perceive such linguistically-relevant motion patterns. This work summarizes a research line including a motion-capture study examining the precise kinematic distinctions between telic and atelic verb signs, and an EEG experiment probing the neurocognitive timeline underlying event structure interpretation from unfamiliar sign input.

Telicity refers to whether an event has an inherent endpoint. In several sign languages, telic verbs (e.g. *arrive*) involve faster acceleration and deceleration compared to atelic verbs (e.g. *walk*), marking the visual boundary of the event (Wilbur, 2008). We quantified the kinematic differences between telic/atelic verb signs in Austrian Sign Language using 3D motion capture (Table 1). Results showed that telic signed verbs had higher velocity, acceleration and jerk, alongside faster deceleration and shorter duration than atelic signed verbs.

We also examined whether non-signers neurally distinguish such motion patterns using EEG recorded during a sign classification task. German speakers labelled unfamiliar signs from four sign languages (Croatian, Italian, Turkish Sign Language and Sign Language of the Netherlands) as telic/atelic (Figure 1). Significantly earlier anterior ERP effects for telics (Figure 2) indicated perceptual processing of the velocity differences. Later posterior effects likely reflected integration of perceptual and linguistic information.

Despite lacking sign language experience, non-signers accurately classified telicity above chance. Neural data suggests perceptual encoding of a physical parameter (velocity change) serves as the pathway for incorporating motion features into sign language grammatical distinctions. We suggest that visually-accessible encoding principles are invariant between event representation and segmentation skills in non-signers, and event visibility in sign languages.

Keywords: sign language, telicity, event structure, motion capture, EEG

Table 1: Kinematic features; standard deviations in parentheses; only significant results are reported.

Parameter	Atelics	Telics	p-value
Sign duration in sec	1.69 (0.36)	1.19 (0.30)	< 0.01
Deceleration (max) in m/sec ²	6.2 (2.9)	12.3 (5.2)	< 0.01
Acceleration (max) in m/sec ²	6.4 (2.6)	11.7 (5.7)	< 0.05
Jerk (max) in m/sec ²	765 (537)	1933 (1598)	< 0.05
Relative hold duration in %	16.88 (11.51)	40.07 (13.30)	< 0.001

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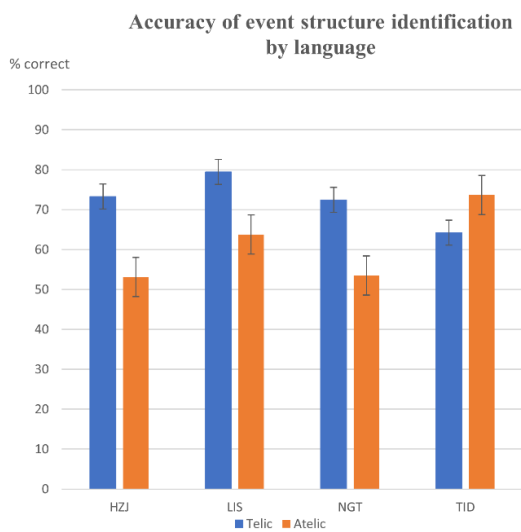


Figure 1. Participants’ accuracy of event structure identification by sign language (Croatian Sign Language/HZJ; Italian Sign Language/LIS; Sign Language of the Netherlands/NGT; Turkish Sign Language/TID. The error bars show standard deviation).

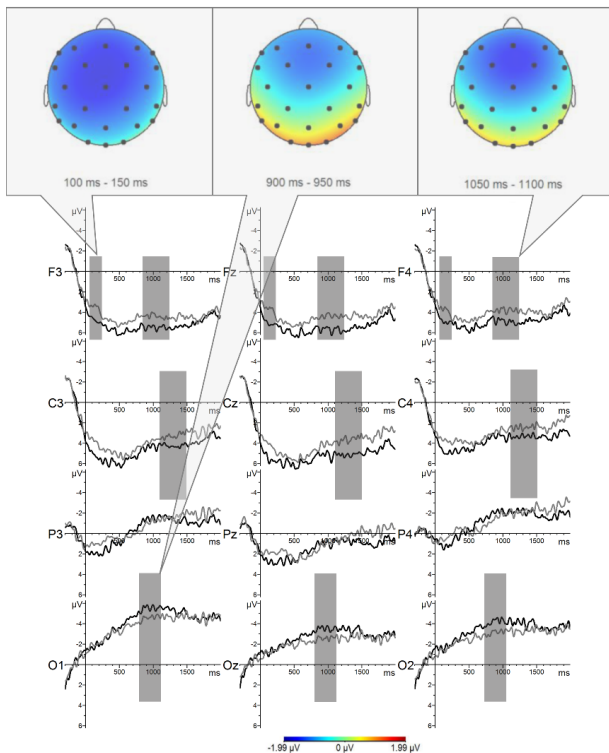


Figure 2. ERP and topographic differences between neural responses to atelic (black line) and telic (grey line) stimuli, starting from time of target handshake in target location for sign onset. Time ranges with statistically significant differences between condition are marked by grey rectangles and illustrated by topographic out-takes.

**Progressive uses of a parallel corpus:
Using Europarl to trace cross-linguistic unconventionality in verbal constructions**

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Key words: progressive aspect, unconventionality, parallel corpus

It has long been noticed that parallel corpora constitute practical and efficient data sources for cross-linguistic research (James 1980; Cartoni et al. 2013). As these corpora contain original texts directly paired with their translations, otherwise confounding factors in cross-linguistic comparisons of particular linguistic items can be held constant. That is to say, the precise role of the linguistic item under investigation becomes more prevalent because the meaning, text type and most of the pragmatic content remain stable between a source context and its parallel target context. This presentation focusses on the advantages of the parallel corpus Europarl (Koehn 2005) for the cross-linguistic study of non-aspectotemporal uses of the progressive construction. These seemingly unconventional uses of the progressive have already received attention in various studies, but have not been systematically examined on the basis of cross-linguistic corpus data so far.

Progressive constructions are usually described in terms of their aspectotemporal functions; the prevalent idea is that these constructions mark ongoingness or duration (e.g. Bertinetto 2000). Non-aspectotemporal uses like the French example below are then treated as exceptions to a general aspectotemporal rule, or as pragmatic extensions of a core aspectotemporal meaning.

- 1) *Il est en train de lire de travers.*
3SG be.PRS.3SG PROG read upside down
'He's reading (it) upside down!' (Franckel 1989: 78)

What the progressive seem to be expressing here, rather than ongoingness, is a certain situational non-canonicity. The speaker perceives the situation as a deviation from a particular convention (i.e. a certain expectation or moral norm), which in turn generates subjective senses of surprise or irritation. The exploitation of the progressive for what we will call the expression of *perceived unconventionality* is not exclusive to French – it is also attested in other languages, including Italian (Viola 2023), Dutch (Anthonissen et al. 2019) and Western Armenian (Donabédian-Demopoulos 2012). Moreover, these non-aspectotemporal uses are often formally unconventional as well; their occurrence in the given linguistic context tends to be marked compared to the simple tense alternative (e.g. *il lit* vs *il est en train de lire*). We refer to this linguistic non-canonicity as *produced unconventionality*, and propose to examine (often overlapping) uses of perceived and produced unconventionality not as pragmatic extensions of a prototypical aspectotemporal function, but rather as direct results of the semantics of the progressive. In fact, many existing semantic discussions of the progressive can easily be reconciled not only with their typical aspectotemporal meanings, but also with the semantics of unconventionality. Goldsmith & Woisetschlaeger (1982), for instance, describe the progressive in terms of phenomenal rather than structural properties (81), a characteristic which can be linked to aspectotemporal uses including ongoing, less permanent situations, as well as to unconventional uses denoting unusual, deviating states of affairs.

In our presentation, we will offer cross-linguistic evidence for this analysis. Our cross-linguistic data collection from Europarl proceeds in two steps: a first dataset is sampled for French and Dutch, while the second step of data collection involves the extension of this source dataset to all parallel translations in two target languages (Spanish and German). To compile our initial dataset, we operationalize the minimal pair method first proposed by Petré (2017) in order to be able to contrast the unconventionality potential of progressive constructions with that of their simplex counterparts. For this source data, which includes French and Dutch progressives as well as their paired simple tense counterparts, we subsequently identify each context as (un)conventional on the basis of the presence or absence of unconventionality indices such as exclamation and emphatic deictic markers. With the extension of this annotated dataset, then, we can verify which constructions are used in each (un)conventional context in the translations in the various target languages. Ultimately, this genetically and geographically broader perspective will allow us to verify whether existing findings on the progressive, which usually focus on single languages, are indicative of a robust semantic predisposition rather than a more peripheral pragmatic phenomenon characteristic of some language-specific constructions.

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Aspect, Type Frequency and Token Frequency of Slavic Verbal Nouns

Key words: aspect, verbal noun, frequency.

Our focus is on verbal nouns of action (hereafter referred to as VN(s)) that denote the same types of situation (actions, processes or states) as the corresponding verbs. Despite the significant similarity of the developmental features of the grammatical systems of the Slavic languages, VNs constitute heterogeneous classes within one and the same language, but also in a comparative perspective.

Thus, while Russian and Belarusian normally do not keep the morphological distinctions of aspect and diathesis (+/- “reflexive”) in their VNs, these categories remain marked in VNs of Czech and Polish, and also partially Ukrainian, those of aspect remain in VNs of Bulgarian. There are several parameters by which these classes (and particular vNs) can be differentiated, such as: (i) preservation / loss of diathetical features, (ii) preservation / loss of arguments and the ways these are realized in the syntax, (iii) (in)ability to take modifiers, and others, among which we also have to account for the preservation / loss of actionality features and the range of aspect functions (cf., e.g. Kockova 2019; Koptjevskaja-Tamm 2015; Korytkowska & Małdziewa 2002; Malchukov 2004). The following three aspects are important for our study:

1. Categorical pairs (PF/IMPF) VNs (in -(e)ni(e) / -ci(e)) in Polish demonstrate complementary distribution and are used exclusively in “their” aspectual meaning, for which reason they have been considered members of the verb paradigm (Korytkowska & Małdziewa 2002). Ukrainian VNs ordered in pairs, in accordance with their base verbs (e.g., *čitannja/IPFV* — *pročitannja/PFV*. ‘reading’), also quite often select specific aspect functions, but in the contemporary language this is only a tendency, not a rule. Nonetheless, we think that this behavior provides an argument in favor of their stronger grammatical integration (cf. also Marvan 1992, Pchelintseva 2022) in comparison to Russian. Russian VNs, even in those rare cases when they are derived pairwise (e.g. *spasanie/IPFV*. — *spasenie/PFV*. ‘rescuing’), do not show a tendency toward complementary distribution (which makes them less suitable as members of the verb paradigm).

2. The total (recorded in dictionaries) number of VNs in Polish, Ukrainian and Russian is significantly different: according to the data (Pčelinceva 2016), obtained by continuous dictionary sampling of VNs from academic dictionaries of the three analyzed languages compared to the total number of verbs, only one Polish verb out of 100 does not form a VNs, in Ukrainian VNs are formed from every 4th verb, and in Russian — only from every 6th verb.

3. There are also data that suggest that “from West to East” the frequency of VNs in speech decreases: for example, according to (Fědorova 2006), only half of Polish VNs (47.4%) are translated into Russian with similar VNs, in the remaining cases the translator chooses verb forms or other translation methods. Of course, the frequency of use of VNs may be influenced by the speech style, the speaker's speech competence or preferences, the need to complete a phrase or to focus attention, the communicative function of thematization, etc. (Tesnière 2006/1988: 379–380, Jędrzejko 1993: 41, Remčukova 1997: 155), but in a comparative study of original and translated texts these pragmatic factors are practically neutralised. Nevertheless, this assumption requires further study.

Thus, the following three trends are important: the ability of VNs to preserve and realise aspectual semantics decreases “from West to East”, as well as (presumably) their frequency and their total (dictionary) number decreases noticeably (on this see also: Dickey (2000: ch. 8), but

note that this conclusion is based on a small amount of data and no systematic study has been conducted).

Based on the above, we can hypothesise that increasing type frequency (regularity / expectation of formation from as many lexemes as possible), regularity and predictability of their expression of aspectual meanings and increased token frequency (frequency at the text level) are closely related phenomena. We will test this hypothesis on the material of modern texts of different styles (fiction, journalistic, official-business, scientific), as well as on the material of comments and dialogs of users in social networks (written colloquial speech), in Polish, Ukrainian and Russian and in equal volume (about 20,000 characters of texts of each style in each language, random sampling of texts). The absolute and relative quantitative ratio of verb forms on the one hand and VNs (only those resulting from the predicate nominalization), on the other hand will be established. By means of transforming detected constructions with VNs into verb constructions (a method used e.g. in: Padučeva 1991), we will establish which aspectual meanings are realized by VNs (PF/IMPF or their neutralization) and to what extent these meanings correspond to the aspect of the base verb (if VN unambiguously correlates with a verb of a certain aspect). In this way, we hope to get a more definite idea of the relationship between the token frequency of VNs and the regularity of their expression of verb aspectual meanings and to compare these data in three Slavic languages (Ukrainian, Russian and Polish). The paper will present the results of this pilot study.

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(3b). Critically however, unlike base imperfectives (4a,b), continuatives do not have habitual readings (4c), only in-progress readings.

(3) a. $\text{la}^?$ $\text{c-n}^?$ u^{xw} Hailey, kn **s- \emptyset - nik-x** t $\text{sp}^{\text{ic}\dot{\text{a}}\text{n}}$.
 when CISL-enter Hailey 1SG.SUBJ CONT-PFV-dance-MID+CONT OBL rope
 When Hailey came in, I *had already* cut the rope.
 DM Comment: Or it could mean you were cutting the rope when she walked in.

b. $\text{la}^?$ $\text{c-n}^?$ u^{xw} Hailey, kn **s-c- nik-x** t $\text{sp}^{\text{ic}\dot{\text{a}}\text{n}}$.
 when CISL-enter Hailey 1SG.SUBJ CONT-IPFV-dance-MID+CONT OBL rope
 When Hailey came in, I was (still) cutting a rope.
 DD Comment: You were cutting the rope when Hailey walked in.

(4) a. Q: ha k^{w} **c- tr^{q} - ám ?**
 YNQ 2SG.SUBJ IPFV-get.kicked-MID
 Do you dance?

b. A: ki , kn **c- tr^{q} - ám** kn $\text{la}^?$ $\text{sk}^{\text{w}\dot{\text{a}}\text{k}^{\text{w}}\text{iy}\dot{\text{m}}\dot{\text{a}}\text{lt}}$.
 yes 1SG.SUBJ IPFV-get.kicked-MID 1SG.SUBJ when child
 Yes, I danced when I was younger.

c. A': * ki , kn **s-c- \emptyset - tr^{q} - mix** kn $\text{la}^?$ $\text{sk}^{\text{w}\dot{\text{a}}\text{k}^{\text{w}}\text{iy}\dot{\text{m}}\dot{\text{a}}\text{lt}}$.
 yes 1SG.SUBJ CONT-IPFV-/PFV-get.kicked-MID+CONT 1SG.SUBJ when child
 Yes, I danced when I was younger.

I suggest that continuativity is circufixal $s \dots \text{-(mi)x/-m}$, and applies to perfective and imperfective predicates. It enforces an in-progress reading of an imperfective predicate by introducing an atomicity requirement on a super-interval $\boldsymbol{\varepsilon}$ of the run-time of the event ($\text{ATOM}(\boldsymbol{\varepsilon})$, 5). This approach utilizes components of Alexyenko's (2018) analysis of imperfectivity.

$$(5) \llbracket s \dots \text{-(mi)x CONT} \rrbracket = \lambda P_{\langle s, i, t \rangle} \lambda t \exists e. [P(e)(t) \wedge \exists \boldsymbol{\varepsilon} [\tau(e) \subseteq_{\text{nf}} \tau(\boldsymbol{\varepsilon}) \wedge P(\boldsymbol{\varepsilon}) \wedge \text{ATOM}(\boldsymbol{\varepsilon})]]$$

With perfectives, these semantics introduce an ambiguity: Perfectives are defined in terms of $\tau(e) \subseteq \mathbf{t}$, and while continuativity requires $\tau(e) \subseteq \tau(\boldsymbol{\varepsilon})$, crucially $\tau(\boldsymbol{\varepsilon})$ and \mathbf{t} are unordered with respect to one another. In case $\tau(\boldsymbol{\varepsilon}) \subseteq \mathbf{t}$, a completive reading will emerge, while if $\mathbf{t} \subseteq \tau(\boldsymbol{\varepsilon})$ an in-progress reading will emerge. I demonstrate how this ambiguity corresponds to the difference between an existential and universal perfect interpretation, matching A. Mattina's (1993) original description.

Overall, while perfective continuatives closely resemble a perfect (Bertrand et al 2022), imperfective continuatives are, at their core, simple progressives. I argue that the continuative itself is therefore best treated not as introducing a retrospective interval of times (McCoard 1978), as in an extended-now approach, but rather as introducing an additional inclusion relation.

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Before degree achievements

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Rett (2020) offers a degree-comparative-based analysis of *before*, which combines with the widely accepted coercion mechanisms in the aspects literature, and makes better predictions than previous analyses such as (Beaver and Condoravdi, 2003; Condoravdi, 2010, a.o.) with respect to the available readings of *before*-clauses with different embedded eventuality (EE) types.

- (1) a. $\llbracket A \text{ before } B \rrbracket = \exists t \in A[t \prec_{\text{MAX}}(B_{\prec})]$
 b. $\text{MAX}(X_R) = \iota x[x \in X \wedge \forall x' \in X[x' \neq x \rightarrow xRx']]$
 c. **Completive coercion:** if e is a culmination with duration T , e can denote T or $\text{lub}(T)$, where $\text{lub}(T) = \iota t[t \in T \wedge \forall t' \in T[t \succeq t']]$

	process EE	derivation	culmination EE	derivation
A before B	\prec initial	(1-a)	\prec initial	(1-a)
			\prec final	(1-c)+(1-a)

Table 1: Rett’s Generalization

I examine the available readings of *before* + intransitive degree achievements (DAs) in Mandarin Chinese and provide an analysis of the puzzles observed, filling a gap in the existing literature. It has been noted that Mandarin Chinese belongs to a group of languages where the \prec initial and \prec final readings are disambiguated by explicit inchoative or completive/resultative morphology. Unlike English *red(d)-en*, de-adjectival DAs in Mandarin Chinese is morphologically indistinguishable from the base adjective (e.g. *hong* ‘red, redden’), but they may also combine with a verb to make a compound DA (e.g. *bian-hong* lit. ‘turn-red’). Hence, this project can provide insights for understanding how each reading is derived and how coercion and the meaning of *before* interact with DAs in general.

Assumption of Mandarin Chinese DAs: I adopt the analysis of Mandarin Chinese DAs in Zhang (2018), where intransitive DAs are classified into de-adjectival and de-verbal ones, and the former further divided depending on whether the base adjective is relative gradable or absolute gradable.

	De-adjectival		De-verbal
	relative gradable	absolute gradable	—
bare form	kuan ‘wide, to widen’	gan ‘dry, to dry’	chen ‘to sink’
compound	bian-kuan ‘to turn-wide’	bian-gan ‘to turn-dry’	xia-chen ‘(lit. down-sink) to sink’

Table 2: Intransitive DAs in Mandarin Chinese (Zhang, 2018)

Research questions: (i) How do different types of DAs behave under *before*? (ii) what explains the distribution of bare and compound DAs and their readings? (iii) Can Mandarin Chinese morphologically disambiguate the \prec initial and the \prec final readings for DAs?

Answer to (i): Both de-adjectival DAs with absolute gradable base adjectives and de-verbal DAs can appear in *before*-clauses in either the bare form or in the compound form (5)-(6), and they both get the reading that the maximum point in the scale is reached. De-adjectival DAs with relative gradable base adjectives in general cannot appear in its base form under *before*, and the compound form gives rise to ambiguous readings: \prec initial of the changing process, or \prec final of the changing process (4).

Answer to (ii): De-adjectival DAs have basic stative, atelic semantics that measures the change in the degree of the object compared to a prior state (Marín and McNally, 2005; Kennedy and Levin, 2008; Zhang, 2018). Therefore, they behave like regular statives as in Rett’s prediction. By the **Interpretive Economy** principle (Kennedy and Levin, 2008), the maximum point of the scale is selected, resulting in \prec initial of the state of the maximum degree. **This maximum point is available for absolute gradable adjective DAs but not for relative gradable adjective DAs,**

which explains the oddness of the latter in their bare form. De-verbal DAs such as *chen* ‘sink’, which come with a natural maximum degree, behave like absolute gradable adjective DAs. Since bare relative gradable adjective DAs cannot be interpreted due to the lack of the maximum degree, they generally require the compound form under *before*. A compound-forming verb like *bian* turns the stative measure function reading into a dynamic changing event. Compound DAs may either have a \prec initial (before the onset of the changing process) or a \prec final reading, with **the culmination point being wherever the degree ends up by the end of the changing process** (cf. the partial success reading (Tatevosov and Ivanov, 2009; Zhang, 2018) that only requires some change in the relevant property, without necessarily reaching the typical degree standard denoted by the adjective). Therefore, compound DAs do not run into the problem of not having a maximum degree on the scale. **For absolute gradable adjective DAs and de-verbal DAs, this does not make a difference since they do not allow the partial success reading, and the culmination point is always the maximum degree.** They behave like other Mandarin Chinese accomplishments under *before*, with only the \prec final reading (Rett, 2020).

Answer to (iii): For compound DAs, there is at least some modifiers, such as *manman* ‘slowly’, that distinguish the \prec initial and the \prec final readings (7).

(2) **Analysis of de-adjectival DAs (cf. Zhang (2018); Kennedy and Levin (2008)):**

- a. $\llbracket \text{kuan} \rrbracket = \lambda x. \lambda t. \text{wide}(x)(t)$
- b. $\mathbf{pos} = \lambda g_{\langle e, d \rangle}. \lambda t. \lambda x. g(x)(t) \geq \mathbf{stnd}(g)$
- c. $\mathbf{pos}(\text{kuan}) = \lambda x. \text{wide}(x)(t) \geq \mathbf{stnd}(\text{wide})$
- d. **Difference function:** For any measure function m and scale S , for any $d \in S$, m_d^\uparrow is a derived difference function, just like m except that
 - (i) its range is $\{d' \in S \mid d \leq d'\}$;
 - (ii) for any x, t in the domain of m , if $m(x)(t) \leq d$, then $m_d^\uparrow(x)(t) = d$.
- e. For any measure function m , $m_{s' \prec s} = \lambda x. \lambda s'. \lambda s. m_{m(x)(\text{CH}(\tau(s')))}^\uparrow(x)(\text{CH}(\tau(s)))$, where
 - (i) $\text{CH}(\tau s)$ picks out a relevant point from $\tau(s)$ for calculating the difference;
 - (ii) s' is a salient relevant state prior to s .
- f. $\mathbf{pos}_{m_{s' \prec s}} = \lambda g \in D_{m_{s' \prec s}}. \lambda x. \lambda s'. \lambda s. m_{m(x)(\text{CH}(\tau(s')))}^\uparrow(x)(\text{CH}(\tau(s))) \geq \mathbf{stnd}(g)$
- g. ‘hedao kuan’: $\mathbf{pos}_{m_{s' \prec s}}(\text{kuan}_{m_{s' \prec s}})(\text{the river})$
 $= \lambda s' \lambda s. \text{wide}_{\text{wide}(\iota x[\text{river}(x)])(\text{CH}(\tau(s')))}^\uparrow(\iota x[\text{river}(x)])(\text{CH}(\tau(s))) \geq \mathbf{stnd}(\text{wide})$
 after existentially closing s'
 $= \lambda s. \exists s' \text{wide}_{\text{wide}(\iota x[\text{river}(x)])(\text{CH}(\tau(s')))}^\uparrow(\iota x[\text{river}(x)])(\text{CH}(\tau(s))) \geq \mathbf{stnd}(\text{wide})$
- h. **Compound DA forming verbs:**
 $\llbracket \text{bian} \rrbracket = \lambda g. \lambda x. \lambda e. g_{g(x)(\text{init}(e))}^\uparrow(x)(\text{fin}(e))$, where
 - (i) $\text{init}(e)$ maps an event e to the initial point of $\tau(e)$;
 - (ii) $\text{fin}(e)$ maps an event e to the final point of $\tau(e)$.
- i. $\llbracket \text{bian-kuan} \rrbracket = \lambda x. \lambda e. \text{wide}_{\text{wide}(x)(\text{init}(e))}^\uparrow(x)(\text{fin}(e))$

(3) **Interpretive Economy (Kennedy and Levin, 2008)**

Maximize the contribution of the conventional meaning of the elements of a sentence to the computation of its truth conditions.

(4) **Relative gradable base adjective**

Zai he-dao {?kuan/ bian-kuan} zhiqian, ...

at river-course wide(n)/ turn-wide before ...

‘Before the river course widened, ...’ (before the start/completion of the change)

(5) **Absolute gradable base adjective**

Zai yifu {gan/ bian-gan} zhiqian, ...
at clothes dry_{N/V}/ turn-dry before ...
'Before the clothes are completely dry...'

(6) **De-verbal**

Zai Taitannikehao chen zhiqian, ...
at Titanic sink before, ...
'Before the Titanic completely sank, ...'

- (7) a. Zai rongye **manman** bian-hong zhiqian, jia-ru yangpin.
at solution slowly turn-red before add-in sample
✓ add sample before the solution starts to change
✗ before it completely turns red (possibly after the onset of the changing process)
- b. Zai rongye bian-hong zhiqian, jia-ru yangpin.
at solution turn-red before add-in sample
✓ add sample before the solution starts to change
✓ before it completely turns red (possibly after the onset of the changing process)

Selected references: Rett (2020) Eliminating EARLIEST: a general semantics for before and after; Zhang (2018) On non-culminating accomplishments in Mandarin; Kennedy and Levin (2008) Measure of change: The adjectival core of degree achievements.

Imperfectives as spatiotemporal predicates

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Keywords: grammatical aspect, imperfectives, spatiotemporal predicates, Scottish Gaelic

Overview: Demirdache & Uribe-Etxebarria (1997 and forward, ‘D&UE’) present a unified syntactic approach to tense, grammatical aspect, temporal adverbials, and modality, featuring spatiotemporal ordering predicates that relate one time to another (utterance and assertion/reference time in the case of tense, and assertion/reference and event time in the case of aspect). Exceptions to this rule in the domain of aspect are perfectives and imperfectives. While D&UE identify progressives as arising from the spatiotemporal predicate IN, imperfectives come about via binding (D&UE 2014). I present evidence from Scottish Gaelic that imperfectives, too, may arise from a spatiotemporal ordering predicate—specifically, AT.

Problem: D&UE’s work, grounded in Hale’s (1986) claims about the themes of central and non-central coincidence in human language, is a theory of temporal relations in grammar. They claim that such a theory should both provide limits to the set of logically possible instances of tense, aspect, temporal adverbials, and modality, as well as predict the diversity we see in the way human languages express these distinctions (D&UE 1997, 2000). Given this stated aim, we would hope to find languages whose temporal morphosyntax reflects the predictions made by the theory.

With the exception of perfective aspect (realized via synthetic forms), and a prospective (realized by a grammaticalized motion construction), Scottish Gaelic realizes its distinctions of grammatical aspect with spatiotemporal elements, most synchronically homophonous with prepositions in the language (Ramchand 1993; Reed 2012). These particles may be characterized (as in Reed 2012) as spelling out the relationship between assertion/reference and event times, and generally behave as predicted by D&UE’s proposal; for instance, *as dèidh* ‘after’ marks a perfect aspect (assertion/reference time AFTER event time). D&UE note (2004, p. 151) that if progressive aspect is a predicate of central coincidence, the cross-linguistic appearance of prepositions of central coincidence (such as ‘in’) as markers of the progressive is explained. D&UE’s analysis of the progressive is that assertion/reference time is fully within event time, excluding the initial and final endpoints of the runtime of the event. Their (2014) analysis of the imperfective, on the other hand, allows for not just this situation, but also any situation in which assertion/reference time and event time overlap—assertion time can also overlap with event time’s initial bound, or overlap with its final bound. They do not propose a temporal relation for the imperfective.

However, Scottish Gaelic employs *ann an* ‘in’ in the formation of a particular type of nominal predicate (Schreiner 2015), not as a progressive marker. Furthermore, while D&UE establish binding relations as the locus of imperfectivity, Scottish Gaelic employs another particle, *a’* (*ag* before vowels), from *aig* ‘at’—a predicate of (terminal) central coincidence. The imperfective form yields an event-in-progress (1) or habitual/characterizing (2) reading with eventive verbs, and a simple present reading with stative verbs in the present (3):

- (1) Tha Mòrag a’ sgrìobhadh litir a-nis.
be.PRES Mòrag A’ write.PTCPL letter now
‘Mòrag is writing a letter now.’ (Reed 2012, p. 261, ex. 96)
- (2) Tha Mòrag a’ sgrìobhadh litrichean a h-uile latha.
be.PRES Mòrag A’ write.PTCPL letter.P every day
‘Mòrag writes letters every day.’ (Reed 2012, p. 261, ex. 97)

-
- (3) Tha Mòrag a' creidsinn anns an fhirinn.
be.PRES Mòrag A' believe.PTCPL in.the truth
'Mòrag believes the truth.' (Reed 2012, p. 261, ex. 98)

Proposal: While 'in' is the appropriate predicate for an aspect that requires that the event extend beyond the bounds of the time under discussion (the progressive), imperfective meaning does not carry this requirement, and so would be more appropriately represented in the theory by a different predicate. As prepositions, 'in' and 'at' both represent central coincidence between figure and ground (Hale 1986), but 'in' also involves containment, while 'at' merely involves coincidence (see e.g. Zwarts & Winter 2000, Coventry et al. 1994), or perhaps 'terminal coincidence' (Franco & Lorusso 2018). This makes it appropriate for imperfective aspect, which can (in general) have meanings that involve incomplete overlap between assertion/reference time and event time. I propose that this is precisely the situation in Scottish Gaelic: Imperfective aspect is the spatiotemporal predicate 'at', and this is realized in the language by the (former) preposition *a'* 'at'.

The imperfective indicates a coincidence of assertion/reference and event times, without the requirement that the former be contained by the latter. D&UE explain the existence of 'bare' forms that yield imperfective meaning by attributing the semantics to the result of predicate abstraction over event time (such that assertion/reference time becomes the external argument and event time the internal argument of the predicate). The predicate holding during event time and event time being bound by assertion time results in the necessity of the predicate holding during assertion/reference time, as well. The time relation introduced by AT, however, equally accounts for the meaning of the imperfective, as well as the appearance of the overt spatiotemporal element in Scottish Gaelic.

Implications: The Scottish Gaelic data represent support for a slightly altered version of D&UE's proposal for the aspectual domain: in addition to the spatiotemporal relations they propose, AT should be included to account for the imperfective. The data also suggest that we should pay special attention to the fine variations of meaning in one sub-domain of spatiotemporal phenomena when we find pieces with those meanings appearing elsewhere in the language. That is, we know from the domain of prepositions that languages distinguish between simple coincidence and containment; that difference can then be exploited by other parts of the grammar, as we see with Scottish Gaelic's distinguishing of 'at' and 'in' in their non-spatial uses.

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The expression of avertivity in Italian: the periphrasis *fare per V_{inf}*

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Keywords: Avertive, Romance periphrases, emerging grammaticalization path

Avertive is a cross-linguistic gram type expressing an event that was potentially imminent but did not get realized (Kuteva 1998, 2001). Avertive constructions are semantically elaborate (Kuteva 2009) in that they combine meanings from the temporal, modal, and aspectual domains, namely, pastness, counterfactuality, and imminence. Proximative is to be distinguished from avertive in that, although similar, it is not restricted to the past and does not always imply the non-realization of the action (Kuteva et al. 2019).

Cross-linguistic data show that both grammaticalized and lexical avertive and proximative constructions are attested in many languages of the world (e.g., Alexandrova 2016; Caudal 2023). In Italian, as in other languages, the proximative meaning is expressed by verbal periphrases and, more specifically, by so-called “imminential” periphrases, which are a subset of “phasal” or “aspectual” periphrases (Squartini 1988; Bertinetto 1990, 2001). Italian has a variety of imminential periphrases, such as *stare per V_{inf}* (lit. stay for V_{inf}) ‘be about to’, *essere lì lì per V_{inf}* (lit. be there there for V_{inf}) ‘be about to’, or *essere sul punto di V_{inf}* (lit. be on the point of V_{inf}) ‘be about to’. The avertive value is generally not discussed in the literature on aspectual periphrases. However, imminential periphrases may end up expressing avertivity, under certain contextual conditions (Saviano 2023), testifying to the closeness of the two categories.

In this contribution, we identify and analyze a periphrastic construction that – to the best of our knowledge – is still undescribed and that seems to convey specifically avertivity, namely, *fare per V_{inf}* (lit. do/make for V_{inf}):

- (1) *Il bambino fece per scendere dalla sedia. Anna lo trattenne.* [CORIS]
‘The kid prepared/tried to get off (lit. made for get_off) the chair. Anna held him back.’

Authentic data from the CORIS corpus of contemporary written Italian were automatically extracted and then manually checked. The final dataset amounts to 850 valid occurrences, which were annotated and then analyzed according to various variables: the TAM of the verb *fare*; the verb in the infinitive and its semantic and actional type; the function performed by the periphrasis; co-textual avertive markers or adversative clauses; the subject’s agentivity, and the reason for the non-realization of the event (whether it is subject-internal or external).

The following research questions are addressed:

- RQ1: What are the formal and functional properties displayed by the construction?
- RQ2: What meanings can the construction encode? What triggers their interpretation?

Our results suggest that, differently from the already mentioned imminent periphrases (whose main function is proximative, the avertive interpretation being triggered by certain contexts), *fare per V_{inf}* is primarily avertive (2). It is therefore a candidate to be considered a full-fledged avertivity marker in Italian, considering its fair frequency.

- (2) *Arrivato a me ha fatto per passare oltre, poi si è fermato ed è tornato indietro. Mi si è piazzato di fronte, gambe divaricate.* [CORIS]

‘Upon reaching me, he almost passed by (lit. made for pass_by), then he stopped and walked back. He stood in front of me, legs apart.’

Indeed, *fare per V_{inf}* doesn’t just highlight the temporal phase shortly before the initial boundary of the event but implies that the event has already started to some extent, even though the realized portion of the event may be extremely brief, partial, or uncertain. In (3), for instance, we may imagine Rajasta with his mouth open to start articulating a reply, an image that would not be evoked if we used an imminential periphrasis (e.g., *stava per ribattere* ‘was about to answer back’).

- (3) *Rajasta fece per ribattere, ma subito si trattenne.* [CORIS]
‘Rajasta almost answered back (lit. made for answer_back), but he immediately held back.’

This “embryonic” event, which is far from being fully realized, is reminiscent of approximation as a function that describes a deviation from a standard, norm, or prototype (e.g., Masini et al. 2023). In this case, the standard would coincide with the full-fledged realization of the event, in all its portions and phases. The *fare per V_{inf}* periphrasis approximates the event in that the latter is aborted immediately, leading to an “almost” reading. Therefore, our study, besides spotting and describing a new marker of avertivity in Italian, may also pave the way to an expansion of the semantic notion of approximation to the TAME domain (especially time and aspect), thus broadening its scope beyond categorization and towards event structure.

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Progressive Aspect in Swedish and English

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There are differences in how Swedish and English express progressive aspect:

- (1) We are playing football.
- (2) We play football.
- (3) Vi spelar fotboll. (*We are playing football.; we play football.*)

(1) intuitively denotes an ongoing activity, whereas (2) is more naturally interpreted as an habitual. In contrast, an interpretation in terms of ongoing activity is natural in the Swedish example, which is ambiguous between a progressive reading and an habitual one. As is well attested in the literature (Blenselius, 2015), ‘håller på’ (*hold on; is in the process of*) combined with an infinitival clause (e.g. ‘att spela fotboll’; *to play football*) is used in Swedish for emphasizing progressive readings and avoid habitual ones:

- (4) Vi håller på att spela fotboll. (*We are in the process of playing football; we are playing football.*)

In such cases, the progressive reading is the most natural interpretation.

Consider the following examples, which are important for the discourse meaning of ‘ing’:

- (5) When I arrived, John was writing the letter.
- (6) In the darkness, John felt his way up the stairway of the dilapidated old house. Halfway up, there was a loud cracking noise under his feet, and suddenly he was falling through space. (Dowty, 1986, p. 55)

In (5), the intuitive meaning is that the state of John writing the letter obtained when the speaker arrived. In contrast, there is no coherence relation of overlap in (6). Examples of this kind are expected, if the coherence relation is a result of free enrichment (Pagin, 2013). It is suggested that variables for free enrichment are introduced in combination with existential closure, in a last step in the compositional analysis.

But ‘håller på’ and ‘ing’ are not synonymical. In (6), where there is no overlap between the falling and the cracking, a formulation in terms of ‘håller på’ would be odd and a bare preterite is strongly preferred (7 shows the Swedish translation of 6 with the bare preterite ‘föll’, *fell*, and 8 with the past tense variant of ‘håller på’):

- (7) I mörkret kände sig John upp för trappan i det ålderstigna gamla huset. Halvvägs hördes ett starkt, knakande ljud, och plötsligt föll han fritt.
- (8) [...] ?höll han på att falla fritt.

The hypothesis that ‘håller på’ requires a salient reference event and a coherence relation of overlap, in contrast to ‘ing’, predicts these intuitions. The coherence relation is therefore a case of saturation and not modulation (Recanati, 2010).

The method of formal modeling is used for illustrating how saturation and modulation are at work in the examples, in an extension of the model-theoretic framework in Petersson (2019). An analysis in terms of variadic functions is applied to progressive readings of the Swedish simple present, and an indexical analysis is developed for ‘hålla på att’. The result is contrasted to earlier formal accounts of progressive aspect, which cannot be straightforwardly extended to the Swedish data.

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Evidence for an aspectual projection

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Introduction: I argue for a functional projection (AspP) within eventive (i.e., dynamic) VPs, and claim that it is absent in stative (i.e., non-dynamic) VPs, based in part on Spanish *hacerlo* "do so" substitution. I claim that *hacer* is a light verb that heads Voice and syntactically selects AspP under sisterhood. Moreover, we argue that Spanish verbal interfixes like *-ot-* in *fregotear* "half-wash" or *-iz-* in *lloviznar* "drizzle", provide morphological and interpretative evidence for this same head.

Hacerlo & statives: Beyond the observation that Spanish *hacerlo* requires an eventive VP antecedent (see Zagana 2002) little work has been done on *hacerlo* (in contrast to English *do so*). Stative VP antecedents of *hacerlo* give rise to ungrammaticality, in (1b), contrasting with the eventive VP in (1a).

- (1) a. El arbusto creció rápidamente y el árbol lo hizo también. [crecer → eventive]
 The bush grew quickly and the tree it did also
 "The bush grew quickly and the tree did so too."
 b. *Estos estudiantes saben francés y aquellos lo hace también. [saber → stative]
 These students know French and those it did also
 "These students know French and those do so too."

The same stative-eventive contrast has been assumed for English *do so* (see Lakoff 1996, Hallman 2004) although, statives can be found as noted in Stroik (2001). Houser (2010:3) observes that English stative VPs are perfect antecedents when embedded in a relative clause as in (2a). (See also Bruening 2019). Observe Spanish *hacerlo* in a parallel configuration in (2b); while improved compared to (1b), it is still ungrammatical, in contrast to English.

- (2) a. The students that know French best, do so because they lived in France for a year.
 b. *Los estudiantes que mejor saben francés, lo hacen por qué vivieron un año en Francia
 the students que better know French, it do because lived a year in France

Importantly, agentivity is not at issue, since, as seen in (1a), no agents are involved and *hacerlo* is grammatical. Spanish *hacerlo* only takes eventive VPs as antecedents.

Hacer as light verb: Following Stroik (2001) and Hallman (2004) for English *do* in *do so*, we claim that *hacer* is a light verb that heads Voice. Like light verbs cross-linguistically, *hacer* is semantically light--Alonso Ramos 2004 calls *hacer* a "pure" light verb--and the nominal complement determines the interpretation of the VP. A few examples are provided in (3).

- (3) a. hacer mención b. hacer alusión c. hacer reposo d. hacer uso
 do mention do allusion do rest do use
 "to mention" "to allude" "to rest" "to use"

Ramchand (2014: 217), citing Butt (2003) and Butt & Lahiri (2013), notes that light verbs, in contrast to auxiliaries, have a (diachronically) stable "heavy" version. This is also the case in Spanish, where *hacer*, on its heavy interpretation, is a verb of creation, as illustrated in (4).

- (4) a. Hicieron la mesa a mano. b. Hizo la cena para todos.
 made the table at hand made the dinner for all
 "They made the table by hand." "S/he made dinner for everyone."

Moreover, Folli & Harley (2007, 2013), who assume a participle phrase below where light verbs merge (on the present account Voice), note that light verbs are not predicted to form passive participles, because of their higher structural position, compared to "heavy" verbs. Observe in (5a) that the light verbs from (3) are out in passive, in contrast to heavy *hacer* in (5b).

- (5) a. *Fue hecha/o mención/alusión/uso/reposo. b. Fue hecha la mesa/la cena
 was done mention/allusion/use/rest was made the table/the dinner
 "Mention/allusion/use/rest was done." "The table/dinner was made."

Observe in (6) that *hacerlo* patterns with light verbs by also being ungrammatical in passive.

- (6) *La revista fue comprada ayer y también lo fue hecho el libro.
 the magazine was bought yesterday and also it was done the book
 "The was bought yesterday and the book was done so too."

Hacer selects AspP: We assume that from its position heading Voice, *hacer* selects for AspP (sandwiched between Voice and VP à la Travis 1991, 2010, MacDonald 2008), as in (7).

- (7) [VoiceP [Ext. Arg.] hacer-Voice [AspP Asp [VP V (DO)]]]

Lo replaces VP and everything it contains. Note that *lo* itself is not responsible for the aspectual restrictions; it can replace stative predicates as well, as illustrated in (8).

- (8) María es medico/simpática y Laura lo es también.

María is doctor/nice and Laura it is too.

"María is a doctor/nice and so is Laura."

When a stative VP antecedes *hacerlo*, the sectional requirements of *hacer* are not met since, as we claim, stative VPs lack AspP - the result is ungrammaticality, as noted in (1b) and (2b). *Syntactic* selection seems possible. First, since *hacer* is semantically light, it is less likely to impose semantic restrictions. Second, observe in (9) below that the aspectual/phase verb *continue* can predicate of a subject that their current situation holds for more time, whether the situation is eventive as in (9a), or stative as in (9b). Semantically, there is nothing that prevents *continue* from selecting a locative state.

(9) a. Pat continued (running) the race. b. Pat continued (*being) on the terrace.

Syntactically, however, *continue* cannot select a gerundive complement denoting that state. This is evidence for aspect related *syntactic* selection and independent support for our approach to *hacer*.

Interfixes head AspP: Spanish has derivational interfixes between the root and theme vowel (TV), as illustrated in (10). We assume with Fábregas (2017) that the TV in Spanish is a light verb; we take the TV to head Voice. If so, the structure of an interfixed verb would be as in (11), where the interfix heads Asp, a natural morphological result assuming the Mirror Principle.

(10)a. llover → lloviznar b. cantar → canturrear c. llorar → lloriquear
"rain" "drizzle" "sing" "half-sing" "cry" "half-cry"

(11) [TP r-T [VoiceP a-Voice [AspP iz-AspP [VP llov-V]]]]

Their structural position heading AspP suggests that these interfixes should interact with the (a)telicity of the VP. As Fábregas (2022) observes, if the original verb is telic, an atelic VP results, as in (12).

(12) Juan fregó/*fregoteó los platos en media hora.

Juan washed/half-washed the dishes in half hour

"Juan (*half-)washed the dishes in half an hour"

Portolés (1999) observes instances where a frequentative meaning results, as in (13). The addition of the interfixes in these cases seems to derive a semelfactive from a non-semelfactive predicate.

(13)a. pisar → pisotear b. besar → besuquear c. tentar → tentalear
"step on" "step on repeatedly" "kiss" "kiss repeatedly" "try" "try repeatedly"

AspP = Eventive/Dynamic VP: Following Hey, Kennedy, & Levin (1999), Kennedy & Levin (2008), eventive VPs can be analyzed in terms of a model of change along a scale. We claim that AspP introduces an initial minimal degree of a scale (the dimension of which is determined by the lexical properties of the predicate), such that the event transitions from degree zero to an initial non-zero degree along that scale, essentially defining what it means to be an eventive/dynamic VP.

Interfixes and the scale: We claim that the dimension of the scale of an interfixed verb is the same as the original verb's scale, and that their meaning differences can be framed in terms of that scale. In the case of (10a) and (10c), perhaps volume of water and amount of tears is the dimension; in (10b), possibly the number of correct words of the song, or amount of effort. The interfix, we claim, derives a meaning that the event is at a lower degree along the shared scale. *Drizzling* is of a lower degree than *raining* on the volume scale; *half-singing* is of a lower degree of *singing* on the correct words or effort scale. We suggest that this underlies De Miguel's (1999) characterization of interfixed verbs like those in (10) in terms of the *intensity* of the event; *intensity* is often framed in terms of degrees on a scale (i.e., *loud*, *very loud*, *unbearably loud*). On this proposal, since the degree on the scale in an interfixed verb is lower than the original verb, there is an entailment that the final degree of the scale will never be reached - the scale will be open-ended and an atelic VP will result, which, as noted in (12) is the case. Interestingly, one verb, *churruscar*, based on *churrar* "toast", means to (almost) burn - indicating a degree greater than the degree of toasting. On our account, a greater degree surpasses the final degree resulting in closed-ended scale. A telic VP would result, which is the case, as in (14).

(14) Churruscaron el pan en 10 minutos.

browned the bread in 10 minutes.

"They browned the bread in 10 minutes."

Interfixes and stative VPs: If these interfixes head AspP and AspP gives rise to eventive VPs, then, a prediction arises: the Spanish interfixes will not derive stative VPs. As far as we are aware, this prediction--not previously stated before--is borne out, and supports the overall proposal that there is a functional aspectual projection present in eventive VPs (related to degrees along a scale) and absent in stative VPs, which lack a scale altogether.

Vector Verbs in the Caucasus: A comparative approach based on material from three language families

Murad Suleymanov (EPHE-PSL / ILARA) & Monika Rind-Pawłowski (Goethe University Frankfurt)

This talk will analyze the usage of the vector verbs ‘stay’ and ‘go’ in three neighbouring languages of the Caucasus: Azeri (Oghuz Turkic), Tat (Iranian) and Khinalug (East Caucasian). The term “vector verb” is defined as a semantically bleached verb belonging to a set of mostly basic motion verbs whose function is to accompany another (fully semantic) verb and assign it Aktionsart, aspectual or evidential meanings (Bashir 2008: 65–66). Azeri, Tat and Khinalug are all spoken in Azerbaijan. Azeri, as the official state language, has a considerable influence on the minority languages (for Khinalug, see Rind-Pawłowski 2023; for Tat, see Suleymanov 2023). We shall distinguish, per Johanson (1971), nontransformative (a.k.a. atelic), finittransformative (FTt, a.k.a. telic) and initiotransformative verbs. The latter type refers to verbs that express an initial finittransformative phase of an action (‘sit down’, ‘fall asleep’, ‘find out’) followed by a nontransformative phase (‘sit/be sitting’, ‘sleep’, ‘know’).

Regarding ‘stay’, all three languages use it for the resultative Aktionsart. Azeri can combine it with a semantic verb in both contextual (a.k.a. clause-chaining) converb (cf. Johanson 1976, Haspelmath 1995) and finite form, which yields synonymous expressions. Tat can combine it only with the finite form, and Khinalug only with a coordinative converb or a perfective verb stem, i.e. the functional equivalent of the contextual converb in Azeri. In all three languages, the resultative can only be formed at intransitive semantic verbs, which must be fini- or initiotransformative.

Azeri examples: *otur-ub qal-* <sit-CVB stay> ‘remain seated’; *səpələn-ib qal-* <be scattered-CVB stay> ‘remain scattered’; *yat-ib qal-* <sleep-CVB stay> ‘remain asleep’; *don-ub qal-* <freeze-CVB stay> ‘remain frozen’.

Tat examples: *xuna-hon=şun rixt-e mund-e bäärä* <home-PL=POSS:3PL flow₂-PRF.2/3 stay₂-PRF.2/3 here> ‘their homes are (and remain) scattered all around here’; *čäšmiš bir-om mund-om* <confused be/become₂-PFV.1 stay₂-PRF.1> ‘I became (and remain) completely confused’

Khinalug examples: *Afäddin t^halk^hu-i j-eccin-i* <PN CIS.LEVEL_fall(PFV)-PTCP 1-stay(PFV)-PTCP> ‘Afäddin fell down (and remained lying)’; *ilišmišfi-jä v-accun-i* <get stuck.PFV(SUPP)<3/HPL>.PTCP-COORD 3-stay(PFV)-PTCP> ‘got stuck (and remained stuck)’; *Sahibä mik’ si-jä r-accin-i* <PN ice 2-be/become(PFV.SUPP).PTCP.COORD 2-stay(PFV)-PTCP> ‘Sahiba froze (in shock) (and remained frozen)’; *Namik aččvi-i j-eccin-šä=mä* <PN sleep(PFV)-PTCP 1-stay-PST-DECL> ‘Namik is still sleeping (has fallen asleep and remains sleeping)’; *čeb-i v-accin-ešä lap^h ink^he urt^ha-r* <sit.3(PFV)-PTCP 3-stay-PQP quite river.GEN.AL middle-ESS/LAT> ‘(the sheep) was sitting (lit. sat down and remained seated) right in the middle of the hay’.

Only Azeri makes consistently use of ‘stay’ to form the continuative Aktionsart, which has only just started spreading to Khinalug due to recent language contact. Here, ‘stay’ can combine with both intransitive and transitive semantic verbs, which must be nontransformative. Both Azeri and Khinalug combine ‘stay’ with a semantic verb in its converb of manner form.

Azeri examples: *darıx-a darıx-a qal-* <long_for-CVB long_for-CVB stay> ‘continue to long for’; *üz-ə üz-ə qal-* <swim-CVB swim-CVB stay> ‘continue to swim’.

Khinalug examples: *gäxku-i čäxkui- j-eccin-i zı* <UP_turn.IPFV-PTCP DOWN_turn.IPFV-PTCP 1-stay(PFV)-PTCP 1SG> ‘I kept tossing and turning’.

As for ‘go’, Azeri and Tat use it as a vector verb with three grammaticalisation steps, from simple translocative over a connotation of disappearance, loss and disconnection to a connotation of thoroughness, completeness and irreversibility. Both languages use ‘go’ with both intransitive and transitive semantic verbs. However, transitive verbs can only be used if the agent is not affected together with the object. Azeri forms synchronous constructions with converbs and finite forms of the semantic verb only for intransitive verbs. Transitive semantic verbs must be finite in all languages. Tat can combine ‘go’ only with finite semantic verbs, irrespective of transitivity. Khinalug lacks one grammaticalisation

step and hardly makes use of this construction with transitive verbs. If it does, the semantic verb is finite, whereas intransitive semantic verbs combine with ‘go’ in their coordinative converb form.

Azeri examples: *uç-ub get-di* <fly-CVB go-PST> or *uç-du get-di* <fly-PST go-PST> ‘flew away’; *yat-ib ged-əcək* <sleep-CVB go-FUT> or *yat-acaq ged-əcək* <sleep-FUT go-FUT> ‘will fall fast asleep’; *ruslaş-ib get-di-lər* <become Russian-CVB go-PST-PL> or *ruslaş-di-lər get-di-lər* <become Russian-PST-PL go-PST-PL> ‘have been completely / irreversibly Russified’; *sandığ-ı at-di-m get-di* <chest-ACC throw-PST-1SG go-PST> ‘I’ve thrown the chest away (and it’s gone)’; *alma-nı ye-di-m get-di* <apple-ACC eat-PST-1SG go-PST> ‘I’ve eaten the apple (and it’s gone)’; *kitab-ı oxu-du-m get-di* <book-ACC read-PST-1SG go-PST> ‘I’ve read the book (and needn’t deal with it anymore)’.

Tat examples: *xuna-hon=şun rixt-e mund-e bäärä* <home-PL=POSS:3PL flow₂-PRF.2/3 stay₂-PRF.2/3 here> ‘their homes are (and remain) scattered all around here’; *čäsmiş bir-om mund-om* <confused be/become₂-PFV.1 stay₂-PRF.1> ‘I became (and remain) completely confused’; *köç soxt-e raft-e* <moving do₂-PRF.2/3 go₂-PRF.2/3> ‘everyone has moved away’, *lägv bir-e raft-e* <cancelation be/become₂-PRF.2/3 go₂-PRF.2/3> ‘it has been discontinued for good’; *qujalmiş bir-om raft-om* <grown_old be/become₂-PRF.1 go₂-PRF.1> ‘I have grown completely old’; *bä här gede=män ye kilö dor-om raft-e* <LOC each boy.BS=POSS:1 one kilo give₂-PRF.1 go₂-PRF.2/3> ‘I gave each of my sons one kilo (so I have it no longer)’.

Khinalug examples: *koč^hunmuşfi-jä ku-it^ho=mä šähär-ir* <move_house<3/HPL>.PFV(SUPP).PTCP-COORD go-PRS.FAR-DECL town-ESS/LAT> ‘they are moving away to the town’ *zattubiž-i p^h-çi-šä=mä* <TRANS.DOWN_go back(PFV)-PTCP 3/HPL-go-PST-DECL> ‘went back (away from the speaker downwards)’; *lattubiž-i p^h-çi-šä=mä* <TRANS.LEVEL_go_back(PFV)-PTCP 3/HPL-go-PST-DECL> ‘went back (away from the speaker on the same level TRANS.LEVEL)’ *hoz-um bit^hin bi-k’-i p^h-çi-šä=mä* <they-FOC all 3/HPL-die(PFV)-PTCP 3/HPL-go-PST-DECL> ‘they all died (and are gone)’; *dädä-baba adät^h-irdir it^hmišhi çi-ğo=ma* <ancestor tradition-PL be lost<3/HPL>.PFV(SUPP).PTCP go-PRET.below-EXCL> ‘the traditions of the ancestors are all lost (and gone)!’ *dugunk^hu-šä=mä p^h-çi-šä=mä* <forget-PST-DECL 3/HPL-go-PST-DECL> ‘you have forgotten it (and it’s gone)’.

Conclusion for VV ‘stay’: The resultative construction probably developed simultaneously in Tat and Azeri as an areal feature. However, the combination of finite semantic verbs plus vector verbs is very untypical for Turkic languages. This might be a trace of an Iranian substrate. The continuative meaning is frequent only in Azeri, and seems to start spreading to Khinalug as a result of intense language contact.

Conclusion for VV ‘go’: Azeri and Tat use it with the same broad functional range, it may have developed as a common areal feature. Finite semantic verbs in Azeri may be a trace of Iranian substrate again. The go-construction is hardly used with transitive verbs in Khinalug and the connotation of thoroughness, completion and irreversibility is excluded. Hence, in Khinalug, it may have developed independently for intransitive verbs to express translocativity, and the first step of its semantic extension, as well as its use with transitive verbs, may be due to recent Azeri influence.

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Baltic evidence to external aspect

Aspect in Latvian is often described in the same terms as Slavic aspect [2], as it also has perfectivising prefixes (1). These prefixes add telic interpretation to the verb as well as normally change aspect to perfective. Some of them additionally induce lexical meaning change; others, like *no-* in (1b)¹, do not.

- (1) a. *Katru dienu sūtī-ju viņam vēstules*
every day send-pst him letters
'I used to send him letters every day.'
b. *Vakar no-sūtī-ju viņam vēstuli*
yesterday pfv-send-pst him letter
'I sent him a letter yesterday.'

(1a) is understood as a habitual action in the past, whereas (1b) is an episodic action. Same opposition applies in Russian (2).

- (2) a. *Každy den' ja sla-l jemu pis'ma*
every day I send-pst him letters
'I used to send him letters every day.'
b. *Včera ja po-sla-l jemu pis'mo*
yesterday I pfv-send-pst him letter
'I sent him a letter yesterday.'

In Slavic languages all imperfective contexts require imperfective morphology [1]. When carrying present morphology, verbs with perfective prefixes refer to future. Conversely, Latvian allows the so-called perfective present (PP), where verbs with perfective prefixes are used in typical present contexts [2]. Although it is unavailable as progressive (*I am sending him a letter right now* in Latvian is expressed with an imperfective verb), perfective is felicitous in habituais and praesens historicum (3).

- (3) a. *Varētu teikt, ka ne-ēdu kūciņas, bet tad es melotu — gadā vienu,*
can.cond say that not-eat.prs cakes but then I lie.cond year one
varbūt divas kūciņas ap-ēdu.
maybe two cakes pfv-eat.prs
'I could say that I don't eat cakes, but then I would be lying – I eat one, maybe two cakes per year.' [2]
b. *dzejnieks pārsvītro visus trīs "Tu" un vietā uz-raksta "Es"*
poet cross.out.prs all three "You" and instead pfv-write.prs "I"
'[In the fourth part of the action ...] the poet crosses out all three "You" and writes "I" instead.' [3]

Overall, PP is available when the culmination of the event is asserted. In progressive, on the contrary, it is outside of the evaluation time, so prefixless form is used.

Still, Slavic languages require imperfective in such contexts. When telic interpretation is needed in present, Russian employs imperfectivising affixes like *-yva-* and *-a-*. Compare (a)

¹This and other Russian examples are constructed as the authors are native speakers of Russian. Latvian examples are elicited, unless stated otherwise.

with the semantically identical Russian (4).

- (4) *na samom dele ja s-jed-a-ju odin-dva v god.*
 in fact I [pfv-eat]-ipfv-prs one-two per year
 ‘[One could say that I don’t eat cakes, but] in fact I eat one-two cakes per year.’

[2] proposes that Latvian verbs are bi-aspectual, but that is problematic [1]. In [1] authors claim that the difference between the Baltic and Slavic system is the degree of grammaticalisation. More precisely, “[in Slavic] the perfective present has basically become a perfective future”, however in Baltic languages it is not a strict requirement. We are to employ S. Tatevosov’s analysis [4] of Russian, which suggests that aspect is external to the verb. The difference between verb-internal and verb-external aspect is (5).

- (5) a. [CP ... [F_{i+1}P ... [F_iP ... [F_{i-1}P ... [VP ... [V PFV na-pisa]]]]] internal
 b. [CP ... [F_{i+1}P ... [F_iP ... PFV [F_{i-1}P ... [VP ... [V na-pisa]]]]] external

Aspect merges in AspP with a constraint that it should comply with the uppermost “aspectual” affix, such as perfectivising prefix *s-* and imperfectivising suffix *-a-* in (4). We thus propose that Latvian PP, i. e., usage of perfectivised verbs in present, is in fact imperfective, like in such contexts in Slavic languages. The question arises what is the reason for Latvian to allow imperfective aspect to combine with perfectivising prefixes. We have two options: to posit a null imperfectiviser functionally similar to Russian *-yva-*, or to allow free variation of aspect relative to “aspectual” affixes.

Against the first hypothesis stands the fact that in Russian, *-yva-* is mostly used with lexically saturated prefixes and combines quite unproductively with perfectivisers that do not induce meaning change. In the Russian translation of (3b), bare imperfective is used instead (6).

- (6) ... poet ... *pish-et* /**na-pis-yva-jet* “Ja”
 ... poet ... write-PRS / pfv-write-ipfv-prs “I”
 ‘[In the fourth part of the action ...] the poet crosses out all three “You” and writes “I” instead.’

This would lead us to propose that the Latvian imperfectiviser is not only null, but also unprecedentedly productive, a poor theoretical choice. We will review the properties of an “aspectless” analysis and problems related to it. We believe that Latvian data, which is similar to Russian except for the availability of aspectual interpretations, is a strong argument towards Tatevosov’s external aspect analysis.

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‘Know’ at the crossroads of evidentiality and iterativity

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The Croatian verb *znati* ‘know’ assumes different readings depending on its syntactic environment: a finite complement yields attitude semantics (1); an infinitive results in an ability reading (2) or a habitual-like sporadic one (roughly ‘occasionally’ (3)/(4); see also Hellman 2005).

- (1) *Znam da je Martina visoka.* (2) *Znam (kako) popraviti bicikl.*
know.1SG that is Martina tall know.1SG how repair.INF bicycle
‘I know that Martina is tall.’ ‘I know how to repair a bicycle.’

Focusing on **sporadic *znati***, I propose a syntactic analysis combining semi-lexicality with cartography (§4) and a semantic implementation based on a presupposition-assertion flip (§5). The proposal accounts for the properties in §1–3 and relates the different readings of *znati*.

§1 Raising. Sporadic *znati* (unlike attitude/ability) is compatible with inanimate subjects (3), weather predicates (4), and idiom chunks—the subject need not possess any knowledge.

- (3) *Ove ladice znaju zapeti.* (4) *U travnju zna sniježiti.*
these drawers know.3PL get.stuck.INF in April know.3SG snow.INF
‘These drawers occasionally get stuck.’ ‘It occasionally snows in April.’

§2 Repeatability. The event denoted by the infinitive has to be repeatable: (5) is infelicitous (assuming that one’s hair turns grey only once). The restriction concerns entire events rather than predicates: *osijedjeti* ‘turn grey’ is fine under *znati* if understood as applying multiple times (e.g., to multiple scientists as in (6)). Questions and conditionals are subject to the same requirement (not shown; see below for negation), which suggests that this is a **presupposition**.

- (5) #*Zrinka zna rano osijedjeti.* (6) *Znanstvenici znaju rano osijedjeti.*
Zrinka know.3SG early turn.grey scientists know.3PL early turn.grey
#‘Zrinka occasionally turns grey early.’ ‘Scientists occasionally turn grey early.’

§3 Evidentiality. Despite the repeatability requirement, a single actual occurrence of the embedded event can suffice to make the sentence true, but it is essential that the speaker deems recurrence possible. I can truthfully utter (7) if Igor wore blue shoes once, but cannot then add that that was a unique exception. Attitude *znati* has no such requirement: the Croatian counterpart of ‘I know that Igor wore blue shoes (once), but that was an exception’ (omitted for space) is perfectly fine. At the same time, at least one actual occurrence is also necessary: (7) is false if uttered, say, after seeing blue shoes in Igor’s flat which he turns out never to have worn. This distinguishes sporadic *znati* from epistemic modals such as *morati* ‘must’ or *moći* ‘can’.

- (7) *Igor je znao obući plave cipele.*
Igor AUX.3SG know.PTCP.ACT.SG.MASC put.on.INF blue shoes
‘Igor occasionally put on/wore blue shoes.’

Sporadic *znati* (again unlike attitude *znati*) implies that the embedded event is unexpected and that the opposite is the regular or default state of affairs: (8) implies that Viki normally eats meat, making it incongruous with the advice not to prepare meat.

- (8) I invited Viki for dinner and ask Viki’s flatmate whether I should prepare meat.

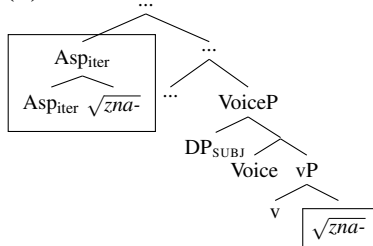
#*Bolje ne, Viki zna jesti vegetarijansku hranu.*
better NEG Viki know.3SG eat.INF vegetarian food
#‘Rather not, Viki occasionally eats vegetarian food.’

Descriptively, sporadic *znati* conveys that the embedded event has happened (at least) once and that the speaker, taking this occurrence as evidence against a certain previously assumed state of affairs, infers (the possibility of) recurrence. (In embedded contexts (omitted) it is the attitude holder, rather than the speaker, that is involved.) ‘Knowledge’ thus appears to shift from the subject to the speaker (or attitude holder), applying more abstractly and conveying inferential reasoning. Such shifts are not unheard of; see, e.g., Traugott (1997) on ‘subjectification’.

§4 Syntax. I analyse sporadic *znati* as **semi-lexical**. Following Cavirani-Pots (2020), semi-lexical items reflect combinations of (lexical) roots and functional heads. Supplementing her approach with cartographic clause structure (Cinque 1999, 2006), I propose that $\sqrt{zna-}$ merges with different functional heads along the clausal spine, summarised in (9). Attitude *znati* is fully lexical, resulting from $\sqrt{zna-}$ being merged as complement to *v*, the lowest position available, and sporadic *znati* arises in combination with the iterative head (Cinque’s $Asp_{\text{frequentative}}$). Ability *znati* (not shown) reflects a combination with Mod_{abil} .

The raising nature of sporadic *znati* (§1) follows: Asp_{iter} is above the subject (introduced by *Voice*), and $\sqrt{zna-}$ thus cannot affect the latter. Since Asp_{iter} is higher than Mod_{abil} , we predict that sporadic *znati* may embed ability *znati* (but not *v.v.*) and that both of them may embed attitude *znati*. Both predictions are borne out, as shown in (10)/(11) (these examples require amnesia scenarios to reconcile the stativity of attitude/ability *znati* with the repeatability requirement—e.g., (11) implies that Viki does not always know that she is a singer).

(9)



(10) *Viki zna+iter znati+abil (kako) pjevati.*

Viki know.3SG know.INF how sing.INF
 ‘Viki occasionally knows how to sing.’
 *‘Viki knows how to occasionally sing.’

(11) *Viki zna+iter znati_v da je pjevačica.*

Viki know.3SG know.INF that is singer
 ‘Viki occasionally knows that she is a singer.’

§5 Semantics. Assuming the classical analysis of attitude verbs (Hintikka 1969) as in (12) (where index *i* is a world-time-individual triple $\langle w, t, x \rangle$), I propose that the semantics for sporadic *znati* (13) can be derived from (12) by **i**) adding iterative semantics (see, e.g., Van Geenhoven 2004) contributed by Asp_{iter} and **ii**) an assertion–presupposition flip (see Portner & Rubinstein 2020 for *hope*). The two readings differ in three core respects: 1) attitude *znati* takes a proposition; sporadic *znati*, due to Asp_{iter} , a predicate of events; 2) attitude *znati* presupposes the truth of its prejacent and asserts that it is also true in a set of doxastic alternatives; sporadic *znati* places the doxastic alternatives in the presuppositional component and asserts its prejacent (more precisely, due to Asp_{iter} , quantifies existentially over the embedded event); 3) the doxastic alternatives with attitude *znati* are those of the subject; with sporadic *znati*, those of the attitude holder (or speaker in root contexts).

$$(12) \llbracket \sqrt{zna-+v} \rrbracket^i = \lambda p. \lambda x : p(w) = 1. \forall w' \in \text{DOX}_{x,w}. p(w') = 1$$

$$(13) \llbracket \sqrt{zna-+Asp_{\text{iter}}} \rrbracket^i = \lambda P. \lambda s : \forall w' \in \text{DOX}_{x,w} P \text{ is repeated in } w'. \exists e. \tau(e) \subset \tau(s) \wedge P(e)$$

s = state; τ = running time of the event/state

The repeatability requirement (§2) is then due to Asp_{iter} and encoded as a presupposition, reflecting its retention in questions and conditionals. Embedding repetition in the attitude holder’s or speaker’s doxastic alternatives (contributed by $\sqrt{zna-}$) captures the sufficiency of inferred (as opposed to actual) recurrence and existential quantification accounts for the observation that a single actual occurrence of the embedded event is both necessary and sufficient (§3).

§6 Extensions. Sporadic *znati* is incompatible with negation and behaves like a PPI. Since attitude and ability *znati* may be negated, it is unlikely that this property originates with $\sqrt{zna-}$, pointing instead towards Asp_{iter} . Linking PPI-hood to Asp_{iter} provides a connection to the PPI *ponekad* ‘sometimes’, as well as to sporadic uses of *can* (Boyd & Thorne 1969) and its French counterpart *pouvoir* (Kleiber 1983, Barbet & Saussure 2012), which share with sporadic *znati* the resistance to negation as well as, e.g., repeatability and existential quantification. The proposed analysis may thus provide insights into the underpinnings of sporadic *can/pouvoir* as well as similar readings of ‘know’ in other languages (e.g., Eng. *be known to*, Hung. *tud*).

Progressive and Resultative: do opposites attract? A Northern Khanty case study

Progressive-resultative polysemy is an uncommon, but crosslinguistically attested phenomenon (see Crane 2013, Ogihara 1998). We aim to provide a formal account of one such case on the basis of our own fieldwork data from Northern Khanty (Ob-Ugric < Uralic), an endangered language spoken mostly in the Khanty-Mansi Autonomous Okrug in Russia.

In Northern Khanty, progressive and resultative (further PROG and RES) meanings are associated with two different syntactic contexts of one morpheme, the converb suffix *-man*. Firstly, *-man* can form a monoclausal resultative construction with the copula *wəłti* ‘to be’, which is quite similar to the stative passives in many European languages (1). In such clauses, the Theme argument becomes the subject, the lexical verb cannot have overt causative morphology (the bare inchoative stem is used instead, 3b), and agent-oriented modification is banned (3a). This suggests that *-man* is merged directly above the V head and higher verbal projections are handled by the copula. Secondly, *-man* can also head same-subject adverbial clauses. We assume that in these uses of *-man* it can be merged as high as above VoiceP, because unergative activity verbs are allowed (2):

- (1) sumka-jen χυλna wəš-man wə-λ
 bag-POSS.2SG still lose-CVB be-NPST[3SG]
 ‘The bag is still lost.’
- (2) [tiwetλ tuχetλ χəχ-ət’λ’ə-man] pet’a-jen ʉw-λ
 back.and.forth run-PLAC-CVB P.-POSS.2SG scream-NPST[3SG]
 ‘Petya is screaming and running back and forth.’

In monoclausal contexts, *-man* is only compatible with verbs with a lexically specified result state¹, *i.e.* accomplishments (both transitive (tr.) and intransitive (intr.), 3a-b), and some achievements (1), only in the RES reading:

- (3) a. išn-en (*pet’a-jen-ən) pəš-man wə-λ
 window-POSS.2SG petya-POSS.2SG-LOC open-CVB be-NPST[3SG]
 ‘The window ^{ok}is open /*is being opened (*by Petya).’
- b. λor jɪŋk pot-(*əλ)-man wə-λ
 lake water freeze-CAUS-CVB be-NPST[3SG]
 ‘The water in the lake ^{ok}is frozen /*is freezing.’

Adverbial clauses with *-man* have somewhat different restrictions. In this syntactic environment, states, activities (2) and tr. accomplishments with *-man* (4a) get a PROG reading, intr. accomplishments are compatible with both PROG and RES interpretations (4b-c), while intr. achievements only have the RES reading (4d).

- (4) a. maša-jen [kinška λəŋət-man] mərəχ λε-λ
 masha-POSS.2SG book read-CVB cloudberry eat-NPST[3SG]
 ‘^{ok}While reading a book /*Having read a book, Masha is eating cloudberryes.’
- b. jɪŋk [ajλta pot-man] jɛŋk-a ji-λ
 water slowly freeze-CVB ice-DAT become-NPST[3SG]
 ‘Slowly freezing, the water is turning into ice.’
- c. χuməsəwəλ-λ-aλ [pot-man] χolodilnik-ən uλ-λ-ət
 cranberry-PL-POSS.3SG freeze-CVB fridge-LOC lie-NPST-3PL

¹ We assume that they have an RP projection in the complement of V, which introduces the result state as well as the Resultee argument (Ramchand 2008).

‘Frozen cranberries are in the fridge.’

d. $\acute{n}awr\acute{e}m$ [pākən-man] $\chi o\lambda\lambda\acute{e}p$ -a pit -əs
child become.frightened-CVB crying-DAT fall-PST[3SG]

‘^{ok}Being afraid /*Becoming frightened, the child started crying.’

We take stativity to be at the heart of PROG-RES polysemy² and consider *-man* to be a stativising operator:

- (5) $[[\text{-man}]] = \lambda P\lambda x\lambda s: [s \in C_e] \exists e.[\text{State}(s) \wedge \text{Holder}(s)=x \wedge P(e)]$,
where C_e is the set of subevents of e .

Essentially, *-man* binds the event variable e , picks out one of e ’s subevents (the presupposition ensures that only the subevents that are already present in the structure can be chosen), stativises it and merges the closest c-commanded DP as the state’s Holder, obeying syntactic minimality. Here, some pragmatic considerations come into play. In case of tr. accomplishments, the external argument is the highest DP, so it has to be the Holder, as the syntax dictates. Pragmatically speaking, the external argument is usually not relevant for the result state subevent, which explains the general impossibility of telic (RES) construals of tr. accomplishments in adverbial *-man* clauses. However, in some cases it is possible (cf. 4a&6):

- (6) ^{ok} $wa\acute{s}aj$ -en [u χ -əl i λ $\epsilon s\acute{\alpha}\lambda$ -man] $\acute{s}et$ - λ
W.-POSS.2SG head-POSS.3SG down let.loose-CVB walk-NPST[3SG]

‘Vasya is walking with his head down.’

Here, the external argument, Vasya, can be construed as the Holder, because it is his head that is lowered and this state can be observed by looking at Vasya himself. Note that intr. accomplishments do not pose the same problem, because their only argument is both the Theme and the Resultee, so either the process or the result state subevent may be picked out by *-man* (e.g. we can observe the water freezing, as in 4a, just as we can observe the cranberries when they are already frozen, 4b).

The observability of the result state is also relevant in monoclausal *-man* constructions. For instance, some verbs of destruction require contextual enforcement:

- (7) a. $t\acute{u}t$ $j\acute{u}\chi$ - λ -an $\acute{s}o\eta\chi it$ -man b. * ma $\acute{n}a\acute{n}$ - ϵm $\lambda\epsilon w$ -man $w\acute{\theta}$ - λ
fire wood-PL-POSS.2SG burn-CVB 1SG bread-POSS.1SG eat-CVB COP-NPST[3SG]
‘The firewood is burnt up.’ exp. ‘My bread is eaten up.’

If one utters (7a) in a context near a woodpile, the sentence is fine, since the interlocutors expect there to be firewood and nothing else, and the result state is deductible by there being none left. However, in a context without explicit expectations about the Resultee’s whereabouts, like (7b), in which no special place for the bread is mentioned and no visible trace of the bread is left, the sentence is odd.

In our talk we will discuss *-man*’s actional and pragmatic restrictions in greater detail and elaborate further on how they can be derived under our proposal. We will also touch upon the possible extensions of our analysis onto similar cases in other languages.

Non-standard abbreviations: NPST — non-past tense; PLAC — pluractionality marker.

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²See (Kratzer 2000, Delfitto 2004, *inter alia*) for stative accounts of resultative and progressive, respectively.

On the structure of Russian verb: one solution to three puzzles

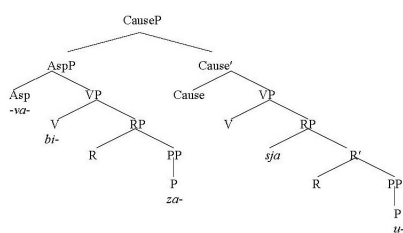
The phenomenon. There is a class of Russian verbs that exhibit multiple prefixation and a reflexive morpheme *-sja*, illustrated in (1). Semantically, (1) conveys two pieces of information: ❶ M. scores systematically; ❷ in the course of scoring, M. undergoes a certain change, which results in his entering a new state approximated as ‘having got one’s fill’. Morphologically, *u-za-bi-va-l-sja* is a verb consisting of the stem, two lexical prefixes (LPs), the “secondary imperfective” (SI) morpheme, the reflexive *sja* and the past tense inflection. Its morphological derivation is informally shown in (2).

- (1) Maradona až u-za-bi-va-l-sja.
 M PTCL LP-LP-hit-SI-PST-REFL
 ‘Maradona got his fill of scoring (goals).’
- (2) *bi-* ‘hit, beat’ → *za-bi-* ‘score, lit. hit behind’ → [*za-bi-*]-*va-* ‘score frequently / regularly’
 → *u-*[[*za-bi-*]-*va-*]-*-sja* ‘get one’s fill of scoring frequently/regularly’

Given (2), ❶ can be identified as the contribution of [*za-bi-*]-*va-*, while ❷ should be attributed to (the combination of) the two pieces of morphology: the prefix *u-* and the reflexive morpheme *-sja*.

The puzzles. (1) and similar cases come with three puzzles. ❶ How can (1) contain one lexical verb but at the same time describe two states of affairs, ❶ and ❷? What is the event structure of (1)? ❷ The reflexive *-sja* morpheme is an obligatory component of (1); leaving it out leads to ungrammaticality (**u-za-bi-va-l*), but it is not clear why. ❸ (1) involves two **lexical prefixes**, *za-* and *u-*. Lexical prefixes have to immediately precede the stem (Babko-Malaya 1999, Romanova 2006, Svenonius 2004, 2008, Biskup 2019, a.m.o.). Outside of examples like (1), *u-* is never separated from the stem by another prefix, so the question is what makes configurations like (1) special.

(3)



Previous work. A response to ❸ is suggested in Žaucer 2009: since there can only be one lexical prefix per VP (Ramchand 2004, Svenonius 2004, 2008), (1) with two lexical prefixes must involve two VPs, as in (3). The VPs appear in the complement and specifier positions of CauseP. One is projected by the lexical verb and contains the prefix and the SI morpheme (*za-bi-va* in (1)). The other contains a phonologically null V, the other prefix and the reflexive clitic (*u-* - *sja* in (1)).

I believe that (3) falls short of accounting for ❷ and makes unwelcome semantic predictions wrt ❶. In (3), the reflexive element occupies an argument position, spec, RP. It is not clear without further stipulations what makes it obligatory in that position. Semantically, (3), being a causative configuration, inevitably involves two eventualities: scoring regularly, ❶, brings about an eventuality that leads the subject to a state of having got his fill, ❷, shown in (4).

- (4) $\lambda e.\lambda e' [\text{❶}(e) \wedge \text{❷}(e') \wedge \text{cause}(e')(e)]$

The analysis predicts that the two VP in (3) should allow for independent adverbial modification. One would expect an ambiguity, depending on whether an adverbial modifies *e* or *e'* in (3). This does not happen, however:

- (5) Maradona u-za-bi-va-l-sja za dva mesjaca. za dva mesjaca.
 M LP-LP-hit-SI-PST-REFL in two months
 1. *‘M’s regular scoring (for years) made him get his fill in two months’
 2. *‘It took two months for M’s regular scoring to make him get his fill (in a minute).’
 3. ^{OK} ‘In two months, the following happened: M scored regularly and got his fill of scoring.’

Under (4) and (3) it is not difficult to derive (5.3); however, there is no obvious way of making (5.1) and (5.2) unavailable. Relying on converging evidence from examples like (5) as well as the distribution and interpretation of temporal, measure, rate adverbials, low adverbials like ‘almost’ and ‘again’, and interpretation under negation (to be presented in the full version of the paper), I argue that (1) is **monoeventive** and that Žaucer’s idea involving two VPs is right, but its specific implementation in (3) leading to the bi-eventive structure in (4) is not.



Analysis. I propose that (1), while involving two VPs, comes with two descriptions of the same eventuality. It is not the case that ❶-events

cause ②-events. Rather, events described as ①, are **identified** with events described as ②. The structure I am assuming is shown in (6); category labels are left out whenever their identification is not substantial. I follow Babko-Malaya (1999) in assuming that lexical prefixes are adjoined to V heads. The denotation of the upper V is shown in (7), the denotation of its complement, the lower [-va- VP] in (8); more detailed derivations will be presented in the full version of the paper.

- (7) $\llbracket [V \text{ u-V- }] \rrbracket = \textcircled{2} = \lambda x. \lambda e. \exists s [u'(s) \wedge \text{holder}(x)(s) \wedge \text{cause}(s)(e)]$
The relation between events that bring about a state of getting one's fill ("u") and its holders.
- (8) $\llbracket [\text{-va- } [VP \text{ za-bi- }]] \rrbracket = \textcircled{1} = \lambda x. \lambda e. *(\lambda e'. \exists s \exists y [bi'(e') \wedge \text{agent}(x)(e') \wedge \text{theme}(y)(e') \wedge za'(s) \wedge \text{holder}(y)(s) \wedge \text{cause}(s)(e')]) (e)$
The relation between plural events of hitting an object ("bi") and making it enter a behind state ("za") (i.e. plural events of scoring) and agents of these events.

I propose that (7) and (8) combine by Generalized event identification (GEI) in (9), which, unlike the original Kratzer's (1996) version, is capable of combining *any* relations between events and other objects. This results in the relation between two individuals and events in (10).

- (9) Generalized event identification (GEI)
If α id a branching node and $\{\beta, \gamma\}$ is the set of its daughters,
 $\llbracket \beta \rrbracket$ is in $D\langle \sigma_{\alpha_1}, \langle \dots, \langle \sigma_{\alpha_n}, \langle v, t \rangle \rangle \rangle \rangle$, and $\llbracket \gamma \rrbracket$ is in $D\langle \sigma_{\beta_1}, \langle \dots, \langle \sigma_{\beta_k}, \langle v, t \rangle \rangle \rangle \rangle$, then $\llbracket \alpha \rrbracket =$
 $\lambda \omega_{\alpha_1}. \dots \lambda \omega_{\alpha_n}. \lambda \omega_{\beta_1}. \dots \lambda \omega_{\beta_k}. \lambda e. \llbracket \alpha \rrbracket (\omega_{\alpha_1}) (\dots) (\omega_{\alpha_n}) (e) = \llbracket \beta \rrbracket (\omega_{\beta_1}) (\dots) (\omega_{\beta_k}) (e) = 1$
- (10) $\llbracket [VP [V \text{ u-V- }] [\text{-va- } [VP \text{ za-bi- }]]] \rrbracket = \lambda y. \lambda x. \lambda e. \exists s [u'(s) \wedge \text{holder}(y)(s) \wedge \text{cause}(s)(e) \wedge *(\lambda e'. \exists s \exists z [bi'(e') \wedge \text{agent}(x)(e') \wedge \text{theme}(z)(e') \wedge za'(s) \wedge \text{holder}(z)(s) \wedge \text{cause}(s)(e')]) (e)]$

(10) answers ① by capturing monoeventiveness of (1) and fixing the problem revealed in (5): the readings (5.1) and (5.2) are now impossible to derive, as required.

At the same time, (10) offers a solution to ②. GEI outputs a three-place relation in which all non-eventive elements are inherited from the denotations of both daughter nodes. In (10), there are two individual arguments: a holder of a state of getting one's fill, and an agent of multiple scoring. However, the syntactic structure in (6) only has space for one external argument DP. At this point, the reflexive element is called for to do the usual job of the reflexive: to identify two individual arguments, which repairs the mismatch between syntax and semantics, (11). (

- (11) $\llbracket \text{-sja } [VP [V \text{ u-V- }] [\text{-va- } [VP \text{ za-bi- }]]] \rrbracket = \lambda x. \lambda e. \exists s [u'(s) \wedge \text{holder}(x)(s) \wedge \text{cause}(s)(e) \wedge *(\lambda e'. \exists s \exists z [bi'(e') \wedge \text{agent}(x)(e') \wedge \text{theme}(z)(e') \wedge za'(s) \wedge \text{holder}(z)(s) \wedge \text{cause}(s)(e')]) (e)]$

This explains why the reflexive is necessary for the derivation to converge and thus provides an argument for a GEI-analysis.

GEI as a rule of construal. A success of this analysis depends on whether GEI is admitted as a general composition principle. At first glance, GEI overgenerates. It can combine any descriptions of eventualities with any amount of participants. But, apparently, we do not find descriptions, either morphosyntactically simplex or derived, of complex eventualities like (12), where Olga eats a sausage and Cathy swims.

- (12) $\lambda e. \text{eat}(e) \wedge \text{agent}(\text{olga})(e) \wedge \text{theme}(\text{sausage})(e) \wedge \text{swim}(e) \wedge \text{agent}(\text{Cathy})(e)$

I would conclude by suggestion that overgeneration may only be apparent. The output of GEI is subject to a number of constraints that rule out predicates like (12) without affecting predicates like (11). One is **uniqueness of participants** (e.g. Krifka 1989): no distinct participants that bear the same thematic relation to an event. Another is **fine-grainedness**. The strongest version of fine-grainedness (e.g. Kim 1966) suggests that events that fall under different properties are distinct. This only leaves space for GEI if one of the eventuality descriptions has no positive descriptive properties. Further restrictions come from the **syntactic realization of the arguments**. If the output of GEI cannot be mapped to the available argument positions in the syntax, the derivation has to be rescued by existing morphosyntactic devices (e.g. reflexivization); otherwise it is bound to crash. Crucially, while (12) is problematic from the point of view of all the three types of constraints, (11) is not. This may suggest that GEI is indeed freely available, only being subject to semantic interpretability and interface constraints.

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What is punctual when you can stretch time? Actionality in Khwarshi proper

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The approaches to the semantic domain of actionality are numerous and varied. The language-specific investigation I propose is based on the methodology of Sergej Tatevosov. According to [Tatevosov 2002], actionality in any given language is the "partition of the whole set of verbs into non-overlapping actional classes, defined by a set of language-independent actional criteria". Actional characteristic of a verb is a pair where IPFV represents the set of actional values of the imperfective form, PFV — the set of actional values of the perfective form. The two forms must be determined with the help of [Dahl 1985]’s Tense-Mood-Aspect Questionnaire (TMAQ): the imperfective form should be the one that manifests either IMPERFECTIVE or PROGRESSIVE crosslinguistic (universal) gram type, the perfective form — either PERFECTIVE or PAST. The relevant actional values are: State, Process, Entry into a State, Entry into a Process and Multiplicative Process.

The actional types encountered in all of the languages from Tatevosov's sample form the core crosslinguistic actional classes as contoured on Table 1. It is expected that the core classes are present in any given natural language system.

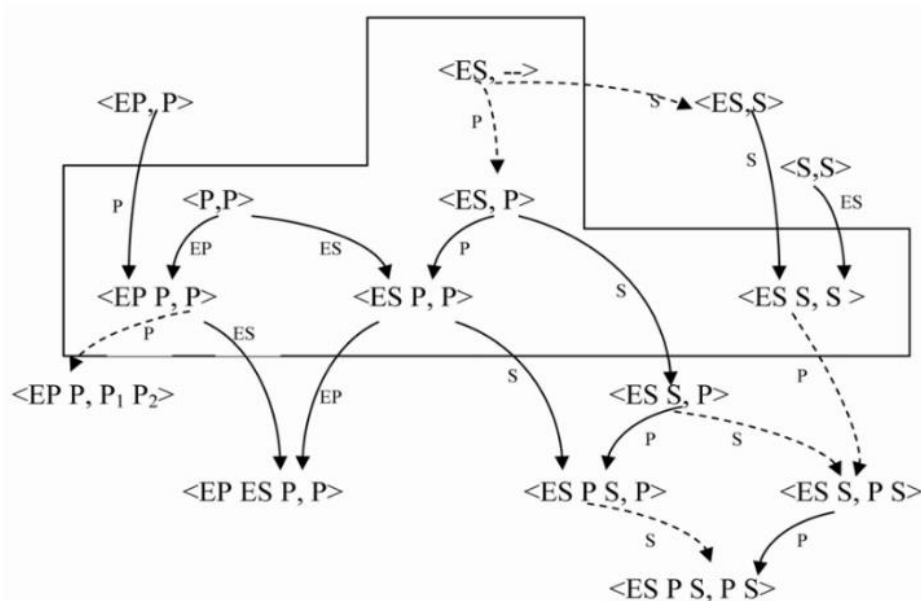


Table 1. Actional classes

The present study discusses the actional system of Khwarshi proper and addresses some of the problems regarding Tatevosov’s methodology.

The Khwarshi language belongs to the West Tsezic subgroup of the Tsezic branch of the East Caucasian (Nakh-Dagestanian) family. The two varieties of Khwarshi – Inkhokwari and Khwarshi proper – are both spoken in the Tsumada district in the Republic of Dagestan, Russian Federation. The research is based on data collected in villages Khonokh and Mucalaul in April and August 2023.

The investigation of Khwarshi actional classes was the first methodological step to a thorough research of the language's complex tense-aspect system. However, it was during this first step that I encountered a few unexpected problems. The punctual verbs proved to be the most troublesome: the only two verbs to fall into the punctual class are *licaxa* 'to break' and *coxa* 'to throw'. From the typological perspective, this might be due to the fact that progressive in Khwarshi has the ability to "stretch" punctual or achievement verbs — such progressive is also known as the 'slow motion progressive' as mentioned in e.g. [Filip 1999]. Interestingly enough, the closely related Bagwalal language (Andic < Avar-Andic < Nakh-Dagestanian) encounters a similar problem: the only punctual verb in it is *bisā* 'to find' [Kibrik et al. 2001], the only difference being that for Bagwalal the imperfective diagnostic form was the present, not the progressive.

Languages with a 'slow motion progressive' are problematic for Tatevosov's method: having progressive as the imperfective diagnostic form is likely to deprive the system of the punctual class entirely, and when it does not, like in Khwarshi case, then what is the true reason behind some of the verbs' unsusceptibility to such a derivation? The only other diagnostic form option is the present, but it did not help the situation in Bagwalal case. The anticipated question is whether or not the punctual type should be a part of the core crosslinguistic actional classes.

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Aspectual distinctions in Romance – a view from L2 acquisition

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The acquisition of aspectual distinctions in a second or foreign language has proven to be highly challenging – even more so with increasing (typological) differences between the source and target language(s). On the one hand, this difficulty is due to the variety of aspectual shades typically expressed in the individual languages, on the other hand, to the different linguistic means used to express these shades: Whereas Romance languages, for instance, show fairly differentiated aspectual systems predominantly expressed by verbal morphology or periphrastic structures, the aspectual system in German appears rather limited, relying mostly on lexical or derivational means (e.g. adverbs or prefixes).

While research can already draw on a reasonable number of studies investigating the acquisition of tempo-aspectual morphology – in particular the perfective/imperfective distinction in past contexts (cf. e.g. Bardovi-Harlig 2000, Cadierno 2000, Salaberry/Shirai 2002, Eibensteiner 2019, Vallerossa et al. 2023) – the field is still lacking attention, especially regarding periphrastic verbal structures. In order to investigate which (periphrastic) aspectual structures are most problematic for German-speaking learners, a self-paced reading study was administered to a L1 German experimental group (proficiency level in Spanish B2-C2) and a L1 Spanish control group (see Marsden et al. 2018 for a methodological review). The stimulus material consisted of sentences in Spanish containing complex verbal structures from 12 aspectual categories (80 items in total, 38 critical ones), which were presented on a computer screen using the moving-window technique (Just et al. 1982), immediately followed by an acceptability rating and a comprehension task.

First results (n=17) suggest that gerundival structures (except for the progressive) are most challenging – for learners and natives, interestingly – surfacing in highly divergent acceptability ratings and reaction times. Apart from that, some infinitival structures expressing habitual, inchoative and terminative values show varied results among learners and natives. Drawing on reference grammars, corpus research and retrospective interviews with the participants, some of these divergences may be explained by (i) frequency of use, (ii) regional variation, (iii) combinatorial preferences and (iv) instructional input. All of these factors coincide in the Spanish complex verbal structures *ir/venir/andar* + gerund (literally ‘go/come/walk around’ + gerund), expressing cumulative and distributive values (often with modal shades), making them especially vulnerable in non-native language acquisition.

Key words: Aspectual distinctions, Romance languages, L2 acquisition

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Nor tense nor aspect: can Forest Nenets aorist qualify as perfect?

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The semantic nature of perfect has been widely debated¹ (Bohnenmeyer 2014, Chen et al. 2021). The current research aims to enrich the discussion by exploring two verbal forms in Forest Nenets (Uralic > Samoyedic) with respect to tests applied to perfects cross-linguistically (Bertrand et al. 2022). The data comes from elicitation in the field.

The forms considered are traditionally described as tense inflection. Past tense is marked as *s'* after agreement markers, while aorist (non-future tense (Burkova 2022)) has no overt marking. With imperfective verbs, they contrast as past and present:

- (1) *s'and'et* *λοχο-mp'i-s'* / **λοχο-mp'i* *tajn'a* *kiniλε-j*
teapot boil-PROG-PST / boil-PROG then freeze-SFS[3SG]

'The teapot boiled, then cooled down'

With perfective verbs, neither of the forms can refer to present. The contrast between them is traditionally described as recent and remote past (Burkova 2022). However, the fieldwork shows that this opposition does not boil down to remoteness (see (5) below as an argument against such contrast).

Past tense surfaces in experiential (2) and relative past (3) contexts. Moreover, it is acceptable in recent past and resultative contexts (see (5-6) below), being also compatible with definite time adverbials (see (7) below). The only restriction is unacceptability of reference to present. Fitting into past perfective in the typology of (Bertrand et al. 2022), the past tense can be regarded as an instance of pronominal tense.

- (2) *man' s'ica mema* *χαλακαλt-xana* *kæ-ηa-ta-s'* / **kæ-ηa-m*
1SG 2 time Salekhard-LOC go-GFS-SUBJ.1SG-PST / go-GFS-SUBJ.1SG
'I've been to Salekhard twice' [But I live in Kharampur]

- (3) *man' kal'i* *ηama-t* *čiki n'ελn'a* *m'a?a-j* *kampulompn'a-m*
1sg fish.ACC.PL eat-SUBJ.1SG DEM in.front house-POSS.1SG rubbish-ACC
pad'ila-t-as'
throw.away-SUBJ.1SG-PST

'I ate fish. Before that, I threw the rubbish away'

Aorist exhibits more restrictions. It is acceptable in universal contexts (cf. (4), where it surfaces as present tense), recent past (5) and resultative (6) contexts. At the same time, it cannot be used with definite time adverbials (7) and is not acceptable as experiential (2). The data suggests that aorist is similar to resultative perfect (see Marquardt et al. 2019 for result state account of Mee perfect)

- (4) *man' d'olnu* *n'ajat kalita-ηa-t* / #*kalita-ηa-ta-s'*
1SG morning since fish-GFS-SUBJ.1SG / fish-GFS-SUBJ.1SG-PST

¹ The results of the project "Crossmodal interaction in the grammatical theory: modeling grammatical features based on the data of the languages of Russia", carried out within the framework of the Basic Research Program at the National Research University Higher School of Economics (HSE University) in 2024, are presented in this work.

'I've been fishing since morning' (^{ok} if the speaker is at the river bank; # if the speaker is back home)

- (5) **četid'aŋ** kad'an-λ ko-ŋa-t / ko-ŋa-ta-s'
just trap-POSS.2SG find-GFS-SUBJ.1SG / find-GFS-SUBJ.1SG-PST
 'I've just found a trap' [Is it yours?]
- (6) čuku d'olnu okos'ko næ-ŋa-t / ^{ok}næ-ŋa-ta-s'
 DEM morning window open-GFS-SUBJ.1SG / open-GFS-SUBJ.1SG-PST
 'I've opened the window this morning' [It's better to close it, otherwise it would rain on my curtains]
- (7) **čeŋ** s'ičals'i-m næ-ŋa-ma-s' / *næ-ŋa-m
yesterday window-ACC open-GFS-SUBJ.1SG-PST / open-GFS-SUBJ.1SG
 'I opened the window yesterday' [Then went to work]

When it comes to narrative progression, both forms are equally acceptable. The only restriction attested is that eventuality introduced by past tense cannot follow eventuality introduced by aorist (see (3) for relative past interpretation of such cooccurrence).

- (8) man' d'ol-d'a-ma-(s') mas-d'a-ma-(s') s'kola-n kad'a-t
 1SG wake.up-SFS-REFL.1SG-(PST) wash-SFS-REFL.1SG-(PST) school-DAT go-SUBJ.1SG
 'I woke up, did the washing up and went to school'.

The ability to support narrative progression is expectable from past tense, which I argue to be pronominal tense. However, it is completely unexpected from resultative perfect. Such data challenges known accounts in terms of existential tense (Chen et al. 2021), resultant state (Nishiyama & Koenig 2010), extended-now (Grønn & von Stechow 2020) or simple present tense.

While exhibiting attested contrast between experiential and resultative (Bertrand et al 2022), the forms question narrative progression as criteria to distinguish between tense and aspect. In the talk, I will show more data and suggest a modified account of Forest Nenets that can capture its aspectual and discourse properties.

Glosses: 1 – 1 person; ACC – accusative; DEM – demonstrative; GFS – general finite stem; LOC – locative; PL – plural; POSS – possessive; PST – past tense; SG – singular; SFS – special finite stem; SUBJ – subjective conjugation; REFL – reflexive conjugation.

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L'imperfectif en rembarrnga

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Mots clés : aspect, imperfectif, langue australienne

Le rembarrnga est une langue non-pama-nyungan de la famille des langues gunwinyguan, parlée par une cinquantaine de locuteurs, en Terre d'Arnhem (Territoire du Nord, Australie). Bien que la morphologie TAME du rembarrnga ait reçu de l'attention dans la littérature (McKay 1975 ; Saulwick 2003), sous la forme d'une description morphologique détaillée, aucune étude ne s'interroge véritablement sur les possibles motivations sémantiques et pragmatiques opérant derrière l'expression de l'aspect. Basé sur une ré-analyse des précédentes descriptions du rembarrnga, d'une analyse des données de second-main (Ponsonnet, 2014-2016), et de nouvelles données de terrain (2023), nous allons proposer une nouvelle lecture de *l'aspect imperfectif* en rembarrnga qui intégrera des éléments d'explication à l'interface sémantique pragmatique.

Dans les précédentes analyses, l'aspect n'est pas traité indépendamment des temps verbaux et s'exprime à travers des marqueurs temps-aspect (McKay 1975 en dénote cinq — passé contrefactuel, passé ponctuel, passé continu, présent et futur — en plus de l'infinitif, que Saulwick 2003 reprend en ajoutant deux autres — passé habituel et passé lointain). L'imperfectif n'est abordé qu'à travers l'analyse des constructions progressives tel que *Verbe à l'infinitif*+ <yi~yu>+<aller> fléchi¹ qui ne sont pas restreintes par les temps verbaux (1), (2).

(1) Yarra - rumh - yu -many, Ø - yip
1a - dormir - PRG.STEM -PROG.PST 3a - faire sombre -

- yu -many yarra - rumh - miny
-PRG.STEM -PROG.PST 1a - dormir - PST

Nous dormions. Pendant que la nuit tombait, nous avons dormi.

(2) Garakkuh barr - yaw - yaw - yu - many
sur les hauteurs 3a>3 - REDUPL - transpercer - PRG.STEM - PRG.PST

Sur les hauteurs [=loin de la rivière], ils l'ont transpercé [avec des lances] plusieurs fois alors qu'ils le poursuivaient.

Ces constructions progressives ont plusieurs lectures possibles : l'évènement est duratif, il est en cours de réalisation (1) ou même l'évènement a lieu quand le sujet est en mouvement² ; mais il est complexe de déterminer laquelle domine dans chaque cas, si ce n'est plusieurs en même temps (2).

¹ Tel que décrit par Saulwick (2003). McKay (1975) ne considère pas le verbe « aller » fléchi comme faisant partie de la construction progressive et défend l'existence d'un marquage à l'aide d'un suffixe progressive <yi~yu> ou d'une substitution phonologique non-systématique du <r> initial des formes di- et tri-syllabiques du verbe *ra* <aller> par un <y>.

² Saulwick lie cette construction progressive à du mouvement associé (Saulwick 2003:486).

Concernant la terminologie et les enjeux théoriques de l'expression de l'aspect, nous suivrons la théorie de l'aspect à la Smith (1997), une théorie à deux composants qui distingue le point de vue aspectuel — qui renvoie au contenu aspectuel lié aux temps verbaux et qui repère l'évènement dans le temps par rapport à un point de référence, l'évènement est présenté comme visible dans son entièreté (perfectif) ou en partie (imperfectif) — de la structure événementielle dite « *Aktionsart* ». L'*Aktionsart* dérive de l'interprétation du verbe, de ses compléments et de ses modificateurs, et repose sur des paramètres aspectuels — tel que la télicité, l'atomicité, la dynamicité, etc. — qui permettent de classer les différents types de situation, selon des classes aspectuelles : achevements, accomplissements, activités, états et semelfactifs (Vendler 1957, Smith 1997).

Nous avons observé dans les données de terrain les plus récentes, une ambiguïté au niveau des points de vue aspectuels : par exemple, un même énoncé porteur d'un marqueur de temps passé ou présent, aurait à la fois une lecture perfective (3a) et une lecture imperfective (3b).

- (3) Wangginy bi Ø - rdirditj -miny balkku.
 un homme 3>3 - attacher ensemble -PST corde
 a. Un homme a enroulé la corde.
 b. Un homme enroulait la corde.

Ces ambiguïtés laissent à penser que le point de vue aspectuel des événements est probablement sous-spécifié morphologiquement. Pour tenter de résoudre ces ambiguïtés particulièrement et plus généralement pour mieux comprendre l'aspect imperfectif en rembarnga, nous nous questionnerons sur la structure interne des événements et sur leurs paramètres aspectuels afin de déterminer leur pertinence dans l'expression de l'aspect dans les constructions verbales.

Légende

STM = base ; PROG = progressif ; PST = passé ponctuel ; NP = présent (« non-passé ») ; REDUPL = reduplication

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The acquisition of English modality by Francophone learners in second language (ESL) and foreign language (EFL) settings

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Numerous studies have investigated the L2 acquisition of English modality by learners with various L1 backgrounds (e.g. Adloo & Rohani 2019; Parkinson 2022; Torabiardakani et al. 2015; Whitty 2022), but only a handful have targeted Francophone learners. In Ayoun & Gilbert (2017), the results of a sentence completion task revealed that advanced French learners were only starting to acquire modal auxiliaries with a strong modal effect in that they performed well with ‘can’ and ‘might’ but at or below chance level with the others. Both Leclercq & Edmonds (2017) and Leclercq & Mélaç (2021) administered an oral elicited narrative task to French learners of English at various levels of proficiency. They concluded that epistemic and evidential modality does not emerge before advanced levels. It is thus unclear how L1 speakers of a language such as French that relies primarily on moods (e.g. subjunctive, conditional) acquire the English modal auxiliaries to express the concepts of possibility, certainty, probability and necessity.

The current study includes ESL (n=45), EFL (n=45) and ENS (n=53) participants. The ESL speakers were French graduate students, instructors or professionals who lived in the United States. The EFL learners were French undergraduate and graduate students who lived in France. The English native speakers (ENS) lived in the United States. The EFL group is the youngest with a 21.58 average followed by the ESL group (29.50) and the ENS group (33.91). Participants had been studying English for an average of 14.41 years (ESL group) and 9.58 years (EFL group). ESL participants had been residing in the United States for an average of 5.98 years with a wide range (1–18 years). Only 12 out of 45 EFL participants had studied abroad for short stays. ESL participants thus represent learners in a naturalistic setting while EFL participants represent instructed learners in a foreign language setting.

ESL and EFL participants completed a pretest to establish their proficiency levels, then all three groups were administered three cloze tests, two sentence completion tasks and three production tasks over five sessions to obtain converging evidence to describe the TAM system L2 learners may build in their interlanguage grammar. All the tasks were written and available online.

The research questions related to the acquisition of modality are: a) what modal auxiliaries do Francophone learners acquire in English?; b) is there a modal effect for ESL and/or EFL learners?; b) does the naturalistic setting of the ESL learners facilitate their acquisition of modal auxiliaries more than the foreign language classroom setting of the EFL learners?

This talk reports on the findings of three written production tasks. Each production task had a specific topic intended to elicit different verbal forms: modal auxiliaries and the imperative (session 2), future temporality (session 3) and past temporality (session 4). Qualitative analyses

reveal that: 1) on average, modal auxiliary tokens represent 17.3% (session 2), 13.43% (session 3) and 8.0% (session 4) of the participants' overall production of verbal forms; 2) none of the modal auxiliaries are produced by 100% of the participants in their respective groups. No more than 80.0% of participants produce a give modal (i.e. *can*, EFL group, session 2); 3) there is a strong task prompt effect combined with a modal effect: the types of modal auxiliaries participants produced depended on the prompt; 4) there are significant differences between groups and important standard deviations within groups. For instance, in session 3, participants produced between 8 and 10 modal auxiliaries but only the first four (*can*, *would*, *should*, *could*) are produced in the same decreasing order of frequency; 5) surprising findings include the very low frequency of *must*.

The research questions are addressed and findings are discussed from a cognitive linguistics approach that offers a usage-based analysis and a new way to provide motivated, precise explanations of complex linguistic phenomena such as modality as well as practical pedagogical implications as suggested in Tyler et al. (2010). A frequency-based contextualized exposure along with the use of meaningful linguistic constructions in cultural and interactional behavior in target communities may facilitate L2 learners' understanding of the modal auxiliaries and thus their acquisition.

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Nina Dobrushina

From the verb ‘say’ to jussives and optatives: a story of one grammaticalization

Many languages have grammaticalized constructions that express indirect command (*3rd person imperative* AKA *jussive*, ex. 1) and the wish of the speaker (*optative*, ex. 2), although their expression by inflectional forms is cross-linguistically not very common.

- (1) *If he needs money, let him earn it!*
- (2) *May you have a long and fruitful marriage.*

The two categories are semantically rather close and are often expressed by the same form or construction (see Dobrushina 2011 for a survey of the data of Daghestanian languages).

In Nakh-Daghestanian languages (Northern Caucasus), one of the most frequent ways to express the jussive is to add the imperative of the verb ‘say’ to the imperative of the main verb: literally *do.IMP say.IMP*, thus conceptualizing the jussive as a command transferred to the third person via the addressee (*tell her/him ‘do!’*). This pattern was qualified in Maori & Sanso (2011) in their study of the diachrony of directives as a subtype of causative-based jussives. In their sample of 100 languages they found only one language which used the verb ‘say’; and it was a Nakh-Daghestanian language Chamalal.

Nakh-Daghestanian forms of jussives and optatives can be observed at different stages of morphologization - from a multiword construction (3) to an inflectional form with bound affixes (4).

- (3) Archi (personal fieldwork)

jasqa-t:u-t Pat’imat-li lo barha ba
today-ATR-IV Patimat-ERG child nurse.IMP say.IMP
‘This day, let Patimat take care of my child’.

- (4) Lak (example courtesy Rosa Eldarova, quoted in Dobrushina 2011)

Pat’imat-lu-l č:at’ šaši-ča
Patimat-OBL-ERG bread bake.IMP-JUSS
‘Let Patimat bake bread.’

This allows us to trace the process of grammaticalization of these forms in greater detail, observing a number of changes at different linguistic levels. First, the construction with the ‘say’-imperative changes the marking of its argument from the case licensed by the verb ‘say’ to the case licensed by the lexical verb, compare (5) and (6), where both stages are observed in the same language:

Mehweb (Dobrushina 2019)

- (5) *musa-ze uz-e bet’a*
Musa-INTER(LAT) M.work.IPFV-IMP say.PFV-IMP.TR
‘Tell Musa to work.’

-
- (6) *musa uz-e* *bet'a*
Musa M.work.IPFV-IMP **say**.PFV-IMP.TR
 ‘Let Musa work.’

Second, the meaning of the construction can extend to situations involving inanimate subject, as in (7)

- (7) Mehweb (Dobrushina 2019)
rurž-e *bet'-a* *harši*
boil,IPFV-IMP **say**.PFV-IMP.TR **soup**
 ‘Let the soup boil.’

Third, the full form of the imperative of the verb ‘say’ can undergo morphological reduction and become a bound suffix. For example, Lak *uča* ‘say.IMP’ has developed into the jussive suffix *-ča* (ex. 4).

Finally, the jussive can develop into an optative. It extends its usages to the first and second persons, and starts being used in the expressions of blessings and curses; compare (8) and (9).

- (8) Chamalal
wun-abe-λ':a
 go-IMP.INTR-OPT
 ‘Let him go!’ (Magomedova, 2004: 45)

- (9) *taleh* *guda-λ':a* *duła*
 happiness give.IMP-OPT you.DAT
 ‘May you be happy!’ (Magomedova 1999: 428)

The aim of this paper is to describe the process of grammaticalization of the verb ‘say’ towards jussive and optative, exploring the accompanying morphosyntactic and semantic changes. I use rich data from dozens of languages of the Nakh-Daghestanian family.

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The Semantic Values of Indicative and Subjunctive in Evaluative Sentences with the Neuter Article in Spanish: A Qualitative Analysis of “lo bueno es que”

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Keywords: indicative and subjunctive, Spanish neuter article, evaluative sentences

This study focuses on mood selection in evaluative sentences introduced by the neuter article in Spanish —see example (1) below.

Previous works (Loporcaro *et al.*, 2024) have shown that most adjectives used in the structure with “lo” tend to exclusively induce the indicative, although there exists a subgroup that leans towards the subjunctive and another that presents a relatively balanced alternation. Additionally, it has been observed that the tendency to use a single mood decreases with adjectives that are used less frequently. For example, with “*lo peor es que*” [the worst thing is], the indicative is used in 399 out of 417 occurrences (95.68%), and with “*lo increíble es que*” [the incredible thing is], in 19 out of 26 (76.24%).

These data have been interpreted from a pragmatic perspective. Specifically, two contrasting theories have been considered. Some authors indicate that the selection of indicative and subjunctive determines the distribution of the theme and rheme in the sentence (NGLE, 2009, § 25.6h-1), while others argue that the subordinate clause always represents the rhematic information, making the verb mode irrelevant (NGLE, 2009, § 14.9o).

It has been concluded that the tendency to exclusively use either indicative or subjunctive could reflect a simplification of the system originating in the lack of influence that mood has on the pragmatic level (Lehmann, 2015; Godard, 2012). In other words, this economization is due to the fact that the subordinate clause always constitutes the rheme, regardless of the mood of its verb. This has also been corroborated through a study of native speakers' perceptions (Loporcaro *et al.*, in press).

However, these sentences have not been deeply explored from a semantic perspective. This implies the need to consider to what extent the use of one mood or another refers to an affirmed or hypothetical situation. In the former case, both indicative and subjunctive can be used, while in the latter, only the subjunctive is allowed:

			Statement			
(1)	<i>Lo peor</i>	<i>es que</i>	<i>continúa ~ continúe</i>	<i>abrigando</i>	<i>ideas de suicidio.</i>	<i>Vigilala.</i>
	The worst thing	is that	she keeps	harboring	suicidal thoughts.	Keep an eye on her.
			Possibility			
(2)	<i>Lo peor</i>	<i>es que</i>	<i>continúe</i>	<i>abrigando</i>	<i>ideas de suicidio.</i>	<i>Vigilala.</i>
	The worst thing	is if	she keeps	harboring	suicidal thoughts.	Keep an eye on her.

Considering that mood alternation occurs freely in affirmative contexts, it is necessary to separate these from hypothetical ones to fully understand the phenomenon. Indeed, without this separation, the data on mood selection provided in Loporcaro *et al.* (2024) could reflect that either 1) different adjectives are used in different extents to express hypothetical situations or 2) different adjectives show various degrees of alternation devoid of implications.

In view of all this, the following research question is posed: To what extent is the subjunctive used to express affirmed or hypothetical situations with various evaluative adjectives?

To answer this question, a qualitative analysis of subjunctive occurrences (N = 1696) from Author *et al.*'s study has been carried out. Specifically, by observing the co-text provided by the Corpes XXI (RAE), or resorting to the complete source, if necessary, affirmative cases have been separated from hypothetical ones. Additionally, the analysis has not been limited to the “affirmative ~ hypothetical” value opposition, but has adopted an open stance to verify the existence of values not yet contemplated by scientific literature.

The results show that the vast majority of the analyzed adjectives present affirmative occurrences in 97% of cases. Consequently, there is not a very significant difference between the general mood alternation percentages and those derived from distinguishing between affirmative and hypothetical contexts. This also indicates that the structure with “*lo*” is not adequate to express abstract actions.

Regarding the adjectives that tend to exclusively induce the subjunctive, two subgroups have been conceived. One includes adjectives used exclusively to express hypothetical actions and, therefore, do not allow the indicative. These are adjectives that indicate compliance with a certain norm, such as “*lógico*” [logical], “*normal*” [normal], etc.

The second group consists of adjectives presenting a value that had not been previously considered, i.e., the gnomic value. This implies the expression of situations of regularity and shares properties of both affirmative and hypothetical contexts. Adjectives like “*frecuente*” [frequent], “*usual*” [usual], etc. fall within this category. With these attributes, the indicative tends to be excluded, although it is not impossible.

Finally, another group of adjectives and verbs present a relatively balanced alternation between affirmative and hypothetical value. Generally, these are adjectives and verbs expressing importance: “*importante*” [important], “*esencial*” [essential], etc. With this group, the use of the mood seems to have been completely simplified, resulting in a perfect alternation where the indicative is exclusively used to express affirmation and the subjunctive for hypothetical actions.

In conclusion, by complementing the pragmatic analysis, these results allow for a comprehensive understanding of the sentences in question. This is relevant not only for future studies in the field of Linguistics but also in the teaching of Spanish as a Foreign Language.

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Back to the future or the past? The effect of Chinese Sign Language (CSL) on deaf CSL-Mandarin bilinguals' spatial conceptualisation of time

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Little research has investigated deaf signers' spatio-temporal reasoning, which, in the case of Chinese, represents a particular interesting group, as they share a similar culture to hearing Chinese, but use a language that encodes different sagittal time-space mappings: Chinese Sign Language (CSL) has past-at-back space-time metaphors whereas Mandarin additionally allows past-in-front metaphors (Gu et al., 2019). In this study we focused on a previously unexplored population, deaf CSL-Mandarin bilinguals, and investigated (1) the effect of such cross-modal/linguistic differences on their sagittal space-time mappings and (2) whether they have different spatial-temporal reasoning than Mandarin hearing speakers.

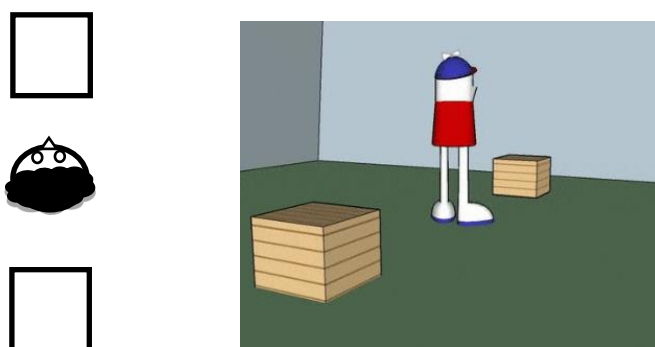


Figure 1. Schematic illustration of de la Fuente et al.'s (2014) temporal diagram task (left); a still picture from the 3D animated video of Exp 1 (right).

In Exp1 we used an adapted temporal diagram task (de la Fuente et al., 2014, Fig 1 left) to test deaf bilinguals' ($N=123$) sagittal space-time mappings first in CSL and then in Mandarin. Particularly, the temporal expressions in the Mandarin test (but not in CSL) had overt past-in-front/future-at-back metaphors indicating past-in-front/future-at-back mappings. Deaf signers saw a 3D animated clip of a character named Xiaoming with one box behind and one box in front of him (Fig 1 right). They watched/read an instruction stating that 'the day before yesterday Xiaoming went to visit a friend who liked eating apples, and the day after tomorrow he would be going to visit a friend who likes eating pears'. Participants were instructed to put the apple in the box that corresponded to the past and the pear in the box that corresponded to the future (order counterbalanced). Results were compared with those of hearing Mandarin speakers. We found that deaf signers, irrespective of being tested in CSL (27.50%, $p=.006$) or Mandarin (28.75%, $p=.009$), were less likely to have past-in-front/future-at-back mappings than Mandarin speakers (52.08%).

In Exp2, we used two real-life questions (a meeting and a clock question, Lai & Boroditsky, 2013) to examine participants' understanding of time in Mandarin, related to the ego-moving and time-moving perspectives (e.g., "Next Wednesday's meeting has been moved forward two days. What day is the meeting now that it has been rescheduled?"). Results showed that, Mandarin speakers (98.75%) mostly took the time-moving perspective (Monday) whereas deaf signers (69.23%), influenced by the CSL ego-moving time perspective, were less likely to take the Mandarin time-moving perspective ($\beta=-4.0$, $p<.001$), even after controlling for education, gender, questions, etc.

In Exp3 ($N=104$), we did a conceptual replication of Exps 1-2 using multiple items to examine deaf signers' mental space-time mappings (8 trials) and time perspective (32 trials) while considering their language proficiency and age of acquisition (AoA). The testing order of CSL and Mandarin print for the temporal diagrams was counterbalanced with an interval of one week. We used logistic regression for panel data to deal with multiple observations and individual differences. Apart from a generalisation of our findings, we further showed that deaf CSL-Mandarin print bilinguals were less likely to have past-in-front mappings in CSL (32%) than in Mandarin print (39%) ($\beta=-.59, p=.005$). Furthermore, deaf signers with higher CSL proficiency were less likely to have past-in-front/past-at-back mappings ($\beta=-.61, p=.011$). The CSL effect remained highly significant ($\beta=-.95, p=.001$) when a positive effect of Mandarin proficiency ($\beta=.66, p=.041$) on past-in-front mappings was additionally controlled for. In addition, a later acquisition of CSL ($\beta=.17, p=.006$) predicted more past-in-front mappings (Fig 2). As for the time perspective, deaf signers with higher CSL proficiency were less likely to take time-moving perspective ($\beta=-1.0, p=.041$), whereas an earlier acquisition of Mandarin print predicted a more time-moving perspective ($\beta=.21, p=.038$).

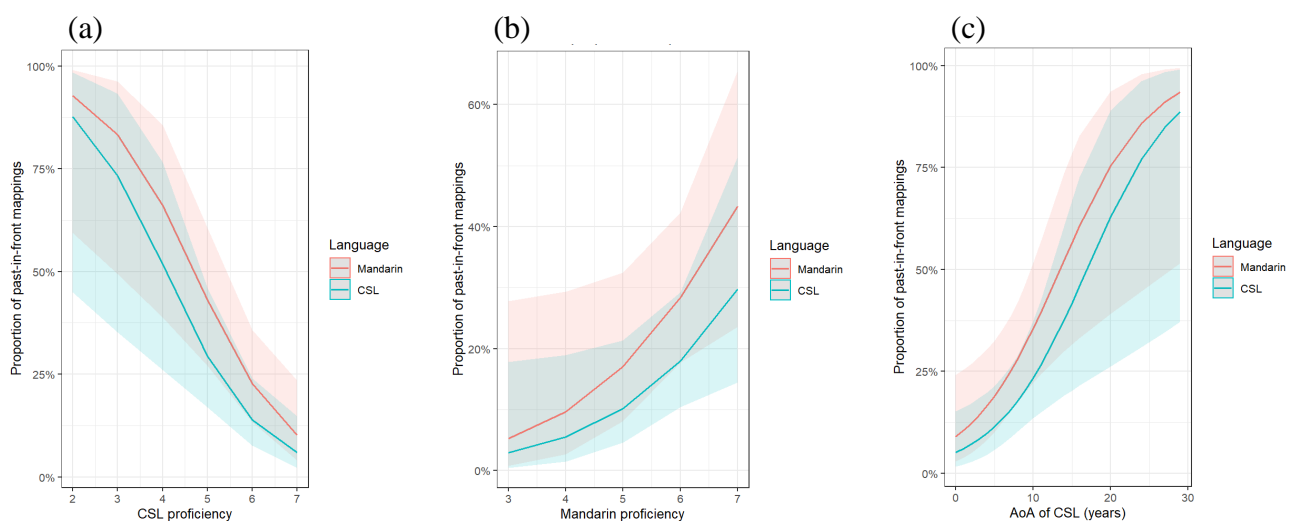


Figure 2. Predicted effects of (a) CSL proficiency, (b) Mandarin proficiency, and (c) age of acquisition (AOA) of CSL on past-in-front mappings in Mandarin print and CSL by CSL-Mandarin deaf bilinguals. Shaded bands are 95% CI.

Within Chinese culture, signers persistently displayed different spatial-temporal reasoning than Mandarin speakers. Given that habitual use of certain sign patterns may affect signers' spatial thinking (Emmorey et al., 1998; Pyers et al., 2010), and given that people use space to think of time (e.g., Casasanto & Boroditsky, 2008), we conclude that bodily experience of sign language may impact signers' spatial-temporal reasoning, which is enhanced by a higher CSL proficiency or an early AoA of CSL. This first study on signers' spatial-temporal reasoning has implications for theories on space-time mappings and the relationship between sign language and thought.

Keywords: Chinese Sign Language; cross-modal/linguistic influences; conceptual metaphor; language and thought; space and time

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Modal verbs vs. modal adverbs: the expression of epistemic possibility in English, German and Dutch

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It is well-known that English, German and Dutch feature modal verb systems with different degrees of formal grammaticalization and semantic/pragmatic (inter)subjectification. The English modal verb system stands out as being most strongly grammaticalized, on the one hand, and most strongly geared towards the expression of epistemic modality, which qualifies as inherently strongly subjectified, on the other (see for instance Kranich & Gast 2015). With respect to German and Dutch, it has been shown that their modal verb systems are less grammaticalized (Mortelmans et al. 2009) and seem to specialize more in expressing non-epistemic values. Epistemic uses make up a small minority of all modal verb uses in German and Dutch (for German, see Diewald 1999, Baumann 2017; for Dutch, see Nuyts/ Byloo/ Diepeveen 2010).

If we focus on the expression of (subjective) **epistemic possibility** in English, three verb forms are regularly used to denote this notion: *may*, *might* and *could* (Depraetere & Reed 2006, Usonienė & Soliene 2010), whereby *could* often expresses non-epistemic possibility as well. German and Dutch only have one modal verb regularly coding epistemic possibility: German *können*, Dutch *kunnen* (German *mögen* and Dutch *mogen* also feature epistemic uses, but with a strong concessive flavour). For German, elements of the well-preserved mood system must be taken into consideration as well: epistemic *können* can occur in the indicative (*kann*) and in the subjunctive (*könnte*), whereby the latter form has been argued to specialize in expressing epistemic meanings *per se* (see Diewald 1999). Dutch – with its reduced grammatical mood system – can use the auxiliary *zou* in combination with *kunnen* to express weak epistemic possibility.

I will present a case study – based on an analysis of a **self-compiled parallel English-Dutch-German corpus of present-day crime novels** - of how German and Dutch actually deal with the expression of epistemic possibility – in comparison to the elaborated and highly grammaticalized system in English. More concretely, I will compare the use of epistemically used modal verb forms *might*, *may* (and to a lesser extent) *could* with their German and Dutch translations. This case study will address the conditions under which correspondences between epistemically used modal verbs are found as well as the interplay of these modal verbs with adverbs of epistemic possibility (e.g. Dutch *misschien*, German *vielleicht/womöglich*). As they also contribute to the expression of epistemic possibility, I will include the possibility adverbs *perhaps* and *maybe* in the analysis as well (see Suzuki 2018; Suzuki & Fujiwara 2017). One of the preliminary results of this study is the observation that (the rather infrequent use of) epistemic *may* most often corresponds to an epistemic **adverb** (DUT *misschien*, GER *vielleicht, möglicherweise*), as in the following extract from the crime novel ‘The Girl on the Train’ and its translations in Dutch and German.

(1)

ENG I have to accept that now. And I can feel at least that I **may** have helped, because I cannot believe it could be a coincidence that Megan disappeared the day after I saw her with that man. (Hawkins, Paula. The Girl on the Train, p. 127)

DUT En ik heb het gevoel dat ik **misschien** toch al heb geholpen, want ik kan eenvoudigweg niet geloven dat het toeval was dat Megan precies een dag nadat ik haar met die man had gezien is verdwenen.

GER Und ich kann mich zumindest in dem Gefühl sonnen, dass ich ihnen **vielleicht** geholfen habe, denn es war doch bestimmt kein Zufall, dass Megan am selben Tag verschwand, nachdem ich sie mit diesem Mann gesehen hatte.

For the distal form *might*, however, the subjunctive form *könnte* appears more often as an equivalent than in the case of *may*, while at the same time the epistemic adverb *vielleicht* is the (relatively) most frequent equivalent of *might*. In Dutch, we again find the adverb *misschien* as the most strongly preferred equivalent. When a modal verb is used, it is a non-distal form (i.e. *kan/kunnen*) which is clearly preferred to [*zou kunnen*].

(2)

ENG I think that he got off at Witney, and I think he **might** have spoken to me. ((Hawkins, Paula. *The Girl on the Train*, p. 92).

DUT [...] en **misschien** heeft hij ook iets tegen me gezegd.

GER Ich glaube, er ist in Witney ausgestiegen, und er **könnte** mit mir gesprochen haben.

Fully in line with this observation is the fact that epistemic possibility adverbs in Dutch and German generally outnumber the uses of corresponding epistemically used modal verbs, whereas the opposite tendency is found in English. In the novel ‘The girl on the train’, we find epistemically used modal verbs (especially *might*, n=122) being more dominant than the individual modal adverbs (*perhaps* (n=60; *maybe*, n=65), whereas the modal adverbs GER *vielleicht* ‘maybe’ and DUT *misschien* ‘maybe’ completely outnumber modal verbs in the German and Dutch translations.

My presentation will thus demonstrate how and to what extent the characteristics of a particular language system influence the choice of an epistemic possibility marker in that language. I will especially focus on a) the conditions in which German and Dutch feature epistemic modal verbs and b) the differences between *might*, *may* and *could* and their possible equivalences in German and Dutch.

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Modal Verbs like *must*, *can*, and adjectives or affixes like “*able*”, which denote possibility or necessity, have been analysed semantically in terms of truth values, possible worlds, conversational backgrounds, and ordering sources. (Kratzer, 1977, 2012).

“The notional category of modality” Kratzer refers to exists beyond this class of morphemes, however. For example, it is triggered by predicates implying possibility plus effort in “tough–movement” (2a) and “middle” (2b) structures. The contrasts in (1) vs (2a–b) and (3a) vs (3b) show that the grammaticality of such structures depends on the interaction of the lexicon and the morpho–syntax.

(1) It is possible/necessary/important/tough/a cinch/takes ten days to translate that poem.

(2) a. That poem is *possible/*necessary/tough/a cinch/takes ten days to translate.

b. That poem translates easily/*possibly/*necessarily.

English middles, lacking an overt agent argument, exhibit only a CAN Modality, while French middles, with reflexive clitic representing the external argument, extend to MUST modality (Fellbaum and Zribi–Hertz, 1989).

(3) a.* This dish eats in the evening.

b. Ce plat se mange le soir.

Aspect is also pertinent. A *perfective* dynamic/deontic modal introduces an actuality entailment which is absent with imperfective aspect (Bhatt, 1999; Hacquard, 2006).

(4) Marie pouvait/devait traverser la rivière à la nage (mais ne l’ a pas fait).

(Mary could/was able to swim across the river (but didn’ t).

(5) Enfin, Marie a pu/dû traverser la rivière à la nage (*mais ne l’ a pas fait).

(Mary was finally able/obliged to to swim across the river (* but didn’ t).

Construals which involve the interaction of independent components of grammar cannot be determined by any single component. We suggest a cognitive approach is more adequate. In particular, the various syntactic structures construed as modal can be associated with a single conceptual scenario, the *Goal–Directed Trajectory (GDT)* defined in (6) and illustrated in (7).

(6) GDT: An intentional +human agent initiates a trajectory towards a change of state goal. An accessible instrument makes the goal attainable but cannot assure success.

(7) John tried to fix the sink (with a wrench).

A mental scenario provides economy in the grammar: not all its components

need be overt for the structure to be interpretable. Thus (8) contains an implicit goal, (9) both implicit goal and instrument, and (10) an implicit agent.

- (8) John washed his shirt (but it is not clean). (Martin, 1985)
(9) Bill stabbed Max (but Max didn't die).
(10) The tractor picked up the load.

We claim that modal verbs *can, must, etc.*, trigger an *unaccusative* version of the GDT associated with (7). In a transitive GDT, an intentional +human agent undertakes a trajectory towards a change of state goal. Modal verbs lack a lexically selected subject. Here, the covert speaker assumes the role of the intentional +human agent defined in (6): the speaker informs the hearer of a goal, an event or situation which can or must take place in order to perpetuate the current world order threatened by entropy over time.

- (11) a. It must rain or the crops will spoil.
b. It can rain without snowing.

The overt subject of a modal sentence, when present, is *raised* from an embedded verb phrase (VP) and construed as an accessible instrument capable of attaining the goal VP expresses.

- (12) John_i must/can [t_i leave immediately].

An actuality entailment is associated with perfectivity not only in modal structures with CAN and MUST but also in modal structures without modal verbs like the Middle in (13) and the Accomplishment in (14).

- (13) a. Ces livres se vendent bien. (middle)
(These books sell well)
b. Ces livres se sont bien vendus. (middle-passive)
(Those books sold well)
(14) a. Marie taught John French for two years but he learned nothing.
b. Marie taught John French in two years (*but he learned nothing)

Perfective aspect signals the speaker's guarantee that the change of state described in VP actually happened. Consequently perfective GDT sentences, like (5), (13b) and (14b) are not *modal* but *resultative*: the speaker guarantees that the implied goal has been attained.

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Variable-force modality and inevitability in Tatyshly Udmurt: the case of the *-ono* modal form

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Introduction. I report on the semantics of the modal form on *-ono*, which displays the effects of variable-force modality (see Rullmann et al. 2008, Deal 2011, Newkirk 2022, a.o.) in Tatyshly Udmurt—an understudied variety of Udmurt, belonging to the Uralic language family and spoken in the Tatyshly district of the Republic of Bashkortostan (Russia). The Standard Udmurt grammar (GSUYa 1962) treats *-ono* as a form encoding necessity. However, my data show that this form is not that straightforwardly restricted to necessity uses, cf. (1)–(2).

- (1) *dâšet-is' bas't-ono kn'iga-les' n'im-ze vera-Ø-z.*
 teach-PTCP.ACT take-DEB book-GEN2 name-ACC.POSS.3SG say-PST-3SG
 ‘The teacher said the name of the book that I **should** buy’.
- (2) *mânam uks'o-je ôžät, ta odig gine bas't-ono kn'iga.*
 I.GEN money-POSS.1SG little this one only take-DEB book
 ‘I don’t have much money, this is the only book I **can** buy’.

Methodology. The data were collected during fieldwork in 2022–2023, elicitation sessions with 8 native speakers of Tatyshly Udmurt were organized. All the consultants are bilingual between Tatyshly Udmurt and Russian, and the first step in elicitation was a translation task from Russian into Udmurt. The context types that I elicited to check the range of modal meanings available for the *-ono* form were in line with Vander Klok (2022) questionnaire. This was followed by a felicity judgment task, where the consultants were given designed contexts triggering either possibility or necessity readings of the *-ono* form within the same sentence, and were asked to evaluate whether the form in question was felicitous in both context types. I also implemented the diagnostics suggested for variable-force modals by different scholars and summarized by Mirrazi & Zeijlstra (2022) (downward-entailing contexts of negation, universal quantifiers, etc.). Finally, I analyzed the spoken corpus of Tatyshly Udmurt to estimate the frequencies of constructions where *-ono* is attested, and their semantics.

Data. The pattern exhibited by *-ono* broadens the existing knowledge about variable-force modals, as the form in question can be used both attributively and predicatively, and its interpretation depends on the syntactic position it holds. Variation between possibility and necessity takes place in attributive contexts, see (1)–(2) above, while the necessity reading is preferred in predicative ones (3). Predicative uses of *-ono* are estimated as most felicitous by my consultants in the contexts implying that the future is determined in a particular way (e. g. scientific predictions (4)).

- (3) *mon šukaje gorod-e mân-ono lü-o-Ø.*
 I tomorrow city-ILL go-DEB become-FUT-1SG
 ‘I have to go to the city tomorrow {I have no choice}’.
- (4) *šukaje s'iz'âm sägäd kuamân minut-ân met'eorit muzjem-en*
 tomorrow seven hour thirty minute-LOC meteorite Earth-INS
pümis'k-ono lü-o-z.
 meet-DEB become-FUT-3SG
 ‘At 7:30 tomorrow the meteorite will collapse with Earth’.

Putting attributive *-ono* into downward-entailing contexts results in inconsistent interpretations, though the necessity reading is almost always accessible.

Table 1. Interpretation of attributive -ono in different context types

Affirmative context	Negative context	Other DE contexts (universal quantifier)
Possibility / Necessity	Possibility / [?] Necessity	^{??} Possibility / ^{OK} Necessity

The only context where the necessity reading is regularly ruled out is the context of the marker *kad'* (5) that usually functions as an implicit equative in terms of Rett (2013). Recent study reveals that at the same time *kad'* can be viewed as an operator widening the pragmatic halo (Lasersohn 1999) of an expression it is combined with. The semantic constraints it imposes on the interpretation of the *-ono* form provide new insights on the interaction of (variable-force) modality with other grammatical categories.

- (5) a. *so-os van' s'i-ono daru-zes kušt-i-zâ.*
 that-PL all eat-DEB medicine-ACC.POSS.3PL throw-PST-3PL
 'They threw away all the medicine they **could / had to take**'.
- b. *so-os van' s'i-ono kad' daru-zes kušt-i-zâ.*
 that-PL all eat-DEB EQU medicine-ACC.POSS.3PL throw-PST-3PL
 'They threw away all the medicine they **could take** {the expiration date has not passed yet} / ***had to take**'.

Analysis. I propose a semantics for the *-ono* modal form in the spirit of Yanovich (2016) for Old English **motan*, where the statement *motan(p)* is argued to 1) assert that the situation *p* is an open possibility, and 2) presuppose that if *p* gets a chance to actualize, it inevitably will do so. Such an analysis entails an absence of alternatives for *p*, and that is in fact the semantics I postulate for *-ono* in predicative contexts (also supported by the “inevitable” context types as (4) or “lack of choice” effect noted by native speakers in (3)). In attributive contexts, however, the *-ono* form is no longer the only component of the clause assertion (as it is in the case of predicative uses), and its interpretation (whether the situation will actualize due to the possibility at the subject’s disposal or their necessity to act in a particular way) depends on the contextual environment. When used with *-ono*, the implicit equative marker *kad'* as an operator widening the pragmatic halo includes alternatives to *p* into consideration, which yields a possibility reading of the *-ono kad'* combination.

Concluding remarks and outlook. I provide the data on an understudied language, where there is a modal displaying the effects of variable-force modality in specific syntactic configuration (attributive context). I propose such effects to be a pragmatic consequence of the semantics of the *-ono* form, presupposing inevitable realization of a situation in case there is an open possibility for it. Such markers are usually neglected in the literature on variable-force modality, which mainly focuses on modal verbs or particles with a relatively fixed and predictable position within a clause. In the talk I will also discuss a possible grammaticalization path for *-ono*, as well as provide typological data on participial forms in other Uralic and Altaic languages (e. g., Tundra Nenets, Tatar) in favour of the proposed analysis.

Abbreviations. 1–3 – 1–3 person, ACC – accusative, DEB – debitive, EQU – equative, FUT – future, GEN – genitive, GEN2 – 2nd genitive, ILL – illative, INS – instrumental, LOC – locative, PL – plural, POSS – possessive marker, PST – past tense, PST2 – 2nd past tense, PTCP.ACT – active participle, SG – singular.

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On the similarity of causatives and modals: Targeting abstract modal representations

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Motivation. It's debated whether causatives contain a modal component [5, 6, 9] or not [3, 7]. Any semantic theory must capture the fact that obligation and permission interpretations are associated with causatives shown here with a cancellation test, “Jane *made* George go to the store, ?but he didn't *have to*.” To account for this [9] provides a modal analyses of causatives, in which *made* universally quantifies over possible situations, entailing necessity, which is also entailed by strong deontic modals, such as *had to*. If causatives and modals share core meaning, and priming effects can target shared meaning, then **it's possible the shared modal necessity conveyed by causative *made* and deontic modal *had to* can be targeted with priming.** Here we tested the hypothesis that strong causatives and deontic modals in English share a necessity entailment using priming in a **sentence recall task (SRT)** [2, 4, 8]. Our results show that ***had to* can be primed by *made* despite their structural differences, suggesting that causatives and deontic modals indeed share the same core meaning and that priming can arise from the shared meaning.**

Background. In English there are differences between causatives such as *made* and deontic modals such as *had to*: *made* yields actuality entailments, *had to* doesn't; *made* takes a small clause as argument, *had to* doesn't. Yet modal meanings arise with causative sentences, shown in the example above. Similar cancellation tests have shown the inability to cancel deontic meaning in causative sentences cross-linguistically, such as in Serbian, Japanese, Yu'pik, and Italian [5, 6]. Causatives and modals are semantically similar in that they can vary in strength. For causatives: *cause* vs. *allow*, for modals: *necessity* vs. *possibility*, and they have similar entailment patterns between strength: *cause* entails *allow*, and *necessity* entails *possibility*. For [9] the modal interpretation is available with causatives because they convey modal necessity in the case of *cause* and possibility in the case of *allow*, entailing the respective obligation and permission. These similarities between *made/had to* motivate the hypothesis that both expressions share core meaning. We use priming to test this hypothesis.

Design. To observe whether people could be primed to produce a *had to*-sentence after uttering a *made*-sentence, we tested sentence production in a priming experiment using the SRT. In each trial participants (n=48) were asked to read aloud and memorize two sentences, one of which they were asked to recall later given a cued prompt, an uninflected verb that appeared in the to-be-recalled sentence (Fig. 1). Sentences appeared as either *had to*-sentences (modal), *made*-sentences (causative), or in the simple past (control). For critical trials (n=24), target sentences were in the simple past, prime sentences were either a *made*-sentence (n=12) or in the simple past (n=12), and people were asked to recall the target (Fig. 1). Of the 72 total trials, 36 of them contained a *had to*-sentence, meaning people were biased to insert *had to* during recall. If *made* indeed primes *had to*, we should observe that the **rate of *had to* production should be higher when the prime sentence contains *made*, compared to when the prime is a control sentence** where no causative or modal expressions are involved.

Results. During recall people inserted *had to* after uttering a *made*-sentence 47.4% of the time, and after uttering a control sentence 41.3% of the time (Fig. 2). A maximally-structured mixed effects logistic regression model [1] suggests that **the rate of *had to*-insertion after uttering a *made*-sentence is significantly higher than the rate of *had to*-insertion after uttering a control sentence ($p = 0.037$).** This replicates a prior, similarly designed, pilot experiment with less statistical power ($p = 0.08$).

Conclusion. The results of the current study suggest that *made* and *had to* share some core meaning as hypothesized by [5,6,9], and that priming can be used to target high-level

representations used when processing *made, had to*. Our results show that abstract semantic representation can be primed using the standard psycholinguistic method and contribute to the methodological and theoretical progress of understanding semantic processing and its effect on language production.

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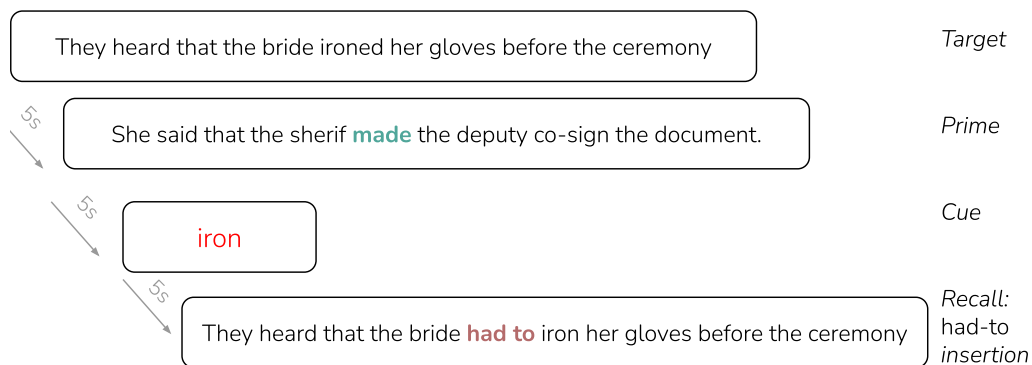


Figure 1. Example of critical trial

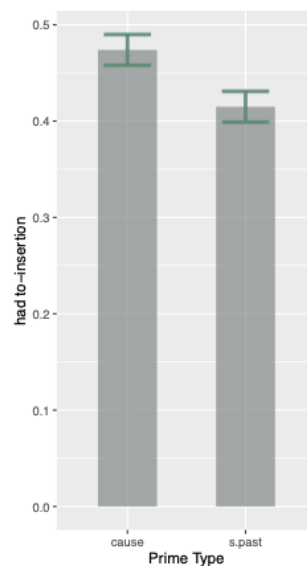


Figure 2. *Had-to* insertion for causative and control conditions

Epistemicity and Evidentiality in the Speech Act of Assertion: Syntax and Interpretation of Adverbs and Modal Verbs in German

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We standardly distinguish between root (e.g., deontic) and non-root (e.g., epistemic) modals. I will argue that epistemic modals and evidentials can be interpreted at four distinct syntactic levels, where I consider both epistemic/evidential adverbs and verbs in German. I will present an explicit syntactic theory together with a compositional interpretation in a framework of dynamic semantics.

The work builds on and extends Krifka (2023). The basic assumptions are: (a) In an assertion, the speaker *S* vouches for the truth of a proposition *p*, which is the reason *S* provides for the addressee *A* to accept *p* into the common ground (the commitment account of assertion, cf. Shapiro 2020). (b) In the syntactic representation of assertions, there are projections that indicate the way how assertions communicate *p* and can host modifications of this way (cf. neo-performative approaches like Miyagawa 2022). I propose that a simple assertion has the structure (1)(a), with an ActPhrase with head \bullet , a Commitment Phrase with head \vdash and a Judgement Phrase with head *J*-. After head movement of the finite verb and prefield movement of a constituent, we get (1)(b).

- (1) a. $[\text{ActP } [[\text{Act}^\circ \bullet] [\text{Comp } [[\text{JP } [[\text{TP } \textit{es geregnet hat}] [\text{J}^\circ \textit{J-}]] [\text{Com}^\circ \vdash]]]]]$ ‘it has rained’
 b. $[\text{ActP } \textit{es1} [[\text{Act}^\circ \bullet \textit{hat0}] [\text{Comp } [[\text{JP } [[\text{TP } \textit{t1 geregnet t0}] [\text{J}^\circ \textit{J- t0}]] [\text{Com}^\circ \vdash t0]]]]]$

We assume that the TP is interpreted truth-conditionally as a function from world-time indices *i* into truth values, cf. (2)(a). The judge parameter would be relevant for predicates of personal taste. The JP addresses this parameter and makes it accessible for additional operators via the argument *x*, cf. (2)(b). The ComP head \vdash introduces a proposition that *x* vouches for the truth of the JP proposition applied to *x*, cf. (2)(c), where $x \vdash_i \varphi$ stands for: *x* vouches at *i* that φ is true at *i*.

- (2) a. $[[[\text{TP } \textit{es geregnet hat}]]]^{s,a,j} = \lambda i \exists i' [i' < i \wedge \textit{rain}(i')] = \textit{HR}$, *s*: speaker, *a*: addressee, *j*: judge
 b. $[[[\text{JP } [[\text{TP } \dots]] [\text{J}^\circ \textit{J-}]]]]^{s,a} = \lambda x [[[\text{TP } \dots]]]^{s,a,x} = \lambda x \textit{HR}$
 c. $[[[\text{ComP } [[\text{JP } \dots]] [\text{Com}^\circ \vdash]]]]^{s,a} = \lambda x \lambda i [x \vdash_i [[[\text{JP } \dots]]]^{s,a}(x)] = \lambda x \lambda i [x \vdash_i \textit{HR}]$,
 d. $[[[\text{ActP } [[\text{Act}^\circ \bullet] [\text{ComP } \dots]]]]]^{s,a} = \bullet \lambda i [[[\text{ComP } \dots]]]^{s,a}(s) = \bullet \lambda i [s \vdash_i \textit{HR}]$

The last line (2)(d) turns the truth-conditional meaning of the ComP into a dynamic meaning that updates the common ground, CG. In this presentation I work with representation of the CG as context sets *c*, sets of world-time indices *i*, that represent the information about the world assumed to be shared by the interlocutors. There are two types of updates with a proposition φ : Informative update restricts the context set *c* to those indices for which φ is true; performative update changes the indices in *c* minimally so that φ is true:

- (3) a. Informative update: $c + \circ p = \{i \mid i \in c \wedge p(i)\}$, cf. Stalnaker 1978
 b. Performative update: $c + \bullet p = \{i \mid \exists i' \in c [i \text{ is like } i' \text{ except for } p(i)]\}$, Szabolcsi 1982

The illocutionary act of assertion updates input CGs performatively, cf. (2)(d), as the speaker creates a commitment that did not obtain before. This commitment to the truth of the proposition *HR* is made to support the introduction of *HR* into the CG. Krifka (2022) models this in terms of proposed continuations: *s* proposes that the CG is further restricted informatively by $\circ \textit{HR}$, provided that there is no update that rules out that *HR* is accepted into the CG, for which I write $\neg_i \textit{HR}$ (one case being that *a* vouches for the truth of $\neg \textit{HR}$). These two options can be expressed by a disjunction between updates (formal details omitted). The full interpretation is given in (4), where interpretation refers to a propositional discourse referent *d* introduced by the TP.

- (4) $[[[\text{ActP } [[\text{Act}^\circ \bullet] [\text{ComP } \dots [\text{TP } \textit{es geregnet hat}] \dots]]]]]^{s,a} = \bullet \lambda i [s \vdash_i \textit{HR}] ; [\circ \textit{HR} \vee \bullet \lambda i [\neg_i \textit{HR}]]$
 $\quad \quad \quad \hookrightarrow \textit{d}: \textit{HR} \quad \quad \quad \textit{d} \quad \quad \quad \textit{d}$

Vouching for a proposition comes with a potential threat to the reputation of the speaker in case the proposition turns out to be false. With epistemic and evidential modifiers, the speaker can mitigate this danger (cf. Sbisà 2001). Epistemic adverbs like *sicherlich* ‘certainly’, *wahrscheinlich* ‘probably’ and evidential adverbs like *offensichtlich* ‘obviously’ and *meines Wissens* ‘according to what I know’ can achieve this because the s vouches only for the proposition that s had a particular epistemic or evidential attitude towards the proposition, which is easier to defend:

$$(5) \quad \begin{aligned} & \llbracket [\text{ActP } eS_1 \llbracket [\text{Act}^\circ \bullet \textit{hat}_0] [\text{Comp} \llbracket [\text{JP } \textit{sicherlich} [\text{JP} \llbracket [\text{TP } t_1 \textit{geregnet } t_0] [\text{J}^\circ \text{J- } t_0] \rrbracket] [\text{Com}^\circ \vdash t_0] \rrbracket] \rrbracket] \rrbracket]^{s,a} \\ & = \bullet \lambda i [s \vdash \lambda i [s \text{ is certain in } i \text{ that HR}]] ; [\circ \text{HR} \vee \bullet \lambda i [\neg_i \text{HR}]] \end{aligned}$$

The role of epistemic and evidential adverbs to give mitigated support to the TP proposition explains why they cannot be in the scope of negation (cf. e.g. Ernst 2009). This is in contrast with epistemic and evidential adjectives like *es ist sicher* / *offensichtlich* ‘it is certain / obvious’, which can be negated. I take this as evidence that these operators are part of the TP proposition itself:

$$(6) \quad \begin{aligned} & \llbracket [\text{ActP } eS_1 \llbracket [\text{Act}^\circ \bullet \textit{ist}_0] [\text{Comp} \llbracket [\text{JP} \llbracket [\text{TP } t_1 \textit{sicher, dass es geregnet hat } t_0] [\text{J}^\circ \text{J- } t_0] \rrbracket] [\text{Com}^\circ \vdash t_0] \rrbracket] \rrbracket] \rrbracket]^{s,a} \\ & = \bullet \lambda i [s \vdash \lambda i [\text{certain in } i \text{ that HR}]] ; [\circ \lambda i [\text{certain in } i \text{ that HR}]] \vee \bullet \lambda i [\neg_i \lambda i [\text{certain in } i \text{ that HR}]] \end{aligned}$$

The subtle interpretational differences between subjective epistemic adverbs and objective epistemic adjectives has been shown experimentally (cf. Lassiter 2016). I will present the results of an experiment that investigated the effect on the trustworthiness of speakers if an asserted proposition turns out to be false, showing that *sicherlich* mitigates and *es ist sicher* strengthens this effect.

I will also discuss epistemic verbs. German *müssen* ‘must’ allows for both a subjective and an objective reading (evidence for the latter is that it can occur in the scope of negation: *Es muss nicht geregnet haben* lit. ‘it doesn’t have to have rained’). This can be modelled when subjective *müssen* originates from the head of the JP, hence is outside of the proposition to be asserted, cf. (7). Interestingly, the subjunctive form *müsste* only allows for the subjective, JP-related reading.

$$(7) \quad \begin{aligned} & \llbracket [\text{ActP } eS_1 \llbracket [\text{Act}^\circ \bullet \textit{muss}_0] [\text{Comp} \llbracket [\text{JP } t_1 \llbracket [\text{PartP } t_1 \textit{geregnet haben}] [\text{J}^\circ \text{J- } t_0] \rrbracket] [\text{Com}^\circ \vdash t_0] \rrbracket] \rrbracket] \rrbracket]^{s,a} \\ & = \bullet \lambda i [s \vdash \lambda i [s \text{ is certain in } i \text{ that HR}]] ; [\circ \text{HR} \vee \bullet \lambda i [\neg_i \text{HR}]] \end{aligned}$$

$$(8) \quad \begin{aligned} & \llbracket [\text{ActP } eS_1 \llbracket [\text{Act}^\circ \bullet \textit{muss}_0] [\text{Comp} \llbracket [\text{JP} \llbracket [\text{TP } t_1 [\text{PartP } t_1 \textit{geregnet haben}] [\text{T}^\circ t_0] \rrbracket] [\text{J}^\circ \text{J- } t_0] \rrbracket] [\text{Com}^\circ \vdash t_0] \rrbracket] \rrbracket] \rrbracket]^{s,a} \\ & = \bullet \lambda i [s \vdash \lambda i [\text{certain in } i \text{ that HR}]] ; [\circ \lambda i [\text{certain in } i \text{ that HR}]] \vee \bullet \lambda i [\neg_i \lambda i [\text{certain in } i \text{ that HR}]] \end{aligned}$$

Reportative evidentials shift the committer role persons differ from the speaker. This applies to adverbs like *laut Hans* ‘according to Hans’ that are analyzed as commitment modifiers. Such sentences can be used to report the TP proposition if s does not distances herself from it (Faller 2019).

$$(9) \quad \begin{aligned} & \llbracket [\text{ActP } eS_1 \llbracket [\text{Act}^\circ \bullet \textit{hat}_0] [\text{Comp } \textit{laut Hans} [\text{Comp} \llbracket [\text{JP} \llbracket [\text{TP } t_1 \textit{geregnet } t_0] [\text{J}^\circ \text{J- } t_0] \rrbracket] [\text{Com}^\circ \vdash t_0] \rrbracket] \rrbracket] \rrbracket] \rrbracket]^{s,a} \\ & = \bullet \lambda i [Hans \vdash_i \text{HR}]] ; [\circ \text{HR} \vee \bullet \lambda i [\neg_i \text{HR}]] \end{aligned}$$

German also has a reportative epistemic verb *sollen* ‘people say’ and a reportative mood, Konjunktiv I (KI). The natural place for these operators is the commitment head, where I assume that KI is a morphological feature that the verb receives by head moving through Com^o.

$$(10) \quad \begin{aligned} & \llbracket [\text{ActP } eS_1 \llbracket [\text{Act}^\circ \bullet \textit{soll}_0] [\text{Comp} \llbracket [\text{JP} \llbracket [\text{InfP } t_1 \textit{geregnet haben}] [\text{J}^\circ \text{J-}] [\text{Com}^\circ t_0] \rrbracket] \rrbracket] \rrbracket] \rrbracket]^{s,a} \\ & = \bullet \lambda i \exists x [x \vdash_i \text{HR}]] ; [\circ \text{HR} \vee \bullet \lambda i [\neg_i \text{HR}]], \text{ where } x \text{ refers to unspecified persons} \end{aligned}$$

$$(11) \quad \begin{aligned} & \llbracket [\text{ActP } eS_1 \llbracket [\text{Act}^\circ \bullet \textit{habe}_0] [\text{Comp} \llbracket [\text{JP} \llbracket [\text{AspP } t_1 \textit{geregnet } t_0] [\text{J}^\circ \text{J- } t_0] \rrbracket] [\text{Com}^\circ t_0 + \text{KI}] \rrbracket] \rrbracket] \rrbracket]^{s,a} \\ & = \bullet \lambda i [x \vdash_i \text{HR}]] ; [\circ \text{HR} \vee \bullet \lambda i [\neg_i \text{HR}]], \text{ where } x \text{ refers to a contextually given person} \end{aligned}$$

I will argue that the ActP can also be targeted by modals, namely by the concessive modal *mögen*. It does not result in a performative update but is a test on the input in the sense of Veltman (1996) and does not involve any commitment or judgement phrase.

$$(12) \quad \llbracket [\text{ActP } eS_1 \llbracket [\text{Act}^\circ \textit{mag}_0] [\text{InfP } t_1 \textit{geregnet haben}] \rrbracket] \rrbracket]^{s,a} = \lambda c [c + \circ \text{HR} \neq \emptyset]$$

Comparative modals: introducing a new hierarchy

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Key words: comparative modals, epistemic modals, deonticity

Comparative modals (term used by van der Auwera & De Wit (2010) and van Linden (2015); also labeled modal comparatives by von Stechow & Kratzer (2014) as well as Goncharov & Irimia (2018, 2020)) indicate stronger possibility or probability of an event as compared to some other event. In English, for which such modals have been studied most, the notion is expressed by comparative adverbials *better*, *sooner* and *rather* among others. It would be an understatement to say that this subset of modals is understudied. The few papers that do cover the topic are mostly concerned with English or – lately – other European languages (limited, as far as we know, to Germanic, Slavic and Roman language groups). Most grammars fail to provide information about such modals, let alone the constructions that can be headed by such modals. Comparative modals are unfairly excluded from the typology of modal systems (cf. van der Auwera & Ammann 2013, for example). The goal of the present study is to right this wrong and provide a variety overview of comparative modals in several non-Indo-European languages (Karelian, Khwarshi, Japanese, Chinese, Tatar, Evenki and Arabic) as well as a few Indo-European ones. The study includes expressions of the non-comparative modality, so that the comparative modals could be incorporated properly into the holistic system.

The languages I consider differ considerably in their comparative constructions. Russian and Karelian exhibit morphological comparative compatible with gradable predicates and therefore can show morphological constraints on the formation of comparative modals; Khwarshi and Japanese, on the other hand, do not mark comparison within the parameter predicate, but rather use an adverbial (*yori* in Japanese) or simply add a nominal phrase marked as standard for comparison to the predication (as is the case in Khwarshi). However, all of the languages I considered show the same tendency: different modal flavours (in terms of [H.Rullman et al 2008, J. Vander Klok 2013] among others) can exhibit different patterns of comparative modals, with some flavours seemingly incompatible (or very poorly compatible) with the notion of comparison.

Based on my data (which include field data on the minor languages as well as elicitation and corpus based analysis for the bigger ones) we propose a hierarchy of modal comparability, where the rightmost modal flavour is least compatible with comparison in any given language, and if some flavour is compatible with comparison, so are all the flavours to the left of it:

Root > Teleological > Epistemic > Deontic

The current hierarchy is tentative and needs to be checked on a wider range of languages. In my talk I intend to elaborate more on the comparative modals in the languages I considered and introduce a typological questionnaire aimed at revealing other tendencies in comparative modals.

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Pragmatics of intentions

Julie Goncharov (*University of Göttingen*)

In this paper, I connect two threads that have been recently explored by a number of scholars. The first thread comes from the discussion of the so-called subject obviation and has to do with the idea that subject obviation is related to ‘direct experience’ or an event *de se* interpretation (e.g., Schlenker 2005, 2011; Costantini 2016; Szabolcsi 2021). The second thread comes from the literature on *intend* and intending which are argued to involve self-referential properties (e.g., Grano 2021). I propose a conceptual modification of the current analyses, in which ‘direct experience’, event *de se*, and intending are unified in terms of self-locating beliefs. The proposal is implemented in Stalnaker’s framework in which the Common Ground is represented as a set of multi-centered possible worlds compatible with how participants of the conversation locate themselves and each other in the actual world (Stalnaker 2008, 2014).

Background I start with introducing Hungarian examples of subject obviation from Szabolcsi (2021). The examples in (1)a and (2)a are obviative in the sense that the matrix subject cannot refer to the same individual as the subject of the embedded clause. Compare this situation with the examples in (1)b where no direct experience is presumed and (2)b where the action is accidental. In these examples, the matrix and the embedded subjects can refer to the same individual.

- (1) a. #Remélem, hogy ugrándozok. ‘I hope that I’m jumping-IND around’
b. Remélem, hogy nem untatlak. ‘I hope that I’m not boring-IND you’
- (2) a. #Azt akarom, hogy távozzam. ‘I want that I leave-SBJV’
b. Nem akarom, hogy (véletlenül) az egészséges lábat amputáljam. ‘I don’t want that I (accidentally) amputate-SBJV the healthy leg’

It has been already established in the literature that subject obviation is not restricted to the subjunctive mood (see also our examples in (1)), nor is it due to some syntactic restriction or a competition between the subjunctive and indicative mood or finite clauses and infinitives (e.g., Schlenker 2011; Szabolcsi 2021; Goncharov 2023). The most promising insight about the nature of subject obviation is formulated in Kaufmann (2019). It explains the unacceptability of (1)a and (2)a as a conflict between two pragmatic requirements: on the one hand, the direct experiencer in (1)a and the instigator of an intentional action in (2)a are certain about whether ϕ (where ϕ = the sentence corresponding to the embedded proposition), but on the other hand, an uncertainty condition is postulated so that in (1)a and in (2)a, the direct experiencer and the instigator of an intentional action have to be ignorant whether ϕ .

Proposal I use the insight in Kaufmann (2019) as a starting point and modify it in a way that makes explicit the sources of the conflicting certainty and uncertainty requirements. My proposal is based on the following three claims: (i) for the purpose of communication, direct experience and intentional actions have one underlying origin that is best represented by self-locating beliefs, (ii) the Common Ground is constructed in a way that takes into consideration self-locating beliefs of the participants of the conversation (Stalnaker 2008, 2014), (iii) for an assertion to be acceptable there should be possibilities in the Common Ground that are excluded by the assertion (Stalnaker 1978). The certainty requirement comes from (i): neither the direct experiencer (once the experience is present) nor the instigator of an intentional action (once the intention is formed) can locate themselves in a (non-counterfactual) possible world in which they do not have *that* experience or have not formed *that* intention (pathological cases aside). Consider Kaplan’s man who looks in the mirror and doubts whether his own pants are on fire. Once the heat reaches the skin, the man

becomes certain that he himself feels pain (although he can still doubt that he is the man in the mirror). The uncertainty requirement comes from the combination of (ii) and (iii). The role of the assertion is such that it requires the Common Ground to contain possibilities in which the subject *mislocates* herself with respect to her own direct experience or intentions. But the Common Ground includes self-locating information, so *mislocating* oneself with respect to one's direct experience or intentions is not possible. Thus, (1)a and (2)a are unacceptable.

More formally, we assume a modified representation of self-locating beliefs in terms of centered possible worlds in Lewis 1979. The main modification proposed in Stalnaker (2008) that we will adopt is that there is one-one correspondence between centered and uncentered possible worlds (that is, possibilities with different centers are different possibilities): For any center c, c', c'' and any world x, y , if $\langle c, x \rangle R \langle c', y \rangle$ and $\langle c, x \rangle R \langle c'', y \rangle$, then $c' = c''$ (where R is a doxastic accessibility relation on a non-empty set of worlds (transitive, Euclidean, serial), c is a tuple consisting of an individual, time, place, and eventuality (in our case) and the rest of the model is as usual). **(I) Direct experience and intentional actions are represented as self-locating information** The difference between (1)a/(2)a and (1)b/(2)b is that the proposition expressed by the complement of the attitude predicate in (1)a/(2)a is a set of possible worlds compatible with the attitude holder's self-location as the direct experiencer or the instigator of an intentional action where ϕ is true: $\{y : xR_f y \wedge y \in \phi\}$ where f is an individual concept and $xR_f y$ iff $\langle f(x), x \rangle R \langle f(y), y \rangle$. The proposition expressed by the complement in (1)b/(2)b does not involve self-locating information and is simply a set of possible worlds where ϕ is true: $\{y : y \in \phi\}$. We assume that embedding under an attitude predicate is a subset relation (as standardly assumed), putting aside (important and intricate, but orthogonal to the current proposal) questions about ordering and prioritizing of the doxastic possibilities in different attitude predicates (and different languages). **(II) CG includes information about self-locating beliefs of the participants of the conversation** Stalnaker (2008, 2014) develops a representation of the Common Ground as taking into consideration self-locating beliefs of the participants of the conversation. Similarly to the way we defined the worlds compatible with self-locating information with respect to one individual, we can define a set to possible worlds compatible with (multiply) iterated self-locating beliefs of two individuals: For any two individual concepts f and g , we can define a binary relation R_{fg} as a transitive closure of R_f and R_g (as defined above). Then, $\{y : xR_{fg} y\}$ is a set of worlds compatible with common beliefs in world x of the two individuals who are the values of f and g for world x . This definition can be easily extended to a group of individuals. As Stalnaker shows, this system allows us to capture otherwise puzzling cases commonly known as *Sleeping Beauty* and Mark Richard's *Phone Booth Story*. In our case, this requirement on CG will play a crucial role because it makes such CGs ill-suited for the assertions with attitudes involving self-locating information such as in (1)a and (2)a. **(III) The role of the assertion is to exclude possibilities incompatible with the asserted proposition from CG** This well-accepted claim going back to Stalnaker (1978) does not require any commentary. Its role in the explanation of subject obviation should also be obvious by now: Asserting attitude ascriptions with self-locating information or without requires the Common Ground to contain possibilities that can be excluded by the assertion. This does not create a problem in cases like (1)b and (2)b where the Common Ground is a superset of the asserted proposition, e.g., $\{y : xR_{fg} y\} \supset \{y : y \in \phi\}$. But in case of assertions with self-locating information such as in (1)a and (2)a, this is never the case, e.g., $\{y : xR_{fg} y\} \not\supset \{y : xR_f y \wedge y \in \phi\}$. This is because the assertion can exclude certain possibilities only if the subject locates herself in the possibilities that are excluded, but we assumed that in case of direct experience and intentional actions, self-*mislocation* is pragmatically impossible.

Apprehensives in Australian languages: a preliminary survey and tentative analysis

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Since (Dixon 1972), and his seminal description of the *-bila* affix in Dyirbal, so-called apprehensive (or apprehensional, or timitive) grams, or *lest* constructions/inflections have been identified in numerous Australian languages, cf. (Austin 1981; Laughren 1982; Dench 1995; Evans 1995; Angelo & Schultze-Berndt 2016), a.o. Capitalizing on this rich scientific context, the present talk will try and further our understanding of apprehensives, by (i) offering a sample-based, areal typological overview of apprehensive markers in Australian languages, and (ii) laying the foundations of a formal account explaining some recurrent semantic and pragmatic apprehensive patterns.

A comparative study based on a sample of 26 languages (see [annex](#)) revealed that Australian apprehensives vary in semantic flavor and morpho-syntactic form. Apprehensive verbal markers can be synthetic (cf. FUTIRR in Murrinh-Patha, (2)) or periphrastic inflections (cf. *angkad* + V_{OPT/PR} in Iwaidja, *marnti/marndi*+V_{PR} in Mawng and Bininj Gun-wok), or clitics (cf. =*maka* in Anindilyakwa, Bednall 2020:97). Mono-clausal structures involving apprehensive verbal markers express an undesirable (_{undes}) possibility modal ('might/will_{undes}') (1), or in some rare cases, a prohibitive modal with an implied 'or else will_{undes} Q' additional clause (e.g., an implicit threat, (2); cf. (Green 1995: 315)). The former type can combine with an additional clause (with or without a special apprehensive connective or complementizer) to constitute a wide range of bi-clausal *P+Q* apprehensive structures: *P*-imperative+*Q*-predictive ('you (must) *P*, or else will_{undes} *Q*') (4), *P*-prohibitive+*Q*-predictive ('don't *P*, or else will_{undes} *Q*'), and finally, *P*-hypothetical+*Q*-Predictive structures ('if_{undes} *P*, then will_{undes} *Q*'), (5) – which only involves an *indirect* priority modal (Portner 2018). Some languages grammaticalize negative priority modals ('don't *P*'), which are then preferred forms for prohibitive *P*-clauses. The directive interpretation of *P*-directive clauses ranges from suggestions, to orders, and the apprehensive reading of *Q* clauses from mere concerns to fears. Some languages in the sample (Worrorra) lack apprehensive verbal markers; the undesirable content of *Q* can either be marked nominally (*via* case, as in e.g. Gooniyandi), or be a contextual matter of pragmatic enrichment; it is then an 'apprehensive strategy'. Many languages in the sample exhibit instances of 'apprehensive strategies'(3) in addition to verbally (and/or nominally) marked apprehensives.

- (1) *k-ini-majpungku-n*, *marnti* *kurruni-wu-n*. (Mawng)
 PR-3MA/3MA-lift.up-NP APPR 3MA/2PL-kill-NP
 'The sea is rough and it might kill you.' (>Implicit instruction: 'you shouldn't canoe') (Singer 2006: 171)
- (2) *mere na-ngi-mathputh-nukun=thurru* (Murrinh-Patha)
 NEG 2SGS.HANDS(8).FUTIRR-ISGO-interrupt-FUTIRR=2SGS.GO(6).FUTIRR
 'Don't you continually interrupt me.' (>Implicit threat: 'or I'll punish you') (Nordlinger & Caudal 2012)
- (3) *yama=lhangwa!* *n-ak nenangkwarba* *kənə-wənyamba-dhu-Ø=ma* (Anindilyakwa)
 watch.out=ABL 3M-that 3M.man IRR.3M-angry-INCH-USP=MUT
 'Watch out! The man might become angry!' (Bednall 2020: 328) (no verbal apprehensive marker)
- (4) *kudn-uka-Ø* *ngartung* *mana* *angkad* *birta* (Iwaidja)(field data)
 1SG>2PL.RMOD-peep-RMOD OBL.1SG MAYBE APPR UNCERT
nganba-ya-njing.
 3PL>1SG.OPT-see-OPT
 'Keep a lookout for me, otherwise they might see me.' (Iwaidja Dictionary)
- (5) *ɲinda ɲaygu bulgugu* *wadilɲaju* /ɲada ɲinuna maja *gunbalbila* (Dyirbal)
 you-SA I-GEN wife-DAT swive-DAY-REL-NOM I-SA you-O ear-NOM cut-APPR
 'If you swive my wife, I'll cut off your ears.' (Dixon 1972: 362)

I will base my formal treatment of apprehensives on the idea that epistemic-predictive (Klecha 2013) and priority modals are lexically endowed (or can be pragmatically enriched with) a

polarity, and a *desirability* degree. ‘Negative priority’ modals (including as denoted by some apprehensives markers, (2)), prompt the addressee not to do *P*, as *P* is undesirable. Epistemic/predictive apprehensive modal markers (e.g. (1)) conveying that some possibility ψ is undesirable (ψ -worlds should be avoided), I will take them to denote negatively evaluated modals. Such structures can be weakly cautionary, or convey a strong warning; without an overt *P*-directive clause, apprehensive structures can be pragmatically enriched with a priority meaning – see (François forthcoming), and (5).

To account for this priority dimension of semanticized apprehensives, I will resort to scalar models of modals, such as e.g. (Lassiter 2014; Portner & Rubinstein 2016), assuming that such modals should not just one, but two scalar dimensions: one for their force (which in the case of directive/deontic apprehensive readings, appears to be lexically rather than contextually set), and one for their degree of undesirability. In contrast to this, for pragmatically apprehensive readings of otherwise non-apprehensive modals, I will rather make use of a ‘commitment management in dialogue’ type of analysis, à la (Portner 2018; Condoravdi & Lauer 2012). I will assume that Portner’s (2018) analysis in terms of commitment slates can be adapted to such pragmatically determined content of normally epistemic (and deontic modals, for a biclausal structure): it can trigger an update of (i) the COMMON GROUND and (ii) of the addressee’s commitment slate (and from there, TO-DO-LIST) with some priority to realize (for imperative *P*-clauses) or not to realize (for prohibitive *P*-clauses) action ϕ , so as to prevent undesirable possibility ψ from materializing. Combining the above analysis with the now well-known variable force of modals in Australian languages (cf. e.g. (Bednall 2020; Gray 2021)) can help us cover most of the contextual, interpretative variation mentioned above: apprehensives can express anything in between a suggestion to act upon a mild preference, and a stern admonition to prevent some impeding disaster. I will furthermore argue that even if no priority modal is semantically introduced (with a mono-clausal epistemic apprehensive, or a bi-clausal hypothetical apprehensive), and the update on the addressee’s commitment slate is a pragmatic matter, apprehensives need not be face-saving devices, *pace* (François forthcoming). If ψ is highly undesirable, apprehensive structures can convey brutal speech acts, e.g., threats.

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Annex – List of languages in the comparative sample: Pama-Nyungan (Pilbara: Martuthunira, Panyjima, Nyangumarta; Western Desert: Pintupi-Luritja; Ngumpin-Yapa: Warlpiri, Warlmampa, Bilinarra; Garrwan: Garrwa; Karnic: Diyari, Yandruwandha; Dyirbalic: Wargamay, Dyirbal), non-Pama-Nyungan (Iwaidjan: Iwaidja, Mawng; Mirndi: Jaminjung,

Wambaya; Gunwinyguan: Dalabon, Anindilyakwa, Bininj Gun-wok, Kuninjku, Rembarrnga; Daly River: Murrinh-Patha; Wororan: Worrorra; Bunuban: Gooniyandi; Maningrida: Gurr-goni; Tangkic: Kayardild)

In this talk I investigate the diachrony of five optative constructions in four Mari lects (< Uralic). The data comes from my fieldwork conducted in 2016–2019 in the villages of Chodrayal (Meadow Mari, Volzhsky district, Mari El), Kuznetsovo, and Mikryakovo (Hill Mari, Gornomariysky district). Besides, literary Meadow Mari data were elicited online in 2021 and supplemented by data from textual sources.

The constructions observed in Mari idioms are listed in Table 1:

No	Construction	Verb form used in the construction
1	V-IMP.3 + (RETR)	3SG imperative (jussive)
2	V-INF-(POSS.2SG) + (RETR)	Infinitive
3	V-NPST.1SG + RETR	Non-past 1SG form
4	V-šas̄ + (RETR)	Debitive form in –šas̄
5	V-PRET + be-COND	Conditional form

Table 1. Mari optative constructions

Each of the lects under consideration features multiple constructions from Table 1, e.g. Kuznetsovo Hill Mari has optative constructions 1, 2, 4 and 5, whereas Chodrayal Meadow Mari has constructions 1, 2, 3 and 4.

In addition, the same constructions in different lects show significant variation in their expression of subject. For example, while in literary Meadow Mari construction 4 is only possible with 1SG subjects (1), in Mikryakovo Hill Mari it is used with all subjects.

(1) LITERARY MEADOW MARI

keč tora gəč pel šinča dene uš-šas̄ əl'e!
at_least distance from half eye with see-DEB RETR

‘I wish I could at least see it from far away with one eye!’ (Vasikova 1975).

(2) LITERARY MEADOW MARI

a. *jür lij-šas̄ əl'e!
rain become-DEB RETR

Intended: ‘I wish it rained!’

MIKRYAKOVO HILL MARI

b. jur cärnä-šüş!
rain stop-DEB

‘I wish the rain stopped!’

In my talk I will show how the dialectal variation observed with these constructions contributes to a diachronic reconstruction of optative constructions.

Constructions 1, 2 and 5 demonstrate typologically expected paths of grammaticalization. For example, the colexification of jussive and optative forms is discussed by Dobrushina (2011), and the development of if-clauses into optatives by Grosz (2012) and others. The use of infinitive in optative constructions has parallels e.g. in Russian (*Vot by pojekhat' tuda!*).

I will focus on constructions 3 and 4, which demonstrate less common paths of grammaticalization. For example, in construction 3 (henceforth *1sg-optative*) the lexical verb takes an invariable 1SG form that does not agree with the subject in person. I am not aware of parallels to this development in other languages.

(3) LITERARY MEADOW MARI (<http://marlamuter.com/muter/en/Search>)

ija nun-əm kočk-am əl'e!
devil they-ACC eat-NPST.1SG RETR

‘Damn them!’ (lit. ‘may devil eat them!’)

1SG-optatives are hardly mentioned in the literature on Mari. However, they are present in literary Meadow Mari, Chodrayal Meadow Mari and Mikryakovo Hill Mari, only being absent from Kuznetsovo Hill Mari.

The use of 1SG forms in an optative construction is enigmatic. A possible scenario could be that *1SG-optatives* may stem from some construction introducing direct speech. For example, in Tatar (< Turkic), which had contact influence on Mari, prospective constructions have developed from direct speech constructions with 1SG forms (Nevskaja 2005):

(4) TATAR (own fieldwork)

<i>agač</i>	<i>awa-m</i>	<i>awa-m</i>	<i>di-p</i>	<i>tor-a</i>
tree	fall-PRS.1SG	fall-PRS.1SG	say-CVB	stand-PRS.3SG

‘This tree is about to fall’ (lit.: the tree stands saying: “I will fall”).

However, the Mari 1SG-optative contains no additional morphological material such as *dip tora* in Tatar. Deriving optative meaning from a construction like (4) is also problematic. Instead, constructions like (5) may shed light on the development of 1sg-optatives:

(5) LITERARY MARI (<http://marlamuter.com/muter/en/Search>)

<i>aš</i>	<i>šižtare</i>	<i>vet,</i>	<i>keč</i>	<i>šinča-m</i>	<i>püjal-am</i>	<i>ale!</i>
NEG.AOR.3SG	warn	PTCL	PTCL	eye-ACC	wink-NPST.1SG	RETR

‘She didn’t warn {me}, at least she could have winked her eye!’

Here, two clauses share the same 3SG subject. The predicate in the second clause expresses speaker’s counterfactual preference and the verb is in 1SG. While the combination of a non-past form and a retrospective marker is expected to yield a counterfactual reading, an interesting question is why the verb in this construction is in 1SG. I propose that this is due to a perspective shift (Spronck et al. 2020), i.e. the speaker literally says ‘She didn’t warn me, {if I were her}, I would have winked at least’. The next step is insubordination of the second clause, which develops into optative.

Additional argument in favor of this scenario is that although *1SG-optatives* are ungrammatical in Kuznetsovo Hill Mari, examples such as (5) are licit. This means that examples like (5) may indeed instantiate the original construction, from which *1SG-optatives* have originated.

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Future tense and modal forcing

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This paper considers a modal reading of the future tense in Italian, illustrated by the true utterance of (a) at a context \mathbf{m} in which Tokyo has just been elected host city of the 2020 Olympics. The utterance of (a) at \mathbf{m} implicates that (b) was false at some past context \mathbf{m}_0 :

- (a) *Adesso (che lo IOC ha deciso) i Giochi Olimpici 2020 saranno [be-FUT] a Tokyo.*
 ‘Now (that the IOC has decided) Tokyo will be hosting the 2020 Olympics.’
- (b) *I Giochi Olimpici 2020 saranno a Tokyo.*
 ‘Tokyo will be hosting the 2020 Olympics.’

Intuitively, however, (a) entails (b), hence (b) must also be true at \mathbf{m} . By the plausible assumption that whatever is in the future of \mathbf{m} is also in the future of any context in the past of \mathbf{m} , it follows that (b) was also true at \mathbf{m}_0 . Therefore, the utterance of (a) at \mathbf{m} both *implicates* that (b) was false at \mathbf{m}_0 and *entails* that (b) was true at \mathbf{m}_0 . Now, utterances that have an implicature that contradicts an entailment sound infelicitous, e.g. “? Mary has two children. She has given birth to one boy and two girls.” The question is then: why does (a) not sound infelicitous?

Our answer points to a particular modal reading of the future tense in (a) and (b): a *modal forcing* reading ([4]). This is based on a general notion of a *forcing relation*: intuitively, a forcing relation R holds between a state s^* and an eventuality e^* when s^* determines the occurrence of e^* , in a sense of “determines” which is context-sensitive. On our analysis of (a), “adesso” (‘now’) is a dyadic modal operator with the following semantics and pragmatics (cf. [4]):

- (i) it is anchored to a presupposed state s^* which obtains at reference time; s^* can be described by an internal argument in the form of a complement clause (e.g. the clause in parentheses in (a); see [1]).
- (ii) it introduces a forcing relation R , of which s^* is one *relatum*;
- (iii) it triggers a *forcing reading* for its prejacent P , whereby the forcing relation R is predicated to occur between s^* and the eventuality e^* described by P ;
- (iv) the utterance of ‘now P ’ at t conversationally implicates that the forcing relation R does not hold at alternative times to t .

To exemplify, “adesso” in (a) is anchored to a state s^* containing the contextually relevant IOC-plan and triggers a forcing reading of (b) – in this case, a *plan reading* – whereby a *plan-forcing* occurs between s^* and a future event of Tokyo hosting the 2020 Olympics; moreover, the utterance of (a) implicates that the plan reading of (b) was false at previous times, i.e., that there was no plan held at previous times according to which Tokyo was to be hosting the 2020 Olympics.

We model forcing relations in a possible-worlds setting in which modal properties of states can vary across times (similarly to what happens in [5]’s treatment of historical modalities). In the definition below, “ R ” is a variable which can be instantiated by different types of forcing relations (see examples below for types of forcing other than forcing from a plan).

R -forcing: State s^* in world w^* at time t^* R -forces the occurrence of a P -eventuality (in symbols, $\Box_{s^*}^R(w^*, t^*)[\lambda w. \lambda t. \lambda e. P(w)(t)(e)]$) iff a P -eventuality occurs in all R -type alternatives to w^* at t^* which are compatible with s^* (in symbols, $\forall w[R\text{-alt}_{s^*}(w^*, t^*, w) \rightarrow \exists e(P(w)(t^*)(e))]$).

The interpretation of “adesso” in ‘adesso *che* S_1, S_2 ’ is formalized as follows (the formula “ $CG_c(Q(s^*))(w)(t^*)$ ” is a definedness condition on the *now*-function, requiring that it be common knowledge in context c that the Q -state s^* holds in world w at reference time t^*):

$$[[\text{now}]]_{c,g,w} = \lambda t^*. \lambda s^*. \lambda Q. \lambda P : CG_c(Q(s^*))(w)(t^*). \Box_{s^*}^R(w, t^*)[P]$$

Assuming that the reference time is t^* (in this case, t^* is also the time of the context c) and $@$ is the world of c (“Q” might be understood as corresponding to the clause “che lo IOC ha deciso”), (a) is analyzed as follows:

$$\begin{aligned} & \llbracket \text{Adesso [Q] [FUT[I Giochi Olimpici 2020 essere a Tokyo]]} \rrbracket_{c,g,@} = 1 \text{ iff} \\ & (\lambda t^*. \lambda s^*. \lambda Q. \lambda P : CG_c(Q(s^*)(@)(t^*)). \Box_{s^*}^R(@, t^*)[P]) \\ & (t^*)(s^*)(\lambda s. \lambda w. \lambda t. \text{IOC-has-planned}(s)(w)(t))(\lambda e. \lambda w. \lambda t. \text{Tokyo-will-host-Olympics}(e)(w)(t)) \text{ iff} \\ & \text{presup.: } CG_c(\text{IOC-has-planned}(s^*)(@)(t^*)) \Box_{s^*}^R(@, t^*)[\lambda e. \lambda w. \lambda t. \text{Tokyo-will-host-Olympics}(e)(w)(t)] \\ & \text{iff} \\ & \text{presup.: } CG_c(\text{IOC-has-planned}(s^*)(@)(t^*)) \forall w [R\text{-alt}_{s^*}(w^*, t^*, w) \rightarrow \exists e \exists t (t^* \leq t \wedge \text{Tokyo-host-Olympics}(w)(t))] \end{aligned}$$

The analysis predicts that (a) is true in context c (with world $@$ and time t^*) at the condition that there will occur an event of Tokyo hosting the Olympics in the future of t^* in every world compatible with a presupposed state s^* , where s^* is a state in which the IOC has made its plan. In this case, the variable R is contextually resolved as referring to the particular kind of forcing exerted by plans.

We extend our account of (a) to other examples of future tensed sentences amenable to forcing readings, which involve other types of forcing relations (e.g., (c)) and linguistic devices other than “adesso” which also trigger a forcing reading (including the phonologically null trigger, as in (d)):

- (c) Ora (che Bolt è stato squalificato) vincerà [win-FUT] Blake.
‘Now (that Bolt has been disqualified) Blake will win.’
- (d) Bolt è stato squalificato. \square Vincerà Blake.
‘Bolt has been disqualified. Blake will win.’

Sentence (c) involves *causal-historical* forcing: (c) is true if and only if some state obtains now (the state of Bolt’s being out of game) which causally forces the future event of Blake’s winning. Sentence (d) involves the same kind of forcing relation, but in this case the forcing is introduced by no overt linguistic device, just exploiting a relation of discourse coherence. normative frame holding at present.

The idea that future tensed sentences can have modal forcing readings opens up the possibility that the future tense *per se* be semantically a purely temporal operator ([3], [2]), with modal readings arising out of forcing. In the paper we will also consider the question whether epistemic readings of the future tense can be analyzed as instances of forcing.

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X-Marking and the Reportative Conditional

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1. INTRODUCTION. Languages often use the same morphology (von Fintel & Iatridou (2023) [vF&I], ‘X-marking’) to mark counterfactual conditionals, unattainable desires and weak necessity. vF&I lay out a research program on X-marking, two of whose core questions are: (i) what other uses can X-marking have? and (ii) can these uses be given a unified account? We address these questions by (i) bringing into the arena a use of X-marking, the Italian reportative conditional, which has received little attention in the formal literature (but see Howell 2012 on the French *conditionnel*) and (ii) providing an analysis of this use that combines two operations argued to be at work in other uses of X-marking: modal domain widening (as in counterfactuals and desire ascriptions) and modal domain restriction (as in weak necessity).

2. DATA. vF&I note that the Romance ‘conditional mood’ [CD] is X-marking. (1) shows that the Italian CD has indeed all the hallmarks of X-marking: it is used in the consequent of counterfactual conditionals (1a), it yields a ‘wish’ meaning when added to *volere* (‘want’) (1b), and it conveys weak necessity when added to a strong necessity modal (1c). In addition, the Italian CD can have a reportative interpretation: (2), with CD morphology on the main verb, conveys that the speaker has learned the proposition via a report.

- (1) a. Se Sara sapesse la risposta, Lea **saprebbe** la risposta.
if Sara know.SUBJ.3sg the answer, Lea **know.CD.3sg** the answer
‘If Sara knew the answer, Lea would know the answer.’
- b. Il mio cane **vorrebbe** essere un gatto.
the my dog **want.CD.3sg** be.inf a cat
‘My dog wishes he was a cat.’
- c. (Per fare questo lavoro) **dovrebbe** avere la patente, ma non è necessario.
(To do this job) **must.CD.3sg** have the drivers-license, but not is necessary
‘(For this job), she should have a drivers license, but it’s not mandatory.’
- (2) Tik Tok **starebbe** pensando ad un servizio streaming musicale.
Tik Tok. **be.CD.3sg** thinking at a service streaming musical
‘Tik Tok is allegedly thinking about (starting) a musical streaming service.’

Like most reportative constructions across languages (AnderBois 2014, Faller 2019), the reportative CD does not require the speaker to be committed to the reported proposition. In (3), e.g., the continuation where speaker B states that they believe the reported proposition to be false is not perceived as inconsistent.

- (3) A: Why was Gianni fired?
B: **Avrebbe** rubato dei soldi, ma io non ci credo.
haveCD.3sg stolen some money, but I not it believe.1sg
‘Gianni allegedly stole money, but I don’t believe it.’

3. THE REPORTATIVE CD AS X-MARKING. The reportative CD is often discussed in the descriptive literature (e.g., Squartini 2001), but has not played a role in discussions of X-marking. We contend that the reportative interpretation of the Italian CD arises through a combination of two operations on modal domains that X-marking has been argued to perform in other environments.

3.1. Background: X-marking. In the view put forward in vF&I, X-marking morphology operates on the domain of a modal, be it covert (conditionals) or overt (desire ascriptions / weak necessity). vF&I suggest that X-marking signals a departure from a default domain of quantification. This amounts to widening of the modal domain in conditionals (beyond the context/epistemic set, Stalnaker 1968, 1975) and desire ascriptions (beyond the sub-type of doxastic modal base employed by ‘want’), and to narrowing of the modal domain in the construction of weak necessity (by adding a secondary ordering source, von Fintel & Iatridou 2008, Rubinstein 2012).

3.2. Proposal. We argue that the reportative CD (i) operates on the domain of a **covert doxastic modal**, and (ii) performs both **domain widening and domain restriction**.

Default modal. We bring together two previously unconnected lines of research: vF&I’s agenda on X-marking and recent work on reportative evidentials. In particular, we take inspiration from Faller’s (2019) account of the Cuzco Quechua reportative *-si*. Faller assumes that declarative sentences are associated with a speech act operator PRESENT (which puts a proposition p up for discussion) and claims that *-si* overrides two defaults linked with this operator, by (i) assigning commitment to p to a third-party rather than the speaker and (ii) signaling that the speaker has reportative evidence for p . In the spirit of Faller, we argue that the reportative CD interacts with a default operator, but we take this operator to be modal, in keeping to the X-marking profile of CD morphology. As a starting point, we take this modal to correspond to a left-peripheral assertoric operator that quantifies over the speaker’s belief set in the world of evaluation w — $Dox(sp)(w)$ — as in (4) (Hacquard 2006, Alonso-Ovalle & Menéndez-Benito 2010, Meyer 2013, a.o.).

$$(4) \llbracket \text{ASSERT} \rrbracket^w = \lambda p. \forall w' \in Dox(sp)(w) : p(w')$$

Domain widening. The CD operates on the domain of the modal quantifier in (4) (the speaker’s belief set in w) to yield an expanded domain of quantification $Dox(sp)(w)^{+P}$ (where p is the propositional argument of ASSERT), defined as in (5) (after Grano & Phillips-Brown’s (2022) on (counter)factual desire ascriptions, via vF&I): $Dox(sp)(w)$ is minimally expanded to include any world that is the most similar p -world to some world in $Dox(sp)(w)$. (If the speaker believes p , the operation will be vacuous).

$$(5) Dox(sp)(w)^{+P} = Dox(sp)(w) \cup \{w' \in W : \exists w'' \in Dox(sp)(w) \ \& \ Sim_{w''}(p) = w'\}$$

Domain restriction. The expanded domain in (5) is then restricted by an informational ordering source g_{inf} (6), which, following standard assumptions on the constructions of modal domains, selects from (5) a subset of worlds ($Best_{g_{inf}(w)}(Dox(sp)(w)^{+P})$) that come closest to realizing the content of the report $g_{inf}(w)$.

$$(6) \text{ An informational conversational background is a function } g \text{ such that for any } w \text{ in the domain of } g, g(w) \text{ represents the propositional content of some source of information in } w. \text{ (Kratzer 2012)}$$

Truth conditions. The overall effect of CD morphology on ASSERT is as in (7). **Expanding** the domain beyond the speaker’s belief set accounts for **lack of commitment** (3): unlike $\text{ASSERT}(p)$, $\text{ASSERT}+\text{CD}(p)$ is compatible with p being false throughout the speaker’s belief set. **Restricting** the expanded domain with an informational ordering source yields the **reportative** interpretation: the resulting domain of quantification consists of those worlds from the expanded modal base that come closest to the content of the report $g_{inf}(w)$.

$$(7) \llbracket \text{ASSERT}+\text{CD} \rrbracket^w(p) = 1 \text{ iff } \forall w' \in Best_{g_{inf}(w)}(Dox(sp)(w)^{+P}) : p(w') = 1$$

4. FURTHER ISSUES. 4.1. The source of covert modality. The assertoric operator in (4) has been noted to be problematic: assuming that assertions always involve this implicit modalization predicts that there is no truth-conditional difference between *It is raining* and *I believe it is raining* (see, e.g., Roberts 2023). To avoid this issue, we could assume that the doxastic operator that the CD interacts with is introduced as a rescue mechanism. The logic would be as follows: as X-marking morphology must operate on a modal (vF&I), when no overt modal is present, a covert one is inserted. (On the use of covert modality to avoid ungrammaticality, see, e.g., Chierchia 2013).

4.2. Lexicalization and cross-linguistic variation. The contribution of the Italian CD in cases like (2) is obviously lexicalized to some degree. First of all, there are languages (like English) that have X-marking but where a reportative interpretation is not attested. Second, interpretations involving a different (non-reportative) OS are not available for (2) (leaving aside implicit conditional readings, vF & I). This raises the question of what range of readings are available for X-marked verbs at the root level, cross-linguistically, and whether there is a principled reason that explains the attested restrictions.

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Évidentialité ou modalité épistémique : comment décider ?

Le cas de sans doute en français contemporain

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Mots-clefs : évidentialité inférentielle, effets de sens épistémico-modaux, modalité épistémique, 'posture de certitude'

Dans notre contribution, nous proposons une réflexion sur la locution adverbiale *sans doute* en français contemporain, à partir de phrases authentiques provenant des bases textuelles intégrées à Sketch Engine (complétées ponctuellement d'exemples pris dans *Google Books* ou dans les études linguistiques sur cet adverbe). Les exemples étudiés sont du type :

- (1) Il a l'air fatigué, boude sa gamelle, tousse, éternue. C'est **sans doute** le signe qu'il a attrapé un rhume. (frTenTen20)
- (2) J'aime beaucoup photographier les clôtures de jardin, les délimitations des champs, les fils barbelés... je ne sais pas pourquoi... **sans doute** parce que dans chacune d'elles, invariablement, il y a la main de l'homme qui l'a construite, et je trouve cela très photogénique.... (frTenTen20)
- (3) Le texte est non daté. Il a **sans doute** été rédigé au début de l'année 1919, même si l'on ne peut en être complètement certain. (cité par Bourmayan et Ashino 2021 : 3)
- (4) C'est la triste réalité que vivent depuis des mois les hôpitaux et centres de consultation liégeois, mais **sans doute** ailleurs aussi (Timestamped French 14-21)
- (5) Ainsi donc, cet homme avait eu un enfant. Un enfant qu'il ne connaissait pas. Pourquoi ? De qui ? De cette femme, **sans doute, sans aucun doute**. Pourquoi ne le connaissait-il pas ? (Piat 2013, *GBooks*, cité par Donaire 2023 : 148).

La question importante qui sous-tend l'étude sémantique de *sans doute*, mais aussi d'expressions comme *certainement, sûrement, à coup sûr, pour sûr, sans aucun doute, probablement* et même *peut-être*, est de savoir s'il faut catégoriser ces expressions comme des marqueurs de modalité épistémique ou comme des marqueurs d'évidentialité. De par le lien morphologique qu'ont ces expressions avec les adjectifs, substantifs ou verbes qui les composent, dont le sens lexical a directement à voir avec les notions épistémico-modales de certitude / non-certitude / doute, il n'est pas étonnant qu'on les appelle « adverbies modaux » ou « adverbies épistémiques » (Meunier 1974 : 8, Guimier 1996 : 11, Gezundheit 2000 : 219, Gosselin 2010 : 329) et qu'en conséquence on les considère *a priori* comme des marqueurs épistémico-modaux.

Or, l'étude des propriétés syntactico-distributionnelles et sémantiques de *sans doute* dans les phrases de notre corpus permet de contester cette catégorisation et cela par trois hypothèses que nous avancerons et étayerons et qui prennent le contre-pied des hypothèses avancées par Bourmayan et Ashino, dans l'étude la plus récente sur *sans doute* (2021).

Notre hypothèse principale est que *sans doute* est fondamentalement un marqueur évidentiel et non un marqueur épistémico-modal. *Sans doute* signale par son sémantisme

lexical que le contenu sur lequel il porte est une hypothèse, plausible, inférée comme conclusion d'un raisonnement défectible par L à partir d'indices ou de prémisses.

De cette première hypothèse en découle une seconde qui dit que la valeur d'incertitude que l'on accorde invariablement au contenu d'un énoncé avec *sans doute* est une valeur pragmatique, seconde, qui n'est pas codée lexicalement. Elle est amenée par défaut par les propriétés de l'inférence défectible à laquelle réfère évidentiellement cet ad-
verbe.

Une troisième hypothèse complète les deux autres. C'est que *sans doute* combine toujours son trait évidentiel inférentiel avec un trait lexical qui a été appelé « expression d'une *posture de certitude* » (Dendale 2020) et qui n'est pas un trait épistémico-modal. La posture de certitude ne résulte pas d'une évaluation épistémico-modale par L et ne représente pas un l'état cognitif de (haute) certitude de L. Nous montrerons qu'elle réfère à ce qu'on pourrait appeler un 'ton' de certitude que prend L ou un comportement d'assurance (vraie ou jouée) qu'il montre. Bref, *sans doute* signale, avec un ton de certitude, que le contenu qu'il qualifie est le résultat d'une hypothèse plausible – donc orientée vers le vrai – inférée par L de prémisses et/ou indices, mais essentiellement défectible et par-là non-certaine.

Les propriétés syntactico-distributionnelles et sémantiques de *sans doute* qui fondent nos hypothèses sont : l'incidence de *sans doute* (une proposition), les positions possibles de l'adverbe dans la phrase, certains faits de distribution (p.ex. la présence de marqueurs d'aveu d'ignorance), d'autres expressions épistémiques, la nature des divers types de contenus avec lesquels *sans doute* se combine de préférence, les indicateurs (co(n)textuels) du statut de vérité établie ou « en attente de vérification » des contenus qualifiés, la nature de l'acte de langage que *sans doute* concourt à réaliser (la 'quasi-assertion', McDowell 1991).

Cette étude de cas aide à comprendre, sur un plan plus théorique, quels types de critères et quels types de raisonnement permettent de déterminer le statut évidentiel ou au contraire épistémico-modal d'une expression. Elle introduit aussi un concept épistémique qui est à distinguer de la modalité épistémique et dont il sera montré qu'il permet d'expliquer certains choix, comme la préférence pour *sans doute* (à *probablement*) dans :

- (6) a. Vous avez **sans doute** raison, mais il faut aussi considérer que...
- b. Vous avez **probablement** raison, mais il faut aussi considérer que...

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Is it “where” or “when”: on the past forms’ opposition in Khwarshi

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Any kind of grammaticalized way to express the source of information is commonly referred to as evidential. But is it always just that? It has been suggested [DeLancey 2001] that sometimes what we call an evidential is in fact some other kind of category, with a meaning somewhat broader than evidentiality suggests. [Lazard 1999] talks about specific kind of evidential systems that distinguish neutral, or unmarked constructions from marked forms expressing inference, hearsay or mirative (unexpected observation). These systems are exemplified by Turkish, Bulgarian, Albanian, Persian and some other languages. While inference and hearsay are indeed kinds of evidential meanings, mirative is not. Lazard proposes an alternative way of describing these types of systems. What he suggests is to consider inference, hearsay and mirative as manifestations of an abstract “mediative” category, which interposes “an unspecified reference to the origin of the information between the speaker and his discourse” [Lazard 1999: 96]. Thus, the speaker has a choice between an unmarked form which does not imply anything and a special form with not-so-much evidential semantics.

Nakh-Daghestanian languages provide an example of language with something that looks very much like mediative. It is normal for these languages to have an opposition within their tense system: an unmarked form is opposed to a form usually expressing an indirect access to the information (i.e. through inference or hearsay) [Verhees 2022]. This study investigates such an opposition in Khwarshi-Khonokh dialect of the Khwarshi language (West Tsezic < Tsezic < Avar-Andic-Tsezic < Nakh-Daghestanian). While questioning its evidential nature, I provide an alternative way of analyzing the principle that underlies it. The data for the study was collected during the fieldwork in 2023 in Mutsalaul and Khonokh (the Republic of Dagestan, Russia).

Khwarshi tense system has two verb forms referring to the past. Current grammatical descriptions [Khalilova 2009; Testelefs, Khalilova in prep.] state that one of them (Past witnessed) is used to denote events directly witnessed by the speaker, whereas another one (Past unwitnessed) denotes events that the speaker was not a witness of. Our data also indicates that the Past witnessed is used when the source of information is not relevant, so it’s more adequate to consider it an unmarked form which denotes a direct access to a situation only in contrast to the Past unwitnessed. On the other hand, the evidential meaning of the latter can be cancelled by the right context that explicitly states the fact that the speaker saw the situation himself. In this case the past witnessed form takes on other implications, which can be exemplified by (1-2):

- (1) *is-i* *kavat lixe-x-na* *di-l* *žu* *j-ajka*
DEM.O.I-ERG paper tear-CAUS-PST.U 1SG-DAT DEM.DIST.ABS V-see\PST.W
‘He teared up the paper, I saw it. (I didn’t understand what exactly he did at the time)
- (2) *hũlχo* *qema* *liχ-χo* *l-eča-na* *di-l*
yesterday rain come.down-PRS IV-AUX.PST-PST.U 1SG-DAT
žu *l-ajka*
DEM.DIST.ABS IV-see\PST.W
‘It turned out to rain yesterday, I saw it.’ (I just remembered that)

In (1) the speaker, using the Past unwitnessed, describes an event which he saw, but at the moment the situation occurred he didn’t understand what happened. In (2) the speaker describes an event that he saw, but which he forgot about and remembered only now. In each case the information was obtained directly by the speaker.

Two other examples (3-4) illustrate more clearly the difference in interpretations between Past witnessed and Past unwitnessed, put in contrast. In both cases the described situation couldn't be witnessed by the speaker directly, so the only prominent distinction is the time of getting the information:

- (3) a. *Šamil-e-l* *Aminat* *goqa-ha* *j-ejča*
 Šamil-O-DAT Aminat love-PRS II-AUX.PST.W
 'Šamil loved Aminat.' (I knew about it at the time he did)
- b. *Šamil-e-l* *Aminat* *goqa-ha* *j-eča-na*
 Šamil-O-DAT Aminat love-PRS II-AUX-PST.U
 'Šamil loved Aminat.' (I heard about it only afterwards)
- (4) a. *Aminat-e-l* *žu* *lik'e-he* *l-ejča*
 Aminat-O-DAT DEM.DIST.ABS know-PRS IV-AUX.PST.W
 'Aminat knew about it.' (we found out about it at the same time)
- b. *Aminat-e-l* *žu* *lik'e-he* *l-eča-na*
 Aminat-O-DAT DEM.DIST.ABS know-PRS IV-AUX-PST.U
 'Turns out Aminat knew about it.' (before I found out about it myself).

Considering the provided examples, one could say that Past witnessed doesn't always point out *where* the speaker got the information, but rather always points to *when* he did it. To be more precise, it always denotes the fact that the speaker got the information some time after the situation had taken place. I suggest to consider it as *desynchronization* between the change-of-state that occurred in real world and the acquisition of knowledge about this change. Though it is usually difficult to distinguish between indirect access and late knowledge (since the first almost always implies the second), it could be possible if we conducted an experiment, modeling the conditions in which each of the factors can be taken separately.

Abbreviations

ABS – absolutive; AUX – auxiliary verb; CAUS – causative; DAT – dative; DEM – demonstrative; DIST – distal; ERG – ergative; O – oblique; PRS – presence; PST.U – past unwitnessed; PST.W – past witnessed. Roman numerals I–VI indicate genders

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« Hier, il parlera » – Origine et nature des difficultés de flexion verbale dans l’aphasie

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Introduction

Les temps verbaux et les adverbes temporels permettent de structurer notre discours en indiquant si un évènement a lieu avant, simultanément ou après le moment de la parole (Reichenbach, 1947). Dans le cadre d’une aphasie (c.-à-d., une perte du langage consécutive à une lésion cérébrale), ces processus temporels sont fréquemment altérés, impactant la communication au quotidien (par ex., Bos & Bastiaanse, 2014 ; Fyndanis et al., 2018).

L’origine de ces difficultés reste toutefois controversée. Selon Levelt et al. (1999), les difficultés de flexion verbale dans l’aphasie seraient ainsi imputables à une atteinte de l’encodage morphophonologique, responsable de la concaténation de la racine d’un verbe et son affixe. Ce point de vue n’est toutefois pas partagé par Faroqi-Shah et Thompson (2007). Partant de ce modèle, les auteurs font un pas ‘vers le haut’ et suggèrent une origine pré-morphophonologique. Les personnes avec aphasie auraient ainsi des difficultés à activer ou sélectionner les traits diacritiques correspondant au contexte sémantique.

Outre la question de l’origine des troubles de morphologie flexionnelle verbale, la nature des difficultés fait également débat. En effet, les temps verbaux ne seraient pas tous affectés de manière similaire. Ce constat a conduit Bastiaanse et al. (2011) à développer la PAST LINKING Hypothesis (PADILIH). Selon cette hypothèse, les temps du passé seraient sélectivement atteints chez les personnes avec aphasie dans la mesure où un « liage discursif », coûteux en ressources cognitives, doit être établi entre le moment de l’évènement et le moment de l’énonciation. Cette dissociation entre les temps verbaux ne fait toutefois pas l’unanimité et n’a jamais été démontrée en français, raisons de la présente étude.

Objectifs

Notre étude poursuivait deux objectifs : (1) préciser l’origine des troubles de morphologie flexionnelle verbale dans l’aphasie et (2) déterminer si des dissociations entre les temps verbaux sont observées chez des locuteurs aphasiques francophones.

Méthode

Vingt-et-une personnes avec aphasie (PAA) et vingt-et-un sujets contrôles (CT) appariés ont été évalués sur leurs capacités de morphologie flexionnelle verbale par le biais de trois tâches. La première tâche (production d’une forme verbale fléchie) consistait à conjuguer un verbe dans une phrase contenant un adverbe temporel induisant du passé, présent ou futur (ex : réunir – hier, tu ____ ; réponse attendue : réunissais). La seconde tâche (sélection d’une forme verbale fléchie) se présentait dans un format similaire à la première, mais incluait trois réponses en choix multiples (ex : réunir – hier il ____ ; choix : réunit, réunissait, réunira). La troisième tâche (sélection d’un adverbe) requerrait de sélectionner parmi trois propositions l’adverbe temporel correctement associé à une phrase contenant une forme verbale fléchie (ex : ____ il réunit ; choix : il y a 5 ans, maintenant, dans plusieurs années).

Des modèles de régression logistique à effets mixtes avec deux niveaux de variabilité (participants et items) ont été réalisés sur les réponses des participants. Les modèles incluaient les effets fixes pour le groupe (PAA vs CT – objectif 1) et le temps (passé, présent, futur – objectif 2). Des tests de rapport de vraisemblance ont été systématiquement utilisés pour

comparer les modèles avec les effets principaux à des modèles sans ces effets afin d'évaluer la significativité des effets principaux.

Les hypothèses suivantes ont été émises : (1) un déficit dans les trois tâches indiquerait une perturbation dans la sélection des traits diacritiques de temps, tandis qu'une atteinte sélective des tâches 1 et 2 ou de la tâche 1 évoquerait un déficit dans la sélection ou la récupération de la bonne forme verbale ou un déficit d'affixation ; (2) une atteinte sélective du passé, en raison du liage discursif, est attendue.

Résultats

Les tests de rapport de vraisemblance ont montré un effet principal du groupe dans les trois tâches (T1 : $\chi^2(1) = 36.65, p < .001$; T2 : $\chi^2(1) = 19.06, p < .001$; T3 : $\chi^2(1) = 12.77, p < .001$), avec de moins bonnes performances chez les PAA que chez les sujets CT. Un effet du temps a également été observé dans les trois tâches (T1 : $\chi^2(2) = 13.82, p < .001$; T2 : $\chi^2(2) = 8.95, p < .02$; T3 : $\chi^2(2) = 12.55, p < .002$). Des tests post-hoc ont révélé de moins bonnes performances pour le temps du passé que pour les temps du présent ($\beta = -1.789, SE = 0.48, z = -3.713, p < .001$) et du futur ($\beta = -1.518, SE = 0.54, z = -2.805, p < .02$) seulement dans la tâche 1 (production d'une forme verbale fléchie).

Discussion

Notre étude a démontré que les PAA performaient moins bien que les sujets CT à l'ensemble des tâches (production et sélection d'une forme verbale fléchie et sélection d'un adverbe). Ces résultats confirment les difficultés de morphologie flexionnelle verbale dans l'aphasie (Bos & Bastiaanse, 2014) et évoquent une origine au niveau de la sélection des traits diacritiques (Faroqi-Shah & Thompson, 2007). À l'avenir, l'introduction de mesures temporelles non verbales permettrait d'explorer l'hypothèse d'une origine plus 'conceptuelle'.

Concernant notre deuxième hypothèse, nos résultats soutiennent en partie l'hypothèse PADILIH (Bastiaanse, 2011), avec de moins bonnes performances pour le temps du passé que pour les temps du présent et du futur dans la première tâche. De façon intéressante, l'absence de différence aux deux autres tâches suggère que ces dissociations pourraient être portées en partie par le coût cognitif des tâches (Fyndanis et al., 2018). Ce coût cognitif de la tâche se surajouterait au coût cognitif du liage discursif du passé, engendrant des difficultés plus importantes dans certaines conditions chez les PAA ayant des ressources cognitives limitées. De futures analyses portant sur l'effet de variables cognitives (les fonctions exécutives notamment) sur les performances fourniraient un éclairage nouveau sur ces dissociations.

Mots-clés : aphasie, temps verbaux, coût cognitif

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The cognitive foundation of time: Evidence from the sign language Kata Kolok

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Keywords: sign language, cognitive semantics, epistemic distance

This presentation brings together insights from the study of sign languages and cognitive-linguistic research on tense and aspect, by exploring the temporal distinctions encoded in Kata Kolok, a Balinese sign language that has been used by deaf and hearing villagers for at least six generations (de Vos 2012ff). In our study, we focus on two highly polysemous aspectotemporal markers: FINISH and PIDAN. Our analysis of these particles is based on an in-depth study of naturalistic signing data from the Kata Kolok Corpus (de Vos 2016), which contains over 62 hours of video of 36 Kata Kolok signers in diverse settings, recorded between 2007 and 2009. In total, we retrieved 183 instances for FINISH and 35 instances for PIDAN. Further syntactic and semantic analysis shows that FINISH can occupy various functions, which are summarized in Table 1, together with their frequency of attestation:

Syntactic Function	Meaning	Tokens	Utterances
Main verb	‘finish’	39	30
Discourse marker	‘then’, ‘so’, yielding the floor to another discourse participant	23	23
Predicative adjective (noun modifier)	‘finished’, ‘gone’ (e.g. ‘there is no more rice’)	18	16
Aspect marker (predicate modifier)	Completive, perfect or perfective aspect	63	56
Ambiguous		39	24

Table 1: Syntactic and semantic functions of FINISH

These different functions are closely related to one another – and thus not always neatly distinguishable (cf. the ‘ambiguous’ cases in the table). It is therefore unsurprising that they should occupy consecutive stages on crosslinguistically attested diachronic pathways (see e.g. Bybee et al. 1994: 56, 105). Yet it is remarkable that Kata Kolok signers apply these different interpretations simultaneously – a strategy that is, to our knowledge, otherwise only attested in spoken creole languages (Winford 2001: 171-173). In each of its uses, FINISH clearly displays a sense of ‘completion’ – whether this be in a temporal sense or not. This merging of temporal and non-temporal senses gives extra credit to the approach advocated in, among others, cognitive-semantic accounts of aspectual constructions as invoking more than time (see e.g. De Wit 2017). Along the same lines, PIDAN can take on a wide range of temporal and non-temporal functions: it is used to express both past- and future-time reference (with various remoteness distinctions), (long) duration, and hypotheticality (see Table 2).

Syntactic Function	Meaning	Tokens	Utterances
Past tense	past-time reference	15	15
Future tense	future-time reference	8	8
Durative adverb	‘a long time’, ‘longer than expected’	7	6

Modal adverb	hypotheticality	3	2
Ambiguous		5	4

Table 2: Syntactic and semantic functions of PIDAN

To our knowledge, this combination of usage types has not been attested in typological/grammaticalization studies, yet again it makes perfect sense in the light of cognitive-semantic accounts that point to the epistemic foundations of time and tense (e.g. Brisard 2002; Langacker 2011): by assigning the same marking to *all* the contexts that they deem epistemically/temporally remote, Kata Kolok signers offer a strong piece of evidence for the relevance, both cognitively and linguistically, of the epistemic notion of (non-)immediacy.

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Understanding Time in Children's Mind: Development of Mental Timeline and Temporal Orientation on Three Axes

Space is an essential means for humans to understand time. Children also map time onto space (e.g., past is “left”; future is “right”) and conceptualize it as a line termed the “mental timeline” (MTL). Tillman et al. (2022) revealed that 3-6-year-old American children are learning to organize the MTL linearly and orderly, like American adults. 5-year-old children begin to arrange time-related events in a linear rather than a random representation, and in a specific orientation such as placing earlier events on the left.

However, the MTLs of Mandarin-speaking and English-speaking adults exhibit differences on both the vertical and sagittal axes, shaped by linguistic and cultural influences. Unlike the horizontal axis, Mandarin speakers are more dominant on the vertical axis than English speakers (Fuhrman et al., 2011). Additionally, Chinese adults prefer to associate the “bottom” with the future and the “top” with the past (Bergen & Lau, 2012; Gu et al., 2017), whereas English adults are less of such a preference (Fuhrman et al., 2011). Moreover, in Mandarin, the word ‘front’ may refer to both the future and the past—an ambiguity uncommon in English (Gu et al., 2019). Despite the clear distinctions in adults’ MTL, it is unclear whether English-speaking and Mandarin-speaking children follow similar developmental trajectories.

In this study, we investigated the developmental milestones of MTL in Mandarin-speaking children. Specifically, we asked two questions: 1) Considering Chinese culture and language may influence MTL, when do Mandarin-speaking children develop the linearity of MTL and its orientation? 2) Do Chinese children and English children differ in MTL orientation (Tillman et al., 2022), particularly for the vertical and sagittal axes that have a special time-space mapping in Mandarin?

145 Mandarin-speaking children (4-6 years, mean = 4.96), divided into three conditions (horizontal, vertical, and sagittal axes), undertook a binary forced-choice task (testing MTL, adapted from Tillman et al., 2022) for ten picture stories. Each picture story had three cards, and children heard a story. For example: “First, there was an egg. Then the egg cracked. And a baby chick came out!” Children were asked to do two tasks: One was taking a linear preference test, in which they chose the appropriate images for the story (either sequential time images - egg, egg cracked, baby chick or the disordered one - egg, baby chick, egg cracked). The second task was an orientational preference test in which children chose their preferred orientations that were arranged in an opposite direction on the same axis (for the sagittal condition, Back-Front vs. Front-Back). We used glmer mode in R to analyse the data, with the independent variable type of axis, and the dependent variable children’s binary responses on ten linear preference tests and ten directional preference tests. The results were as follows:

First, the MTL’s linear preference was affected by age ($p < .001$). Compared to the chance level (50%), on the horizontal and vertical axes, children significantly preferred linear over disordered MTL, both at 4 years (horizontal: 62%; vertical: 65%, $ps < .001$) and 5 years old (horizontal: 80%; vertical: 82%, $ps < .001$). On the sagittal axis, it was higher than the chance level for children aged 5 (74% vs. 50%, $p < .001$), but not for children aged 4 (55%, $p = .074$).

Second, for the preference of MTL orientation, on the horizontal and vertical axes, age predicted the preference ($p < .01$). Children significantly preferred ‘past = left and future = right’ (LR) MTL, and ‘past = top and future = bottom’ (TB) MTL, at 4 years old (61% LR and 62% TB, $ps = .001$) and 5 years old (73% LR and 73% TB, $ps < .001$). However, on the sagittal axis, there was no significant orientation preference, regardless of whether in 4 or 5-year-old children (49% and 42%).

Our study revealed that Chinese children begin to prefer MTL’s linearity and orientation by age 4, which marks a developmental milestone earlier than that observed in American children, who achieve this by age 5 on the horizontal and vertical axes (Tillman et al., 2022). This finding suggests the potential influence of cultural and linguistic frameworks on the early stages of temporal understanding in children.

There was a partial consistency in the orientational preferences of MTL between Chinese and American children, such as the left-right (LR) orientation was found in children in both cultures, but the top-bottom (TB) orientation did not emerge in American children (Tillman et al., 2022). This distinction underscores the impact of linguistic and non-linguistic influences on temporal cognition.

Furthermore, until 5 years old, children start to develop sagittal MTL’s linearity rather than its specific orientation, which is later than horizontal and vertical axes. This pattern can be explained by the ambiguity in the sagittal space-time metaphors (both future and past can be mapped to the front), mirroring the complexities and reflecting a broader, cross-cultural pattern in the development of temporal sequencing.

In short, our study provides insight into how temporal cognition develops in young children, particularly in non-Western contexts. As the first study to examine the 3D time-space mapping in Mandarin-speaking children, it expands our understanding of the ways in which language and culture interplay with the cognition of time.

Keywords: Time and cognition; Chinese children; Timeline development

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Looking downward to the future: What eye movements reveal about Chinese people's conceptualisations of time

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In English, as well as in many other languages, people often use spatial metaphors to talk about time, in examples such as “looking back to the past”, and “gazing ahead into the future”. Interestingly, these phrasings match the way English people think of the concept of time (Ulrich & Maienborn, 2010), and it even has some effect on behavioural measures: For instance, thinking about the future or past will lead English people's body to leaning forward or swaying backward (Miles et al., 2010). Additionally, words like “looking” and “gazing” are often used in such space-time metaphors, suggesting that people's eye gaze may reveal their concept of time. Given the general belief that eyes are the window to the soul, is there any link between eye movements and people's spatial conceptualisation of time?

There is indeed evidence showing that how people spatialize time can be deduced from their eye movements. For example, Stocker et al. (2016) compared Swiss Germans' eye saccades when they listened to sentence pairs expressing the past (e.g., “Now I am watching TV. Before that I was listening to music”) with saccades when listening to sentence pairs expressing the future (“Now I am watching TV. After that I will be listening to music”). Participants had significantly more upward saccades when hearing future-related concepts than past-related ones. In another study, Hartmann et al. (2014) found that when Swiss Germans mentally displaced themselves into the past or future for one minute each, they directed their eyes more to the right up when thinking of the future and more left down when thinking of the past. Across these studies there seems to be a robust vertical space-time association in eye movements, with the future mapped more above and the past more below (Beracci & Fabbri, 2022).

However, it is unknown whether this future-to-up/past-to-down space-time mapping in eyes is universally true. Especially, affected by the Chinese language and culture, Mandarin speakers gesture and think about time differently (e.g., past-in-front, past-to-up mappings) than most western language speakers (Boroditsky, 2001; Gu et al., 2017). If temporal processing evokes eye movements along the mental timeline in a language/culture-specific rather than universally similar way, eye movements of Chinese may reflect a different (even opposite) spatial conceptualisation of time than Swiss Germans. Especially, if language can guide speakers' eye movements (Papafragou et al., 2008), we expect that the language-specific preferences will be strengthened when lexical cues of Mandarin vertical space-time metaphors are present. However, if human beings' eye movement behaviour during temporal processing is indeed a universal cognitive and neurological process, we expect that Chinese will also reveal a strong tendency to look more upward when thinking about the future than the past, regardless of their language and culture.

To test these hypotheses, we conducted two eye-tracking experiments. In Experiment 1, we investigated whether Chinese people's eyes follow a different vertical mental timeline than the one reported for Swiss Germans during language comprehension of sentences that lexically refer to the past and future. Additionally, we examined whether the Mandarin vertical spatial-temporal metaphors influenced Chinese people's eye movements. Unlike results obtained previously with Westerners, Chinese had higher gazing positions when processing past-related sentences than future-related sentences. These eye-gaze related correlates of a vertical mental timeline appeared earlier when processing sentences with Mandarin vertical space-time metaphors than with neutral time expressions.

In Experiment 2, we further studied Chinese people's eye movements in a mental time travelling task which did not contain any direct lexical cues. Mandarin speakers were asked to

mentally displace themselves into the past and future each for one minute while looking at a blank screen. Participants' eye movements were tracked in these two minutes' temporal thinking. Unlike Swiss-Germans, when silently taking a mental time travelling, Chinese still directed their eyes more downward when conceptualizing the future than the past (see Figure 1); such effects were not due to differences in emotion or thinking difficulty between the past and future.

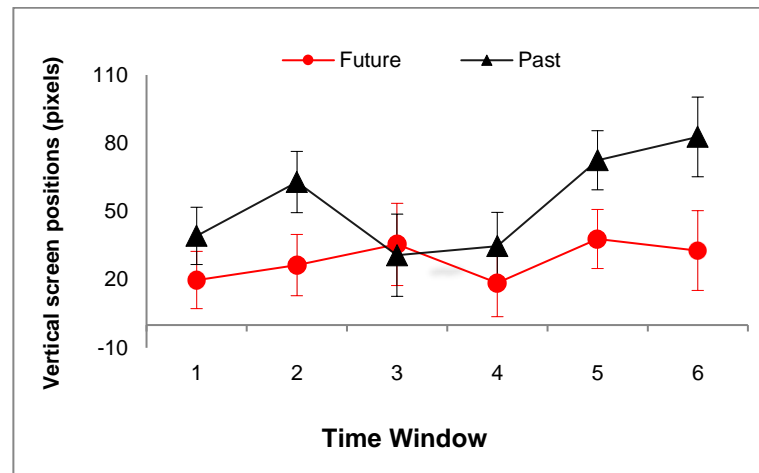


Figure 1. Mean vertical eye gaze position for future and past mental time travel separate for the time windows 0–10, 10–20, 20–30, 30–40, 40–50, and 50–60 s from task onset. Positive values represent gaze position in the upper (vertical) screen half. Error bars represent ± 1 SE.

In conclusion, the differences between Chinese and Westerners show that language and culture can shape people's eye movements when processing time. In addition, our study suggests that perception of time may induce a shift of attention to the left/right or up/down visual field. This can have implications for advertising or sales of time-related products. For example, products with their images facing toward the left (versus right) in advertising are evaluated more favourably when consumers focus on the past, whereas the reverse is true when consumers are future-focused (Zhang et al., 2018). If perceiving time with habitual spatial associations influences the allocation of attention in the visual field (Fischer et al., 2003), such mappings may in turn influence what we see and how we feel – and this could be culturally-dependent.

Keywords: time and space, timeline, conceptual metaphor, Chinese, language and thought

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Variations énonciatives dans des textes narratifs d'élèves de 8 à 11 ans.

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Les études portant sur des textes produits par des élèves d'école primaire et de collège montrent que les scripteurs éprouvent des difficultés à gérer le temps à l'écrit (Dolz-Mestre, Rosat & Schneuwly, 1989 ; Halté 1994 ; Cappeau, 2002 ; Romain, 2007 ; Cappeau & Roubaud, 2018). L'une des difficultés mentionnées concerne la fermeté du choix énonciatif. Les recherches conduites auprès des enseignants montrent que ces derniers sont peu favorables aux variations énonciatives considérant qu'un texte bien formé est un texte homogène du point de vue énonciatif (Rondelli, 2010). Ces considérations trouvent un écho dans les textes officiels qui ont, de fait, à certaines périodes, incité les enseignants « à rendre les élèves sensibles aux ruptures qui surviennent dans leurs productions et à les conduire à rétablir l'homogénéité » (BO, 2002). Ce faisant, les enseignants adoptent une posture de gardien de la norme mais comment penser la question de la norme en matière d'énonciation ? En effet, de nombreux linguistes (Combettes & Fresson, 1975 ; Boyer, 1985 ; Monville-Burston & Waugh, 1985 ; Petitjean, 1986 ; Dolz, 1993) se sont intéressés à l'hétérogénéité énonciative présente dans des textes de scripteurs adultes, professionnels ou non de l'écriture, reconnaissant par là-même la validité et la pertinence de certaines variations. Par conséquent, si certaines alternances de temps verbaux dans les textes des élèves jeunes dont les compétences rédactionnelles sont en cours d'acquisition ne sont pas acceptables, pourquoi d'autres, en revanche, ne pourraient pas l'être ? Nous faisons l'hypothèse que les textes des élèves présentent, tout comme les textes d'experts, des alternances de temps verbaux qui produisent des effets de sens pertinents.

Pour répondre à notre question, nous avons recueilli un corpus de 180 textes narratifs d'élèves du CE2 au CM2 (de 8 à 11 ans), produits en réponse à une consigne d'écriture qui repose sur le principe de l'exercice alpha-oméga (Brassart 1987), le début et la fin du texte étant imposés. À l'instar de Bras et al., nous nous intéressons « à la question de la cohérence des textes du point de vue du récepteur, c'est-à-dire du point de vue de celui qui cherche à comprendre un texte » (2021, p. 116). Nous adoptons, par conséquent, une posture de lecteur sensible aux effets produits qui nous invite à dépasser une lecture en creux qui ne viserait qu'à pointer les erreurs présentes dans les textes des élèves (Cappeau & Roubaud, 2005 ; Cappeau & Roubaud, 2018) en convoquant des théories linguistiques capables de rendre compte des effets produits par certaines alternances de temps verbaux. Notre approche est descriptive. Notre méthode d'analyse repose sur l'identification des variations énonciatives et des effets produits en nous appuyant sur les motivations des ruptures identifiées dans les textes d'experts (Dolz, 1993). Nous nous intéressons, plus particulièrement, aux alternances qui relèvent d'une hétérogénéité externe (passé composé et présent de narration) ainsi qu'aux alternances qui relèvent d'une hétérogénéité interne (passé composé et passé simple).

Les premiers résultats montrent que si certaines ruptures ne sont pas acceptables pour diverses raisons (présence d'éléments perturbateurs, glissements...) d'autres, en revanche, le sont qui produisent un effet. Tel est le cas de l'emploi du présent de narration dans un récit au passé composé pour marquer un épisode à des fins de dramatisation, singulariser un épisode, démarquer la fin du récit, dynamiser le récit ou encore indiquer une accélération. L'emploi du passé simple, dans ce même contexte, permet, quant à lui, soit une mise en relief correspondant à une phase de dramatisation, à la clôture ou à une phase d'évaluation soit une distanciation.

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Analyse des stratégies de repérage et de classification du participe passé à valeur adjectivale chez des élèves de cycle 3

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Mots-clés : verbe ; adjectif ; aspect ; critères définitoires ; métalangage ; didactique

Résumé

La présente communication s'inscrit dans le cadre du projet REALang (Recherche sur l'Enseignement Apprentissage de la Langue en milieu scolaire) qui s'efforce de rendre compte de la réalité des savoirs acquis par les apprenants en cycles 2 et 3 (Gourdet, P., 2014 ; Lavieu-Gwozdz, B., 2014) et des pratiques enseignantes autour de deux catégories : le verbe et l'adjectif. Conformément aux programmes en vigueur (BOEN n° 31 du 30 juillet 2020), à la fin du cycle de consolidation (CM1-6^e, cycle 3), les élèves doivent être en mesure de reconnaître un verbe, un adjectif et de comprendre la notion du participe passé dans l'objectif de l'acquisition de l'orthographe grammaticale. Ils doivent également identifier les constituants d'une phrase simple et notamment l'attribut du sujet.

Nous nous fixons comme objectif l'étude du discours métalinguistique employé par les élèves afin d'identifier le verbe et l'adjectif, ce dernier dans sa fonction d'épithète (GN) et d'attribut (GV – verbes attributifs). En effet, il semblerait que la morphologie de la catégorie particulière du participe passé à valeur adjectivale (adjectif dérivé d'un verbe) mette les élèves devant un dilemme de classification, générant ainsi un véritable défi didactique pour l'enseignant. La performance au niveau de la reconnaissance de cette forme par les élèves est particulièrement faible. En quoi le discours déclaratif des élèves, laisse-t-il entendre que le participe passé à valeur adjectivale correspond à un verbe ? Quel lien cette forme entretient-elle avec l'adjectif ? En quoi ce questionnement préparerait-il le terrain pour approfondir l'étude des valeurs aspectuelles en français (progression : un vase cassé / le vase est cassé / le vase est cassé maintenant / le vase a été cassé), notamment en cycle 4 ?

Alors que les apports de la linguistique structurale attirent davantage notre attention sur les critères morpho-syntaxiques permettant d'identifier les catégories du verbe et de l'adjectif, le recours au seul critère sémantique de la part des élèves ne leur permet pas de produire un discours métalinguistique approprié pour discriminer le verbe de l'adjectif. Les données recueillies montrent qu'ils recourent très partiellement aux manipulations syntaxiques alors que les opérations de commutation et de suppression pourraient améliorer le score d'identification du participe passé à valeur adjectivale. Entre connaissances sur l'adjectif très rudimentaires (Beumanoir-Secq, M. & Renvoise C., 2020) et faible utilisation du métalangage compensée par la production d'exemples où la conceptualisation de la classe grammaticale d'adjectif reste faible (Lepoire-Duc, S. & Valma, E., 2021), il y a urgence d'élaborer un discours didactique permettant aux élèves de convoquer dans leur raisonnement l'environnement syntaxique du participe passé à valeur adjectivale afin d'identifier correctement ses fonctions. Le corpus étudié est constitué grâce à trois activités permettant de recueillir une connaissance intériorisée (Sautot, J-P., Beumanoir-Secq, M., Gourdet, P., 2021) auprès d'élèves de cycle 3 : une dictée, une reconnaissance catégorielle

dans un texte imposé, et le discours métalinguistique des élèves définissant la classe grammaticale d'adjectif et de verbe. Les données ont été collectées en septembre 2022 et en janvier 2023 (cohortes constituées de 1057 élèves en CE2, 636 élèves en CM1, 1294 élèves en CM2, 172 élèves en 6e et 240 élèves en 3^e) et correspondent au protocole du projet REALang² (projet initial : entre septembre 2019 et janvier 2020).

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Les « deux mondes énonciatifs » : vers des choix didactiques raisonnés, résonnants ?

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Ce fut midi. Les voyageurs montèrent dans l'autobus. On fut serré. Un jeune monsieur porta sur sa tête un chapeau entouré d'une tresse, non d'un ruban. Il eut un long coup. Il se plaignit auprès de son voisin des heurts que celui-ci lui infligea. Dès qu'il aperçut une place libre, il se précipita vers elle et s'y assit.
Extrait d'*Exercices de style*, « *Passé simple* », de Raymond Queneau

Cette contribution inscrite dans le champ de la didactique du français comme langue de scolarisation se focalise sur les valeurs de deux temps de référence appartenant au système dit du passé dans la terminologie scolaire (Balma & al., 2013) : le passé composé (désormais PC) et le passé simple (désormais PS). Elle vise à interroger les conceptualisations des oppositions PC / imparfait (désormais IMP) et PS/IMP susceptibles de favoriser l'apprentissage des usages des temps verbaux au sein des textes. Comment relever les défis de l'enseignement du TAME sur le terrain de l'école et du collège ? Dans notre cas, comment faire en sorte que les élèves, de la fin de l'école primaire (7-8^e Harnos, âgés entre 11 et 13 ans) et du début de l'école secondaire (9-10^e Harnos, âgés entre 13 et 15 ans) sachent convoquer les temps verbaux adéquats et justifier leur emploi.

Notre communication s'articulerait en trois temps : une contextualisation du projet GRAFE'Maire¹ et l'explicitation de ses principales orientations théoriques et didactiques ; la présentation d'une des séquences d'enseignement autour des valeurs des temps du passé qui a été élaborée et testée dans les classes d'enseignant·e·s romands du secondaire ; la réception de nos propositions par l'analyse des interactions entre les enseignant·es et les élèves lorsqu'ils se trouvent en situation de justifier de l'emploi de tel ou tel temps verbal.

Le projet GRAFE'Maire vise à penser les interactions entre grammaire et textualité (Bulea Bronckart, 2020) de manière à amener les élèves à construire une représentation systémique de la langue, tout en développant des compétences utiles pour la production et la compréhension des textes (CIIP, 2010). Conduit dans plusieurs cantons romands, le projet a suivi deux grandes phases : une phase d'analyse des pratiques courantes et des ressources didactiques (Marmy & al., 2022) ; une phase d'ingénierie didactique visant l'élaboration de séquences d'enseignement innovantes portant sur deux objets grammaticaux contrastés, le complément du nom et les valeurs des temps du passé ; cette 2^e phase a intégré l'expérimentation des séquences puis leur reprise en vue d'une diffusion plus large². Sur le plan des orientations théoriques et didactiques, les séquences créées reposent sur un ensemble de choix (Merhan & Gagnon, 2021) :

- En fonction du contexte, les temps peuvent exprimer plusieurs valeurs. C'est « le processus discursif (le processus narratif ou expositif) qui constitue le créateur de concordance ou d'homogénéité ; le processus est doté de sa propre temporalité et c'est dans le repérage par rapport à cette temporalité de l'activité discursive que les procès se trouvent eux-mêmes organisés temporellement (Bronckart, 1997, pp. 315 et 319).

¹ Projet soutenu par le Fonds National suisse de la Recherche Scientifique (subside n°100019-179226, 2018-2022).

² Les séquences élaborées sont accessibles sur la plateforme GRAFE'Maire hébergée par l'Université de Genève : <https://www.unige.ch/fapse/grafe/equipes/equipe-de-recherche-grafemaire/outputs-orientes-application>.

- Les temps verbaux sont organisés en systèmes et sous-systèmes qui s'articulent au sein des textes (Adam & Revaz, 1996). À l'intérieur d'un même texte, plusieurs systèmes peuvent coexister.
- Lorsqu'il situe son texte dans un « monde discursif » (Bronckart, 1997) disjoint de la situation de production, celui qui écrit a le choix entre plusieurs temps de référence, notamment le PS ou le PC, qui sont deux formes en concurrence. Le choix d'un temps de référence – PS ou PC – peut se faire en ayant conscience de leurs valeurs, c'est-à-dire en considérant que la « plus exacte caractéristique [d'un temps verbal] est d'être ce que les autres ne sont pas » (Saussure, 1916 : 222), selon un rapport d'opposition.
- Les combinaisons entre les formes verbales, l'aspect lexical et les organisateurs temporels entrent dans le « calcul » de la valeur de chaque temps (Gosselin, 1996 ; Moeschler & al., 1998).

Pour illustrer nos choix didactiques de manière concrète, nous nous arrêterons sur une des séquences qui a été proposée à cinq enseignants de 10^e année. En termes d'ingénierie didactique, la séquence démarre par une phase d'analyse, de manipulations et la formulation de justifications. Par exemple, l'élève est amené·e à créer des phrases en combinant des étiquettes montrant des énoncés formulés à l'infinitif qu'il·elle doit conjuguer au PS, au PC, à l'IMP ou au PQP (plus-que-parfait) à des étiquettes présentant des organisateurs textuels (ce matin, ce matin-là, tous les jours...). Il·elle peut aussi créer des étiquettes d'organisateur de son choix. Au fur et à mesure, il·elle s'interroge sur les combinaisons acceptables. Ces activités grammaticales donnent ensuite lieu à une phase de conceptualisation visant à expliciter et à exercer des procédures. La phase 3 de la séquence prévoit le réinvestissement textuel des acquis puis une observation du rôle de la notion dans des textes. Pour cette activité finale, l'élève est à nouveau interrogé·e à propos des textes *Passé simple*, *Imparfait* et *Passé indéfini* dans lesquels R. Queneau s'est amusé à écrire en utilisant une seule forme verbale.

Grâce à l'analyse des interactions entre les cinq enseignant·e·s et leurs élèves au cours de l'expérimentation d'une de la séquence, nous focaliserons sur une activité de reformulation d'un texte au PS vers un texte au PC, nous étudierons la réception de la séquence par les élèves du secondaire, et les traces d'appropriation de la conceptualisation des deux mondes discursifs par ces derniers.

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Si la question de la temporalité a donné lieu à de très nombreux travaux dans les langues du monde, permettant la construction de cadres théoriques étendus, l'occitan a en revanche été relativement peu décrit. Nous travaillons donc, dans la lignée de (Bras & Sibille, 2022), sur le temps en occitan, à étayer les études dédiées aux temps verbaux et autres marqueurs temporels en occitan. Pour étudier la structure temporelle des textes, nous nous plaçons dans le cadre d'une théorie formelle de l'interface sémantique-pragmatique, la SDRT (*Segmented Discourse Representation Theory* de Asher et Lascarides (2003)), extension de la DRT (Kamp et Reyle, 1993), intégrant la structure du discours en termes de relations de cohérence. Nous choisissons la version de la SDRT de Vieu et al. (2005) intégrant le traitement des adverbiaux cadratifs tels que définis par Charolles (1997).

Il s'agit de dresser un inventaire des différents moyens linguistiques employés pour structurer temporellement les textes – nous nous concentrons sur trois types de marqueurs temporels : le système verbal, les adverbiaux de localisation temporelle et les connecteurs temporels –, afin de décrire leur fonctionnement ainsi que la structuration du discours qu'ils contribuent à construire, dans le but d'en étudier la structure temporelle. Il existe quelques travaux sur l'occitan écrit (Barcelo, 2004 ; Bras, 2005 ; Bras et Sibille, 2020, 2022) et sur l'occitan oral (Carruthers et Vergez-Couret, 2021, 2023), deux modalités que nous souhaitons réunir ici.

Nous avons construit pour cela un corpus original, à la fois écrit et oral, afin de pouvoir comparer les mécanismes spécifiques de l'expression temporelle dans ces deux modalités. Il réunit des textes écrits et des textes oraux transcrits relevant du genre du conte. La constitution du sous-corpus oral s'est appuyée sur des enregistrements audio ou vidéo de l'auteur occitan Joan Bodon en situation de conteur réalisés entre 1964 et 1974. Nous avons associé les versions littéraires de ces contes, issues du volume *Contes del Drac* du même auteur (1975), pour former le sous-corpus écrit. Ainsi construit, notre corpus de dix textes, partitionné selon la distinction oral/écrit, offre la possibilité d'associer la transcription de la performance orale du conteur avec la version littéraire du même conte.

Outre l'enjeu descriptif et théorique pour l'occitan lui-même, l'un des enjeux est aussi de mettre à l'épreuve la théorie considérée (SDRT) sur des données de l'occitan, en profitant de cette occasion précieuse et rare de disposer de deux textes de contenu informationnel proche produits par la même personne, mais dans deux modalités différentes, afin de dégager les spécificités d'un certain type d'oralité sur le plan de la construction temporelle. Cela nous permettra également de tester la robustesse de la théorie sur des données orales, et de profiter par là des enseignements de ces données pour enrichir la théorie. Nous nous inscrivons ainsi à la suite d'autres mises à l'épreuve de la théorie sur des corpus écrits en français (Asher et al., 2017, Bras et Vieu, 2022), et oraux (Prévoit et al., 2021), en ajoutant de nouvelles dimensions et en changeant de langue.

Une première annotation des marqueurs temporels permet d'en faire un inventaire et d'en étudier les valeurs en usage. La SDRT et les manuels d'annotation établis pour les études précédemment citées proposent de segmenter le discours puis d'identifier les relations de discours entre segments, pour fournir une représentation de la structure de discours. C'est ensuite de la structure de discours qu'est inférée la structure temporelle. En effet, les relations de discours sont chacune porteuses d'une caractérisation temporelle et permettent par là d'établir une relation temporelle. Nous proposons d'étendre les méthodologies développées dans ces travaux pour la langue occitane et pour l'oral et de les compléter par une méthodologie d'annotation originale des marqueurs temporels et aspectuels. L'objectif *in fine* est de comparer les structures de chaque narration étudiée, à la fois pour dégager des motifs récurrents associés à l'emploi de certains marqueurs temporels, mais également pour

en saisir la complexité d'emploi, et surtout de comparer les deux versions d'un même conte pour comprendre les spécificités de construction de l'écrit et de l'oral.

Nous nous sommes concentrées, pour cet exposé, sur la comparaison de la macro-structure de discours de deux contes, *l'Auca* et *la Pèl*, dans leurs modalités orale et écrite, et sur le rôle des indices linguistiques qui nous permettent de l'établir. Nous donnerons quelques exemples de phénomènes linguistiques qui ont, d'une manière ou d'une autre, été sources de questionnements lors de l'annotation en relations de discours et nous ferons un focus sur l'emploi de l'adverbe *alara* dans notre corpus et des différents rôles qu'il joue dans la construction des représentations de discours. Enfin, nous ne considérons pas ces données indépendamment de leur contexte de production, conscientes de l'impact possible à la fois du degré d'oralité de la performance et de la coexistence d'une version écrite présente à la mémoire du conteur, sur la structuration du récit.

Notre analyse montre que, dans ces contes, la langue orale, tout en faisant usage de marqueurs que l'on retrouve aussi dans la langue écrite, présente des différences dans l'utilisation de ceux-ci. Nous prolongeons avec cette étude certaines observations faites par Carruthers et Vergez-Couret (2021) sur le lien entre oralité et analyse de la structure du discours.

Nous pouvons dégager deux perspectives majeures de ce travail. La première est théorique et vise à adapter les règles de construction des représentations en SDRT pour l'occitan. La seconde est empirique et vise à profiter de ce premier pont fait avec des données orales pour définir une méthodologie d'annotation de l'oral pour l'étude de la structure temporelle, afin de produire un corpus pour l'occitan entièrement annoté en relations de discours, et pour ouvrir la voie à l'étude d'une oralité bien plus spontanée sans préparation aucune (Garrigou, en préparation).

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Nominal Tense-like Categories in Siberia: a Case of Even and Possible Contact Influence

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Nominal tense is a grammatical category that shows how nominals are distributed on a timeline (Nordlinger and Sadler, 2004). Nominal tense is traditionally found and described in languages of South and North Americas and Africa, although it is present in languages of Siberia as well. Samoyedic languages (namely, Nganasan, Tundra and Forest Enets, Tundra and Forest Nenets) have a grammatical category of predestinative which holds nominal tense semantics, namely future possession (Helimski, 1994; Leisiö, 2014; Nikolaeva, 2015). Destinative case, a category which is similar semantically but different structurally, is found in Tungusic languages. It is attested in Even, Udihe, Oroch, Oroch, Ulch, Kilen and Nanai, and not found in Evenki, Negidal, Oroqen and in the Manchu-Jurchen branch. The aim of the research is to describe semantic and structural features of destinative in Even based on fieldwork data¹. Additionally, I compare it with the Samoyedic predestinative and speculate about the areal status of future possession in Siberia.

In Even, the destinative occurs on a head of a possessive phrase which consists of a theme noun marked with destinative or another case and a possessive suffix and, in case of a lexical possessor, an unmarked possessor (future possessor for destinative) before the theme noun. Destinative marker takes the case position in a wordform and cannot co-occur with other cases, which makes it a part of the case system (Example 1). However, it has some semantic and structural traits unusual for other cases. First, destinative cannot occur without possessive markers. Also, destinative occurs with nominals in three different syntactic positions (subject (Example 2), direct object (Example 1) and functive adjunct (Example 3)), while subject and direct object in Even can also be marked with nominative and accusative cases respectively. The only difference between nouns in nominative or accusative with possessive markers and nouns in destinative is whether possession is in the present or expected in the future. Finally, unlike other cases, destinative is not duplicated on dependent adjectives and participles. Instead, nominative or accusative case marker is attached depending on the syntactic position (Example 4).

Usually the term ‘beneficiary’ is used to describe the semantics of future possessor, though in some cases its semantics is different from the beneficiary (according to the definitions in Kittilä & Zúñiga, 2010; Luraghi, 2016). Destinative cannot occur in contexts without an assumption of future change from one possessor to another. It can also occur on inanimate entities and mark recipient, but not addressee. All these features of destinative liken it to the definition of nominal tense, namely, future possession, although it is a part of the case system.

Even destinative and Samoyedic predestinative have a range of similar features. Besides meanings ‘X destined to Y’ or ‘Y’s future X’, they both require possessive markers, cannot be promoted by passive, and occur in the same syntactic context. The most salient difference between future possession in Samoyedic and Tungusic is that in Samoyedic the marker has a specific slot, while in Tungusic it is embedded into the case paradigm. Also, in Samoyedic languages (according to Nikolaeva, 2015) a possessee marked with destinative has to be already known, so the examples like *Your future wife smokes* are ungrammatical, while it is not true for Even.

¹ The fieldwork data was collected during the field trip to the villages Esso and Anavgaj in Bystrinsky district of Kamchatka Krai in July 2021 organized by HSE University.

Besides Tungusic and Samoyedic, different nominal tense-like categories are also found in other language families of Siberia, such as Chukotko-Kamchatkan, Eskimo-Aleut and Yukaghir. The presence of similar features in different language families could presumably be a result of language contacts. There are a number of hypotheses that explain how this spread could happen generally and how (pre)destinative was shared among Tungusic and Samoyedic in particular, though all of them confront a range of problems. The future research on this area will be determined on further analysis of semantic and grammatical properties of nominal tense in Siberia, and search for evidence for or against the hypotheses about language contact influence.

Examples:

- (1) *bi aŋa-ni-wu anton urbak-ka-n*
 I sew-PST-1SG A. shirt-DST-POSS.3SG
 ‘I sewed a shirt for Anton (that is destined for Anton)’. (fieldwork, 2021)
- (2) *atikan-ga-ku nurge-φ-n*
 girl-DST-POSS.1SG dance-NFUT-POSS.3SG
 ‘My future wife (lit. a girl, destined to me) is dancing’. (fieldwork, 2021)
- (3) *bi bak-ri-wu anton men ge-ga-ji*
 I find-PST-1SG A. REFL friend-DST-POSS.REFL.SG
 ‘I found Anton as a friend to myself’. (fieldtrip, 2021)
- (4) *akən bu-ri-n asatkan-du uj-če-w uken'i-ŋ-ga-n.*
 mother give-PST-3SG girl-DAT boil-PCT.PST-ACCmilk-AL-DST-POSS.3SG
 ‘A mother gave her daughter boiled milk for her.’ (fieldwork, 2021)

Abbreviations: 1, 3 — person; AL — alienable possession; ACC — accusative case; DAT — dative case; DST — destinative case; NFUT — non-future tense, PCT — participle; POSS — possession; PST — past tense; REFL — reflexive; SG — singular.

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Back to the past and down to the future: Asymmetric timeline expressions in Chinese Sign Language based on naturalistic data

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Research on timelines in sign languages has mostly been reported for Western sign languages, although Engberg-Pedersen (1999) has already pointed out that timelines in non-western sign languages are rarely known. So far, no study has systematically looked at timelines in Chinese Sign Language (CSL), even though it has two intriguing premises: First, users of Chinese Sign Language (CSL) share a similar Chinese culture with the hearing community, but little is known about how time is encoded in CSL and whether CSL conveys time differently than spoken Mandarin and gestures (Wu & Li, 2012). Second, spoken Mandarin displays different space-time mappings than Western languages, and speakers of these languages also produce different timeline gestures (e.g., Casasanto & Jasamin 2012; Gu et al, 2017). It is entirely unknown how CSL timelines may be different from Western sign languages.

The present study makes a first attempt to document how temporal concepts, particularly timelines, are expressed in CSL naturalistic data. Different from spoken English, the study of a non-Western signed language (i.e., CSL) provides a unique opportunity to better understand timeline mechanisms in a language that differs in typology and modality. Furthermore, it contributes to our understanding of the relationship between space, time and language, and the use of metaphors in sign language in general.

We studied the temporal expressions of 72 deaf signers (mean age = 61.8 years, range 21-96 years) from the Shanghai Sign Language Corpus, in which deaf people had naturalistic conversations about life topics. We annotated 1259 temporal expressions and coded 3D timeline signs (vertical; lateral; sagittal) with movement directions on an axis (e.g., upwards; backward; leftward).

Results showed that for expressions of the past (N = 661), CSL signers mainly used the sagittal axis (87.14%) and occasionally the vertical axis (12.41%), but hardly the lateral axis (0.45%). In contrast, for expressions of the future/later (N = 598), they mainly used the vertical (60.20%) and lateral axes (38.29%), but hardly the sagittal axis (1.51%). Regression analysis showed that when changing from past to future concepts, signers used more lateral and vertical axes, but less often the sagittal axis (all $p < .001$).

As for dominant space-time mappings on each axis, on the vertical axis there were only future-to-down/past-to-up mappings (100%) and on the sagittal axis, almost all mappings were future-in-front/past-at-back mappings (99.83%). On the lateral axis, future-to-left/past-to-right mappings were significantly more frequent than future-to-right/past-to-left mappings (83.18% vs. 16.82%, $p < .001$). The lateral timeline is used as an event sequencing line, on which CSL signers seem to use gesture-like forms instead of full forms of signs to express time, functioning like time adverbials in sign language.

Surprisingly, dominant space-time mappings show a systematic movement asymmetry on each timeline. CSL only has past-to-backward but hardly any future-to-forward mappings (98.63% vs. 1.37%, $n = 584$, $p < .001$). On the vertical axis, the downward-to-future was the dominant movement, whose proportion (81.45%) was higher than that of upward-to-past movements (18.55%, $p < .001$). Interestingly, younger signers had fewer past-to-up but more pas-to-back than older signers ($p = .0032$). Finally, for the dominant future(late)-to-left(past-to-right) mappings on the lateral axis, there were only leftward movements mapping to the future/late (100%). Rightward movements were also mapped to the future/late, but the proportion was significantly smaller than the leftward (82.97%) movements ($n = 229$, $p < .001$). See a summary in Table 1.

Table 1: Past/future to timeline mapping across modalities in Chinese culture

Timelines	Sagittal		Vertical		Lateral	
Direction	<u>Forward</u>	<u>backward</u>	<u>Upward</u>	<u>Downward</u>	<u>Leftward</u>	<u>rightward</u>
Chinese speech	F/P	P/F	P	F	Na.	Na.
Chinese gesture	F/P	P/F	P	F	P	F
CSL	Na.	P	(P)	F	F/(P)	Na./(F)

Note: F=Future; P=Past, F/P=Future or Past, Na.=None, () denotes a secondly or minor feature

We explain the results in terms of cultural and language contacts as well as modality constraints. CSL is offered in a culture where time can be mapped vertically, sagittally and laterally, and has been partially influenced by the surrounding Mandarin (text) and gestures of the hearing people. However, CSL is also shaped by the internal constraints imposed by the visual-spatial modality. For example, past-to-backward and future-to-downward mappings are affected by the grammaticalization of signs; the mapping of future-to-leftward is also constrained by CSL's internal linguistic system, which is instantiated by the sign for TILL (from right to left). Once there are full forms (or even not fully independent forms) of signs or grammaticalized forms, they will become dominant and overwrite the external influences from the contacts of the written language, gesture and culture. In conclusion, timelines in sign language can be asymmetric, which is the outcome of an interaction between culture, modality and language.

Keywords: Chinese Sign Language; timeline; conceptual metaphor; space and time

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The cross-linguistic variation in the semantics of temporal adverbial clauses

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This talk contributes to the inquiry on the grammatical strategies deployed by natural languages to express temporal reference and event ordering and focuses more specifically on temporal adverbial clauses (TACs). TACS are subordinate clauses (B) that express a relation between the running time of the eventualities they denote (their Event Time) and the one of the eventuality denoted by the matrix clause (A). We focus on TACs that express the meanings of anteriority and posteriority, i.e. the relations of PRE-cedence and SUB-quence. In languages where TACs are introduced by temporal connectives such as *after* (1) and *before* (2), these adverbial clauses differ from other embedding constructions in that the construction itself, *via* the connective, contributes information about the relative temporal order of the eventualities. Therefore, in previous work on these languages, constraints on event ordering and on temporal marking have been largely made dependent on the lexical content of the connectives (Ogihara 1996, Kubota et al 2009, a.o.).

(1) *Peter cried after Mary left.*

SUB : A > B

(2) *Peter cried before Mary left.*

PRE : A < B

There is still debate, however, on how much semantic information can be packed into the lexical content of the connectives; in fact, it has also been shown that temporal connectives can have a distinct semantics from one language to the other (see e. g. Del Prete 2008 on Italian *prima*). In this talk, we argue that, across languages, temporal ordering is obtained by combining a limited number set of ingredients, which languages distribute differently across functional categories. These ingredients include tense, aspect and temporal connectives. We support our argument by looking at TACs in Karitiana, an indigenous language spoken in N-W Brazil, which has the particularity of expressing PRE and SUB without the help of temporal connectives.

Tense and connectives If one takes connectives to be alone responsible for the ordering relation, then Tense is predicted not to be necessary. This is indeed the case in languages that display *finite* or *non-finite TACs with temporal connectives*, whether they have an absolute (English) or relative Tense system. The latter case is exemplified by the distribution of the past and non-past tenses in Japanese. As noted by Ogihara (1996), in Japanese the tense of the TAC is interpreted with respect to the matrix clause event time rather than the speech time, and according to the relative order of the events as determined by the connective: in (3), *-mae* orders the TAC in a PRE relation with respect to the matrix, and the Tense is non-past; the opposite is true for TACs introduced by *-ato* (4).

(3) *Ken-ga ku-ru mae-ni Anna-ga kaet-ta.*
Ken-NOM arrive-NPST before-in Anna-NOM leave-PST
'Anna left before Ken arrived.'

(4) *Ken-ga ki-ta ato-ni] Anna-ga kaet-ta.*
Ken-NOM arrive-PST after-in Anna-NOM leave-PST
'Anna left after Ken arrived.'

The irrelevance of Tense marking is clear in the case of languages that can (optionally) make use of *non-finite TACs*. In the Portuguese examples (5) and (6), the relative event ordering of the infinitive TACs is determined throughly by the connectives *depois* "after" (5) and *antes* "before" (6).

(5) *João saiu depois de Maria chegar.* (6) *João saiu antes de Maria chegar.*

John leave.PST after of Maria arrive.INF John leave.PST before of Maria arrive.INF
'John left after Mary arrived.' 'John left before Mary arrived.'

One may wonder then what happens when temporal connectives are not present. Two options seem to be possible here: either relative Tense marking is enough to express the relation between the matrix and the TAC, or other strategies have to be put into use. We bring into the debate the case of Karitiana, which exemplifies the latter option.

TACs in Karitiana Karitiana has no clausal connectives endowed with lexical content: subordination is marked in the subordinate clause by the absence of Tense marking and by the presence of the general adjunct marker *-t* (Storto and Rocha 2014). In the absence of tense and connectives, we claim that temporal relations in TACs are expressed in Karitiana by means of *perfect aspect*. The predicate of the subordinate TAC in (7) is marked by the morpheme *byyk*, which is not a lexical item comparable to the connective *after*. Rather, as shown by Rocha (2022), *byyk* is a perfect aspect marker, also present in matrix clauses, where it appears after the lexical verb, in the typical position of aspectual markers, and is marked by Fut or NFut tense. The perfect aspect expresses the meaning that the event of the subordinate occurs within an interval that strictly precedes the one of the matrix, and therefore contributes both meanings of temporal precedence and of boundedness. Our analysis accounts for the fact that Karitiana TACs have different truth conditions with respect to English *after*-clauses as for the (im)possibility that the matrix and subordinate events overlap (Anscombe 1964). Contrary to its English translation, the proposition expressed by sentence (7) cannot describe a situation in which the boss entered the dance when Luiz was still dancing.

(7) [Luiz terek.terek *byyk*]-t Ø-na-terek.teregn-yn him.boryt-ty pip Byyj.
Luiz dance PERF]-ADJ 3-DCL-dance-NFT game.party-OBL at chief
'At the game feast, the chief danced after Luiz danced.'

We now turn to clauses expressing a PRE relation (2). This temporal relation is obtained in Karitiana by means of the morpheme *ki*. Again, *ki* is not a connective comparable to English *before*. We analyze it as an aspectual morpheme: just like *byyk*, it occurs in matrix clauses (pace Vivanco and Vanrell 2021) where it must be inflected for Tense (8).

(8) *Jonso* Ø-na-amang *ki*-t gok koot.
woman 3-DCL-plant NEG.PERF-NFT manioc yesterday
'The woman had not (yet) planted (all) the manioc yesterday.'

The morpheme *ki* has two meaning components: negation and perfect aspect. The Perfect states the occurrence of an interval that strictly precedes the one of the matrix. The negative component then negates the occurrence of the property that characterizes the subordinate event within this interval.

(9) [João yry *ki*]-t Ø-na-otam-t Maria.
[João come NEG.PERF]-ADJ 3-DCL-arrive-NFT Maria
'Maria arrived before João came.'
(Lit: 'João not having come, Maria arrived')

The event denoted by the TAC is therefore non veridical, because it is explicitly asserted that it has not occurred. Our account thus shows that non-veridicality is not necessarily part of the lexical content of specific connectives (see also Beaver and Condoravdi 2003).

Conclusions We show in this talk that PRE and SUB relations are realized across languages in different ways, but resort to a limited number of functional tools. While the existing literature on TACs mainly concerns languages that display connectives similar to *before* and *after*, we present original data from Karitiana, a language that has no connectives and expresses PRE and SUB relations by making use of aspect. For future work one can then check the prediction that there may be languages where these relations may be expressed only by means of (relative) Tense.

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How to talk about the Past in Torlak

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Past events in BCMS (Bosnian-Croatian-Montenegrin-Serbian) are usually conveyed via an analytic tense (descriptively known as Perfect Tense, henceforth PERF), that consists of a tensed form of the verb *biti* ‘to be’ and a verbal participle (1). In addition, BCMS has a synthetic past tense of very limited use: the aorist (AOR), which is used as a kind of evidential on witnessed events that have just occurred (2). Anteriority is therefore conveyed in BCMS almost entirely by PERF, just as it happens in French, German, and (northern) Italian dialects.¹

1. *Prošle zime je bilo jako hladno* PERF
last winter AUX be.PstP very cold
‘It was really cold last winter’
2. *Rekoh ja da deca ne treba da skaču u bazen posle ručka* AOR
say.AOR I that kids not need to jump in pool after lunch
‘I have said that kids shouldn’t jump into the pool after lunch’

Interestingly, the productivity of the AOR drastically increases when we look at Torlak, a non-standardized variety spoken in the south of Serbia: the following examples, taken from spontaneous speech, illustrate how the AOR is used to express simple past events (3) as well as past events with current relevance (4).

3. *Jučer gu vido* AOR
yesterday her see.AOR
‘I saw her yesterday’
4. *Ja gu vido* AOR
I her see.AOR
‘I have (just) seen her’

The PERF is found in these varieties as well, as in (5-6). The auxiliary is generally omitted, except in negated contexts (7):

5. *Deda (je) legnaja da spava* PERF
granpa AUX lie_down.PstP to sleep
‘Grandpa has gone to sleep’
6. *Vodu gu pa puštija* PERF
water her again open.PstP
‘He has opened the water again’
7. *Doktorka ne me je pituvala za tebe* NEG-PERF
doctor not me AUX ask.PstP for you
‘The doctor did not ask me about you’

An important question has to do with what makes (4) different from (5-6), since semantically they all seem to denote past events in relation to current situations (i.e. the basic meaning of the Perfect), despite exhibiting different morphosyntactic realizations (AOR and PERF). In order to answer this fundamental question, we set two goals for the talk:

At a descriptive level, we provide a comprehensive overview of the empirical distribution of the AOR and PERF tenses in these understudied varieties of Torlak, with a comparison to the BCMS system. We examine the behavior of the analytic tense with respect to argument structure and predicate class, the possibility of modal readings and their corresponding structural height (Picallo 1991, Cinque 1999), the kinds of perfect readings that it allows among those that are generally identified in the literature, that establish a semantic relation between a past situation and a present state: resultative, experiential, universal (Comrie 1976, Parsons

¹ We leave aside a second synthetic tense, the imperfect (IMP), which denotes continuous events in the past: *Celu noć padaše kiša* (entire night fall.IMP rain– ‘It was raining all night’). Unlike AOR and PERF, this form expresses imperfective aspect.

1990, Iatridou et al. 2001, Mittwoch 2008, a.o.). On the syntactic side, we examine the phenomenon of auxiliary omission in the PERF tense in the varieties under study as opposed to BCMS (cf. (7)). We think this superficial difference is the reflection of a deeper contrast in the internal structure of PERF in BCMS and in Torlak. At a formal level, we will examine the nature of the participle involved in the PERF tense, as well as the specific semantic information that AOR and PERF contribute to the overall meaning of the sentences in which they appear, both in BCMS and in Torlak. We show the monoclausal nature of the construction, with the participle being the predicative core and the auxiliary exhibiting the properties of a fully-fledge auxiliary (Butt 2010, Björkman 2011).

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Titre : **La locution conjonctive temporelle *en loke* en judéo-espagnol : étude diachronique**

Mots-clés : conjonction temporelle, simultanée-concomitance, postériorité immédiate, subordonnée relative nominale neutre, judéo-espagnol

Résumé :

Dans notre contribution, nous présentons une étude de la locution conjonctive temporelle *en loke* (< esp. *en lo que*) en judéo-espagnol, langue parlée par des descendants des juifs séfarades expulsés d'Espagne en 1492, installés majoritairement sur les territoires de l'ancien Empire ottoman :

- (1) La fiesta ke mos plaziya lo mas era Simha Tora. Porke **en lo ke** pasavan las Sefer Toras, echavan bonbones de la azara, i mozotros las arekojiyamos kon grande alegríya. (Eliz Gatenyo, 2019, <<https://www.salom.com.tr/haber/112263/simha-tora>>)

‘La fête que nous aimions le plus était Simha Tora. Car, **au moment où** les Sefer Tora passaient, on jetait des bonbons de la azara et nous les ramassions avec la plus grande joie.’

- (2) A las oras kuarto, **en lo ke** estavamos lavorando, los dos kamiones pasaron delante de mozotros i un amigo de otro grupo de lavorantes ke estavan ayi mos grito kon boz alegre, komo si estuviera indo a pasar la ora “Sabi, Sabi! A mozos ya mos tomaron! Ya van a vinir i para vozos.” (Sabetay Tchimino, “La tragedia de los djudios de Kavala”, *Aki Yerushalayim*, 66, 2001, 19-21)

‘A quatre heures, **pendant que** nous étions en train de travailler, les camions sont passés devant nous et un ami de l’autre groupe d’ouvriers qui étaient dedans nous a crié avec une voix joyeuse, comme s’il parlait s’amuser « Sabi, Sabi ! Ils nous ont déjà pris ! Ils vont venir pour vous aussi. »’

Les auteurs des premières études descriptives de cette variété hispanique reconnaissent dans *en loke* une innovation du judéo-espagnol et le traduisent la conjonction par ‘als’ en allemand (Wagner 1914 : 134, §102), ‘while’ en anglais (Luria 1930 : 180, §VI 25) et ‘tandis que’ en français (Crews 1935 : 297). La locution est restée toutefois très peu étudiée jusqu’à présent (voir toutefois Stulic 2007 : 338-341 ; Belinko-Sabah 2021 : 90-103 ; et Stulic 2021 pour les autres usages innovants de *loke/loké* > *lo que* en judéo-espagnol des Balkans).

Sa composition semble transparente ; le processus par lequel elle a été conventionnalisée comme une locution conjonctive temporelle en judéo-espagnol l’est beaucoup moins. La séquence *en lo que* suggère qu’elle provient d’un groupe prépositionnel composé de la préposition *en* suivie d’une proposition relative nominale neutre (dite « sans antécédent ») introduite par *lo que*. C’est une configuration syntaxique qui est présente en judéo-espagnol à toutes les époques (tout comme en espagnol, dont le judéo-espagnol a hérité le gros de ses formes) :

- (3) Djuntos kon esto, **en lo ke** toka al Zo’har, ay muchos istoriadores ke tienen dudas i se demandan si el verdadero autor del libro fue Shimon Bar Yohay o Moshe de Leon el mizmo. (Filatelia sefaradi: Moshe Shem Tov de Leon, Mordehay Arbell, 23-09-2017, <<https://jewishwebsite.com/opinion/filatelia-sefaradi-moshe-shem-tov-de-leon/20144/>>)

‘Avec cela, **en ce qui** concerne le Zohar, il y a beaucoup d’historiens qui ont des doutes et s’interrogent si le véritable auteur de ce livre était Shimon Bar Yohay ou Moshe de Leon lui-même.’

Si, dans l’exemple (3), ce qui est dénoté par la proposition introduite par *lo ke* est un des arguments de la prédication (à savoir le sujet de la forme verbale *toca*), dans les exemples (1)

et (2), cela ne peut pas être le cas, car les arguments possibles des verbes (ici intransitifs) *pasar* ‘passer’ et *lavorar* ‘travailler’ sont déjà exprimés. La locution *en loke* doit donc être interprétée autrement, comme une locution conjonctive. Dans ces deux exemples, les formes de l’indicatif imparfait dans la proposition subordonnée suggèrent une relation temporelle de simultanéité partielle ou concomitance exprimée par la locution (selon la typologie des relations temporelles de Chétrit 1976 : 40, adaptée à l’espagnol par Eberentz 1982 : 297, 300-301).

Nous appuyant sur un corpus de textes produits par des juifs séfarades après l’expulsion de 1492, nous constatons que cet usage temporel n’est pas marginal en judéo-espagnol, mais reflète un sens conventionnalisé depuis au moins les premières décennies du dix-huitième siècle. Depuis, on assiste à un élargissement des valeurs temporels possibles. A partir de la deuxième moitié du dix-neuvième siècle, *en loke* peut également marquer la relation de postériorité immédiate (Eberentz 1982 : 297, 305) et constitue l’une des principales conjonctions temporelles en judéo-espagnol, à côté de *kuando* et *mientres*.

À partir des données observées, en adoptant une perspective constructionnelle (Carlier & Prévost 2021), nous cherchons à mettre au jour le processus de conventionnalisation d’*en loke* nous intéressant plus particulièrement à la « persistance » des éléments sémantiques et schématiques des constructions qui sont à l’origine de cet usage. De notre analyse découle que le sens temporel d’*en loke* peut être mis en relation avec la valeur temporelle des groupes prépositionnels construits avec la préposition *en*, alors que le sens procédural de la locution conjonctive *en loke* doit être cherché dans les fonctions discursives de la proposition introduite par *loke* en judéo-espagnol. Les conclusions présentées seront mises en perspective avec la redéfinition du processus de grammaticalisation proposée dans Boye (2023) comme « conventionnalisation du statut discursif secondaire d’un signe ».

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Perfect(ive) particles in Indonesian: the case of *sudah* and *telah*

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Summary. Standard Indonesian (SI) has two aspectual particles said to denote perfect: *sudah* and *telah*. Based on fieldwork data and systematic tests from Bertrand et al. (2022), we argue that they have different semantic contributions and denote a hybrid perfect and a past perfective, respectively.

Aspectual properties. *telah* and *sudah* are said to denote perfect, with *telah* supposedly belonging to the more formal register (MacDonald & Dardjowijojo 1967, Sneddon 1996, a.o.). However, upon closer inspection, they differ not only with regard to their licensing contexts, but also with regard to the readings they yield. First, only *sudah* can appear in experiential contexts (which make the experiential particle *pernah* obligatory).

(1) Answering the question ‘Have you ever climbed a mountain?’

Saya **(sudah)/#telah** **#(pernah)** mendaki gunung.
1SG **SUDAH/TELAH** **ever** MEN-climb mountain
‘I have already climbed a mountain.’

Stative verbs as in (2a) are compatible with both *sudah* and *telah*, yielding the reading that the state still hold at the Reference Time (RT). However, contrary to Grangé (2006)’s claim, we find that adjectival verbs as in (2b) are incompatible with *telah*:

(2) a. Saya **#telah/#sudah** kaya dan sekarang saya miskin. b. Mary **sudah/#telah** capek.
I **TELAH/SUDAH** be.rich and now I be.poor Mary **SUDAH/TELAH** tired
Intended: ‘I was rich and now I am poor.’ ‘Mary is tired already.’
(Grangé 2006:270)

With atelic eventive verbs (activities), *sudah* means that the event has started (and is still on-going), but *telah* indicates that it has already finished. In (3), *sudah* is strange because the utterer should still be asleep, and thus unable to speak at the Utterance Time (UT):

(3) Ya, pangeran, aku **?#sudah/telah** tidur nyenyak.
Yes prince 1SG **SUDAH/TELAH** sleep nicely
‘Yes, my prince, I have slept soundly.’ (Grangé 2006:295)

With telic eventive verbs (achievements or accomplishments), only *sudah* asserts that the result-state of the event is still relevant at the RT, not *telah*:

(4) Saffanah **#sudah/telah/∅** kehilangan kunci-nya, tapi **sudah/#telah/?∅** ketemu lagi.
Saffanah **SUDAH/TELAH/∅** lose keys-3SG but **SUDAH/TELAH/∅** found again
‘Saffanah lost her keys, but she found them again.’

When combined with a past time adverbial, *sudah* means that the event took place prior to this time, while *telah* asserts the realization of the event during this time span:

(5) **Tahun lalu**, tanah ini **sudah/telah** di-jual.
 year pass land this **SUDAH/TELAH** PASS-sell
With sudah: ‘Last year, this land had (already) been sold.’
With telah: ‘Last year, this land has been sold.’ (Grangé 2010:2,3)

Finally, while none of the two particles is rejected in future contexts, *sudah* is considered more felicitous than *telah*:

(6) **Besok** jam sepuluh, mereka **sudah/??telah** pergi.
tomorrow hour ten 3PL **SUDAH/TELAH** go
 ‘Tomorrow at 10 o’clock, they will be gone.’ (Grangé 2010 and personal elicitation)

Analysis. Based on the data above, we claim that *sudah* is a hybrid perfect, which can yield both experiential and resultative readings (see Bertrand et al. 2022). These meanings are obtained from a decomposition of the aspectual layer into Aspect and Viewpoint (following Iatridou 2003, Pancheva 2003): the PERF aspect (from which the universal reading is directly derived) can be further combined with a RES-operator instead of a PFV/IPFV, thus deriving resultative or experiential readings. On the other hand, *telah* does not denote a perfect, as claimed by the literature (Sneddon 1996, Grangé 2006, a.o.), but a simple perfective: the anteriority reading associated with it can easily be derived from the Bounded Event Constraint (Smith et al. 2003), which posits that bounded events cannot be located in the present.

- (7) a. **[[sudah]](p)(t) = 1 iff $\exists t'$ [PTS(t',t) & p(t')(t)]**
With PTS(t',t) the Perfect Time Span where t is a final subinterval of t' .
[[RES]](p)(e)(t) = 1 iff $\exists e$ [Result(e, e') & $t \subseteq \tau(e')$ & $\tau(e) \subseteq t' & p(e)$]
 (8) **[[telah]](p)(t) = 1 iff $\exists t$ [$\tau(e) \subseteq t & p(e)$]**

Selected references. *Bertrand et al. (2022). “Nobody’s Perfect”. *Languages* 7.2. *Grangé (2006). *Temps et Aspect en Indonésien*. PhD thesis. *Grangé (2010). “Aspect and modality in Indonesian”. *Wacana* 12.2. *Pancheva (2003). “The aspectual makeup of perfect participles and the interpretations of the perfect”. *Perfect explorations* 2. *Sneddon (1996). *Indonesian: A comprehensive grammar*.

The Spanish future: Against a foretold dead

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1. Irrespectively of the methodology, the date, and the framework any study on the tendencies in the use of morphological futures (CANTARÉ, CANTARÍA ‘I will sing’, ‘I would sing’) MF within the functional space of posteriority (R-E) come down to the well-known and mostly agreed-on conclusions summarized in (1), ([8], [15], [14], [2], [15], [1], a.m.o.):

(1)

a. MF lack of any temporal meaning, being restricted to epistemic and concessive values, as well as to formulaic expressions.

b. MF have been replaced (or displaced) by periphrastic futures (PF), mainly -but not only- <ir a + infinitive>.

c. On the top of this, the distribution of morphological and periphrastic futures PF seems to pattern with that of a diglossic situation: MF are characteristic of formal speech and written registers whilst for oral speech and informal situations PF are almost exclusively preferred.

The pattern described in (1) uniformly holds across all the American Spa. varieties. As regards European Spa., morphological futures apparently retain their temporal meanings although, at the same time, the diglossic situation equally applies to them.

2. In this talk I show that a research-based i. on the large corpus *esTenTen18* and ii. on the version NOW of the *CDE* reveals quite a different situation for the distribution of both MF and PF (see tables in Annex). Particularly, I will focus i. on the possibility of both being selected by the same classes of predicates used in [1] and [10] —see Table 1, and ii. on the possibility of finding MF in contexts completely ruled out by (1a) and (1b), as (2) and (3). Similarly, [6], [7] and [17], a.o., support the idea that quantitative data are necessary to confirm or correct the received grammatical description.

3. The situation depicted in (1) is the result of assuming a theory about language change heavily based “on the notion on language as a functioning system” ([12]), with slots to be filled and pushing forms. Large corpora show, however, that, as Lehman in [12] defended, this cannot be the right explanation for language change. Specifically, PF is not pushing the MF out of the temporal realm and into the modal domain. Instead, both MF and PF must be analyzed on their own terms, independently one from the other (also [13], and [20]), and not as ‘poor copies for another existing construction’ ([10], for *tener* + pp). The strong hypothesis is the null one: reference to the future is made in terms of plans, expectations or attitudes in general ([18], [5], [3]) -our PF- as well as in terms of locating events in the temporal line ([19]).

4. Accordingly, the focus is not to be established between PF and the MF but between PF and the corresponding aspectually simple tenses, that is, present tenses and subjunctive simple tenses, and to a less extent, futurates. These tenses share the three the property of rendering posterior readings due to aspectual reasons: achievements reject the overlapping with the utterance time or the anchoring time [9]; non-punctual predicates are ambiguous between a simultaneous reading and a posterior reading. In addition to this, the subjunctive lacks a dedicated tense to unambiguously locate the situation in the posteriority domain (4). Polarity and emotive-factive subjunctive clauses ([4]) are not temporally ordered with respect to the matrix verb and, hence, the subjunctive is not tenseless. It is in these subjunctive clauses where the PF is being used to unequivocally express posteriority and completely deprived of any modal sense. It is in these contexts where the PF grammaticalizes the posteriority relation R-E. This is shown in (5), where the PF is selected by a modal expression of possibility, and hence, completely unexpected according to the data in Table (1).

Examples

- (2) El presidente de YPF detalló que “**creemos** que prontamente **vamos a tener que** hacer otra exportación y en los próximos 18 a 24 meses **habrá** regularidad en las exportaciones”. Y remarcó que “...**vamos a ir** creando ese mercado y ahí **sabremos** cuál es el verdadero precio, que **creo que será** cercano al Medanita”. [Arg. CDE: NOW] The President of YPF explained that “we *believe* that soon we **are going to have** to make another export and in the next 18 to 24 months there will be regularity in exports”. And he remarked that “... we **are going to be creating** that market and then we **will know** what the real price is, which I *believe will be close* to the Medanita”.
- (3) Actualmente tiene su propio sitio web... Síguela y te **aseguro que estarás** súper informada. (Mx, esTenTen18) ‘She currently has her own website... Follow her and I *assure* you that **you will be** super informed’.
- (4) a. No {cree / le preocupa} que **tenga** hambre {ahora / mañana}. ✓ Simul/ ✓ Post
not believes/him worries that has hunger {now / tomorrow}
- b. No {cree / le preocupa} que vaya a tener hambre {*ahora / mañana} × Simul/ ✓ Post
not believes/him worries that goes.SUBJ to have.INF hunger {now / tomorrow}
- (5) ‘Creo que con el nuevo formato **será** más fácil contar con los mejores...’, estimó Bruguera. Noah se mostró más nostálgico... ‘*Puede que vaya a satisfacer* a algunos, pero no **será** nunca la Copa Davis’. [Pa. CDE: NOW] ‘I believe that with the new format it will be easier to count on the best...’, Bruguera estimated. Noah was more nostalgic. It lit. may that be.SUBJ going to satisfy some, but it will never be the Davis Cup.

Tables

Table 1. Distribution of MF / PF according to the semantics of the subordinator

	Cantaré.Temp	Cantaré.Conj	Voy a cantar.Temp	Total
Subordinator	%(N)	%(N)	%(N)	%(N)
Uncertainty	49(22)	88(15)	17(12)	36(49)
Believe	11(5)	6(1)	32(23)	22(29)
Certainty	29(13)	6(1)	38(27)	30(41)
Perception / Say	11(5)	0(0)	14(10)	11(15)
Total N =	45	17	72	134

Source: Laca (2017) elaborating on Aaron’s (2014)

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Deriving the paradoxical effects of metalepsis (Dag Haug & Daniel Altshuler)

Intro: In Chapter 3 of *Sylvie*, by Nerval, a 1st person narrator tells us what he sees as he travels on a coach to Loisy, where he spent his childhood. The chapter concludes with the sentence in (1).

- (1) Pendant que la voiture monte les côtes, recomposons les souvenirs du temps où j' y venais si souvent. ('While the coach is making its way up to the hills, let us piece together the memories of the days when I often visited these parts.')

Here, the narrator asks the implicit hearer to join him, *at the time of narration*, in piecing together past memories while the coach is going up the hills, i.e. *at the time of the event in the story*. That is, the text paradoxically identifies the narration time and the story time. This paradox is related to *metalepsis*, defined by Genette (1980, 234–5) as: “any intrusion by the extradiegetic narrator or narratee into the diegetic universe (or by diegetic characters into a metadiegetic universe, etc.), or the inverse [...], produces an effect of strangeness that is either comical [...] or fantastic.”

Genette's definition – and most subsequent work on metalepsis – is focused on cases of 3rd person ('extradiegetic') narration, as in his example in (2), from Balzac's *Illusions perdues*, which gives the impression of a transgression of an ontological boundary when the narrator suddenly enters the text. By comparison, the metalepsis in (1), which involves 1st person ('diegetic') narration is more subtle; the paradox here is purely temporal.

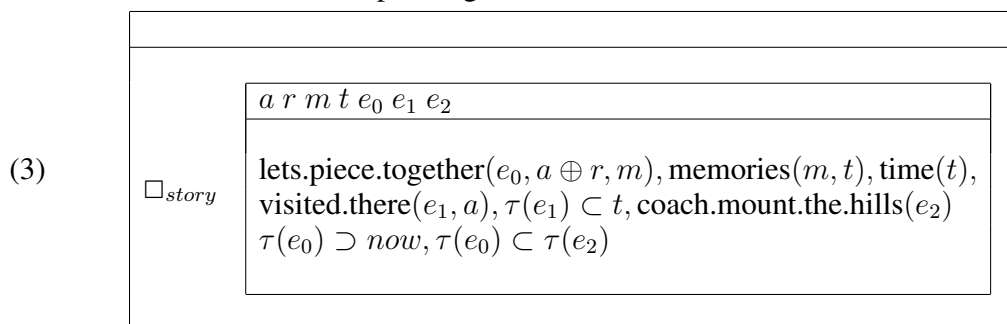
- (2) Pendant que le vénérable ecclésiastique monte les rampes d' Angoulême, il n'est pas inutile d'expliquer ('While the venerable churchman climbs the ramps of Angoulême, it's not useless to explain...')

While there is extensive work on metalepsis in literary studies (see, e.g., Fludernik 2003; Matzner and Trimble 2020), we know of only one linguistic analysis, by Bücking (2023), who treats metalepsis as a species of copredication. In this paper, we argue that Bücking's analysis falls short because it doesn't consider cases like (1). Subsequently, we propose a new analysis that can account for (1) and (2), while also doing justice to potential differences in their aesthetic import.

Bücking's analysis: Following Recanati (2018), Bücking (2023) assumes that fictional characters are complex objects with an abstract and a physical sense, as suggested by *Sherlock Holmes was invented by Doyle and he lives on Baker Street*. Complex objects are analyzed in terms of dot-types (Asher, 2011), familiar from research on co-predication (cf. *Lunch was delicious, but it took forever*). On this theory, we can assign Sherlock Holmes a dot type of semantic object, with ABSTRACT and PHYSICAL as constituents. The novelty of Bücking's analysis is that fictional events are proposed to be even more complex: in addition to having an abstract and an eventive sense (cf. *The Bowling Green massacre was invented by Conway and took place in Kentucky*), fictional events have a 'pretense' sense; they can be “conceived of as if it were actual.” Applying this idea to (2), Bücking would say that: (i) in the actual world, there is a dot-type fictional event of climbing which only occurs qua event in the story world, but (ii) is an event-in-pretense in the actual world, and (iii) this pretense event serves as the temporal frame for the matrix clause eventuality (*it is not useless to explain*), which only holds in the actual world. Put differently, metalepsis is proposed to be a parafictional statement about an event and metafictional statement about a pretense-event — two senses of the same complex dot-object. Hence, metalepsis is a species of copredication.

While Bücking's analysis can account for (2), it fails for (1). In particular, eventualities described in the matrix clause of (1), *let us piece together the memories...when I visited there*, are predicted to occur in the actual world. This means that *I* is predicted to refer to the author (Nerval), but the described memories are about the time when the protagonist-narrator – and not the author! – went to the described location, and the protagonist and the narrator are the same individual in the same world, just at different times. Hence, metalepsis involving 1st person narration falsifies any analysis which takes the matrix clause to be evaluated in the actual world, viz. Bücking's analysis.

Our analysis: A possible reply to our objection is that the author (Nerval) is merely an individual-in-pretense, corresponding to the protagonist of the story. However, this would commit us to a duplication of individuals and events across worlds, undermining Bücking’s idea that metalepsis involves (in part) a description that only concerns the actual world. We reject this idea and propose that the narration time and the story time are identified *inside the story*, viz. (3), which represents (1) using tools from DRT (Kamp and Reyle, 1993). The *universe* of (3) contains discourse referents for individuals (a for the narrator-protagonist, r for the implicit narratee, etc.) and events (e_0 , etc.). Crucially, all of these exist inside \square_{story} , which is a fiction operator in the style of Lewis (1978). Moreover, there are *conditions* on those discourse referents—e.g., e_0 is a (simplified) exhortation to the plurality $a \oplus r$ to piece together m ; e_2 is an event of the coach mounting the hills, and e_0 is temporally included in e_2 . The discourse is true iff in all worlds compatible with the fictional work, there are entities corresponding to the discourse referents such that these conditions hold.



To be sure, this analysis involves an inconsistency. The exhortation to piece together memories (e_0) includes *now*, but is also included in the time of the coach mounting the hills (e_2). This paradoxical identification of narration time and story time is, we argue, the source of the effect of metalepsis: the narrator asks us to join him in recollecting his memories while the protagonist – who is, after all, identical to him – is travelling on the coach. This creates a cinematic effect: story time and narration time are collapsed into one, and we are asked to imagine that the narrator joins his younger self to narrate what happens as the events unfold.

Extending the analysis: While our analysis is motivated by (1), it extends to (2). Key to our extension is the assumption from Altshuler and Maier 2022 that when a story is told from an impersonal, omniscient point of view, there is no discourse referent that stands for the narrator (although the narrator is entailed by the semantics of \square_{story}). We further assume, following Altshuler and Maier, that readers accommodate a narrator discourse referent if necessary. They motivate this idea by looking at cases of ‘imaginative resistance’ (Gendler, 2000), where the accommodated narrator is understood to be immoral/unreliable. We show how narrator accommodation in (2) does not lead to such an inference, but rather supports the paradoxical identification of narration time and story time. Finally, we propose to explain the potential difference in aesthetic import of (1) and (2) in terms of whether there is a need for narrator accommodation.

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Future tenses and future-time reference across languages

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In-person presentation

This talk will present the results of a cross-linguistic survey of tense in a geographically and genealogically stratified sample of 180 languages (based on the *genus-macroarea* sampling method, Miestamo 2005). Special focus will be given to the future tense and future-time reference. Two major points will be made, concerning a) the special status of the future as opposed to the present and the past, and b) the question whether grams expressing reference to the future should be characterized as tense or rather as mood markers.

Point a) relates to the fact that cross-linguistically, languages tend to set the future as a timeline area apart from the present and the past, which is illustrated by several independent observations: firstly, binary tense systems (i.e., tense systems that divide up the timeline into one positively and one negatively defined area) of the future/non-future type are far more frequent than those of the past/non-past type. In addition, there seems to be a strong areal bias in the distribution of past/non-past systems that cannot be found for non-future/future systems. Secondly, binary tense distinctions triggered by specific semantic contexts (such as polar questions or negation) in otherwise tertiary tense systems are exclusively of the future/non-future type. Thirdly, in some languages in the sample the past tense is morphologically based on the present tense, whereas the reverse situation where it is the future tense that is based on the present tense cannot be found. The last observation concerns a specific type of interaction between tense and actionality, termed the *present perfective paradox* (henceforth: PPP) (Malchukov 2009; De Wit 2017). In languages exhibiting the PPP, the gram that is used for present-time reference with stative verbs licenses a non-present, i.e. a future or past interpretation with dynamic verbs. Results show that in languages with PPP, the past interpretation with dynamic verbs is far more frequent than the future one. This pattern is stable across linguistic macroareas and tense system types. These four observations taken together suggest that there is a marked semantic difference between the present and the past as timeline areas on the one hand, and the future on the other. It has been argued in prior literature that this difference lies in the fact that past and present pertain to the domain of reality while the future pertains to the domain of irrealis (e.g., Langacker 1991; Smith and Erbaugh 2005).

This explanation, in turn, has led some scholars to argue that future/non-future tense systems are in fact modal systems making a distinction between realis and irrealis. Point b) of this talk will address this issue by investigating the additional, non-temporal functions of tense markers in binary tense systems. The picture implied by the results is mixed: on the one hand, future-marking grams in future/non-future systems have significantly more additional functions than past tenses in past/non-past systems, and all of these functions can indeed be characterized as having irrealis semantics (e.g., imperatives, negated clauses and counterfactual constructions). On the other hand, the notion of "irrealis" seems to be a fuzzy category, as has already been observed in prior literature (e.g., Cristofaro 2012): no language simultaneously expresses all of the identified non-temporal functions with a future gram; conversely, there is no single non-temporal function which is systematically expressed by all future-marking grams in the sample.

Moreover, there is a substantial amount of future/non-future systems where the future-marking gram does not express any non-temporal functions. Finally, non-temporal functions with irrealis semantics can also be found for past-marking grams in past/non-past systems (e.g., the protasis of hypothetical conditional clauses), even though in lesser proportions. This implies that markers used for future-time reference might be less prototypically “tense-like” than markers used for past-time reference, but that their core function is still temporal in nature.

In summary, the results suggests that a) the future as a timeline area stands out as opposed to the present and the past, but that b) this shouldn’t lead one to assume that future-marking grams are not tenses at all. Instead, the semantics of future tenses across languages seems to form a scale ranging from “exclusively temporal” to “temporal with significant modal overtones”.

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Le futur (désormais: FUT) et le conditionnel (désormais: COND) des langues romanes se configurent comme un domaine de recherche particulièrement riche et complexe, du point de vue de leur origine et de leur structuration morphématique et, notamment, de la perspective des relations sémantiques qui s'établissent, d'une part, entre les sémèmes de ces deux formes verbales, et, de l'autre part, entre les structures correspondantes de tel ou tel système linguistique (romans, dans notre cas). Aussi, le FUT et le COND des langues romanes, représentent-ils des modalités spécifiques par lesquelles chaque communauté linguistique a réussi à valoriser l'héritage latin, d'un côté, et, de l'autre côté, à actualiser au niveau de l'expression, de différentes notions cognitives.

Cette approche se propose d'esquisser quelques réflexions sur la relation possible entre le FUT et le COND des langues romanes, tant au niveau intralinguistique, qu'au niveau interlinguistique, à partir des données morphosyntaxiques et sémantiques obtenues dans le cadre d'une recherche postdoctorale (Popescu 2013) sur la catégorisation sémantique de ces deux tiroirs en français, espagnol, italien et roumain. L'objectif majeur de cette démarche – en tout premier lieu typologique, mais aussi empirique – est de déceler certains traits communs et/ou distinctifs qui puissent motiver le comportement sémantique et fonctionnel du FUT et du COND à l'intérieur de chaque système linguistique d'origine.

Par conséquent, nous allons observer qu'une première zone d'intersection de ces deux paradigmes, certifiée aussi étymologiquement, se réalise-t-elle au niveau morphologique, les deux tiroirs étant formés, dans les langues romanes occidentales, sur une base infinitive faible, atone, dont l'indice *-r-* (en position prédésinentielle) est réinterprétée actuellement comme faisant partie de leur structure morphématique (v. Fleischmann 1982 : 115 ; Nocentini 2001 : 368). En ce qui concerne le roumain, où le FUT dispose de quatre paradigmes, le COND se croise seulement avec le FUT canonique (le type *voi*_{AUX.} *cânta*_{INF.} « je chanterai » - désormais : FUT –Type 1) et avec le FUT populaire (le type *oi*_{AUX.} *cânta*_{INF.} « je chanterai » - désormais : FUT –Type 2), par leur construction morphématique quasi identique, à savoir : auxiliaire suivi de l'infinitif court du verbe lexical.

La deuxième zone d'intersection entre le FUT et le COND des langues romanes, beaucoup plus intéressante, s'établit au niveau sémantique. A ce point, la relation entre les deux tiroirs analysés présente de différents degrés d'interaction d'un système linguistique à l'autre, mais on peut résumer que le FUT aussi bien que le COND recouvrent *grosso modo* trois zones sémantiques de convergence, à savoir : [la zone temporelle], [la zone modale de l'éventualité] et [la zone de l'illocutionnaire]. Une analyse approfondie au niveau interlinguistique, pourrais mettre en exergue que cette congruence n'est pas aléatoire, mais plutôt complémentaire, étant dépendante de certains paramètres internes ou contextuels, tels que : (i) [+/-référence à la Sit₀], [+/- référence au passé] ou bien (ii) le cadrage discursif, le registre de langue, etc.

A l'exception de la zone illocutionnaire qui ne pose pas de problèmes, les deux autres aires de congruence se révèlent beaucoup plus complexes. Tout en appliquant la grille d'analyse proposée par M. Squartini (2004) et décomposant la signification prototypique de ces tiroirs à l'aide des traits suivants : [+/- passé] (trait de nature temporelle) *vs.* [+/- dubitatif] (trait de nature modale), on obtient une définition et une représentation du fonctionnement du FUT et du COND dans la Romània. Ainsi, grâce à la composante temporelle [+/- passé], le FUT actualise-t-il le prospectif déictique par rapport au moment de la Sit₀, tandis que le COND fonctionne comme un équivalent dans le passé pour le FUT, ayant une valeur anaphorique face à T₀. De l'autre côté, grâce à la composante modale [+/- dubitatif], tant le FUT que le COND se trouvent chargés des valeurs modales qui puissent être organisées selon le degré de factualité actualisé: le COND traduit une inférence faible, tandis que le FUT exprime « una vera e propria inferenza » (Squartini 2004 : 71).

Faisant le passage vers le niveau interlinguistique il est à remarquer une grande fluctuation notamment pour l'actualisation du trait sémique [+/- dubitatif], une telle oscillation qui se

manifestant par une évolution scalaire des formes du COND vers l'annulation de toute interaction avec le FUT : dans l'aire des langues romanes occidentales, de l'espagnol vers l'italien, le COND (la forme simple) renonce pas à pas à tout trait de nature temporelle et renforce ses aptitudes modales. Cette hypothèse est bel et bien illustrée par le roumain actuel, où la relation sémantique entre le COND et le FUT s'est affaiblie en diachronie, malgré le témoignage des vieux textes (v. *Palia de la Orăștie, Noul Testament de la Bălgrad, Sicriul de Aur, Biblia de la București*, ou les œuvres de N. Costin, D. Cantemir et Gh. Șincai) qui attestent (v. aussi Avram 1976 : 353–358) qu'entre le 16^e et le 17^e siècle les formes de COND fonctionnaient à l'égal des formes de FUT dans les emplois purement prospectifs. La situation du roumain – où le COND s'est servi, paraît-il, au début de son histoire, des occurrences déictiques seulement pour renforcer ses valeurs modales – d'ailleurs, les seules fonctionnelles dans la langue actuelle – résume, à petite échelle –, dans notre opinion, la configuration fonctionnelle et sémantique de ce tiroir au niveau des langues romanes actuelles. Plus précisément, de l'ouest à l'est de la Romània, le COND a parcouru ou est en train de parcourir un processus de *regrammation* (v. Andersen 2001, 2006), par lequel on essaie une *réanalyse* en ce qui concerne le placement de point référentiel du [dépassé] au [non-actuel] et, en même temps, une évolution sémantique de *l'objectif* vers le *subjectif*. La prise en charge du roumain pourrait apporter aussi des arguments pertinents pour l'évolution et le fonctionnement du FUT roman, car cette langue en dispose d'un véritable système quaternaire, très bien organisé, à chaque paradigme constitutif étant attribué une valeur spécifique au niveau du contenu temporel et/ou modal.

Mots clés: *futur, conditionnel, langues romanes*

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