> **Phonetics & Phonology**

Allomorphy in unexpected tonal alternations in Dinka

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The Dinka language (West Nilotic, South Sudan) is known for a complex suprasegmental system; independently-contrastive three-level vowel length, binary voice quality, and tone express most of the language's phonology (Andersen 1987, Andersen 1992-94, Remijsen & Gilley 2008, Andersen 2017). The tone system is particularly rich in this regard, not only because it has a high functional load, but also because it is subject to extensive tone sandhi, which can be conditioned both phonologically and morphophonologically. Consequentially, a given tonal alternation can be due to any number of causes, including inflectional morphology, contextual tonal processes, or a combination of the two—contextual tonal processes triggered or restricted by a given morphosyntactic context.

In the Bor South dialect of Dinka, however, several tonal alternations between the High and Rise tones have eluded analysis via one of these routes. In (1), one sees that the short vowel noun 'bees' is realized with a High tone in (1a) and a Rise tone in (1b). This alternation is unexpected, and nominal inflectional morphology and contextual tonal processes do not explain the alternation—it is not seen on non-short vowels.

(1) a. ă-nɔ̀ŋ   **cíc**   b. ă-tìŋ   **cǐc**
     DECL.SG-have bee.PL   DECL.SG-see
     bee.PL
     'He has bees.'   'He sees bees.'

In (2), the second-person singular inflection of the transitive verb 'point at' is realized as a Rise tone when followed by a High tone (2a), and as a High tone when followed by a Low tone (2b). Again, this alternation cannot be explained by verbal or nominal morphology, nor is a contextual tonal process like this seen anywhere else in the variety.

(2) a. **ɲǒoṯ**   ɲáaŋ   b. **ɲóoṯ**   tìim
     point_at\2SG crocodile.SG   point_at\2SG tree.SG
     'Point at the crocodile!'   'Point at the tree!'

This paper argues that seemingly inexplicable—or at least highly complex—tonal alternations in

Dinka can be explained via suppletive allomorphy (cf. e.g., Paster 2006, Archangeli &

Pulleyblank 2016). In both cases, the allomorph LH is exceptional, found in specific environents, and H is the default. Allomorphy as such has not been previously posited in Dinka, but alternative (e.g., autosegmental) analyses of these alternations are overly complex at best. Therefore, an emergent phonology analysis (Archangeli & Pulleyblank 2016, 2022) provides the most straightforward perspective on these tonal alternations in Bor South Dinka.

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The fifty-word milestone in early vocabulary development of two bilingual children

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The ability to produce words is one of the critical features of language development (De Houwer, Bornstein, Putnick, 2014), and the first fifty words acquired by children are one of the developmental milestones (Robb, Bauer & Tyler, 1994; Slančová et al., 2018). Receptive knowledge naturally precedes active use of words (Leńko-Szymańska, 2020) that appear in children around one year of age (Levey, 2019). However, vocabulary size and the rate of its growth might vary in bilingual environments, since children exposed to two languages inevitably receive less total exposure to each of them than monolingual children (MacLeod et al., 2013).

The paper examines the first fifty words acquired by two bilingual children in a specific context: the parents and children are Slovaks, but the mother also regularly speaks a non-native language (English) in order to make them bilingual. This type of bilingualism is referred to as intentional bilingualism (Štefánik, 2000).

The analysis is based on empirical research in progress, drawing upon the diary records of the author observing her sons´ bilingual first language acquisition. It is focused on several aspects of the fifty-word milestone in each language: the time span between acquiring the first and fiftieth word, word class ratio and conceptual count (vs. total word count) – words with the same meaning acquired in both languages (Durdilová, 2017). The analysis includes a comparative investigation in both monolingual and bilingual contexts. Since Slovak and English are typologically different languages, the distinctive elements of vocabulary development expectedly involve polysemy of certain English words with two corresponding concepts in Slovak, and different word class ratio. The latter is related to the fact that while in English the most frequent word classes of early vocabulary are nouns, verbs, and adjectives (Gunter & Koenig, 2011), Slovak early vocabulary usually comprises a high number of interjections, besides nouns and verbs (Slančová et al., 2018).

The aim of this paper is to describe the similarities and differences in the vocabulary development of two siblings raised in an intentionally bilingual environment with closer scrutiny of their first fifty words, as well as to compare their achievements with both monolingual and bilingual data of the same language combination.

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The phonological spell-out of K in Kazakh
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This paper addresses the exceptional behavior of the comitative/instrumental marker in Kazakh regarding palatal harmony, and shows that it follows from the K head being phonologized separately from its complement. This is crucial following work on Cophonologies by Phase (CBP), in which phase heads are claimed to be phonologized with their complements (see Sande & Jenks 2018, Sande et al. 2019, Sande 2019, Felice 2022).

In Kazakh, the backness of the left-most vowel iteratively determines the backness of all subsequent vowels. The process of palatal harmony is consistent in the language. However, the comitative/instrumental marker does not partake in palatal harmony, as is demonstrated in (1).

(1) a. bɵːp͡ie-m͡ien   'baby-COM'

   b. naːn-m͡ien   'bread-COM'

In this paper, the comitative/instrumental marker is considered one of six overt case markers (i.e. Balakaev 1962: 157). For this reason, it is assumed that the comitative/instrumental marker like other case markers is located in KP (see Takashi 2011, Bošković 2014).

As a departure from the current CBP model (see, e.g. Sande 2019), regarding the disharmonic comitative/instrumental marker, analyzing the K head as being phonologized separately from its complement results in the optimal phonological form matching the attested form. The two constraints involved in this analysis are an agreement by projection constraint (BACKHARM), and a faithfulness constraint (ID-BACK). Following the consistency of palatal harmony in Kazakh, the default constraint weighting for the language weighs BACKHARM

(weight = 3) more than ID-BACK (weight = 1).
In analyzing an example like, *oqu͡wʃə-*

(2)

lar-m͡ien, 'with students', the structure in (2) is assumed. In (2), *n*P and KP are considered phases, and NumP, as the complement of the K head is spelled out separately from K. Only K$_{COM}$ is associated with a reweighting of constraints (BACKHARM^{-2}, ID-BACK^{+2}).
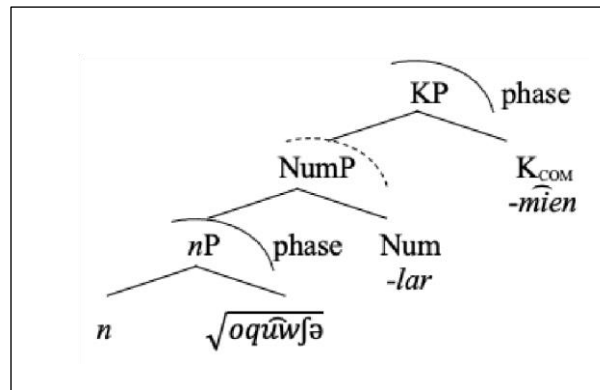
Assuming cophonologies scope over spell-out domains, when NumP is phonologized, it is associated with the default constraint weighting (BACKHARM (3); ID-BACK(1)). The input is /[oqu͡wʃə]-lier/ and the optimal output is *oqu͡wʃə.lar*. The K head is then phonologized in the next round of spell-out. Thus, the reweighting of constraints associated with K (BACKHARM (1); ID-BACK(3)) scope over this spellout domain. The input is /[oqu͡wʃə.lar]-m͡ien/ and the optimal output is *oqu͡wʃə.lar.m͡ien*, which matches the attested form. If the K head were phonologized with its complement, the spell-out domain would be the entire phase and the reweighting of constraints

would scope over the entire phase (KP and NumP). Thus, the optimal output would be *oqu͡ wʃə-lier-mien*.

These results demonstrate variation in terms of phase heads being phonologized with their complements, and are consistent with literature that suggests categorizing heads are spelled out separately from their complements (i.e. Newell 2008). The contribution of this paper is twofold. On the one hand, it adds to a growing literature on a novel theoretical framework, CBP. It does so by exploring the concept that phase heads are phonologized with their complements. On the other hand, this research focuses on a lesser studied language with patterns that are typologically unexpected and beneficial to theoretical growth.

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Structural mediation between functional-adaptive constraints and morphology

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A recent debate among functional linguists has been between result-oriented and source-oriented explanations for structural distributions across languages (Schmidtke-Bode et al. 2019). Result-oriented explanations (Haspelmath 2019, 1999; Levshina 2022, 2019; Michaelis 2019, Hawkins 2004; 2014) argue that these distributions depend on constraints related to communicative motivations ('functional-adaptive constraints'). These constraints relate to what is economic/efficient for users, such as shortening words that occur frequent (Zipf 1935, Bybee 2007). Source-oriented explanations (Cristofaro 2019, Collins 2019, Garrett 1990, Aristar 1991, Givón 1984, Greenberg 1969) instead argue that the historical sources of structure are a stronger factor for distributional asymmetries. For example, nasal vowels are rarer than nasal consonants not necessarily because they are less sonorant, but because nasal vowels arise from nasal consonants following vowels (Greenberg 1978), and this shift does not happen in all languages.

While these perspectives can certainly be unified, this paper argues that both fail to account for the persistence of structures that are non-adaptive for users. Certain languages exhibit morphological patterns that are highly complex, such as lexically conditioned inflection (LCI). LCI involves inflectional paradigms that are unpredictable because they are either restricted by certain lexemes or by lexical classes. Users must therefore not only know the paradigm but also the lexeme (class) to master the correct inflection. Examples include ablaut systems or conjugation classes in Indo-European languages, and similar patterns across the globe, such as in Yelî Dnye (Yele, Papua New Guinea), Zuaran Berber (Afroasiatic, Tunisia) or Ket (Yeniseian, Russia). From a result-oriented perspective, it is difficult to attribute functionality to LCI, even if there are patterns of multiple convergence (fusion of affixes with stem, analogy of affixes across semantic classes). Source-oriented explanations, on the other hand, would emphasize the accidental character of LCI, but would not be able to generalize trajectories of this type of changes that lead to less systematic patterns (increase in entropy).

However, LCI shows relevant structural associations with other parts of words. Our study of 79 verbal morphological positions with LCI in 30 genetically and geographically distant languages shows that LCI frequently patterns with prosodic prominent positions such as stressed syllables, as opposed to 134 non-lexically conditioned inflectional positions. This association with prominence evokes functional-adaptive constraints because prominence is adaptive for users. However, since the prominence does not derive from morphology, but from phonology, the relationship to functional-adaptive constraints is indirect. The novel contribution of this paper is that typological explanations must account for the role of structural elements through which the functional-adaptive constraints are mediated, impacting the distributional asymmetries of specific

phenomena. Missing this structural link is common because it is not evident in phenomena that lend themselves directly to source- or result-oriented explanations.

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> **Syntax**

The expression of indefiniteness in Central Sicilian. Evidence from the dialect of Delia

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This study is to be considered as a contribution to the ongoing discussion on the expression of indefiniteness in Italo-Romance, and the related variation vs. optionality issue, by providing new data from Deliano. This is done by means of recent fieldwork interviews, and the construction of a small corpus of 850 observations by 24 native speakers of Deliano (12 M; 12 F; mean age: 36.37; SD: 17.25).

The participants were asked to describe a videotape depicting a young woman during a shopping session at a supermarket, and to talk about their own shopping routines, first in general and then during a specific past event. These activities were designed to detect the following indefinite strategies:

i) a definite article with an indefinite interpretation (ART in Cardinaletti & Giusti 2018's terms) (cf. (1));
ii) a zero determiner for bare nouns (ZERO) (cf. (2)); iii) the so-called "partitive article" (or *di*+art) (cf. (3)); iv) pseudo-partitives such as 'a bit of' (cf. (4));
v) the grammaticalized cardinal 'two' (cf. (5));
vi) the grammaticalized cardinal 'four' (cf. (6)).

Most of the findings are in line with C&G's (2015, 2018, 2020) work on Italo-Romance. However, something else worth investigating further emerged:

i) C&G (2020)'s claim that ZERO is more preferred in Sicily than in the rest of Italy is confirmed, Sicily being part of the two peripheral, and thus conservative, areas with respect to the central spreading of the definite article, which is a Romance innovation (since Latin did not display any articles); ii) ZERO is the preferred option to encode indefiniteness in negative generic sentences in the present; iii) ART is the preferred option to encode indefiniteness in positive episodic sentences in the past; iv) 'certain' is never used with core indefinite interpretation (cf. (7a)), as reported in Rohlfs (1968) for other Southern Italo-Romance varieties (see also Baldi & Savoia 2021), but only with a wide scope interpretation (cf. (7b));

v) there is a negligible use of *di*+art (6 occurrences by 2 participants), which may be considered as a contact effect with Standard Italian, where *di*+art is a common strategy to express indefiniteness in episodic sentences; vi) pseudo-partitives *tanticchja di* (or *tecchja di*) 'a bit of' and *nna puicu di* 'a bit of' are lexically specialized respectively for singular mass and plural count nouns, and convey a 'small quantity' meaning (cf. C&G 2018; Giusti 2021), but vii) grammaticalized low cardinal *quattru* 'four' is preferred to *nna puicu di* as the actual indefinite for small quantities with plural count nouns in positive sentences, cardinal *dui* 'two' being limited to very small quantities, and *nna puicu di* (which has generally a positive nuance) being preferred for greater indefinite quantities (cf. (8)).

Finally, the present study also aims at providing dialectal data on the frequency of the verb-noun collocations issue, as a research desideratum in Giusti (2021: 285) to favor cross-linguistic comparison on indefiniteness both among Italo-Romance varieties and among regional varieties of Italian.

(1) *'Ncapu la mènzola cci su **li** libbra.* (Deliano) on the shelf there are the books
     'There are some books on the shelf.'

(2)   **Ø** *Libbra nun ni ljiggiu.* (Del.) books NEG NE read.PRS.1SG
       'I don't read books.'

(3)   *Ho   bevuto   **del**   vino.* (Italian)
     have.PRS.1SG   drink.PPT   of-the wine
     'I've drunk some wine.'

(4) *Arsira   accattavu   **tanticchja**   **di**   murtatella.*   (Del.)
     last-night   buy.PST.1SG   a-bit   of   mortadella
     'I bought some mortadella last night.'

(5) *Cuglì   **du**   margariti   e   si   nni   jì.*   (Del.)
     pick.PST.3SG   two   daisies   and   REFL NE   go.PST.3SG
     'He just picked a couple of daisies and left.'

(6) *Ppi   stasira   ordinammu   **quattru**   panina.*   (Del.)
     for   tonight   order.PRS.1PL   four   sandwiches
     'We can have some sandwiches for tonight's dinner.'

(7)   a. ***Certi**   carusi.* (Del.)
       certain   guys
       'Some guys.'

  b. *A **certi** carusi nun l' ammitavu picchì èranu antipàtici.* (Del.) to certain guys NEG them invite.PST.1SG because be.PST.3PL unpleasant   'I didn't invite some guys because they were unpleasant.'

(8)   *L'   a-bbuliri   **nna**   **puicu d'** aranci?*   (Del.) them have-
     to-want.INF a   bit   of oranges
     'Would you like some oranges?' (implying: I've got plenty of them)

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Topicalization occurs when a syntactic object representing given information is merged sentence-initially (1). Some natural languages display a special form of topicalization, in which a constituent appears to be split into two parts and only one of them is topicalized. German is among the most studied languages in this respect (2). (I will refer to the topicalized constituent as TOP and the constituent that remains in the base position as REM.) Different proposals have been made to account for ST (e.g., subextraction, van Riemsdijk 1989; distributed deletion, Fanselow and Cavar 2002; labeling-driven movement of an autonomous phrase, Ott 2015). A major question that´ this work sought to answer is whether the derivation of ST involves movement of TOP (i.e., subextraction) or is derived via another mechanism.

Facts about ST are crucial in filtering out previous work. The first is that many cases of ST cannot have been derived via subextraction, such as gapless splits (3a), in which TOP does not associate with a gap in the constituent containing REM (3b). Second, in contrast with the previous observation, other empirical evidence indicates that ST involves movement. For instance, ST is sensitive to islands (4). The third fact is that ST is characterized by special information structure properties and is only acceptable with certain intonation patterns.TOP is characterized by a rising tone, and REM by a falling tone. The last is that ST is not restricted to nominals. Various categories can be split in topicalization. In addition to split noun phrase topicalization (SNPT; e.g., 2), languages display split verb phrase topicalization (SVPT; 5a) and split adjective phrase topicalization (SAPT; 5b). Any analysis of ST should account for (at least) the first two facts. I show here that previous work does not account for *all* of these facts.

This paper empirically and theoretically investigating ST in Jordanian Arabic (JA), a previously undiscovered phenomenon in JA. In (6), a nominal is topicalized leaving a remnant, parallel to the cases of German and Dutch (6). The paper reports on a large-scale (n = 463) acceptability judgment task. The task reveals that JA displays ST of different categorial types. Further properties of ST in JA are also presented, among which is that ST in JA is characterized by bridge-contour intonation. To capture these facts, I propose a unified analysis of ST in which REM undergoes focus movement to the specifier of a low focus phrase in the IP domain (e.g., Jayaseelan 2001; Belletti 2004; Gengel 2013), followed by topicalization of the remnant of that movement. I illustrate the analysis for (6) in (7). I show that this analysis captures all the categorial types of ST in JA. The empirical investigation and the analysis proposed provide insights into the functional structure of the left periphery of the vP phase and forms a further aspect of the parallelism between CP and vP as phases.

(1)   A car this expensive, Simon would never buy.

(2)   *German* (Ott, 2015, 157, (1))

       Bucher hat Peter leider erst drei gute gelesen.
       books has Peter unfortunately only three good
       read

'As for books, Peter has unfortunately only read three good ones.'

(3) *German* (Fanselow, 1993, 63)

  a. [Raubvogel] glaube ich kennt Gereon nur
[Bussarde]. birds of prey believe I knows
Gereon only buzzards
'As for birds of prey, Gereon knows only buzzards.'

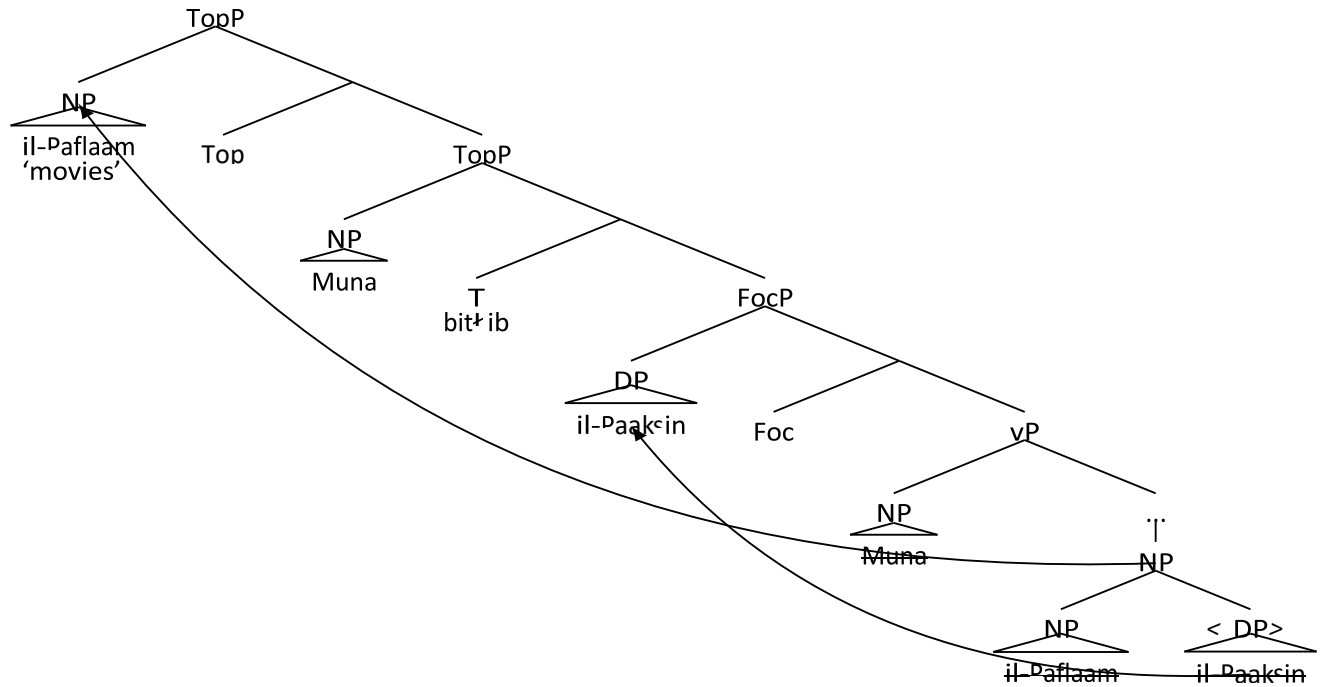 b. *[NP Raubvogel Bussarde]

(4) *German* (van Hoof, 2006, 7,(14b))

*[Augen] kenne ich [[NP keine Frau, [CP die [schonere _ t_i] hat [als ich]$_i$]].
eyes know I no woman who more beautiful (ones) has than I

'As for eyes, I know no woman who has more beautiful ones than I have.'

(5) *German* (van Hoof, 2006, 4, (6)-(7))

  a. [CP [Gegessen] [C hat [IP er [VP nur grune¨ _
Bohnen]]]. eaten has he
only green beans
'He has eaten only green beans.' (SVPT)

  b. [Stolz] ist er vor allem [AP _ auf seine Kinder].
proud is he especially on his children
'He is especially proud of his children.' (SAPT)

(6) il-Paflaam, Muna bitŁib ~~il Paflaam~~ il-Paaksin. the-moves Muna like ~~the movies~~ the-action
'As for movies, Muna likes the action type.'

(7)

TopP
├─ NP
│   il-ʔaflaam
│   'movies'
├─ Top
└─ TopP
    ├─ NP
    │   Muna
    └─ T'
        ├─ T
        │   bitḥib
        └─ FocP
            ├─ DP
            │   il-ʔaakˤin
            ├─ Foc
            └─ vP
                ├─ NP
                │   Muna
                └─ ·|·
                    NP
                    ├─ NP
                    │   il-ʔaflaam
                    └─ < DP>
                        il-ʔaakˤin

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Aspects of the syntax of negation in Khuzestani Arabic

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Abstract

Negation has received considerable attention in both Standard and local Arabic dialects (e.g., Benmamoun, 2000; Aoun, Benmamoun, & Choueiri, 2010; Fassi Fehri 1993; Moutaouakil 1993; Ouhalla, 1993). One thorny issue is whether negation heads its own projection and, if so, whether NegP selects TP. We report on Khuzestani Arabic (KhA), an understudied dialect of Mesopotamian Arabic spoken in southwestern Iran, because of interesting syntactic behaviors involving tense and negation. KhA uses *maa*, *laa*, and *muu(š)* for sentential negation, none of which host tense information[1]. All three negatives can also express negative imperatives, however, with pragmatically different functions: prohibition with *laa*, warning with *muu(š)*, and presupposed shared information with *maa* (1a, 1b, & 1c, respectively). (1) *maa* negates both perfective (2a) and imperfective (2b) verbs, conditionals, existential *ʔakuu* 'there is/are', possessive *ʕəd-* 'have/has', so-called verbless sentences with adjectival predicates, in negative discourse expressions (2c), and as a negative quantifier with indefinite singular NPs (*maa walad* 'no boy'). As also reported for Egyptian, Kuwaiti, and Moroccan Arabic, in verbless sentences with nominal or prepositional predicates, *maa* in KhA must combine with subject pronominal clitics, evidence that *maa* heads its own projection and probably carries a [+D] feature (Benmamoun, 2000). (2) *Laa* is used in negative imperatives that imply prohibition, for negating a series of items and negative contrasts (3a), as an emphatic negative quantifier with *wa-* in verbal and verbless sentences (3b, 3c), and for invoking emotions (3d). When preceded by *wa-*, *laa* can host subject clitics (3e) in verbless sentences, indicating that *laa*, like *maa*, also heads its own projection. When *wa-laa* occurs in preverbal position, negation is not allowed (3f) unless a Double Negation (DN) reading is intended (3g). However, when *wa-laa* is in postverbal position, the presence of negation is required (3h). Thus, when in lower position than verbal Neg, *wa-laa* seems to be a Negative Concord (NC) item and its behavior patterns well with languages like Egyptian Arabic and Italian. We thus classify KhA as a non-strict NC language. (3) *muu* is a proclitic that can optionally combine with enclitic *-š* to form *muuš*. Unlike some other dialects, in KhA the two morphemes are always continuous. *Muu(š)* occurs in non-verbal predicates and its scope of negation can be sentential or constituent. *Muuš* also occurs in past tense (perfective) context (4a). In line with Aoun, et al., (2010), we analyze *muuš* as an interrogative with a null expletive subject and thus an independent clause that takes another clause as its complement. Supporting evidence comes from (a) negating the verbal clause (4b) and (b) moving *muuš* (4c). These results explain why the embedded clause verb does not raise to T to merge with Neg *muuš*. Overall, in KhA, all three negative markers appear external to the verbal complex and TP. *Laa* can serve as a negative complementizer in KhA with a warning implication. Since *laa* can precede the subject, it indicates that *laa* has moved to C. If it were below TP, the T head would induce a minimality violation. We take this to be evidence for the higher position of NegP.

Keywords: Arabic, Khuzestani Arabic, negative concord, Standard Arabic, syntax

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[1] Instead, temporal information can be conveyed on the verb, through a proclitic, modals (e.g., *kuun* 'must') or auxiliaries (e.g., *čaan* 'was/were').

Examples:

(1) a. Laa truuħ leɣaad! 'Don't go there!'

b. Muu(š) truuħ leɣaad! 'You're not supposed to go there!'

c. Maa truuħ leɣaad! 'You're not going there!'

(2) a. maa-raaħ li-l-madrisah aməs. 'He did not go to school yesterday.'

b. maa-y-ruuħ li-l-madrisah baačər. 'He will not go to school tomorrow.'

c. maa ʕaliak 'Don't worry about it!'

(3) a. laa ʔaana w laa inta 'neither I nor you'

b. wa-laa walad bi-l-madrisa 'Not a single boy is at school.'

c. wa-laa ʕəddah bakhat 'He has no conscience whatsoever.'

d. Allah laa-yrəzjah 'May Allah not bless him!'

e. wa-laa-ni muhandis 'I'm not an engineer at all.'

f. wa-laa walad raaħ 'No boy left'

g. wa-laa walad maa-raaħ 'Every boy left'

h. maa-raaħ wa-laa walad: 'No boy left'

(4) a. muuš čənət bi-l-madrisa? 'weren't you at school?'

b. muuš maa-čənət bi-l-madrisa? 'Isn't it the case that you were not at school?'

c. maa-čənət bi-l-madrisa, muuš? 'You were not at school, right?'

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Split-ergativity in Nuristani languages

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In my paper I analyze split-ergativity in Nuristani languages and, in a second step, discuss what this data means for some new generative approaches to split-ergativity. Split-ergativity refers to a phenomenon where some tenses, aspects and/or moods trigger ergative alignment, while other tenses, aspects and/or moods exhibit another pattern, in the case of Nuristani nominative-accusative alignment.

The Nuristani languages are spoken in Eastern Afghanistan and form an independent subbranch of the Indo-Iranian language family. Most Nuristani varieties are insufficiently studied and Nuristani data never is never utilized in discussions of grammatical features in a cross-linguistic or theoretical perspective. For example, in articles and monographs discussing (split-)ergativity – even those which discuss Indo-Iranian split-ergativity more specifically –, Nuristani data is not mentioned despite the fact that all Nuristani languages except Prasun are clearly ergative in the past tenses:

(1) *tü ĩ wňtoš* (Waigali proper)   (2) *yɛmɛ wř-yā* (Western Kati)

you.SG-DIR me-OBL saw-PST.2SG me-OBL saw-PST.3PS

'I saw you.'[2]   'I saw him.' (Mohammad 1991: 13)

In ditransitive verbs, the past-tense verb agrees with the NP which occupies the highest position in the person-animacy hierarchy (unlike in many other Indo-Iranian languages):

(3) *ĩ tu-ṣə ošṭ ḍũ palā́ partóš* (Waigali proper)

me-OBL you.SG-OBL-to eight piece-DIR.SG apple-DIR.SG gave-PST.2SG

'I gave you eight apples.'

Coon 2013: 251 proposes that "split ergativity is generally an epiphenomenon of the fact that imperfective and progressive constructions are periphrastic, involving an aspectual main verb, while the perfective is monoclausal—a pattern found in unrelated languages, regardless of grammatical alignment, all over the world." And intransitive verbs would not trigger ergative alignment anyway, neither in split-ergative nor more classically ergative(-absolutive) languages like Basque. The idea was further elaborated in Coon, Preminger 2017, and in Coon 2019: 1, the scholar proposes "[t]he different factors that trigger split ergativity boil down to a reduction in transitivity", and that "[t]hese factors are present in *all* languages".

Example 4 shows that this statement is overgeneralized, not only regarding Nuristani languages, but also, as I will lay out, other Hindukush languages. The perfect tense of the Nishey variety consists of the perfect participle and a present auxiliary; nevertheless, the auxiliary does not render the whole verb syntactically transitive.

(4) *ũ äw pratost=oš* (Nishey)

me-OBL bread-DIR.SG given-PP.SG.M=AUX.PRS.2SG

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[2] Uncited data stems from my own fieldwork with native speakers.

'I have given you bread.' (Degener 1998: 511)

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The study syntactically probes into the (V_1 + V_2) structure using empirical evidence from Palestinian Arabic (hereafter PA) to show that there is not a unified syntactic category for V_1. More specifically, I provide a new analysis within a double v/VP approach (Larson,1988; and later work) in addition to other diagnostics dividing V_1 into a dichotomy of light verbs (LV) and auxiliary verbs (AV) or Tense heads (cf. Hussein (1990) and Ouali et al. (2016)). I argue that in an LV structure: (i.) both V_1 and V_2 are generated in two distinct vP shells: vP_1 is allocated for V_1 as a 'light light' verb both syntactically and semantically. V_2 as a syntactically and semantically heavy verb, is hosted by the little v projection (vP_2) where Ө-roles are assigned to its external and internal (if any) arguments (ii.) V_1 is base-generated in [v_1,vP_1] and raises to a higher position [Asp_1, $AspP_1$] position to get inflected (iii.) V_1 does not assign Ө-roles, but morphologically behaves akin to V_2 (iv.) V_2 is first merged in [V, VP] position as the main thematic verb before moving to [v_2, vP_2]. The last movement of V_2 is to [Asp_2, $AspP_2$] to get inflected similar to V_1, and (v.) there is no v/V-to-T movement for either V_1 or V_2 since both are imperfective verbs which only make their way up to [Asp, AspP] position (Benmamoun, 2000). The proposed blueprint of an LV structure in PA replacing the syntactic analysis of Hussein (1990) is in (1). On th other hand, the main assumptions regarding AV structure are (i.) V2 as a main verb behaves similarly to V2 in LV structure in the sense that it is base-generated in [V, VP], then it moves to [v, vP] where Ө-roles are assigned to the external and internal (if any) arguments (ii.) V2 raises to a lower [Asp2, AspP2] head, but it does not raise further as the overt auxiliary blocks V-raising (Tucker, 2011), (iii.) V1 assumes a grammatical function, so it is not generated in [V, VP] or [v, vP]. It is base-generated as [Asp1, AspP1], then it raises to [T, TP], and (vi.) V1 is proven to undergo Aspto-T movement; standard V-raising diagnostics have been adopted including the placement of aspectual adverbs and negation, additional T-to-C movement, and floating quantifiers (Pollock,1989; and later work). All things being equal, AV structure in PA can be assigned the syntactic analysis in (2) that replaces the syntactic analysis of Ouali et al. (2016).
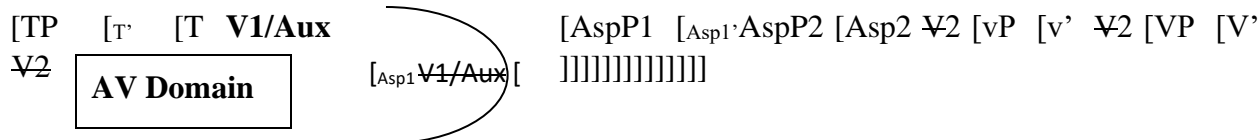
Keywords: light verbs, movement, T heads, shell structure, Palestinian Arabic

(1):

[TP [T' T [AspP1 [Asp1' [Asp1 ᵛᴾ¹ [ᵥ₁' V̶1 p̶r̶o̶ [V1 *pro* [AspP2 [Asp2' [Asp2 V2 *pro* [vP2 [ᵥ₂' V̶2̶ p̶r̶o̶ [VP [ᵥ' V̶2̶ p̶r̶o̶

]]]]]]]]]]]..

  LV Domain

(2):

[TP   [T'   [T **V1/Aux** ~~V2~~   [AV Domain]   [Asp1 ~~V1/Aux~~ [[AspP1 [Asp1'AspP2 [Asp2 ~~V2~~ [vP [v' ~~V2~~ [VP [V']]]]]]]]]]]]]]

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Grammatical Transfer in Arabic-speaking Learners of Hebrew

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Cross-linguistic influence (CLI) is typically defined as the influence of one language on an individual's learning or use of another language (James, 2012). This influence can involve various aspects of language and language learning, particularly the phenomena of language-related knowledge being applied while using another language. With Odlin's (1989:27; 2022) definition of transfer as "the influence resulting from the similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired," this study adds to the discussion on understanding how the similarities and differences between Arabic and Hebrew influence language learning. This research examines cross-linguistic influences (CLI) in the grammatical systems of L1 Arabic students receiving pedagogical training to teach Hebrew. This analysis is done through a compiled corpus of thirteen written reflection essays (7,479 words) produced after the pedagogical training program ended at the Beit Berl College's Arab Teacher Training Institute for Education in Israel. Additionally, the thirteen reflection essays were from thirteen Arabic-speaking learners with various levels of language experience in the L2 (Hebrew).

Predictions are that this group of L2-Hebrew learners will apply grammatical features commonly used in their L1, often resulting in innovative non-target-like forms in their writing. The data collected were tagged/annotated in NVivo for a thematic analysis of syntactic features or 'non-target-like forms.' We found patterns regarding conjugation (habitual past tense), coordinating conjunctions, and gender/number agreement (e.g., irrational nouns) in the reflection essays. The data also shows some commonalities between the non-target forms across the thirteen learners.

For example, in Arabic, adjectives agree with the nouns they modify in gender and number except for plural irrational (nonhuman) nouns (Alkuhlani & Habash, 2011; Khwaileh & Albustanji, 2020), which always take feminine singular adjectives. However, gender and number agreement is strict in Modern Hebrew. Hebrew requires the gender and number to agree regardless of whether the noun is human or nonhuman (Kantor & Zhakevich, 2019). Below, the preposition *'otah* is feminine and singular, but the head noun in the construct state, χomrej, which the preposition should match, is in the masculine plural form. The correct preposition should be *'otam*, which is masculine and plural, but because the head noun is plural irrational

(i.e., nonhuman), the learner used the feminine singular form of the preposition Arabic requires.

χomrej	ha-ləmidah	ʃe-lakaχ-ti	('ot-ah)
material.PL.M	DEF-learning.SG.F	SUB-take.PST-1.SG	PREP-3.SG.F

'The learning materials that I took (her).'

Thus, the students are applying or transferring their grammatical knowledge (Gass, 1979) of their L1 (Arabic) to their L2 (Hebrew). Similar studies (Haskel-Shaham et al., 2018; Manor,

2014; Abu Baker, 2016) have found that native speakers of Arabic (L1) reveal cross-linguistic influences when writing in Hebrew (L2), which includes language transfer from L1. The findings of this study are significant because they also demonstrate the strong influence of L1 Arabic on Hebrew, and this can help instructors focus on cross-linguistic influences and non-target-like forms when teaching Hebrew as a second language.

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Rex Sprouse (Indiana University, Department of Second Language Studies)

It is well known that adults with a given first language (L1) acquiring a third language (L3) often acquire it faster and more easily than adults with that L1 acquiring the same language as a second language (L2), the so-called "Bilingual Advantage" (Cenoz, 2013). However, the source of the Bilingual Advantage is controversial. This paper reports on preliminary results of an ongoing study seeking to empirically contrast approaches based in general cognitive benefits resulting from bilingualism (e.g., Bialystok, 2021; Tremblay & Sabourin, 2012) vs. approaches based in specific previous language experience (e.g., Kopečková, 2016), i.e., the availability of a facilitative structure in the L3er's L2.

Here we study the acquisition of two Russian case alternations: genitive of negation (GenNeg) and path/location (PathLoc). In GenNeg, canonical subject nominative or object accusative is replaced with the genitive under negation in the absence of existential commitment (EC) to the relevant argument (Kagan, 2013). While English has no analogous alternation, EC underlies the indicative/subjunctive alternation in French and Spanish relative clauses, and this alternation could facilitate the acquisition of GenNeg in Russian. In PathLoc, the objects of certain prepositions are in the locative case when they denote stationary location, but in the accusative when they denote the endpoint of a path of motion—a distinction that coincides with the distribution of certain verbal prefixes (Nikitina, 2010). English, French, and Spanish have no analogous grammatical alternation that could facilitate the acquisition of PathLoc in Russian.

Thus far, three groups (L1 Russian (n=12), L1 English/L2 Russian (n=4), and L1 English/L2 Spanish or French/L3 Russian (n=4) participants) have completed a contextualized Acceptability Judgment Task, in which they rated Russian sentences on a 4-point Likert scale, including 56 items testing the use of GenNeg, and 60 items testing PathLoc, together with 16 fillers. If the Bilingual Advantage derives from general cognitive benefits of bilingualism, we predict that the L3 group would outperform the L2 group on both phenomena. However, if the Bilingual Advantage depends on specific distinctions in an L3er's L2, then the L3 group should outperform the L2 group on GenNeg (because French and Spanish offer a facilitative structure for GenNeg), but not on PathLoc (because neither French nor Spanish offers a facilitative structure for PathLoc).

Participants in the L2 group averaged 10 semesters of Russian study, while participants in the L3 group averaged only 6.5 semesters. Nevertheless, the L3 group generally performed similarly to the L2 group on most items, despite differences from the L1 group (Figures 1 and 2). The most significant difference between the two groups is that the L3 group outperformed the L2 group in the acceptance of locative case marking in locative contexts. It is striking that this is not a grammatical phenomenon for which French or Spanish provides a facilitative analog. Although additional participants are still being recruited, results thus far favor general cognitive benefits of

bilingualism, while the results are mysterious if the Bilingual Advantage depends on phenomenon-specific facilitation from a previously acquired language.
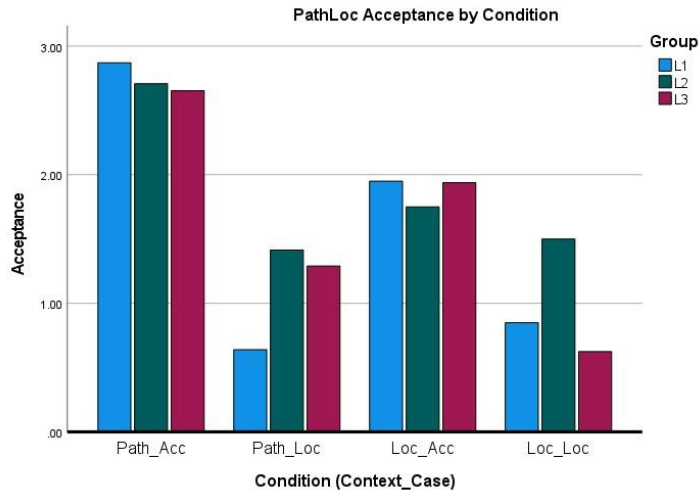

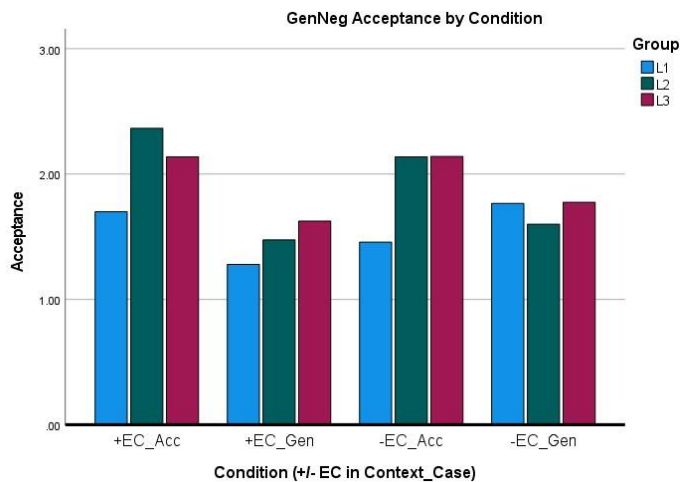Figure 1. PathLoc acceptance by condition and group

Figure 2. GenNeg acceptance by condition and group

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Multiple sluicing and coordinated *wh*-questions are both quite restricted, obligatorily following the clause-mate conditions and being confined to optionally transitive verbs respectively, as in (1). However, the ungrammaticality can be shaved either by coordinated multiple *wh*-sluicing (CM-sluicing) or coordinated clefts, as shown in (2) (data from Lasnik 2014, Citko and Gracanin-Yuksek 2020):ˇ

(1)   a. *Some saw something, but I can't remember who what.

        b.   *Who or what saw?

(2)   a.   Someone saw something, but I can't remember who or what.

        b.   Someone saw something, but I can't remember who it was or what it was.

The differences in coordinated sluicing and clefts seem to lie in their compatibility with adjuncts. To account for these distinct properties of CM-sluicing, Citko and Gracanin-Yuksek (2020) suggest that CM-sluicingˇ is the coordination of two interrogative CPs together with TP ellipsis.

To validate such a derivational analysis as well as to investigate its grammatical properties with empirical data, we performed a corpus investigation with COCA (Corpus of Contemporary American English) and BNC (British National Corpus) obtained 260 tokens of CM-sluicing examples including the following:

(3)   a. Someone was keeping something a secret. The only way to get Gella out of there is to find out what and who. (1991 FIC)

        b.   He's moving something with all new guys. I don't want to tell you what or where. (2006 FIC)

        c.   Something had been achieved, even though he was not quite sure how or what. (BNC 1985-1994)

        d.   Breast cancer can be beaten, they say, and they are here to tell how and why. (2002 MAG)

To resolve the meaning of such examples, Citko and Gracanin-Yuksek (2020) suggest that these involveˇ a derivation from coordination of singular *wh*-questions, with an E-type pronoun in the second conjunct, co-indexed with the trace of the *wh*-phrase in the first conjunct. We could observe that this approach, however, faces challenges from examples like (3c) since either the second clause would not have an E-type pronoun or be different from the first clause. Examples like (4) also question this derivational analysis, as the two putative clauses would be syntactically different, and the second clause also cannot derive an E-type pronoun from the antecedent.

(4)   "I had heard about yippies throwing pies at political figures," says Decker, "though I couldn't tell you who or what." (1999 MAG)

Considering the possible issues of such a clause-based derivational analysis, we suggest a constructionbased approach where each elliptical construction carries its own contextual conditions regulating its semantic resolution. In particular, adopting Ginzburg and Sag (2000), we assume that the *wh*-remnants function as nonsentential utterances (directly projecting into an utterance unit), and that its resolution refers to a structured discourse which includes information such as question-under-discussion and focus-establishing constituent.

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Previous studies on English as a second language (ESL) have shown that advanced English learners show higher accuracy in interpreting subject *wh*-questions and relative clauses than in processing their object *counterparts, thus called the subject-object asymmetry in sentence comprehension* (Gass & Lee, 2007; Hopp, 2017; Hopp et al., 2019; Rankin, 2012; Rankin, 2014). However, not many studies have investigated *wh*-questions and relative clauses processing by Chinese learners of English, particularly among adolescent learners. In this study, we assess the extent to which seven groups of participants from 6th grade to 12th grade show differences in their comprehension of *wh*-questions and relative clauses and whether differences in their current grade affect the degree to which they give target responses in all sentence types. A picture-selection task adapted from Rankin (2014) was constructed using 10 quadruplets of sentences with familiar verbs **bite** and **catch** as in (1) and (2):

(1) a. Which animal bites the lion?   (subject *wh*-question)
     b. Which animal does the lion bite?   (object *wh*-question)
(2) a. The animal that bites the lion.   (subject relative clause)

     b. The animal that the lion bites.   (object relative clause)

Hypotheses: Adolescent Chinese learners of English will display a relatively higher comprehension accuracy in interpreting both subject *wh*-questions and subject relative clauses in comparison to interpreting object structures. Meanwhile, participants will make reversal errors in comprehending object structures by interpreting them as their subject counterparts, similar to other L2 learners of English. Overall, participants from the higher grades will demonstrate better performance than lower grade students.

Experiments: A total of 625 adolescent Chinese learners of English participated in the experiment (the number of participants from 6th graders to 12th graders is respectively: 190, 70, 60, 80, 100, 80 and 45). In the picture-selection task (see Fig. 1), participants circle the target animal that would be the best answer/fit to the *wh*-question/relative clause. Target response and reversal errors are calculated.

Results and Discussion: All seven groups displayed higher accuracy in interpreting subject *structures* as opposed to object structures (*$p < 0.05$). Participants of all grades made reversal errors by parsing object structures as their subject counterparts. Participant's current grade in school affects overall comprehension accuracy, with students in higher grade outperforming students in a lower grade. Conclusively, consistent with the previous research, the results of this

study indicated that the subject-object asymmetry in ESL in favor of subject structures can also be found in Chinese adolescent English learners.

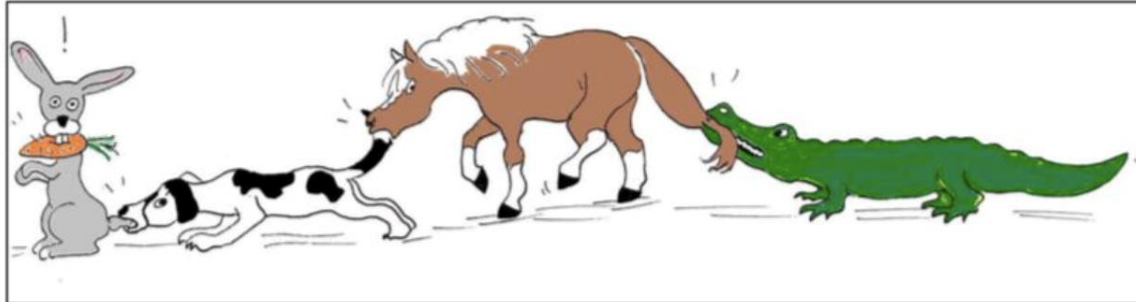**Figure 1.** example display for the verb *bite*

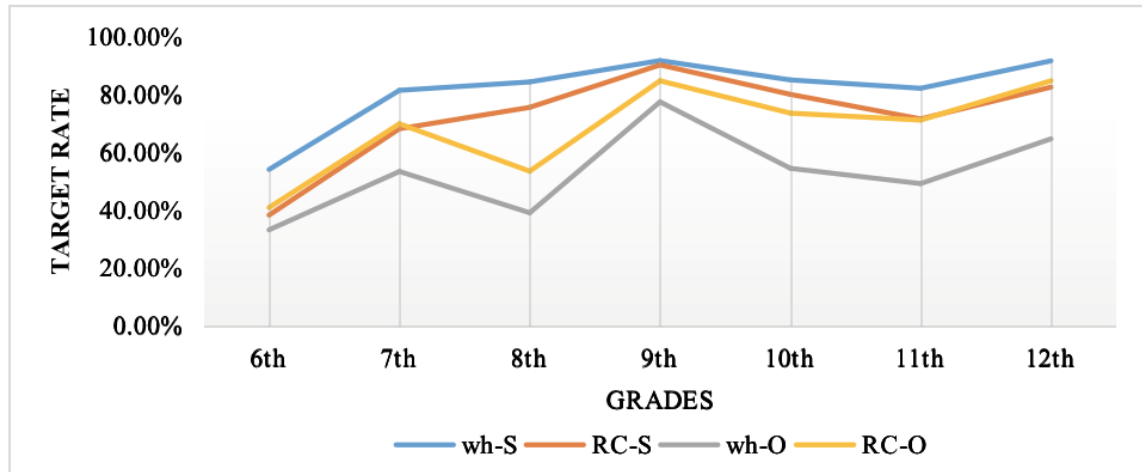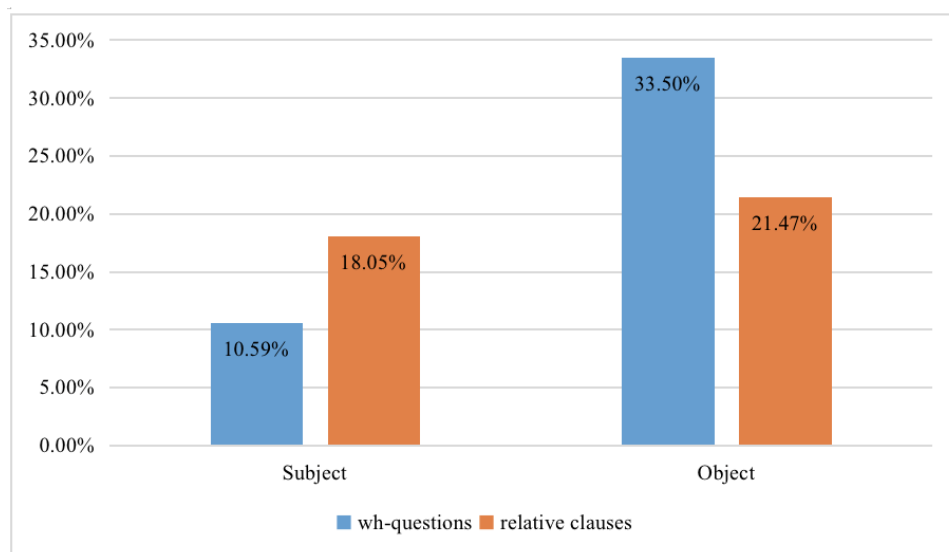**Figure 2.** The change of target rate in seven groups

Figure 3. Reversal error rates of four sentence types

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Towards a new model to study the acquisition and use of verb tenses in Spanish

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Many studies have found that past tense poses a significant challenge in Second Language Acquisition (SLA) (Bardovi-Harlig 2000; Slabakova and Montrul 2002; Izquierdo 2009). Much of the research on the acquisition of verb tenses in French and Spanish has focused on the contrast between simple past tenses (i.e. *cantaba* '*sang_{IMPERF}*' and *cantó* 'sang_{PERF}'), while other verb tenses, as well as issues such as verb tense polysemy, have received much less attention. Consequently, in order to better explore the different contextual uses of verb tenses in a language, it is necessary to take into account the temporal information encoded in the categories Tense, Grammatical Aspect and Lexical Aspect, as well as the pragmatic traits (as narrativity and subjectivity) that are grafted onto the basic semantics of verb tenses to help characterize their different uses (Grisot 2018; Meyer, Grisot, and Popescu-Belis 2013; Moeschler, Grisot, and Cartoni 2012).

This project will address this issue by proposing a methodology to study the acquisition of temporal reference considering the semantic and pragmatic information encoded by the three categories mentioned above. To do so, we set out to accomplish two goals. The first one is to present the model of Spanish verb tenses *Function-Meaning-Form* (FMF) (Cruz Enríquez 2019) −based on the distinction between commentary and narration− that establishes four narrative functions to study different meanings and contextual uses of verb tenses. Our second goal is to show how the FMF model ca be used to analyze narratives using past tenses. To illustrate this second goal, we offer a sample analysis of 27 Spanish written narratives produced by L1 (n=12) and L2 advanced (n=15) speakers. These narratives are based on an excerpt from the Chaplin film *Modern Times*. The results of the sample quantitative analysis indicate that both groups are successful in their use of different verb forms to express the meanings conveyed in the four narrative functions that conform the MFM model, but also point to a possible difference between the groups in terms of how they deal with verb tense polysemy. Specifically, L2 speakers tend to associate a form with one unique meaning, while the L1 seem to have a greater tendency to relate a form to multiple meanings, especially concerning the form *cantaba* ($p = 0.005$ using the X^2 de Pearson test), wish is used by L2 speaker (1) more often than L1 speaker to designate the progressive phase of an event in contexts as the adverbial clause. L1 speaker prefer to use *cantaba* in these contexts (2). These results are in line with previous studies on the L2 acquisition of tense polysemy (Crossley, Salsbury, and McNamara 2010, among others). To conclude, the results of the sample analysis illustrate the potential of the FMF model to provide a fine-grained analysis of verb tense production, both in L1 and L2.

Keywords: verb tenses, polysemy, morphosyntax, second language acquisition, Spanish.

Examples

(1) Mientras el mismo delincuente **estaba robando** unos cigarros delante del agente, un camión de pan se paró. (ESL2AV015)

'While the same criminal **was stealing** some cigarettes in front of the agent, a bread truck stopped.'

(2)   Mientras el policía **hablaba** por teléfono, el hombre pidió un cigarro. (ESL1002)

'While the policeman **was talking** on the phone, the man asked for a cigarette.'

'While the policeman **talk*IMPERF*** on the phone, the man asked for a cigarette.'

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The production and interpretation of infinitives in L2 and heritage Spanish

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The present study investigates the use and interpretation of infinitives in Spanish as heritage and second language as well as the potential role of crosslinguistic influence from English, linguistic proficiency and patterns of language use and exposure on its acquisition. In Spanish, infinitives have nominal properties that allow them to occur in all syntactic positions in which a noun can be (e.g., De Miguel, 1996; Grimshaw, 2005). They can function as the subject of the main clause (1a), as the complement of a verb in a subordinate clause (2a), or as the object of a preposition (3a) (e.g., Hernanz, 1999). English usually disallows infinitives in these contexts and relies on the use of gerunds (1b-3b) (e.g., Emonds, 2013).

1. a. **Caminar** es mi hobby favorito.
    b. **Walking** is my favorite hobby.

2. a. Yo amo **jugar** tenis
    b. I love **playing** tennis

3. a. Siempre tomo una siesta después de **comer.**
    b. I always take a nap after **eating** lunch.

Previous research has reported difficulties in the use of the infinitive among bilingual speakers. Belpoliti & Bermejo (2019) found that heritage speakers overextended the gerund in lieu of the infinitive in a corpus of written essays. Similarly, Escobar & Potowski (2015) reported higher acceptance of the gerund in contexts where infinitives were expected among heritage speakers. Research with L2 learners of Spanish remains unexplored. We cover this gap by investigating these two bilingual populations and exploring whether age of onset of acquisition, proficiency, and linguistic experience play a role on the use and interpretation of infinitives in subject position and in object of the preposition (e.g., Montrul, 2008; Sánchez, 2019).

25 heritage speakers (age range, 18-27; mean proficiency = 40/50), 16 L2 learners (age range, 1822; mean proficiency = 34/50), and 25 Spanish dominant speakers serving as control baseline (age range, 18-27) took part in the study. All participants completed a language background questionnaire and a modified version of the DELE test as a proficiency measure (e.g., Duffield & White, 1999; Montrul & Slabakova, 2003). The use and interpretation of infinitives was tested via a sentence-completion task and a contextualized preference task (e.g., Castilla-Earls et al., 2018; Cuza & López-Otero, 2016; Geeslin & Guijarro-Fuentes, 2005).

Preliminary results showed gerund overextension among the L2 learners in both sentential and object of preposition contexts across both tasks. The heritage speakers, however, showed divergences only with infinitive use and interpretation in subject position (~60%). They outperformed the L2 learners in both contexts, and behaved closer to the baseline, suggesting age effects. Furthermore, we found significant associations with proficiency and with language experience. We discuss our results following recent work on the role of age of onset, proficiency, and language experience in bilingual language development (Sánchez, 2019; Shin et al., 2022).

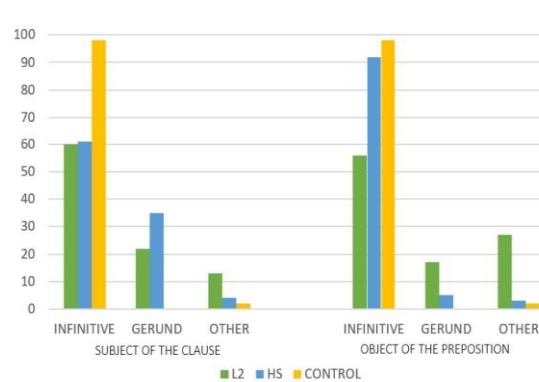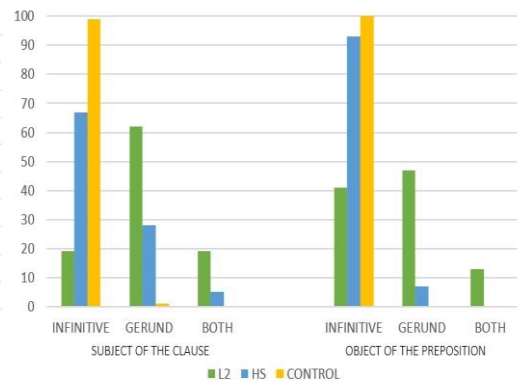Figure 1. Mean production of infinitive, gerund infinitive, gerund, and and other forms by group forms by group

Figure 2. Mean preference of other

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Processing ditransitive constructions in L3 English: A self-paced reading task

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SLA research has recently turned to language processing to explain the variation in learners' language. The rationale is that differences between native and non-native parsing can account for the differences between L1 and L2 use (Juffs & Harrington, 1995; Marinis et al., 2005). Specifically, Papadopoulou and Clahsen (2003) argue that L2 learners rely more on lexical cues and less on purely structure-based parsing strategies than native speakers.

Argument structure alternations are a common research area in language processing as they involve mapping from lexicon to syntax. Such is the dative alternation in English. There are ditransitive verbs that alternate between two constructions (Levin, 1993); a double object dative (*John sent **Mary** a letter,* DOD) and a prepositional dative (*John sent a letter **to Mary***, PD). Research on L2 English has indicated that the PD is easier for learners and acquired first. However, research with L3 learners is scarce.

This study aims to research Greek-German bilingual children learning English as a L3. The dative alternation is allowed at least to some extent in these languages too. In German (1) the use of the PD is rather restricted, whereas in Greek (2) the DOD is more marked than the PD. Contrary to English, both languages are morphologically rich and allow flexible word order. As a result, the question arises whether the knowledge of these constructions in the other languages can facilitate or inhibit in any way the development and processing of the English ones.

1. (a) John schickte **Marie** einen Brief (DOD)
   (b) John schickte einen Brief **an Marie** (PD)

2. (a) O Janis estile **tis Marias** ena γrama (DOD)
   (b) O Janis estile ena γrama **stin Maria** (PD)

The main objective of this study is to investigate non-native processing strategies and potential cross-linguistic influence in processing ditransitive constructions with pronominals in L3 English. For this purpose, a self-paced reading task, which is on-line as it measures reading times (RT), was administered to Greek-German children (N=39) living in Hamburg and a control group (N=21). The task was designed following the moving-window paradigm and four lists were created for the items based on condition 1: DOD vs PD and Condition 2: pronoun vs reflexive. The scope is to explore potential processing effects—as reflected by longer RT—in both constructions and examine whether the learners employ target-like processing strategies or not. Based on previous findings, the learners' RT are expected to be longer in general and in the critical regions (e.g., the indirect object) especially of the DOD. The PD is predicted to be easier, which means fewer

processing effects as well as higher comprehension rates. Finally, they are not expected to transfer their L1 processing strategies, meaning no influence from their background languages.

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Keywords: *ditransitive constructions, language processing, reading comprehension, L3, self-paced reading task*

The Role of Locatives in Determining Telicity in Akan

Eunice Opoku & Yegorova Yekaterina

This study provides a structural analysis of how telic predicates are expressed in Akan [AKN] - a Kwa language widely spoken in Ghana and other parts of West Africa. Akan presents a relatively well-studied system of Serial Verb Constructions (SVCs) that are used in expressing Motion event. The data for the study was video-recorded from four speakers of Akan with an instrument that consists of 175 animated video-clips designed to elicit and contrast the following set of parameters that correspond to the various subcomponents of a motion event – path, telicity, result and agentivity. Predicate sub-eventive structure has been shown to be represented syntactically (Borer 2005; Ramchand 2008). This study explores the morphosyntactic expression of the telic subeventive structure in telic predicates. Preliminary results show that a telic reading is obtained in Akan motion events only by the presence of a resultative morpheme *si* 'stand' as in (1). This morpheme, in turn, selects a locative constituent introduced by a morpheme such as *so* 'top' that denotes the endpoint. The absence of the morpheme *si* 'stand' indicates atelicity; if there is a locative in this case, it will be *nkyɛn/ho* 'side' as in (2).

1. Anomaa   no   a-tu   a-firi fence no   so   a-kɔ-**si**   dua
   Bird   DEF   PRF-fly 3SG-leave   fence DEF   top   PRF-go-stand tree

   no   **so**
   DEF   top

   'The bird flew from the fence and landed on a tree there.'

2. Anomaa   no   a-tu   a-firi   fence no   so   re-kɔ
   Bird   DEF   PRF-fly   PRF-leave   fence DEF   top   PROG-go

   dua no **ho**
tree DEF side

   'The bird on the fence is flying towards a tree'.

We follow the general lines of the analysis by Osei-Tutu (2019), Chen (2021), Zuniga (2022) who argued for the presence of a Larsonian layered VP structure including a number of subcomponents (i.e., path, path, telicity, result and agentivity). We claim that *si* is the morphological representation

of the result subcomponent in the sub-eventive motion structure as shown in the tree in (3), and that *-si* moves head-to-head to the path denoting head *kɔ* 'go'.

3.
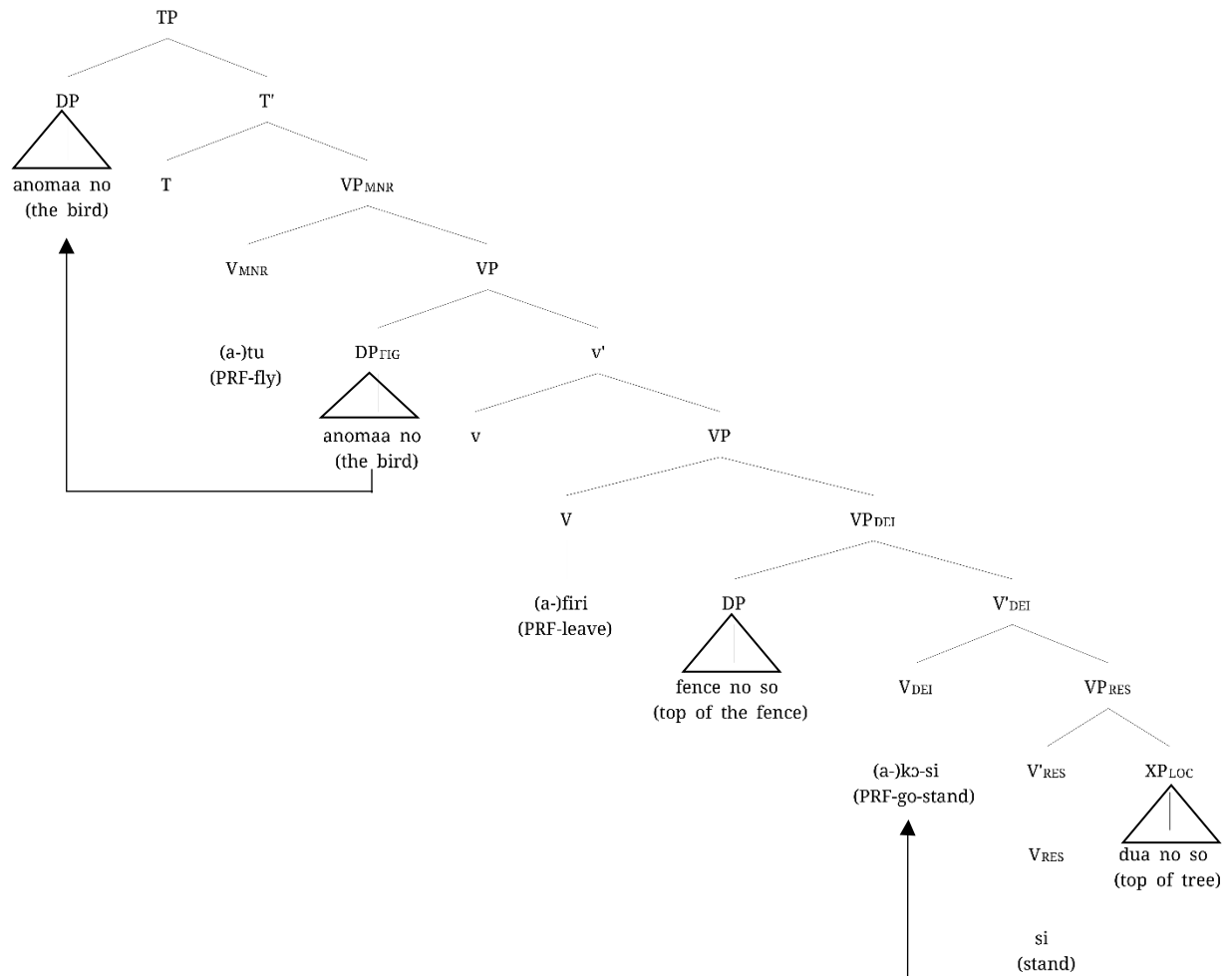
The locative constituents denote a region in terms of Svenonius (2008).

The structure in 4 represents an atelic structure.

4.

```
                              TP
                  ┌────────────┴────────────┐
                 DP                         T'
               ╱──╲              ┌──────────┴──────────┐
              ╱ │  ╲             T                  VP_MNR
             ╱──────╲                      ┌──────────┴──────────┐
          anomaa no                      V_MNR                   VP
          (the bird)                       │            ┌─────────┴─────────┐
                                         (a-)tu       DP_FIG              v'
                                        (PRF-fly)    ╱──╲         ┌────────┴────────┐
                                                    ╱ │  ╲        v               VP
                                                   ╱──────╲              ┌─────────┴─────────┐
                                                 anomaa no              V              VP_DEI
                                                 (the bird)             │        ┌───────┴───────┐
                                                                     (a-)firi    DP           V'_DEI
                                                                    (PRF-leave) ╱──╲      ┌─────┴─────┐
                                                                               ╱────╲    V_DEI      XP_LOC
                                                                            fence no so    │        ╱──╲
                                                                            (top of fence)  kɔ     ╱────╲
                                                                                           (go)  dua no ho
                                                                                               (towards tree)
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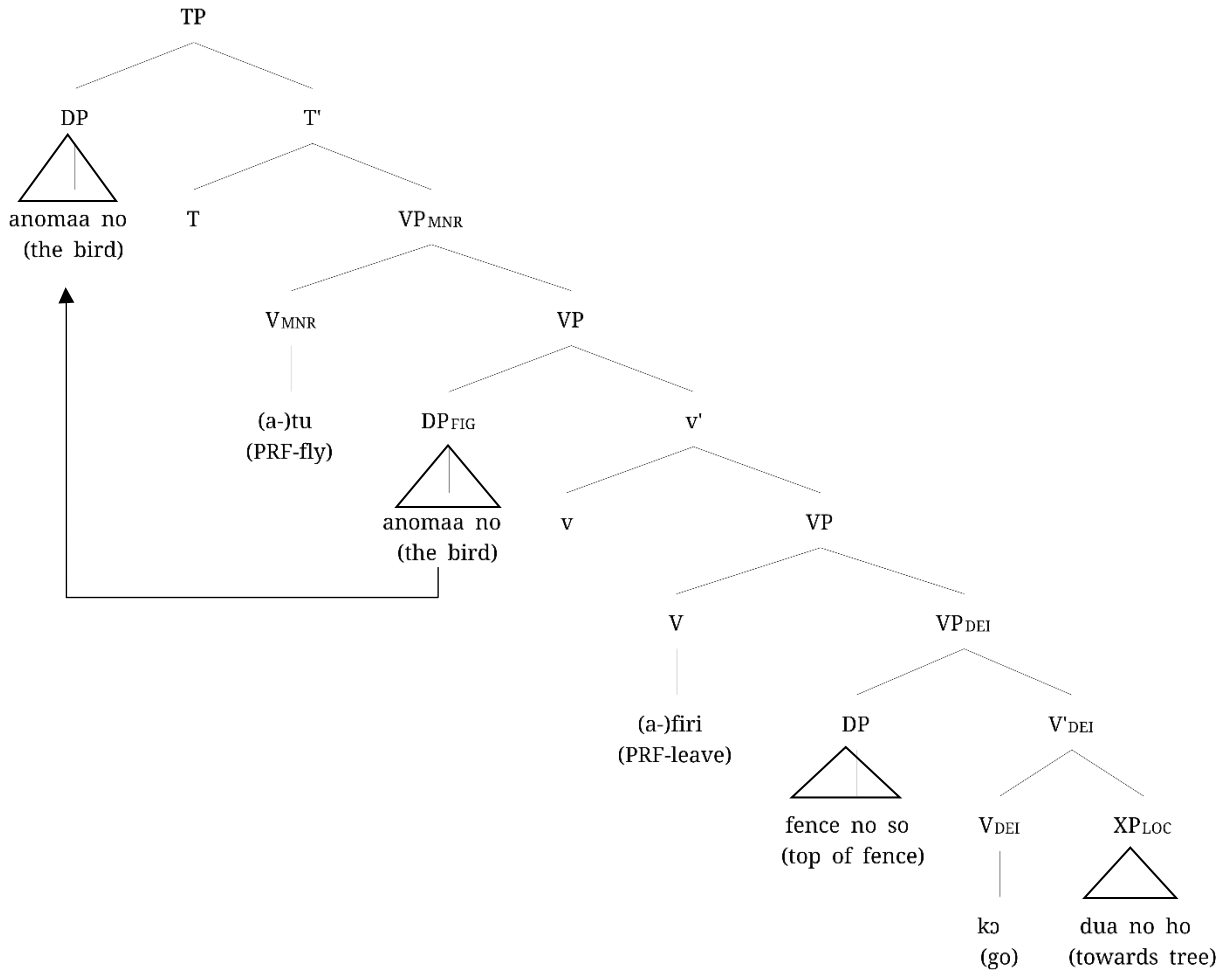
The locative in atelic structures has the interpretation of projection in terms of Svenonius (2008).

Keywords:

Telic predicate, motion event, locative, Kwa language.

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<mark>**Aural processing of syntactic and semantic cues in Mandarin garden-path sentences by L1, L2, and heritage speakers**</mark>

Vanessa Sheu & Elaine Francis

Previous studies of English suggest that L1 (native) speakers and second language (L2) speakers use different interpretive strategies in garden-path sentences (*As the woman edited the magazine amused the reporters*). L1 speakers show syntactic and semantic cue sensitivity, slowing more at the syntactic disambiguation point (*amused*) if the initial interpretation is plausible but less if it is implausible (*As the woman sailed the magazine amused…*) (Pickering & Traxler, 1998). In contrast, L2 speakers do not slow at the syntactic disambiguation point regardless of the plausibility of the garden-path reading (Brothers et al., 2021; Roberts & Felser, 2011; Jacob & Felser, 2016). They may not integrate syntactic cues online and instead prioritize offline semantic cues, building underspecified "shallow structures" (Clahsen & Felser, 2006). However, no previous studies of garden-path processing have examined heritage speakers of any language. Few studies have used self-paced listening (Ferreira et. al, 1996), with none in Mandarin Chinese. This study examines processing differences among L1, L2, and heritage speakers of Mandarin by measuring reaction time at critical segments in aurally-presented garden-path sentences. The sentences, which involve the causative *ba* construction and an object relative clause, differ between conditions in the plausibility of the initial garden-path reading, as in 1):

1) shushu | ba | haizi / dayu | nongzang | de xiezi | gan kuai-de | pao-yi-pao
   Uncle / *cause* / *the child/the rain* | get dirty | REL shoes* | quickly
   | soak
   'Uncle quickly soaked the shoes that the child/the rain got dirty.'

   Plausible condition: "Uncle got the child dirty…"
   Implausible condition: "Uncle got the rain dirty…"

Hypotheses: L1 speakers will slow down at the syntactic disambiguation point (*) with a plausible initial interpretation but less when it is implausible. L2 speakers will not slow at the syntactic disambiguation point in either condition. Heritage speakers will behave similarly to L1 speakers but show a weaker effect of plausibility. For L2 and heritage speakers, effects will be modulated by Mandarin proficiency, Mandarin use, and English dominance.

Experiment: 20 L1, 20 advanced L2, and 20 heritage speakers of Mandarin are currently being recruited. In the self-paced listening task, participants control when to play subsequent segments; reaction time and comprehension question accuracy are collected. Participants complete a questionnaire, naming task, and aural test as measures of use, dominance, and proficiency.

Results and discussion: Using a linear mixed-effects model on preliminary data from 30 L1 speakers, we found decreased reaction time immediately after the syntactic disambiguation point (spillover region) in implausible compared to plausible sentences ($\beta = 0.26016$, 317 ms to 447 ms, $t = 2.137$, $p = 0.0488$*). This suggests that Mandarin L1 speakers are sensitive to syntactic and plausibility cues in incremental aural processing of garden-path sentences. Future analyses on the full dataset will examine group differences in comprehension accuracy and reaction times at the critical regions as well as differences due to Mandarin proficiency, use, and dominance.

These results will shed light on the cues prioritized by heritage speakers in sentence processing.

Figure 1. Native speaker reaction times (milliseconds) by sentence region in self-paced listening
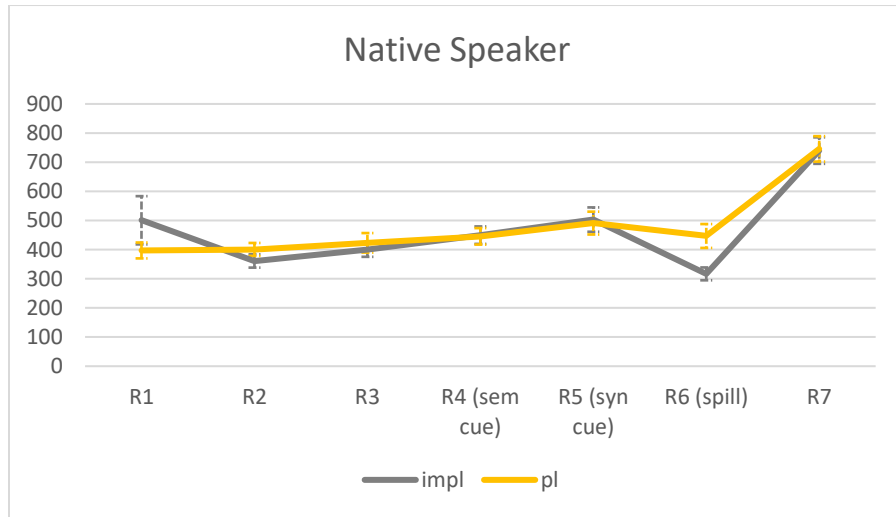

Figure 2. Native speaker reaction times (milliseconds) by sentence region in self-paced listening
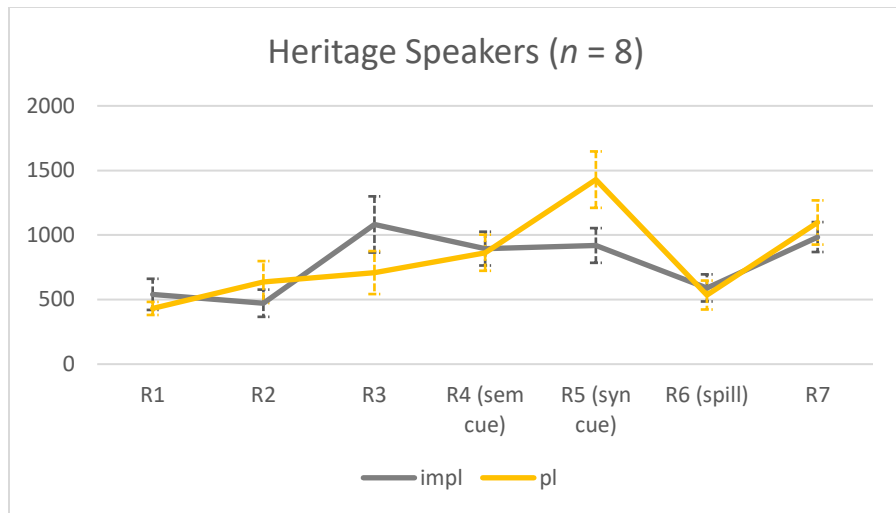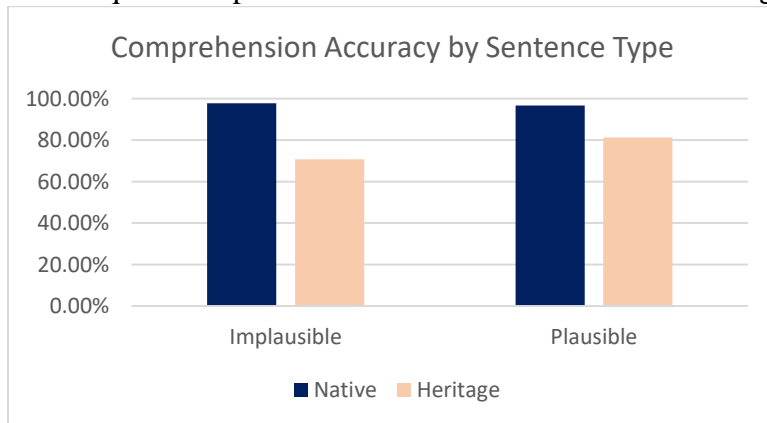

Figure 3. Comprehension questions percent correct between native and heritage speakers

➢ Sociolinguistics

Language Contact Situations and Language Endangerment: A Sociolinguistic Study of Obolo

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Abstract

In language contact situations, two or more languages and their speakers interact and almost always influence one another in different domains. Interestingly, there are a number of claims that no language in Nigeria is safe; meanwhile, the Obolo language and its speakers have been in contact with other languages, directly and indirectly. This is therefore, a sociolinguistic study to investigate the nature of the effect of contact on the Obolo language and its speakers. It examined the Obolo speakers' language use and language attitudes, to ascertain the endangerment/ vitality status of the language on account of contact with other languages. These are examined when compared with the speakers' gender, age and educational status. The survey was carried out in four Andoni communities using participant observation, informal interviews and the questionnaire as instruments. As an Obolo speaker, getting involved in the daily lives of the people at home, community, classroom and market and these enabled the researcher observe the language use and attitudes of the speakers; thus providing a better understanding of the sociolinguistic situation. The informal interviews were conducted with a community chief, two school teachers and a few reputable indigenous people. The information gathered were used to interpret and complement the results from the questionnaire. The questionnaire consisted of forty items, which were made up of open, closed and Yes/No questions and their socio-demographic/ linguistic background data. The output of the survey was analyzed using eight factors out of nine on the UNESCO's Language Vitality Index (LVI). The data, with a research population of 203 subjects, has 109(53.69%) males and 94(46.31%) females, 115 (56.65%) younger and 88 (43.35%) older subjects; 89(43.84%) single 108(53.20%) married and 6(2.96%) widowed subjects; 45(22.17%) primary, 69(33.99%) secondary and 89(43.84%) tertiary subjects according to educational status. The findings of the study showed that Obolo language speakers have become multi lingual due to contact as 96.06%, 93.60% and 24.63% of the research population know and speak Nigerian pidgin. English and Igbo languages respectively, in addition to knowing and speaking their mother tongue. There are more Obolo speakers of languages in indirect contact than of languages in direct contact. The Ibibio language which is genetically related to the Obolo language is only known by 17(8.37%) of the research population. This is in line with previous studies which claimed that non-genetically related/indirect languages in contact have the propensity to influence other languages more than the genetically related/direct languages in contact (Argungu 2007) and Udosen and Akpan (2007). This notwithstanding, there is intergenerational transfer of the mother tongue and the attitudes of the people to their language and development initiatives are positive. Thus, the Obolo language may be considered alive but somewhat endangered. The rating on the LVI however, indicated that the Obolo language is wavering between 'unsafe' and 'definitely endangered'. It is recommended that awareness campaigns, the use of Obolo in religious songs and scholarships for Obolo

linguistics students could help preserve and keep Obolo alive. This study is relevant to sociolinguistics, language teachers and planners.

Table 1: Language(s) subjects know and use apart from Obolo

Question 12 (n=203)	Responses	GOK	KAN	IBA	IBI	ENG	NP	IGB	OTH
In addition to Obolo, What other languages(s) do you know and speak?	**Freq.**	2	2	3	17	190	195	50	2
	Percent(%)	0.99	0.99	1.48	8.37	93.60	96.06	24.63	0.99

Table 2: Showing best spoken language by subjects

Question 14 (n=203)	Responses	OBO	GOK	KAN	IBA	IBI	ENG	NP	IGB	OTH
What languages(s) do you speak best?	**Freq.**	203	-	-	-	-	-	-	-	-
	Percent(%)	100	0	0	0	0	0	0	0	0

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Lexical Variation For Four American Sign Language Signs, All Of Which Mean 'All'

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Abstract

American Sign Language (ASL) is a spatial visual language (Stokoe, 1960) and like all languages, has variation based on geographical regional, age, ethnicity, (Lucas et. al., 2003). In addition, variation patterns can be related to language-internal syntactic variation (MacDonald, 2013). For instance, in English 'many' is used with count nouns (e.g., 'too many dogs') while 'much' is used with mass nouns (e.g., 'too much candy'). This study investigated the variation in use among ASL signs that convey the meaning of 'entirety' or 'all' from native ASL signers (n = 20). This study included three types of data collection: language elicitation, opinion about their language choice, and grammatical judgments for the other variants: ALL_{wrap}, ALL_{glide}, ALL_{area}, ALL_{bounce}. The data suggest that the spatial characteristics of the noun explains the overarching pattern for the variant choice, although age (or language change) might be driving some of the variant choice. This study adds to the understanding of language variation within ASL and seems to be the first investigation of lexical variation of ALL. The results may inform future studies on ASL variation, language change, and language development, as well as practical implications on the teaching of ASL.

Keywords: ASL, visual language, spatial relations, noun classes, data elicitation, grammaticality

opinion

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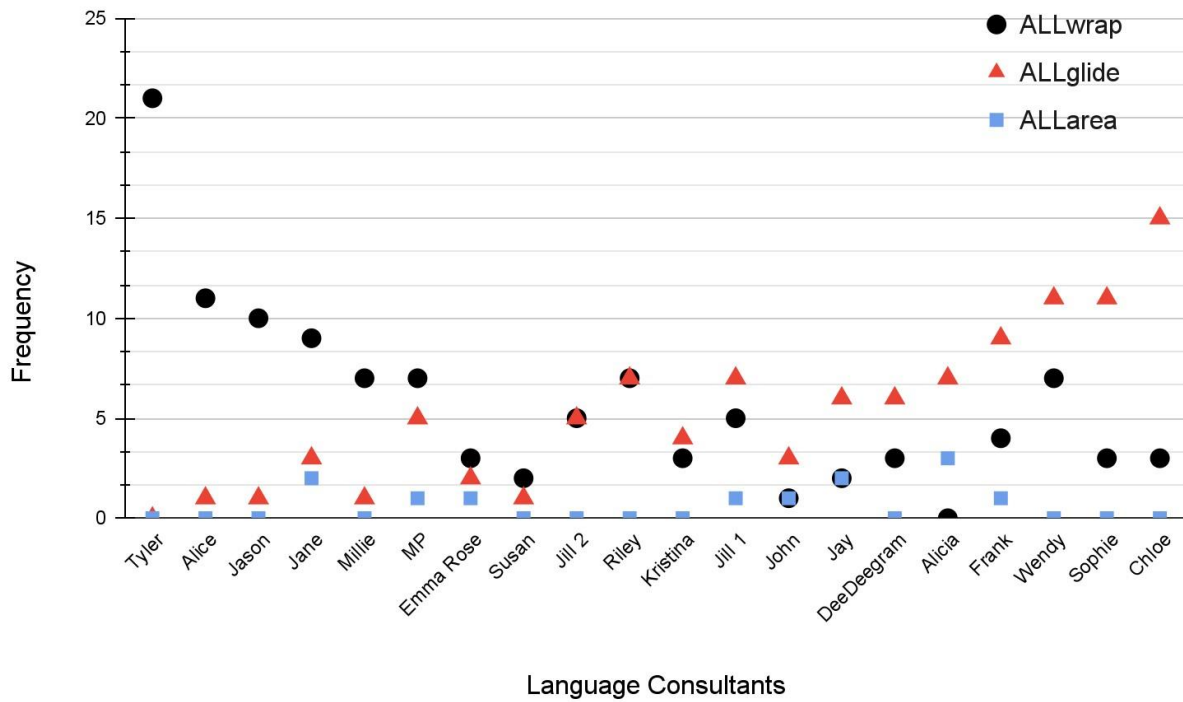
Honorificity Change and Loss in Maithili-Bangla Bilinguals

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Introduction Recent years have seen increased interest in multi-modular constructs, especially those at the syntax-pragmatics interface, such as honorificity and allocutivity (cf. McFadden 2020; Kaur 2020; Alok 2021). In this paper, we extend the inquiry on these phenomena to the bilingual context, with the intent to (i) examine how speakers acquire pragmatic phenomena when faced with input from two different grammars, and (ii) the extent to which one grammatical system influences the other.

Data Our target population includes young Maithili speakers (age range: 20-25 years) in the city of Kolkata (India) who have acquired Bangla simultaneously (see Kumari et al 2021 for the Maithili facts). Maithili and Bangla monolinguals have multi-layered honorificity for 2nd person and 3rd person DPs and exhibit subject honorificity agreement (1a-b). Maithili monolinguals also have allocutive agreement (2), while Bangla monolinguals don't (see (1a) again).

In contrast to Maithili monolinguals, Maithili-Bangla (M-B) bilinguals are inconsistent in the use of honorificity and allocutivity in Maithili. First, they overuse the Maithili 2nd person honorific pronominal form ($\partial h\tilde{a}$) for all 2nd person (Non-Honorific/NH to Honorific/H) referents; the corresponding verbal agreement is always honorific (3). Second, they borrow the 3rd person honorific pronoun *uni* from Bangla, instead of using the Maithili form *o* (4). Third, they obligatorily drop allocutive agreement (5). M-B speakers are therefore currently innovating at two levels – (i) direct lexical borrowing in the 3rd person domain, and (ii) modifying the grammar of 2nd person honorificity and allocutivity.

Analysis M-B speakers borrow the 3rd person honorific form from Bangla since honorific differences are not evident from the Maithili 3rd person pronominal form (*o* is both nonhonorific and honorific). The presence of a distinct honorific form aligns better with the corresponding honorific verbal agreement, where non-honorificity and honorificity are distinctly marked.

For the 2nd person paradigm where $\partial h\tilde{a}$ supersedes all other 2nd person forms, it follows a general tendency in bilinguals to simplify their grammar, especially when exposed to a language which has either distinct or fewer honorific forms. In the case of M-B bilinguals, the simplest option is to use a single honorific form in the 2nd person paradigm, instead of using 5 pronouns with varying honorific values and verbal agreement markers.

The last innovation is the obligatory suppression of allocutive agreement. Since there is a strong honorific presence ($\partial h\tilde{a}$) in the 2nd person paradigm, it is not immediately clear why the same fails to reflect as allocutive agreement. We believe that this is because M-B speakers have an obligatory Fin to T feature inheritance (in the sense of Haddican 2018), which results in the formation of a single Fin-T head, that takes care of only referent/subject honorificity agreement in the 2nd person. Once Fin loses its independent existence, there is no head to license allocutivity in

M-B. The representation in (6) is the reason why M-B loses out on allocutivity despite having an honorific value for 2[nd] person.

Examples

(1) a. *o   sut-əl   chh-əl-**khinh***   (Maithili   monolingual;   neutral   context)
    S/he.H   sleep-perf   be-pst-3.H
      'S/he had slept'

    b. *uni   ghumie **gae-chhilen***   (Bangla monolingual; neutral/NH/H addressee)

      S/he.H sleep.   go-be.pst.3.H.

      'She had slept'

(2) *o   sut-əl   chh-əl-**əinh***   (Maithili   monolingual;   said   to   a   H   addressee)
    S/he.H   sleep-prf.   be-pst-3.H+alloc.H
    'S/he had slept'

(3) *ə**hã**   apo:n   bəpaɟir soŋe dukən pər **jau***   (M-B   speaker;   said   to   an   NH   addressee)
    you.H. my   father   with shop   to   go.H
    You go to the store with my father'

(4) ***uni-o**   həmre   upar həsʈe*   (M-B speaker; said about an H subject)
    S/he.H-too.   Me-on   over   laugh at

    'S/he too will laugh at me for doing this every other day'

(5) *kəl   həm apən ʧʲəʃma: pər beis geliər   tuti   geil*   yesterday I.   my
    glass   on   sat.   become   broke become
    'Yesterday I sat on my glasses and broke them'

                             (M-B speaker; said to an NH/H addressee)

(6) [Fin-T$_{phi}$ Subject-hon [vP Subject$_{trace}$ [VP …]]]

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Keysmashing: Forms and Functions

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This presentation reports on preliminary findings from an on-going study on the emerging online linguistic feature of keysmashing, e.g., figure 1. The study aims to answer the following questions: What is the structure of keysmashes? How are keysmashes used in conversation? While not yet formally defined, keysmashing has been described by Gretchen McCulloh (2019) as the "haphazard mashing of fingers against the keyboard to signal a feeling so intense that you can't possibly type real words" (p. 13). Results of this study and Park (2022)'s experiments point to greater structure and purpose to keysmashing than suggested by McCulloh (2019)'s definition. Thus, for the purpose of this presentation, keysmashing will be defined as a feature of instant messaging characterized by randomness with forms and functions understood by its users. The study features a corpus of 265 naturally occurring keysmashes collected from 13 participants between the ages of 18 and 25. Formal elements of the keysmashes analyzed include character, length, and case. The analysis finds that keysmashes heavily feature letters from the home-row of the QWERTY keyboard, are usually between 6 to 10 characters long, and are most frequently uniformly uppercase. These findings on keysmashing's formal features largely agree with previous research and anecdotal evidence (McCulloh, 2019; Park 2022). Analysis of the functions of keysmashing draws from speech act theory, conversation analysis, and politeness theory (Brown & Levinson, 1987; Searle & Vanderveken, 1985; Sacks, 1992). Novel findings of the study reveal keysmashing achieving a variety of functions, including indicating laughter, saving face, and structuring discourse (e.g., backchanneling, fillers). These functions are common with other features of text messaging, such as emojis, acronyms, and shortenings (McSweeney, 2018). However, unlike common elements of text messaging, keysmashes are unique in their seemingly random form and the variety of functions they can perform in different contexts.

Figure 1

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> **Applied Linguistics**

Embodying Cars
A Conceptual Analysis of Metaphors in Culture

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Abstract: In human experience, we embody cars when we drive and ride them to become hybrid creatures that move together from point A to point B. In our modern societies we constantly experience cars, which makes car-embodiment metaphors ready to use and worthwhile considering. Adding to the importance of this paper, Arabic car-embodiment metaphors have not yet been investigated within the Conceptual Metaphor Theory (CMT). Prior work on embodying cars dealt with how the car is a representation of a human character or trait such as: being a hero, family member, or being powerful or corrupt (Živković 2014; Young 2001; Notar 2014). As these instances of embodiment are philosophical in nature, there is no prior work that tackled the technical and practical type of embodiment. For this study, I consulted two car technicians/experts to provide a list of car-embodiment metaphors. One of these technicians was a speaker of Arabic and the other a speaker of English. I then searched these metaphors online to see how they are used in Arabic and English. The data collected from the online search was analyzed to establish how car-related concepts are used. Of the metaphors found are:

- The car engine is a human HEAD and the engine has a NAVAL
- The car has a FACE, EYES, and the eyes can be LINED with KOHL
- The car can STAND, WALK, WHISTLE, and CHOKE on liquid

I found that more than two-thirds of the car-related concepts considered in this study were used similarly in both Arabic and English. I propose that the reason for using these technical car-embodiment metaphors is that it is easier and more feasible to use the already available human part and state names than coining new ones. Finding most of the metaphors in both Arabic and English is a result of the importation of cars and their parts from English speaking countries to Arabic ones.

Keywords: car embodiment, conceptual metaphor theory, Arabic metaphors, English metaphors, cognitive linguistics.

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The way home:
A community-based experiment that tests the influence of spatial language on cognition

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Relativistic and deterministic approaches to cognitive linguistics (Lucy 1992) support the idea that language and culture deeply affect non-linguistic thinking (Gumperz and Levinson 1996). In particular, despite being universally experienced, spatial representations are largely culture- and language-specific (Levinson and Wilkins 2006). To locate an object (Figure, F) in relation to a reference object (Ground, G) in sentences such as 'The car (F) is left of the tree (G),' languages can select from among different coordinate systems (frames of reference, FoRs). The referential typology elaborated by Bohnemeyer and O'Meara (2011) entails three basic FoRs. In the object-centered FoR, the coordinate system is extended from G's inherent sides and generally applied with asymmetric Gs. In the geocentric FoR, the source of the coordinate system is anchored outside the spatial array on an external, fixed entity (cardinal directions, prominent landmarks, geomorphic features). In the ego-centered FoR, the coordinates depend on the orientation of the observer (O) and can be projected according to different strategies (reflection, rotation, translation). The FoR strategies applied in language are claimed to affect speakers' cognition, i.e., the referential strategies applied in non-linguistic spatial tasks: finding our way, interpreting/sketching maps, remembering scenes, and pointing to locations of events in the past and future (Majid et al. 2004). Nonetheless, recent studies revealed language/cognition mismatches (Bohnemeyer et al. 2021). The linguistic influence on cognitive structures thus remains an open question. In particular, can geocentric strategies be acquired as non-native skills at school? According to Brown (2015), native speakers of geocentric-framing languages master linguistic/cognitive representations as quickly and effectively as ego-centered- and object-centered-framing speakers. I thus hypothesized that geocentric cognitive representations could be effectively learned at school age through linguistic input. To test this hypothesis, I engaged three elderly Negev Arabic speakers to provide geocentric linguistic input to twenty-six children from first to third grade at a school in the city of Rahaṭ (Israel), four hours a week, alternating classroom and outdoor activities, throughout one school year. Negev Bedouin tribal elders (over age 75) still speak a cluster of closely-related traditional varieties of Bedouin Arabic (Palva 1991) in which the geocentric referential strategy based on four cardinal directions dominates linguistic and cognitive representations (Cerqueglini 2022). Negev Bedouin Arabic speakers under age 40 speak a koineized form of Palestinian Arabic from which geocentric strategies are absent. The Negev Bedouin Arabic-speaking children selected for the experiment, raised in the populous city of Rahaṭ, where ties to tribal lands and elders are loosening, showed no geocentric competence. After three months of training, in December 2022, cognitive skills were tested on the unaware children. Their regular teachers administrated two individual cognitive spatial tasks (recognition and reconstruction of spatial scenes; Levinson 2003: 155–160). Results showed positive language-driven effects on cognitive tasks, interestingly, especially in scene reconstruction. With decreasing scores from first to third grade, thirty-four percent to sixteen percent of the responses aligned with the actual cardinal orientation of the experimental setting. The project will be extended to other age groups.

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Telecollaboration: A 21st century language teaching approach?

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The recent unprecedented global events, including emergency remote teaching, led to an exponential growth of interest in telecollaboration (TC) among practitioners and researchers, evidenced, among others, by the growing number of publications devoted to this topic (Barbosa & Ferreira-Lopes, 2021). This attention is drawn, in particular, by numerous promises associated with TC projects, such as cultural, linguistic, and social gains (Dolly, 2017; Lewis & O'Dowd, 2016). However, such complex and dynamic exchanges also have several limitations. Consequently, a significant number of parties might struggle to make sense of the vast body of knowledge available on the topic and properly implement such undertakings.

To address this issue, my study adopts a meta-analytical approach (Norris & Ortega, 2006) and provides a synthesis of the recently published research on TC. The reviewed sample comprises 38 journal articles devoted to English as a lingua franca TC projects, published between 2016 and 2021. The results of these articles are presented in a consolidated and easily understandable manner that permits all interested parties to quickly and efficiently examine the newest findings of the literature and apply them accordingly in real-life conditions. This, in turn, facilitates the implementation of good practices and the organization of future TC exchanges.

The findings of this study cover multiple variables of TC projects, in particular, the learner- and project-related ones. Moreover, advantages and disadvantages of TC exchanges are summarized. The results are also extrapolated to tandem TC projects, correspond to the notions of bi- and multilingualism, and address the ever-increasing diversity in foreign language classrooms. Consequently, this research significantly contributes to the ongoing debate on the future of foreign/second language education that will shape the generations.

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Another look at Noun-Genitive vs. Genitive-Noun in Early New High German

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Historical varieties of German exhibit variation between pre-nominal vs. post-nominal genitives (GN vs. NG orders), with an overall development away from GN and toward NG (Behaghel 1923). Retention of GN order is associated with possessive genitives (as opposed to subjective, objective, partitive, or explicative genitives), genitives denoting persons, and single-words, proper names, and pronouns. In Early New High German (ENHG; 1350-1650) there is often variation between GN and NG within these conditions even within individual texts. By 1700, GN order accounts for only 10% of adnominal genitives, and GN becomes restricted to proper nouns by 1750 (Niehaus 2016). Despite several examinations of this variation and change (e.g., Ebert 1988; Lunt Lanouette 1990, 1998; Pickl 2020), GN vs. NG in ENHG remains surprisingly under-researched.

In this paper, we explore the hypothesis that in at least some varieties of ENHG, the grammar of adnominal genitives includes two properties not found in Modern German:

(1)   Adnominal genitives are generated in the Specifier position of the NP (not in Spec, DP).
(2)   NG order is derived by an optional rule that extraposes the genitive DP or a subpart of it and which is sensitive to the length/weight of the genitive phrase.

Property (1) accounts for examples like (3), in which pre-nominal genitives appear to the right of attributive adjectives, and property (2) accounts for instances like (4), in which a pre-nominal genitive is modified by a post-nominal phrase. Taken together, these properties yield the tendency for NG order with longer genitive DPs, but GN with one-word genitives, as well as the split construction illustrated in (4).

We present data from an ongoing corpus-based study of GN vs. NG variation in ENHG. The corpus will ultimately consist of 60 texts, with one text per 50-year bin from 10 dialects. Texts in the corpus are syntactically parsed according to the Penn annotation system (e.g., Kroch 2020). Preliminary data extracted from the first four completely parsed texts yield the following results thus far:

- By text: GN varies widely from 84% in *Karrenritter* (1430) to 48% in *Fierrabras* (1533) to just 7% in *Geistlicher Mai* (1529). More texts need to be analyzed to tease apart the effects of time, dialect, and genre.
- Proper vs. common noun genitive: In texts other than *Geistlicher Mai,* proper nouns appear in GN order more frequently (67-83%) than common nouns.
- Genitive type: for both GN and NG, the vast majority of adnominal genitives are possessives, thus the effect of this factor is not yet established.
- Length: One-word genitives most strongly favor GN (67% excluding *Geistlicher Mai*) and longer genitives increasingly disfavor it (down to 19% for five or more words, again excluding *Geistlicher Mai.*)

We suggest that the Modern Standard German pattern in which only personal possessives in *-s* (which are no longer "true" genitives, see Fuß 2011) and possessive adjectives occur prenominally and full genitive DPs occur only in the order NG, results from a reanalysis triggered by the increased application of the extraposition rule during the ENHG period.

(3)   *eyn besunder* [DP *Rulands*]   *streitgesel*   (*Fierrabras* 196 [1533])

    a   certain   Ruland-GEN battle-companion

    'a certain combatant of Ruland'

(4)   [DP *Josephs*   t_PP] *sun* [PP *von aramathia*]   (*Karrenritter* 472 [1430])

    Joseph-GEN   son   of Aramathea

    'Joseph of Aramathea's son'

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Panel on the International Decade of Indigenous Languages

This panel, presented by the Indigenous and Endangered Languages Lab (IELLab) at Purdue University, discusses the particular linguistic context of the presenters' communities, from Central America to Asia within the framework of International Decade of Indigenous Languages (IDIL 2022-2032). The United Nations General Assembly (Resolution A/RES/74/135) proclaimed the period between 2022 and 2032 as the International Decade of Indigenous Languages, to draw global attention on the critical situation of many indigenous languages and to mobilize stakeholders and resources for their preservation, revitalization and promotion. This panel is IELLab's contribution to visibilize indigenous languages' situation at this symposium in consonance with the International Decade's aim to ensure indigenous peoples' right to preserve, revitalize and promote their languages.

Chair Dr. Elena Benedicto

Prof. Benedicto will talk about the forces from around the world that brought about first, the International Year of Indigenous Languages and later, the Indigenous Decade of Indigenous Decades. This will serve to introduce the different notions of 'indigenous language' that have been produced by different indigenous groups around the world.

Panelist 1: Dr. Virak Chan

Dr Chan is a Clinical Assistant Professor in literacy and language in the College of Education. He will discuss the indigenous languages of Cambodia and aspects of education programs that deal with multiple languages.

Panelist 2: Eunice Opoku

In this presentation, the realities lived by speakers of indigenous languages from the West Coast of Africa and the sociolinguistic situation of those languages is discussed.

Panelist 3: René Zúñiga Argüello

This presentation will examine the status of Creole-speaking communities throughout the Continental Caribbean coast of Central America. These varieties were born and developed, properly as languages, in situ (thus, indi-genous) – but are not originary, that is, they are not pre-contact. Panelist 4: Share your voice This is an open space where Purdue community people can participate with their (indigenous) language related experiences

Accessibility effects in grammatical resumption and intrusive resumption languages

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Resumptive pronouns bear the morphology of ordinary pronouns and are used in many languages as an alternative to gaps for forming a syntactic dependency within a relative clause, as in the corpus example from English in (1a). The corresponding gap variant is given in (1b).

1.   a. We need **players** who we can count on **them** in a crisis.   (Radford 2019: 75)
          b. We need **players** who we can count on __ in a crisis.

Among languages that have resumptive pronouns (henceforth, RPs), two major language types have been identified: grammatical resumption languages and intrusive resumption languages. In grammatical resumption languages, including Cantonese, Hebrew, and Irish, RPs are grammatically licensed and may be required in some contexts to avoid violating a syntactic movement constraint. For example, Cantonese speakers tend to use an RP in sentences like (2) to avoid 'coverb stranding' (Francis et al 2015: 63).

2.   ngo5   bong1 **keoi5**   maai5 ce1   go2 go3   **neoi5jan2** hou2 hou2jan4
         I   help **her**   buy   car   that CL   **woman**   very kind
         "The woman who I bought a car for her is very kind."

In intrusive resumption languages, including English and French, RPs are not grammatically licensed and are typically judged as unacceptable. However, speakers of these languages do sometimes use them in spontaneous speech, as in (1a) above. For both types of languages, the use of RPs has been linked to the notion of 'accessibility' -- the degree to which the relativized element (RP or gap) is cognitively accessible for integration with the head noun (Ariel 1999; Hawkins 1999; Keenan & Comrie 1977).

In this presentation, I explore how the effects of accessibility are manifested in quantitative data derived from acceptability judgment tasks and elicited production tasks. I then ask whether it is possible to distinguish between grammatical resumption and intrusive resumption languages on the basis of such data. To elucidate these issues, I present data from our previous and ongoing work on Cantonese relative clauses in comparison with related findings on English (Ferreira & Swets 2005; Hitz 2012; Hofmeister & Norcliffe 2013; Morgan et al. 2018; Radford 2019), Mandarin (Chen & Fukuda 2018), and Hebrew (Fadlon et al. 2019; Farby et al. 2010; Meltzer-Asscher et al. 2015) as reported by other authors. Specifically, I discuss Cantonese data suggesting that RPs are preferred but not required in coverb object relative clauses and possessive relative clauses, and suggest that the relevant grammatical constraints governing the use of gaps and RPs are best understood as 'soft constraints' rather than as strict grammatical constraints (Francis et al 2015; Francis 2022).

In addition, I present preliminary results from a new experiment (Lam, Sheu, and Francis in progress) showing that acceptability judgments for RPs and gaps in simple and embedded object relative clauses pattern similarly to those reported for English (Hofmeister & Norcliffe 2013) and Mandarin (Chen & Fukuda 2018), but differ from those reported for Hebrew (Farby et al. 2010). I conclude that although grammatical resumption and intrusive resumption show distinct patterns for some constructions, effects of accessibility may be manifested similarly across the two language types, especially in contexts where gaps are generally preferred.

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Title

Attrition and third language (L3) acquisition: How L3 acquisition research can inform the nature of a first language versus second language

Abstract

The growth of the field of third language (L3) acquisition is due in large part to the focus on the influence of a learner's first language (L1) and second language (L2) in L3 developmental processes and the variables that modulate these processes. However, there is growing interest in how these variables in turn determine how the acquisition of an L3 affects the L1 and/or L2 and what these patterns might tell us about the nature of an L1 versus L2. Using L1 attrition research as a point of theoretical and methodological departure, this talk centers on a research question that is central to attrition in L3 acquisition (i.e., L3 effects on the L2 and/or L1): In what ways does an L3 affect an L2 (quantitatively and qualitatively) differently than an L1? After an overview of existing research, I set forth some key considerations for modeling attrition in L3 acquisition and outline a proposed methodological framework that highlights the need to draw further from experimental approaches used in L1 attrition as a complement to L3-specific methods.