

Revisiting the syntax and development of Kiezdeutsch V3: a new perspective¹

Benjamin L. Sluckin

Ruhr-Universität Bochum

This study revisits the V3 linearisation *AdvP>Subject>finite verb* in Kiezdeutsch, comparing it to resumptive verb-third Left Dislocation and Hanging Topic Left Dislocation. Using corpus data, preverbal object DPs are shown to almost never occur across verb-third distributions, yet preverbal nominative subjects and spatio-temporal elements are unproblematic. This behaviour is argued to involve a low C-domain position encoding a Subject of Predication requirement (cf. Cardinaletti 2004) tied to aboutness and nominative Case-assigning features, but not a strict D-related subject EPP. Based on comparison with other corpora and analysis of metadata, speakers from non-German speaking homes, i.e. successive bilinguals are argued to have innovated this property. A novel account is suggested for the emergence of V3 based on claims that it results from a natural informational order (Wiese et al. 2020), which is formalized as a Minimal Default Grammar (Roeper 1999) available to children before they fully acquire CP and TP. Children acquiring a V2 language must either reject V3 or incorporate it into a V2 syntax. Lacking adequate counter-evidence in their input, Kiezdeutsch speakers do the latter.

Keywords: Kiezdeutsch, V3, bilingualism, resumption, syntactic change

1 Introduction

Kiezdeutsch, an urban vernacular of German characterised by a multiethnic and multilingual speaker base (Wiese 2006, 2009, 2013), has received repeated attention for a verb-third (henceforth V3) linearisation involving an initial adverb and a preverbal nominative subject DP (1) (Alexiadou and Lohndal 2018; Freywald et al. 2015; Hinterhölzl 2017; Schalowski 2015, 2017; Sluckin and Bunk 2023; te Velde 2017; Walkden 2017; Wiese 2006, 2009, 2012, 2013; Wiese et al. 2009; Wiese and Rehbein 2016; Wiese and Müller 2018; Wiese et al. 2020).²

- (1) *jetzt er explodiert oder so*
 now he explodes or so
 ‘now he’ll explode or something.’ (KiDKo, MuH25MA_11)

V3 is remarkable because Standard German (henceforth SG) has a stricter verb-second (V2) constraint (see den Besten 1983; Haider 2010; Holmberg 2015) in which only one constituent may precede the finite verb (V_{FIN}) in matrix contexts. While sentences like (2a) are grammatical, those like (2b) are unacceptable (see Müller 2003, 2005; Fanselow 2004 for regular exceptions).

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2. Kiezdeutsch examples come from the Kiezdeutsch corpus (KiDKo) (Rehbein et al. 2014).

- (2) a. *Gestern ging Maria tanzen.*
 yesterday go.PST.3SG Maria dance.INF
 ‘Yesterday, Maria went dancing.’
- b. **Gestern Maria ging tanzen.*
 yesterday Maria go.PST.3SG dance.INF

In V2 languages, fronting to the left periphery generally relates to an interaction between information structure and syntax (cf. Speyer 2007, 2008; Holmberg 2015). While several analyses of Kiezdeutsch V3 are available (Hinterhölzl 2017; te Velde 2017; Walkden 2017; Sluckin and Bunk 2023), some strong generalisations have emerged:

- i. the initial XP is an adverbial; usually framesetting or discourse linking (Wiese et al. 2009; Wiese and Rehbein 2016),
- ii. the preverbal XP is typically a subject, i.e. nominative DP or pronoun (Alexiadou and Lohndal 2018; Schalowski 2017; Walkden 2017; Wiese 2009, 2013; Wiese and Rehbein 2016; te Velde 2017; among others),
- iii. the preverbal XP is some kind of topic (Wiese 2013; Freywald et al. 2015; Walkden 2017; Hinterhölzl 2017).

The preverbal XP has been identified as a sentence topic (Schalowski 2017; Wiese 2009, 2013; Wiese and Rehbein 2016) or a left-peripheral familiar topic (Freywald et al. 2015; Walkden 2017). In contrast, te Velde (2017) concentrates on the subject status of the preverbal XP. These differences lead to multiple analyses which incorporate information structure into syntax to different extents. From a synchronic perspective, this paper aims to elucidate the syntactic and pragmatic nature of the preverbal position.

From a diachronic perspective, Kiezdeutsch V3 has been considered the result of both contact-induced innovation, caused by young speakers’ attempts to reconcile conflicting L1 and L2 German input (Walkden 2017); or the amplification of a rare pattern available since Early New High German (EHNG) (Wiese and Müller 2018). We argue for a third scenario; Kiezdeutsch V3 results from effects associated with bilingual acquisition in very particular circumstances: later exposure to German and continued reduced exposure to the “model” variety, i.e. so-called input and onset effects (see Tsimpli 2014).

In Section 2, we present a socio- and ethnolinguistic background to Kiezdeutsch and relevant urban vernaculars. Section 3 summarizes the behaviour of the clause-initial adverb. We then provide detailed background and discussion of the preverbal position in V3 in Section 4. In Section 5, we conduct a corpus study exploring the types of preverbal argument in verb-third Left Dislocation (LD) and Hanging Topic Left Dislocation (HTLD) across different speaker types (German vs other home language) in Kiezdeutsch and for other mono-ethnic/lingual speakers of German. Based on the results, Section 6 introduces a new formal analysis capable of deriving a preverbal Subject of Predication requirement across V3, LD, and HTLD in Kiezdeutsch. In Section 7, we motivate a novel acquisition-based account for the emergence of Kiezdeutsch V3, emphasizing the role of different modes of bilingual language acquisition in a multilingual environment. We conclude the findings in Section 8.

2 Kiezdeutsch: an ethnolinguistic background

As introduced, Kiezdeutsch is a vernacular characterized by multilingual and multiethnic speakers in urban areas of Berlin (Wiese 2006, 2009), a dynamic arguably facilitates innovative

language use (Wiese 2006, 2009, 2013; Wiese et al. 2009; Wiese and Rehbein 2016). Thus, we first ground this study in the literature on language contact and sociolinguistic diversity.

Kiezdeutsch belongs to several urban Germanic vernaculars that have emerged in language-contact situations in which linguistically and ethnically diverse communities have adopted the local language (cf. Wiese 2009; Walkden 2017), e.g. *Rinkebysvenska* ‘Rinkeby Swedish’, *københavnsk multietnolekt* ‘Copenhagen multiethnolect’ in Denmark (Quist 2000), Norwegian Urban Vernacular (Opsahl and Nistov 2010; Nistov and Opsahl 2014), Multicultural London English (Cheshire et al. 2011), and similar vernaculars of Dutch (e.g. Meelen et al. 2020). These varieties display several non-standard innovations. Cheshire et al. (2011:152) argue that new vernaculars characterized by such diverse communities constitute a ‘typologically distinct mode of dialect formation’ (Cheshire et al. 2011:189), in part because they are less homogeneous than socio- and regional dialects.

Taking Multicultural London English as an example, Cheshire et al. (2011) argue that innovation across grammatical domains in such vernaculars results from a process termed GROUP SECOND LANGUAGE ACQUISITION (henceforth GSLA) (cf. Winford 2003), “where minority linguistic groups form part of a larger host community and acquire the target language mainly through unguided informal second-language acquisition in their friendship groups” (Cheshire et al. 2011:153). Cheshire et al. (2011) explicitly name Kiezdeutsch as an example of GSLA. In short, in dense multiethnic communities where many speak minority languages at home, acquisition is often peer-based instead of a top-down model in monolingual L1 Child Language Acquisition (CLA), i.e. primary caregivers are not the main source of Primary Linguistic Data (PLD). Acquisition of the majority language begins in earnest once a child is socially mobile beyond the context of time spent at home. Moreover, Cheshire et al. (2011) find that even the youngest child speakers of Multicultural London English reject models from local adult English which results from the adult no longer constituting a ‘target-language model’ in contexts of GSLA. Thus, contact with peers plays a more prominent role in the acquisition of the local language. Moreover, L2 PLD from primary caregivers containing markedly foreign-sounding and radically non-target-like instances of the local language is also rejected. In short, PLD from adult L1 and L2 sources plays a reduced role.

We address variation and innovation in Kiezdeutsch through this lens. Indeed, demographic data in Wiese et al. (2012) supports this position; the Kiezdeutsch speakers who feature in the Kiezdeutsch Corpus (KiDKo) (Wiese et al. 2012; Rehbein et al. 2014), a corpus of spontaneous conversations between adolescent speakers aged 14–17, come chiefly from multi-ethnic/lingual backgrounds. The data was collected in 2008 in Kreuzberg, Berlin, a highly ethnically heterogeneous borough, from 17 anchor speakers and many interlocutors; Wiese et al. (2012) do not give the number of interlocutors, but corpus examination finds 33 V3-producing interlocutors. Wiese et al. (2012) sourced speakers from a school in which 84.4% of pupils spoke a home language other than German, e.g. Turkish, Arabic, Kurdish, Farsi, Bosnian and Serbian. It is safe to assume a similar level of ethnolinguistic heterogeneity among the interlocutors as all belong to the same wider social network. Of the anchor speakers, 4 spoke exclusively German at home, while 8 spoke Turkish, 3 Kurdish, and 2 Arabic. Thus, a high level of bi/multilingualism exists in the population, yet GSLA does not apply to speakers from German-speaking households. Importantly, Kiezdeutsch’s development as a vernacular goes beyond use by bilinguals, having been taken up by monoethnic German adolescents in the peer group (Wiese 2009:784) as a variant carrying covert sociolinguistic prestige, i.e., in-group marking (cf. Bunk and Pohle 2019).

Concerning V3, among other innovations, Wiese and Rehbein (2016:57) argue that the multilingual context underlying Kiezdeutsch facilitates a “more liberal grammatical system” with more innovations as “speakers are familiar with more diverse repertoires and higher degrees of

linguistic variation”. However, it is not clear what acquisitional mechanism is responsible, aside from less homogeneous input; the endogenous interaction between acquisition mechanisms and multilingualism requires further exploration. Furthermore, while Wiese (2009, 2013), Wiese and Rehbein (2016), and Wiese and Müller (2018) view an increased frequency of V3 as novel, Wiese and her co-authors do not consider it an innovation but rather the rediscovery of a minor-use pattern in spoken German. We will revisit this particular claim critically in Section 7.

3 The status of the initial adverb in V3

Kiezdeutsch V3 follows a robust pattern: Adverb \rightarrow Subject_{TOPIC} \rightarrow V_{FIN}; of 126 instances reported by Wiese and Rehbein (2016), 90% adhere to this observation. In a larger study, Wiese and Müller (2018) find 165 examples of V3 and that initial adverbs are significantly more frequent in V3 than in V2. Here, we briefly discuss the types of initial adverb before undertaking a larger investigation concerning the status of the preverbal XP and other verb-third distributions.

The initial adverb(ial) typically fulfills a framesetting function as an ‘interpretational frame or anchor [...] in terms of time, place, condition’ or as a contextualizer (Freywald et al. 2015:89), while expressing that some limitation exists on the predication (cf. Chafe 1976; Frey 2003; Krifka 2008). Krifka (2008) and Féry and Krifka (2008) call this function DELIMITATION, one shared by Left Dislocation, to which we return in Section 5. Wiese and Rehbein (2016) report that 94% of instances followed the pattern [Framesetter \rightarrow Topic] (63% of V3), where information structure is unambiguously identifiable. From a categorial perspective, framesetters are non-unitary; different adverb types with framesetting function appear in the literature and in KiDKo (Rehbein et al. 2014) (3):

- (3) a. **Temporal adverb**
Jedes Jahr ich kauf mir bei Deichmann.
 every year I buy me at Deichmann
 ‘Every year I buy myself (shoes) at Deichmann’s.’ (KiDKo, MuH9WT)
- b. **Conditional adverbial**
[Wenn der mann dis HÖRT], er wird sagen
 if the man this hears he will say
 ‘If the man hears this, he will say...’ (KiDKo, MuH9WT)
- (ex.6-8, Walkden 2017:54-5)
- c. **Locative adverbial**
[Bei uns in der Schule] einer heißt ”SPK15”
 By us in the.DAT school one.INDEF means “SPK15”
 ‘by us in school, one person is called “SPK15”.’ (KiDKo, SPK101, MuH12MD_08)

The next most frequent class of initial adverbs include temporal-discourse linkers, e.g. *dann* ‘then’ (Schalowski 2015, 2017; Wiese and Rehbein 2016) (4), yet a formal distinction may be unnecessary given similarity to framesetters in both form and function (see Walkden 2017:55).

- (4) **Temporal-discourse linker**
[Dann] wir haben uns gestritten.
 then we have us argued
 ‘Then we argued.’ (KiDKo, MuH9WT_05)

Most formal syntactic analyses of Kiezdeutsch posit initial adverbs in V3 to occupy the highest position in the left periphery (see Walkden 2017; Hinterhölzl 2017; Sluckin and Bunk 2023) (for TP alternative see te Velde 2017), yet not all initial adverbs are straightforwardly

analysable as framesetters or discourse linkers. Some instances of initial temporal, locative, and factual conditional adverbials represent lower or central adverbials (see Wiese and Rehbein 2016), e.g. *jetzt* (1); these are typically event-level adverbials standardly assumed to originate in the middle-field, i.e. TP-domain (see discussions in Frey 2003; Haegeman 2012) (see 5). Recent work by Breitbarth (2022, 2023) finds this pattern, albeit considerably less frequent, in colloquial spoken German, which she argues is a change in progress, driven by young women. However, functionally speaking, temporal and locative adverbs scoping over the clause fulfill a framesetting function, e.g. delimiting and anchoring the utterance. Moreover, since the diagnostics between frame and central readings of temporal adverbs, for example, involve different binding facts (Frey 2003), we cannot distinguish them in corpus data.

- (5) **Ganz schnell** ich rufe SPK38 an und sage, sie soll warten
all fast I call SPK38 at and say, she should wait

‘I call SPK38 really quickly and I say she should wait.’ (KiDKo, SPK39, MuH19WT_12)

We note suggestions by Sluckin and Bunk (2023) that Kiezdeutsch verb-third resumption structures with dislocated central adverbials resemble instances in West Flemish (Haegeman and Greco 2018) in which a high locus for central adverbials is assumed, i.e. the same peripheral position as framesetters (see also Breitbarth 2023). Thus, Kiezdeutsch appears to have innovated some lower/central adverbs in this higher position.

In sum, nearly all initial adverbs share a discourse-functional anchoring property. Spatio-temporal adverbs are natural anchors grounding an utterance in time and place; adverbs expressing properties relating to speaker perception/orientation, e.g. *eigentlich* ‘actually’, *lieber* ‘rather’, or *irgendwie* ‘somehow’, can also arguably anchor the utterance in a mental location (see Landau 2010).

4 The status of the preverbal XP

The status of the immediately preverbal XP in Kiezdeutsch V3 is particularly contentious. The prefield is often occupied by a pronominal preverbal subject (Schalowski 2015, 2017; Wiese 2009, 2013; Wiese and Rehbein 2016), although full DP subjects also occur; we understand canonical subjects as nominative DP or pronoun (see McCloskey 1997). Wiese and Rehbein (2016) report that 94% of V3 involves a preverbal subject. Some view this tendency as indicating a structural subject requirement (Alexiadou and Lohndal 2018; te Velde 2017), e.g. a subject-related EPP in TP, while others emphasize the topic-status of the preverbal subject (Schalowski 2015, 2017; Walkden 2017; Wiese 2006, 2009, 2013; Wiese and Müller 2018; Wiese and Rehbein 2016). However, we will show that neither classification is adequate. We ultimately view the preverbal XP as a so-called Subject of Predication, which shows restrictions in both syntactic and information-structural domains (Cardinaletti 2004; Rizzi 2005, 2018; Bentley and Cruschina 2018). We now explore the different types of approaches.

4.1 A subject requirement in V3

A nominative subject requirement in V3 is attractive because preverbal accusative object DPs are largely absent in the data (Walkden 2017; Wiese and Rehbein 2016) and reportedly rejected by speakers (Wiese, p.c. in Walkden 2017:55), although Schalowski (2017) reports one exceptional instance (6).

- (6) [*danach dann*] [*das*] *schneiden die aus*.
afterwards then that cut they out

‘Afterwards then, they cut it out.’ (KiDKo, Mu9WT, ex.25, Schalowski 2017:23)

Multiple attestations of preverbal locative (7a,b) and temporal adverbs and adverbial DPs (c–e) (cf. Schalowski 2017; Walkden 2017) challenge a strict preverbal subject requirement (*contra* te Velde 2017).

- (7) a. *und dann hier ist auch noch ein Loch.*
and then here is also again a hole
'and then here is also another hole.' (KiDKo, MuH27WT_07)
- b. *und dann da ist doch n die U-Bahn und so.*
and then there is though (filler) the U-Bahn and so
'And then there is the subway and so on.' (KiDKo, MuH2WT_03)
- c. *Dann heute habe ich eigentlich auch nichts Besonderes gemacht.*
then today have I actually also nothing special
'Then, today I didn't do anything special, actually.' (KiDKo, Mu1WD)
- d. *Und danach am Ende haben wir so einfach weitergeredet.*
and afterwards at.the end have we like simply further.talked
'Afterwards, we continued talking at the end.' (KiDKo Mu25MA)
- e. *und dann nächstes Jahr findet wieder eine statt.*
and then next year takes again one place
'And then, another one takes place next year.' (KiDKo Mu1WD)

While spatio-temporal adverbs can behave like DP subjects, as argued (controversially) for Locative Inversion in English (Bresnan 1994; Hartmann 2008), such scenarios rely on unaccusativity and aboutness (Sluckin et al. 2021); yet, V3 is unconstrained by argument structure, as transitive verbs are common (7c,d). Kiezdeutsch V3 instead involves a broader requirement in the preverbal position that permits subject DPs and spatio-temporal adverbials, while potentially excluding accusative object DPs or other unattested adverb(ia)ls, e.g. manner adverbs. Thus, a simple EPP-style subject requirement is inappropriate. We now turn to two topic-based approaches before testing their predictions.

4.2 A Topic requirement in V3

The preverbal position has been considered reserved for both familiar topics (Freywald et al. 2015; Walkden 2017) and broadly defined sentence topics (Schalowski 2017; Wiese 2006, 2009, 2013; Wiese and Rehbein 2016; Wiese and Müller 2018), yet different formalization's associated with these categories make different predictions about what is (im)possible.

4.2.1 On Familiar Topics

Freywald et al. (2015) and Walkden (2017) consider the preverbal XP to be a familiar topic, a crucial ingredient in Walkden's formal analysis (see Section 6). A familiar topic is a D(iscourse)-linked, 'given or accessible [i.e. discourse salient] (cf. Chafe 1976) constituent, which is typically de-stressed and realized in a pronominal form' (Pesetsky 1987), often used for providing topic continuity (Givón 1983) (see also Frascarelli and Hinterhölzl 2007:88), yet when they are not D-linked they must refer to a non-new aboutness topic (Schwabe and Winkler 2007:22).

Frequent pronominal subjects in Kiezdeutsch V3 chime with a familiar topic, as pronouns are often inherently D-linked, i.e. they resume antecedents in the discourse. However, this hypothesis makes clear predictions about what should be unavailable. For instance, if correct, newly introduced indefinite subjects should be incompatible with V3. Furthermore, V3 should be ruled out in out-of-the-blue contexts. We test these predictions in corpus data in Section 4.3 as to assess their appropriateness. We now consider the position that V3 is related to preverbal

sentence topics (Wiese 2006, 2009, 2013).

4.2.2 On Sentence Topics

Wiese (2006, 2009, 2013) claim that the preverbal position is instead conditioned by a broad information structural requirement for topics (see also Schalowski 2015, 2017; Wiese et al. 2009; Wiese and Rehbein 2016; Wiese and Müller 2018), which she defines as a Sentence Topic. However, Wiese and colleagues do not posit a formalized restriction on argument types (beyond noting the unavailability of preverbal objects), nor have they articulated more fine-grained restrictions. We briefly discuss the notion of a sentence topic before considering associated predictions. We ultimately argue that this characterization is too broad from a syntactic perspective, demonstrating the challenges of characterizing the preverbal element in Kiezdeutsch V3.

Sentence topichood corresponds to the idea of a topic-comment distinction (Reinhart 1981; Gundel 1985), in which the topic is what the sentence is about (Reinhart 1981; Lambrecht 1994); note the definition as given by Gundel (1985):

- (8) **Topic:** An entity, *E*, is the topic of a sentence, *S*, *iff* in using *S* the speaker intends to increase the addressee's knowledge about, request information about, or otherwise get the addressee to act with respect to *E*.

Thus, a sentence topic is neither obligatorily given nor retrievable from the context, although it can be so additionally. It can be “newly introduced, newly changed or newly returned to” (cf. Givón 1983:8), relating simply to the notion of ABOUTNESS, which is more basic than D-linking and givenness (see Rizzi 2005, 2018); a notational variant of sentence topic is thus aboutness topic. Indeed, aboutness/sentence topics can be indefinite, which are by definition discourse-new, as claimed by (Frey 2004a) for a sentence like (9).

- (9) *Weil er₁ müde war, hat ein Student₁ leider während des Seminars*
 since he tired was has a student unfortunately during the seminar
geschlafen.
 slept

‘Because he₁ was tired, a student₁ unfortunately slept during the seminar’.

A preference for preverbal subjects, but not restriction, is unsurprising if there is a requirement for preverbal sentence topics in V3. However, how does this chime with the observation that the preverbal topic in Kiezdeutsch V3 cannot be an accusative object DP? Several contexts in SG permit preposed accusative objects as sentence/aboutness topics; these include generic utterances such as (10a) or left dislocated DPs (10b).

- (10) a. *Schlechte Wahlergebnisse kann man nicht wieder rückgängig machen.*
 bad election.results can one.PN.NOM not again cancelled make
 ‘One cannot undo bad election results.’
 b. *Die neusten Schuhe von Nike, die will fast jeder Teenager.*
 the.ACC newest shoes.ACC from Nike they.ACC want almost every teenager
 ‘The newest shoes from Nike, almost every teenager wants them.’

Therefore, a sentence topic requirement for preverbal XPs in Kiezdeutsch V3 does not fully encompass the apparent restrictions on the preverbal element. However, this is an empirical issue that can be checked in corpus data.

4.3 New Data for the preverbal position

We searched for V3 in the main multiethnic KiDKo corpus (KiDKo-mu) (Rehbein et al. 2014) (c.345,000 tokens and 23,506 matrix clauses), using the syntactic query used by Walk-

den (2017) and a PoS-based query from the corpus handbook (2017) (see the Appendix for all queries).

We found 199 instances of V3, more than previous studies. Overall, the reported tendencies held up; most preverbal XPs are subjects and most are D-linked pronouns. However, we found multiple instances of preverbal subjects that cannot be familiar topics, e.g. 4 cases of impersonal pronouns which are by definition not D-linked (11a), 1 non-referential pseudo-argument *es* (11b), and 8 indefinite subjects (11c).

(11) a. **Impersonal subject pronoun**

Da man kann sie fast ein Jahr behalten.

there PN.IMPER can almost one year keep.INF

‘there you/one can keep it almost a year.’

(KiDKo, SPK45, MuH1WD_05)

b. **non-referential pseudo-argument**

bei Basketball, es gibt Süddeutsche Meister

at Basketball it gives South-German Champions

‘In Basketball there are South German Champions.’

(KiDKo, SPK101, MuH12MD_08)

c. **Indefinite DP subject**

Bei uns in der Schule einer heißt “SPK15”.

by us in the school one is called

‘At our school, someone is called “Speaker-15”.’ (KiDKo, SPK101, MuH12MD_08)

In sum, these data challenge a familiar topic requirement (*contra* Freywald et al. 2015; Walkden 2017). From a purely informational perspective, Wiese’s sentence topic generalization (Wiese 2006, 2009, 2013) is more appropriate. Yet, the restriction against preverbal accusative object DPs largely holds up, which cannot be explained by a sentence topic requirement. We note, however, that one speaker (Mu9WT) is much more liberal with the preverbal position in V3, accounting for very few counter-examples a reported V4 preverbal light object pronoun example (12a) as also reported by Schalowski (2017); Sluckin and Bunk (2023) and an object-WH pronoun (12b). We follow Sluckin and Bunk (2023) in assuming the possibility of some level of microvariation.

(12) a. *danach dann das schneiden die aus.*

afterward then this cut they out

Afterward then, they cut this out.’

(KidKo, Mu9WT; Schalowski 2017: 18)

b. *Danach was sehe ich Netlog?*

afterwards what see I Netlog

‘And then what did I see on Netlog?’

(KidKo, Mu9WT)

4.4 The preverbal XP as Subject of Predication

We argue that a more appropriate characterization of the preverbal position in Kiezdeutsch V3 relates to the notion of Subject of Predication (SoP) (see Cardinaletti 2004; Rizzi 2005, 2018; Bentley and Cruschina 2018; Sluckin et al. 2021). Cardinaletti (2004) proposed that [\pm SoP]-bearing XPs can move to a position straddling the TP and CP domains (Subj(ect)P), which shows flexible properties akin to but not equal to both a subject and a topic position (see also Alexiadou and Anagnostopoulou 1998; Miyagawa 2017). however, Cardinaletti (2004) shows that the types of argument encoding SoP are limited; specifically, accusative DPs cannot be SoP. Moreover, from a pragmatic perspective, Rizzi (2005:212) has argued that SoP equates to a

sentence/aboutness topic, formalizing SoP as simply [+Aboutness], while given topics encode [+Aboutness, +D-linking]. We first critically introduce SoP, before applying the observations to Kiezdeutsch.

4.4.1 What can and can't be SoP

Cardinaletti (2004) examines Italian and wider Romance, Germanic, and Semitic data, showing that beyond nominative DPs and (non-cliticized) pronouns, certain non-nominative XPs can occupy a subject position, which she calls SubjP between T and C. Alternatively, SubjP can be viewed as crosslinguistically variable properties of T or C, along with other discourse features, depending on the language at hand (Mohr 2005; Miyagawa 2017; Sluckin 2021), a position we ultimately share. A detailed critique of SubjP is beyond our goals (but see Sluckin 2021:§4). The following elements can act as SoP in Italian and beyond (where possible, we use AUX-to-COMP raising, demonstrating a TP-domain position Cardinaletti (cf. 2004)): nominative subject DPs and pronouns (13a), spatio-deictic adverbials/complements (13b), and (free) dative experiencers of unaccusatives and type III psych verbs, e.g. *piacere* 'to please', see Belletti and Rizzi 1988(13c,d). A non-selected dative PP of an unergative is also marginally possible with a late focused subject DP (Cardinaletti 2004:124) (13e). Notably, accusative object experiencers of Type II psych-verbs, e.g. *preoccupare* 'to worry' type cannot be SoP. Recent work has argued that SoP is encodable on covert locatives (shown with an unergative in 13f) and both covert and overt non-thematic situational arguments or situation-anchoring temporal adverbs (13g,h), e.g. German *da* 'there' (Bentley and Cruschina 2018; Sluckin et al. 2021; Cognola 2023).

(13) a. Nominative DP subject

(*che) *Essendo il regalo piaciuto molto a Gianni,*...

(*that) being the gift 'pleased' much to Gianni

'Since the gift was well liked by Gianni...'

b. Locative Fronting

(*che) *Essendo su Gianni caduta una grande disgrazia,* ...

(*that) being on Gianni fallen a big misfortune

'Since a great misfortune befell Gianni...'

c. Psych verb + dative Experiencer

(*che) *Essendo a Gianni piaciuto molto il regalo,*

(*that) being to Gianni 'pleased' much the gift

'Since the gift was well liked by Gianni...'. (ex.18 Cardinaletti 2004:122)

d. unaccusative + (free/unselected) dative Experiencer

(*che) *Essendo a Gianni capitata una grande disgrazia* ...

(*that) being to Gianni happened a big misfortune

'Since a great misfortune happened to Gianni...'

e. PP fronting with unergatives

?*Avendo a Gianni (gia) parlato Maria,*...

having to Gianni already spoken Maria

Since Maria already spoke to Maria...

f. Null locative goal of unergative

che pro_{LOCATION} ha chiamato Gianni, ...

that *pro_{LOCATION}* has called Gianni

'Gianni called here/us...'

g. **Null situational argument**

(*che) essendo *pro*_{SITUATION} morti i soldati al fronte, ...

(*that) being PN died the soldiers at.the front

‘Since the soldiers have died at the front...’

(adapted from ex.21 Bentley and Cruschina 2018:9)

h. **Overt situational argument in Old High German**

Tho quad imo der heilant

THO/there said him the Saviour

‘The Saviour said.’

(ex.44 Cognola 2023:30)

Internal arguments of transitive verbs, i.e. accusative object DPs and also dative object DPs of ditransitives cannot be SoP(14a,b).

(14) a. **No accusative DP objects**

**Avendo il mio libro letto Gianni...*

having the my book read Gianni...

b. **No ditransitive dative DP objects**

**Avendo a Gianni dato questi libri,*

having to Gianni given these books

Overall, Italian has a more flexible subject position than languages with strict nominative DP-subject requirements, e.g. English. This position possesses properties of both A and A' positions. However, the ungrammaticality of (14a,b) show that argument structure or Case properties influence what can be SoP. We now discuss the notion of SoP in more detail before viewing Kiezdeutsch V3 from this perspective.

4.4.2 Dissecting the SoP requirement

We briefly explore the nature of SoP and an SoP requirement, focusing chiefly on the Italian data underlying Cardinaletti's (2004) observations. Rizzi's (2005; 2018) suggestion that SoP is an information-structural notion related purely to aboutness cannot alone explain why internal DP arguments of mono- and ditransitives cannot be SoP; recall that accusative DPs can be aboutness topics in German. However, Cardinaletti's (2004) suggested formal [\pm SoP] endowment requires dubiously defined semantic limitations on syntactic formal features assigned to arguments.³

The most pertinent observation is that accusative DPs cannot be SoPs, indicating a relationship between structural Case and the subject position. Indeed, Cardinaletti (2004) considers limitations on SoP to be understandable in terms of a difference between inherent and structural Case, i.e. object DPs with structural accusative Case cannot be SoP but inherent datives can; yet for Cardinaletti SubjP is not a Case-assigning position. Since accusative object experiencers are assigned inherent Case (Belletti and Rizzi 1988; Landau 2010), they should be possible. If accusatives are universally prohibited but datives are not, the subject position must relate to nominative Case assignment (*contra* Cardinaletti 2004:126), akin to T assigning nominative Case (Chomsky 1995). Crucially, structural Case positions should be blind to inherent Case which is assigned via separate mechanisms before PF (McFadden 2004; Woolford 2006; Landau 2010). So why are inherent accusative DPs impossible as SoP? We suggest that all accusative DPs are incompatible with nominative-assigning subject positions due to interpretive ambiguity at the

3. A reviewer asks how this discussion contributes to the cartographic program; we do not aim to. We view insights from both minimalist and cartographic camps as broadly translatable using different mechanisms, e.g. a rich set of formal features across fewer heads (see Miyagawa 2017; Lahne 2009; Fuß 2008) vs articulated heads (see discussions in Samo 2019)

syntax-phonology interface, which cannot differentiate the matching exponence of structural and inherent accusative Case. Thus, nominative assigning properties clash with accusative marked XPs and prevent Convergence at the interfaces, leading to Crash (Chomsky 1995). We expand the specific mechanism when discussing Kiezdeutsch in Section 6.

The disparity regarding different dative arguments is more puzzling. Why can dative experiencers be SoP but not the internal dative DP arguments of ditransitives? Although Italian dative experiencers are considered quirky subjects (see Belletti and Rizzi 1988; Belletti 2018), unlike dative indirect objects, both receive inherent Case assigned to a thematic position by a v-head (Belletti and Rizzi 1988; McFadden 2004; Landau 2010). Notably, class III psych-verbs are a subtype of unaccusative in which the experiencer is the highest DP and closest to the subject position. If the varying behaviour of dative arguments cannot be explained via Case, the dative internal arguments of ditransitives must instead be blocked by the nominative external argument; Cardinaletti (2004:124) notes that PP scrambling over an external subject argument is never possible. Thus, when there is a choice between a vP external and internal DP arguments, the former is always a more appropriate goal.

The described locality effects appear related to the unavailability of scrambling in VO languages (Haider 2010), i.e. dative indirect objects have no space to leapfrog an external argument within the TP-domain. However, some reordering in the vP-edge is possible (Belletti 2004); yet, solving Italian low-reordering is beyond our goals. Nonetheless, SoP evades locality requirements in a few contexts. For example, the lower nominative theme of a psych-verb can topicalize to the subject position unproblematically, for example, when the predicate remains low under narrow or broad focus. Moreover, in unergative contexts, fronted non-selected (experiential) dative PPs and covert locative/deictic arguments (see Pinto 1997; Sluckin et al. 2021) can raise above the vP external argument to the subject position; yet again these instances relate to broad focus on the vP complex or narrow focus on the external argument so that the nominative DP subject remains low. (see Pinto 1997; Bentley and Cruschina 2018; Sluckin et al. 2021).

Overall, the so-called SoP position is visibly sensitive to Case and locality, beyond aboutness (Rizzi 2005, 2018), regardless of approaches assuming a Cartographic array Cardinaletti (2004), variations on minimalist Spec,TP (e.g. Chomsky 1995; Miyagawa 2017), or split-INFL (Pollock 1989; Alexiadou and Anagnostopoulou 1998). The SoP position is neither an unrestricted topic position nor a strictly D-related subject position, showing both A and A' properties. Aside from the validity of SubjP, greater flexibility in Spec,TP in null-subject languages is predicted via different mechanisms, e.g. D-satisfaction via V-to-T movement (Barbosa 1995; Alexiadou and Anagnostopoulou 1998) and/or an SoP requirement on T itself (Mohr 2005; Sluckin 2021). We thus generalize that this position is related not only to aboutness but also to nominative Case assignment, a property incompatible with accusative DPs; but SoPs can be nominative, dative (with some restrictions), or C/caseless, e.g. a locative or situational adjunct/argument. This behavior is expected where D properties of T are satisfied via mechanisms alternative to DP-movement. Hence, we conclude that the syntactic notion of SoP is epiphenomenal. That is, if information structure, C/case, and locality determine in tandem what can and cannot be SoP, then SoP is a portmanteau property.

Let us now discuss how an SoP-position is descriptively appropriate for Kiezdeutsch V3 without yet providing a formal analysis.

4.4.3 Preverbal elements in Kiezdeutsch as SoP

The above description of SoP encompasses most of the reported preverbal elements in Kiezdeutsch V3, i.e. nominative subject DPs and pronouns, and some temporal and locative adverbs and arguments (e.g. *da*, *dann* as shown above), which can all be understood as SoP. While dative experiencers in V3 should then be possible, we find only one example of a free dative (15),

albeit with a correction limiting its meaningfulness. Given the limited corpus size and the problem of negative evidence in such research, a full realization of predicted categories could remain elusive.

(15) *Wo ich das Foto gesehen habe, ich # Mir ist einer abgegangen.*

Where I that photo seen have, I # me.DAT is one off-gone

Where I saw that photo, one came off on me.

(KiDKo, MuH11MD_04)

A reviewer asks if non-referential quasi-argument *es* in existential constructions (11b) can be SoP. We draw on work by Hinterhölzl (2019) and Fuß and Hinterhölzl (2023) on expletive elements, who view quasi-argumental *es* as a weak demonstrative item which is a generalized quantifier corresponding to a situational argument, i.e. *es* denotes a property of the situation and can be understood as a situation topic which anchors the discourse in a reference situation. Thus, for Fuß and Hinterhölzl (2023) *es* has an existential impact on the assertion of the speaker and naturally anchors an existential statement in the context. Following the aforementioned literature arguing that situational arguments may encode SoP (Bentley and Cruschina 2018; Sluckin et al. 2021; Sluckin 2021; Cognola 2023), we hold that pseudo-argumental *es* is an SoP (11b). In short, *es* encodes aboutness concerning the situation but is not D-linked.

In sum, the incompatibility of the preverbal position in V3 and accusative DPs indicates an active SoP requirement in the Kiezdeutsch prefield. We do not yet formalize the exact syntactic nature of Kiezdeutsch's SoP, yet in Section 6 we will argue that the necessary features are bundled in a low position in the C-domain. Furthermore, we must also ask how Kiezdeutsch produces V2 OV_{FIN}S matrix clauses if the preverbal position is reserved for SoPs. We assume that non-SoP XPs target a higher position in the C-domain (see also Walkden 2017) (Section 6). Given the strictness of SG V2 and the well-known lack of preferential treatment of nominative subjects in the left periphery (den Besten 1983; Vikner 1995), we posit that it lacks the necessary ingredients for an SoP requirement (den Besten 1983; Vikner 1995). Finally, if an SoP-requirement holds in Kiezdeutsch, it should manifest beyond Adv-XP-V_{FIN} V3, e.g. as a lack of preverbal object DPs in resumptive Left Dislocation and Hanging Topic Left Dislocation. This is an empirical matter to which we now turn.

5 Resumption and the preverbal position

Left Dislocation (LD) and Hanging Topic Left Dislocation (HTLD) are verb-third producing resumption strategies which unproblematically evade the V2 constraint in German (Altmann 1981; Frey 2004b; Grohmann 1997; Grewendorf 2002a, 2009; Grohmann 2000, 2003).

LD typically involves adjacent resumption of an integrated dislocated DP argument by a resumptive *d*-pronoun in the preverbal position, agreeing in ϕ -features and Case with the dislocate (16a, b), or resumption of an adverbial by a resumptive adverbial pronoun, e.g. *da*, *dann*, *danach*, *so* (16c) (Altmann 1981; Frey 2004b; Grohmann 1997, 2000, 2003; König and Auwera 1988; Shaer and Frey 2004; Zifonun et al. 1997).

(16) a. *Den Ball_i, den_i fängt der Hund.*

the.MASC.ACC ball it.RP.MASC.ACC catches the dog

'The ball, the dog is chasing it.'

b. *Der Ball_i, der_i wurde vom Hund gefangen.*

the.MASC.NOM ball it.RP.MASC.NOM became.PASS by.the dog caught

'The ball, the dog is chasing it.'

- c. *Im Garten_i, da_i fängt der Hund den Ball.*
 In.the.DAT garden therE.RP catches the.NOM dog the.ACC ball
 ‘The ball, the dog is chasing it.’

HTLD involves resumption of an unintegrated adjunctival dislocate (Grohmann 2003) via a *p*-pronoun in the preverbal position (17a) or can be discontinuous with either a *p*- or *d*-pronoun in the middlefield (17b). We understand adverbial resumption in the middlefield as HTLD (17c). Requirements for Case and ϕ -agreement are weakened (Altmann 1981; Frey 2004b; Grohmann 2003; Petrova 2012; Shaer and Frey 2004) leading to some optionality in Case agreement between the hanging topic (HT) and the resumptive pronoun (henceforth RP) (see also Samo 2019) (e.g. 17b).

- (17) a. *Der Ball_i, er_i wurde vom Hund gefangen.*
 the ball.NOM he.NOM.RP became.PASS by.the dog caught
 ‘The ball, the dog chased the ball.’
 b. *Der/n Ball_i, der Hund hat ihn/den_i gefangen.*
 the ball.NOM/ACC the dog has it.ACC.RP caught
 ‘The ball, the dog chased the ball.’
 c. *Im Garten_i, der Hund spielt da/dort_i mit dem Ball.*
 In.the.DAT garden the dog plays there.RP with the ball
 ‘The ball, the dog is chasing it.’

Although HTLD and LD can be ambiguous (Altmann 1981; Grohmann 2003), HTLD often involves a prosodic break between the dislocate and RP, while LD dislocates and RPs are prosodically inseparable. However, prosody can be unreliable (Frey 2004b) and cannot be tested effectively in corpus data. We thus maintain the definitions above.

In recent work, Sluckin and Bunk (2023) find that speakers of Kiezdeutsch and those from monoethnic/lingual backgrounds (young and adult) show a similar range of resumed categories, i.e. DP arguments, lexical adverbs, PP adverbials, and CP adverbials. However, they did not explore the behaviour of subject vs object DPs in LD/HTLD. Recall that if a preverbal SoP requirement is pervasive across Kiezdeutsch verb-third structures, we might expect a ban on preverbal accusative DP objects in LD/HTLD. Investigating the behaviour of resumed objects and subjects in resumption could thus shed light on the syntax of the Kiezdeutsch C-domain. Hence, we formulate the following research question:

- (18) Are similar restrictions present in the preverbal position across all verb-third constructions, e.g. V3, LD, and HTLD?

5.1 A corpus study of fronted XPs in dislocation

We investigated the distribution of subject and object DPs in resumption in Kiezdeutsch. We searched KiDKo-mu (Rehbein et al. 2014) for both HTLD and LD involving DPs, and adverbials for completeness. We employed queries with both syntactic annotation and Parts-of-Speech (POS) tagging in order to catch potentially erroneously tagged tokens (see Appendix for queries). We manually checked all results to distinguish arguments and excluded false hits and divided them according to metadata on home language.

5.1.1 Results

Adverbials outnumbered DPs in LD (Table 1) (see also Sluckin and Bunk 2023). Notably, preverbal objects are rare, 2.3% (n=6) of all LD. Moreover, when we consider the metadata on home language, 5 hits are from speakers from German-speaking homes; one other comes from

an interlocutor for whom we lack metadata.

Pattern	German	Heritage	Inter.	Total	Percentage
$S_{DP} > S_{RP} > V_{FIN}$	15 (21.7%)	10 (20.8%)	26 (18.7%)	51	19.9%
$O_{DP} > O_{RP} > V_{FIN}$	5 (7.3%)	0 (0%)	1 (0.7%)	6	2.3%
$AdvP > Adv_{RP} > V_{FIN}$	49 (71%)	38 (79.2%)	112 (80.6%)	199	77.7%
Total	69 (100%)	48 (100%)	139 (100%)	256	100%

Table 1: Types of LD in Kiezdeutsch across speaker types

HTLD was less frequent than LD but also shows a strong preference for preverbal subjects (91%) regardless of the dislocate XP (Table 2).

Pattern	Total	% of all HTLD	Preverbal XP	Combined
$S_{HT} > S_{RP} > V_{FIN}$	26	59.1%	Subject	90.9% (N=40)
$O/Adv_{HT} > S > V_{FIN} >_{RP}$	14	31.8%		
$O_{HT} > O_{RP} > V_{FIN}$	4	9.1%	Object	9.1% (N=4)
Total	44	100%		

Table 2: The distribution of possible HTLD orders in Kiezdeutsch

We find only one preverbal dative argument across LD and HTLD (19), an experiencer subject, produced by a multilingual speaker.

(19) *Ich und meine Cousine, uns ist langweilig*

I and my cousin, us.DAT is boring

‘My cousin and I, we are bored.’

(KiDKo, MuH27WT)

When results are broken down according to home language (see Table 3), all $O > V_{FIN}$ comes from speakers from German-speaking homes.

Preverbal XP	German	Heritage	Inter.	Total	% of HTLD
Subject	6 (60%)	15 (100%)	19 (100%)	40	90.9%
Object	4 (40%)	0 (0%)	0 (0%)	4	9.1%
Total	10 (100%)	15 (100%)	19 (100%)	44	100%

Table 3: The distribution of preverbal DP types in HTLD across Kiezdeutsch speaker groups

Strikingly, the combined results for LT/HTLD in Table 4 show that 9/10 preverbal objects come from speakers from German-speaking homes.

Preverbal XP	German	Heritage	Inter.	Total	% of all resumption
$S > V_{FIN}$	21 (26.6%)	25 (39.7%)	45 (28.5%)	91	30.3%
$O > V_{FIN}$	9 (11.4%)	0 (0%)	1 (0.6%)	10	3.3%
$Adv > V_{FIN}$	49 (62%)	38 (60.3%)	112 (70.9%)	199	66.3%
Total	79 (100%)	63 (100%)	158 (100%)	300	100%

Table 4: The distribution of preverbal elements in all resumption in Kiezdeutsch across speaker groups

5.1.2 Quantitative analysis I

Given the limited data, statistical analysis was conducted on the combined LD/HTLD data comparing fronted objects and subjects for the speaker subgroups according to the metadata on home language (or lack thereof for interlocutors).⁴ The results are given in Table 5 with significant results in boldface.

Independent Variables	N	Yates' correction	df	p-value	Fisher's Exact p
German V Heritage	55	6.909	1	.009	.003
German V Interlocutors	76	9.989	1	.002	.000
Heritage V Interlocutors	71	.551	1	.458	1

Table 5: Statistical comparison of preverbal objects and subjects in resumption according to metadata for home language in KiDKo-mu

The tests in Table 5 reveal a highly significant difference between the two anchor groups' usage of preverbal objects and subjects RPs, i.e. speakers with and without German as a home language appear to behave differently. Furthermore, interlocutors also differ significantly from the monolingual anchor speakers but not from the multi/bilinguals in this respect. Thus, the results indicate, albeit tentatively, that interlocutors and speakers from multilingual backgrounds avoid preverbal objects more than their peers from monolingual households.⁵

In sum, the differences between speaker groups pertain to frequency and, by statistical inference, availability of fronted objects. Thus, the behaviour of argument fronting in Kiezdeutsch resumption strategies shares parallels with the V3 pattern, most markedly in the speech of speakers who are unlikely to speak German at home.

5.2 Comparison with Monolingual Spoken German

For comparison, we examine resumption beyond Kiezdeutsch, investigating the relative distributions of argument types from adolescent monolingual/ethnic speakers in the smaller KiDKo-mo companion corpus (Rehbein et al. 2014) (147,000 tokens, 8945 matrix clauses) and adult monolingual speakers in the *Tübinger Baumbank des Deutschen/Spontan-sprache* (TüBa-D/S) 'Tübinger tree bank of German/spontaneous speech' (Hinrichs et al. 2000) (c. 360,000 tokens, 28,545 matrix clauses). Significance tests are applied to these data sets in Section 5.2.3.

5.2.1 The monoethnic KiDKo companion corpus

In KiDKo-mo, we find a strong preference for preverbal subjects in LD and HTLD of DP arguments, similar to Kiezdeutsch. However, the sample size was considerably smaller than the two other comparably sized corpora KiDKo-mu and TüBa-D/S. Overall, we found 29 examples LD involving DPs, one more than Sluckin and Bunk (2023), (Table 6)⁶ and 8 such instances of HTLD (Table 7). Only 3 hits of LD and 1 of HTLD showed preverbal object DPs.

4. Given sparsity in the data, i.e. expected and observed values of both < 10 and < 5 , Pearson's χ^2 -test is used where the minimum value ≥ 10 ; Yates' continuity correction is applied where a value's range is 5-9; Fisher's Exact test is additionally applied where cell values number < 5 (see discussions in Cochran 1952, 1954), e.g. for preverbal objects for interlocutors and speakers from non-German speaking households. Yates' correction is often considered too conservative where values are < 5 (see discussions in Delucchi 1993; Hitchcock 2009), hence the extra layer of testing.

5. Pearson's χ^2 - finds no significant differences for the relative distributions of preverbal nominal (d- and personal pronouns) and adverbial RPs according to home language: German/ Heritage (χ^2 (1, N=142)=0.04, $p=0.8356$), German/Interlocutors (χ^2 (1, N=237)=1.8982, $p=0.168283$), Heritage/Interlocutors (χ^2 (1, N=221)=2.3072, $p=0.12878$). These results are replicated in a 3x3 test for all groups (χ^2 (2, N=300)=3.14, $p=0.208$).

6. We find the same number of adverbial LD (N=54) as reported by Sluckin and Bunk (2023).

Pattern	Total	Percentage
$S_{DP} > S_{RP} > V_{FIN}$	26	31.3%
$O_{DP} > O_{RP} > V_{FIN}$	3	3.6%
$AdvP > Adv_{RP} > V_{FIN}$	54	65.1%
Total	83	100%

Table 6: Types of LD in monoethnic youths in KiDKo-mo

Pattern	Total	Percentage
$S_{DP} > S_{RP} > V_{FIN}$	7	87.5%
$O_{DP} > O_{RP} > V_{FIN}$	1	12.5%
Total	8	100%

Table 7: Types of HTLD in monoethnic youths in KiDKo-mo

The combined results (Table 8) show a similar overall distribution to KiDK-mu. Yet, while these speakers produced more fronted objects than the confirmed multilingual speakers and interlocutors in KiDKo-mu, the limited data and smaller corpus limit the meaningfulness any differences. Notably, speakers from German-speaking homes in KiDKo-mu produced more preverbal objects than speakers in KiDKo-mo; although, we will see in Section 5.2.3 that data is too sparse for tests of statistical significance.

Preverbal XP	Total	% LD/HTLD
$S > V_{FIN}$	33	36.3%
$O > V_{FIN}$	4	4.4%
$Adv > V_{FIN}$	54	59.3%
Total	91	100%

Table 8: The distribution of preverbal elements in all resumption in monoethnic youths in KiDKo-mo

5.2.2 TüBa-D/S

Compared to the KiDKo corpora, the more standard spoken data from TüBa-D/S showed more frequent preverbal objects in LD (circa 14.1%) and HTLD (13%); We used the syntactic annotation-based query [cat="LV"], as HTs and LD topics are not annotated differently. Nonetheless, preverbal subjects were the most frequent preverbal D-element (40.6% in LD and 70.1% in HTLD), suggesting a general $S > V_{FIN}$ tendency in DP resumption; this is unsurprising as $S > V_{FIN}$ is more common than $O > V_{FIN}$ in German matrix clauses (50% $S > V_{FIN}$, 7% $O > V_{FIN}$, 42% $Adv > V_{FIN}$, 1% other; cf. Bohnacker and Rosén 2008:517). Notably, fronted objects were more common in dislocation in TüBa-D/S than is reported for declarative matrix Bohnacker and Rosén (see 2008). Given that TüBa-D/S contains many question-answer-based interactions, we find some HTLD with preverbal C-elements, e.g. wh-words such as *wie* ‘how’; this is absent in the KiDKo corpora. Overall, we find greater variation in HTLD types in TüBa-D/S. The distinct types of resumption are broken down according to dislocate and preverbal XP for HTLD in Table 9 and for LD in Table 10. The combined relative distributions of fronted XPs in LD and HTLD are summarized in Table 11.

Pattern	Totals	%	Preverbal XP	combined %
$S_{HT} > S_{RP} > V_{FIN}$	84	54.5%	Subject	70.1% (n=108)
$Adv_{HT} > S > V_{FIN} > Adv_{RP}$	24	15.6%		
$O_{HT} > O_{RP} > V_{FIN}$	20	13.6%	Object	13% (n=21)
$S_{HT} > O > V_{FIN} > S_{RP}$	1	0.7%		
$Adv_{HT} > Adv_{RP} > V_{FIN}$	10	6.5%	Adverb	6.5% (n=10)
$Adv_{HT} > C\text{-element} > V_{FIN} > Adv_{RP}$	15	9.7%	C-element	9.7% (n=15)
Totals	154	100%		

Table 9: Frequency of attested HTLD types in TüBa-D/S

Pattern	Total	Percentage	Preverbal XP	Totals	% of HLTD/LD
$S_{DP} > S_{RP} > V_{FIN}$	78	40.6%	Subject	186	53.8%
$O_{DP} > O_{RP} > V_{FIN}$	27	14.1%	Object	48	13.9%
$AdvP > Adv_{RP} > V_{FIN}$	87	45.3%	Adverb	97	28%
			C-element	15	4.3%
Totals	192	100%	Totals	346	100%

Table 10: LD in TüBa-D/S

Table 11: Frequency of preverbal XPs in resumption from TüBa-D/S

5.2.3 Quantitative analysis II

Comparison of fronted objects and subjects in resumption across KiDKo-mu, KiDKo-mo, and TüBa-D/S is somewhat inconclusive (see Table 12). Notably, however, there is a significant difference between the KiDKo-mu and TüBa-D/S, i.e. Kiezdeutsch and standard-aligned adult spoken German. In contrast, differences between the two KiDKo corpora and between KiDKo-mo and TüBa-D/S are not significant; the considerably smaller size of KiDKo-mo inhibits effective testing. Thus unsurprisingly, Kiezdeutsch speakers diverge most from spoken adult SG.

Independent Variables	N	Pearson's χ^2	Yates' correction χ^2	df	p-value (two-sided)	Fisher's Exact p
KiDKo-mu/TüBa-D/S	335	5.5495		1	.018	
KiDKo-mu/KiDKo-mo	391		.0261	1	.872	1
KiDKo-mo/TüBa-D/S	138		1.3642	1	.243	.186

Table 12: Statistical comparison of corpus populations regarding differences in the relative distributions of preverbal subject and object DPs in resumption

We then compared the individual subgroups in KiDKo-mu according to home language (Ge(man) or Her(itage)) or inter(locutor) status with KiDKo-mo and TüBa-D/S. The results are given in Table 13 with significant results in boldface.

Independent Variables	N	Yates' correction χ^2	df	p-value (two-sided)	Fisher's Exact p
KiDKo-mu Ger./KiDKo-mo	67	2.7704	1	.096	.065
KiDKo-mu Her./KiDKo-mo	62	1.375	1	.241	.141
KiDKo-mu Inter./KiDKo-mo	83	1.3917	1	.238	.167
KiDKo-mu Ger./Tüba-D/S	264	.9089	1	.340	
KiDKo-mu Her./Tüba-D/S	259	5.009	1	.025	.006
KiDKo-mu Inter./Tüba-D/S	280	7.730	1	.005	.001

Table 13: Statistical comparison of KiDKo-mu samples according to home language with KiDKo-mo and TüBa-D/S corpus populations regarding the relative distributions of preverbal subject and object DPs in resumption

In sum, comparison of KiDKo-mu and TüBa-D/S delivers some striking results: i) speakers from German-speaking homes do not differ significantly from adult speakers; ii) the differences between TüBa-D/S and the KiDKo-mu samples from the interlocutors and anchors from non-German-speaking homes are highly significant ($p < 0.01$). However, no significant differences were present between the Kiezdeutsch subgroups and the monoethnic companion corpus. Thus, it seems that younger speakers employ fewer preverbal objects in resumption, but this trend is strongest in Kiezdeutsch speakers from non-German speaking backgrounds. This strengthens the finding that such Kiezdeutsch speakers behave differently from those from German-speaking homes.

5.3 Discussion

The results support observations that adult speakers of SG, monoethnic adolescents, and Kiez-deutsch-speaking multiethnic adolescents employ the same categorial range of preverbal elements in resumption (Sluckin and Bunk 2023), i.e. DPs and adverb(ial)s. The lack of wh-words in HTLD in KiDKo-mu/mo may result from the different types of interaction. However, Kiezdeutsch speakers from non-German-speaking homes and the interlocutors appear to avoid resumptive preverbal objects, which is uncharacteristic of both monoethnic adults or Kiezdeutsch speakers from German-speaking homes. As noted, the KiDKo-mo data were inconclusive. Most notably, 90% of preverbal object RPs in the Kiezdeutsch data come from 3/4 anchor speakers from German-speaking homes. This finding for speakers from multilingual/ethnic backgrounds can be taken as evidence for a more pervasive SoP requirement in the prefield of their grammars, as predicted in Section 4.4.

However, some factors mitigate the results: firstly, we lack metadata for interlocutors' home languages, although based on Wiese et al.'s (2012) demographic data, many will come from non-German speaking homes; the performance data supports this position. Secondly, negative evidence is unavailable in corpora, yet an acceptability study is problematic, as i) the anonymous speakers (now 28-31) cannot be followed up; ii) the current adolescent population, the next generation, is not a like-for-like comparison; and iii) blurred boundaries between varieties and speakers' proficiency in Kiezdeutsch and SG means that SG grammar is likely always acceptable. Nonetheless, some microvariation in Kiezdeutsch is apparent (see also Sluckin and Bunk 2023), which appears conditioned by linguistic background. We speculate that this relates to differences in the timing and level of exposure to German in and outside the home (see also Walkden 2017), and variation in the linguistic behaviour of peers in early childhood; We address the nature of bilingual CLA and a potential innovation scenario in Section 7. Kiezdeutsch speakers from German-speaking homes' different behaviour results then from either microvariational parametric differences or an e-language phenomenon, whereby they adopt V3 as a sociolin-

guistically salient pattern; indeed, Wiese (2009:790) reports a school teacher's impression that use of salient Kiezdeutsch forms increases around age twelve; yet, it is unlikely that speakers of Kiezdeutsch would seize on a pattern as a stereotyped in-group marker from more general SG-aligning spoken language. If speakers only adopt V3 during adolescence, V3 is reduced to an e-language phenomenon, which is not the general consensus. We refrain from stronger conclusions for these speakers.

The absence of fronted accusative direct objects DPs in the V3 and resumption of multilingual Kiezdeutsch speakers is conspicuous such that we consider a wider syntactic constraint desirable. If Kiezdeutsch differed from SG due to a structural requirement for familiar topics in the preverbal position, as argued by Walkden (2017), more preverbal object resumptive pronouns are expected, since RPs are familiar topics *par excellence*. It is unlikely, however, that the marked lack of preverbal accusative objects in both V3 and resumption falls out from a tendency for subjects to more often be topics than objects. Instead, this result, i.e. a pervasive aversion to preverbal accusative object DPs across Kiezdeutsch verb-third structures, appears to follow from the predictions made in Section 4 if the preverbal position across all V3 in Kiezdeutsch is indeed associated with SoP properties. However, we also hardly found any dative experiencers in the preverbal position. Thus, the results for multilingual speakers correspond to a subset of possible SoPs, although it is unclear if a rule preventing preverbal dative XPs in V3 is desirable; yet both instances were produced by multilinguals. We now turn to a syntactic analysis for Kiezdeutsch which attempts to capture the empirical findings.

6 The Kiezdeutsch C-domain and the syntax of V2/3

Since multiple XPs precede the finite verb, a strict V2 analysis supposing V-to-C movement and only a single position in Spec,CP (den Besten 1983) is problematic, i.e. more positions are needed. Previous analyses of Kiezdeutsch V3 (Hinterhölzl 2017; Sluckin and Bunk 2023; te Velde 2017; Walkden 2017) assume a single unified syntax. In light of our data, the linguistic situation may be too heterogeneous to posit a single grammar. Thus, we suggest that at least two minimally different grammars are present: one shared by most multi/bilinguals (from non-German-speaking homes) with an SoP requirement in the prefield; and a more SG-aligning grammar for monolinguals from German-speaking homes, which has added on salient constructions/usage patterns later on. We attempt to model the former. In this section, we build on CP-approaches to Kiezdeutsch V2/3 (Hinterhölzl 2017; Sluckin and Bunk 2023; Walkden 2017) and attempt to formalize an aversion to preverbal objects in any verb-third linearization. We first give a brief overview of previous C-domain approaches before turning to a novel analysis

6.1 Previous C-domain approaches

6.1.1 Cartographic approaches

Hinterhölzl (2017) suggests a typological difference between V2 grammars with V3, e.g. Kiezdeutsch, those like SG without, relating to a phonological requirement in the latter that V_{FIN} moves to Force. This leaves only one position available for a preverbal element, Spec, ForceP; a fronted framesetter moves from a lower projection to Spec, ForceP (20a) producing strict V2. In contrast, Kiezdeutsch lacks this prosodic requirement and consequently, V_{FIN} moves only as high as FinP, the subject to Spec, Fin or some higher topic projection, and the framesetter merges high in the C-domain (below Force), deriving V3 (20b).

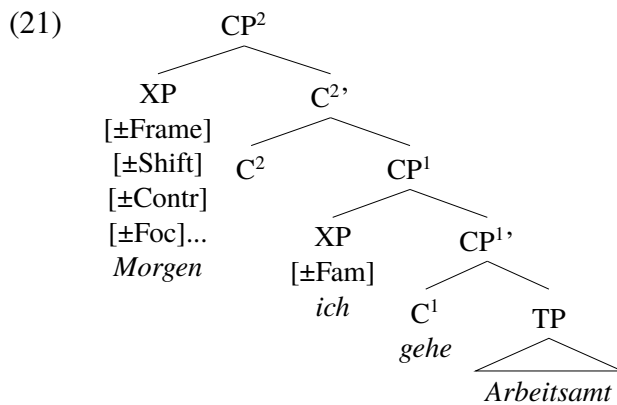
- (20) a. **SG**
 [ForceP (Subj / Frame) (V_{FIN}) [F(rame)-Top [A(boutness)-Top ... [FinP ...]]]]
- b. **Kiezdeutsch**
 [ForceP [F(rame)-Top (Frame) [A(boutness)-Top ... [FinP ((Subj) V_{FIN}) ...]]]]

However, a prosodic condition forcing Fin-to-Force movement seemingly rules out LD and HTLD in SG, or requires V-to-Fin movement only in clauses in which resumption somehow blocks Fin-to-Force. Furthermore, a low locus of V2 in Kiezdeutsch may predict unreported types of $\geq V4$ orders (for such analyses of flexible V2 in medieval Romance see Wolfe 2018, 2019). Finally, this analysis cannot exclude Adv>O>V_{FIN} in Kiezdeutsch. Other cartographic approaches to V3 more widely instead derive Frame>XP>V_{FIN} via V-movement to Force and variation in the lexicalization of the Frame-field (Haegeman and Greco 2018; Greco and Haegeman 2020; Wolfe 2015, 2018, 2019; Meelen et al. 2020; for Kiezdeutsch see Sluckin and Bunk 2023). Nonetheless, these systems also cannot exclude Frame>O>V_{FIN}. Haegeman and Greco (2018) and Greco and Haegeman (2020) do attempt this for West Flemish, positing a V-to-T movement chain which is absent in German (Vikner 2005; Biberauer and Roberts 2010; Haider 2010) and unsubstantiated in Kiezdeutsch.

Finally, recent work by Breitbarth (2023) which finds very marginal, yet systematic and innovative availability of high central adverbs, e.g. *jetzt* 'now' in V3 in L1 colloquial German. These apparently Merge in a high position akin to Hanging Topics and thus also framesetters. This phenomenon has been analysed similarly for Kiezdeutsch by Sluckin and Bunk (2023). Given the functional overlap between framesetters and temporal central adverbials, we ask if the innovation may not only come down to Merge site but also to the role of the adverbs, i.e. it is possible that such innovation equates to a functional merger.

6.1.2 Walkden's double CP

We take Walkden's (2017) feature-scattering approach as a base (see also Giorgi and Pianesi 1997; Hsu 2017), deriving V3 from a double CP-structure, which Walkden stresses is not CP recursion in the sense of Iatridou and Kroch (1992) and Vikner (1995). Here, V_{FIN} targets a lower C-head, C¹, and a familiar topic targets its specifier; this is a conflation of Rizzi's (1997) FinP and Frascarelli and Hinterhölzl's (2007) low left-peripheral topic position FamP. Other active information-structural categories, e.g. framesetters, contrast, focus, shift (aboutness) topics, target a higher specifier on C², a conflation of Force and other information-structural projections, producing the V3 structure in (21).



tomorrow I go job.centre
 'Tomorrow I will go to the job centre.'

(adapted from Walkden 2017:62)

Walkden's analysis encounters the established problem that a familiar topic requirement is pragmatically too restrictive (§4), nor can it exclude preverbal accusative objects. Walkden (2017:61) supposes that the strictness of SG V2 is derived when all "the different possible left-peripheral projections are [...] syncretized into a single multifunctional [...] CP". Thus, Kiezdeutsch has innovated a low topic requirement and expanded its CP structure. Yet, a single CP could not straightforwardly derive LD or HTLD in SG. While we agree that most features

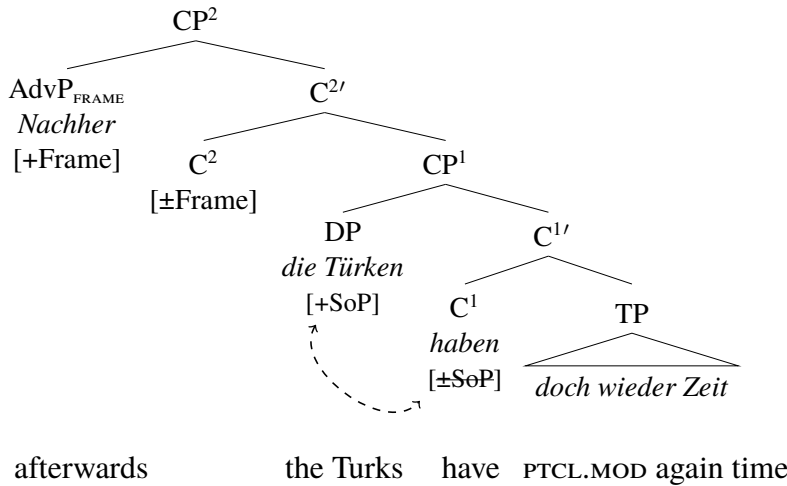
relevant for SG V2 are concentrated on C^1 , the presence of a higher CP is a theoretical requirement for any analysis of LD and HTLD (Frey 2004b; den Dikken and Surányi 2017; Grewendorf 2002a,b, 2009; Grohmann 1997, 2000, 2003; Boeckx and Grohmann 2005; Sluckin et al. 2021), suggesting that the difference between SG and Kiezdeutsch is not the number of C-heads but the distribution of features across these heads. We return to the syntax of HTLD/LD below. We now incorporate the new data into a modified version of Walkden’s analysis.

6.2 Refining the Kiezdeutsch C-domain

We modify Walkden’s (2017) analysis, proposing that the SoP property (discussed in Section 4.4) sits on C^1 , rather than $[\pm Fam]$ which we consider a feature on C^2 (*contra* Walkden 2017). This has the effect that in V3, a simple SoP, i.e. a non-D-linked XP encoding aboutness moves to Spec,CP¹, as shown in (22), yet an accusative DP cannot surface here. Moreover, following Walkden (2017), one must posit variation between SG and Kiezdeutsch as to where framesetters are merged. This is high in Kiezdeutsch in Spec,CP², but in SG, it is low in the C-domain (Hinterhölzl 2017; Sluckin 2021; Sluckin and Bunk 2023), i.e. Spec,CP¹ or in the TP-domain (Frey 2003), so that V3 is ruled out via bottleneck effects (Haegeman 1996; Roberts 2004).

(22)

V3 with simple SoPs in Kiezdeutsch



Although we posit features across C-heads, we do not consider an articulated or syncretized Split-CP to be a theoretical necessity (Fuß 2008; Lahne 2009; Miyagawa 2017; Bacsikai-Atkari 2014, 2021). Assuming the distribution of features across heads to be primarily determined during acquisition (see Biberauer and Roberts 2017), a syncretized Split-CP or featurally distinct recursive C-heads make similar predictions.⁷

This reevaluation of C^1 leaves open three wider questions:

- i. How does a formal requirement for SoP rule out accusatives XPs in Spec,CP¹?
- ii. How then do familiar topics participate in V3, if $[\pm Fam]$ is a property of C^2 ?
- iii. How can we derive a V2 clause without violating an SoP requirement?

We address these questions in turn.

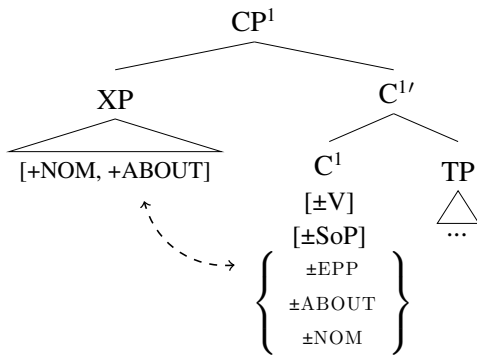
7. We assume that only relevant information-structural features are selected in the numeration, as both redundant features are uneconomical and could not be valued. Indeed, redundant structure could be omitted in Rizzi’s original Split-CP (1997).

6.2.1 Clashing Case explains an epiphenomenal SoP restriction

Recall that SoP has the pragmatic property of encoding aboutness (without d-linking) (Rizzi 2005, 2018; Bentley and Cruschina 2018; Sluckin et al. 2021) but shows a syntactic incompatibility with accusative Case. Based on Italian data, in Section 4.4, we suggested that this (in)compatibility relates to nominative Case assigning properties of the SoP position, or rather TP (although not incompatible with Cardinaletti's 2004 SubjP). We translate this into Kiezdeutsch by placing the SoP requirement on C^1 and decomposing it into three features working in tandem: $[\pm\text{NOMINATIVE}]$, a generalized $[\pm\text{EPP}]$, and $[\pm\text{aboutness}]$, as shown in (23); we embed these features in large brackets under the diacritic label of $[\pm\text{SoP}]$ and include a V-movement feature $[\pm\text{V}]$. Thus, SoP is an epiphenomenal syntactic portmanteau. The difference between Italian and Kiezdeutsch, we argue, is simply that SoP is encoded one head higher in the latter.

(23)

Properties of Kiezdeutsch C^1



We argue that the $[\pm\text{NOMINATIVE}]$ property of C^1 is incompatible with an accusative DP in its specifier, thus ruling out accusative object DPs with $[\text{+aboutness}]$ but not other so-called SoPs. The nominative Case assigning property of C^1 is ultimately an innovation, assuming standardly that SG instead assigns nominative via T, following the traditional conception of nominative Case assignment (Chomsky 1995, 2000, 2001).⁸ Accusative Case is assigned via v to its internal DP argument, the direct object. We hold that C^1 can host a Case feature because rather than passing it on to T via inheritance (Chomsky 2008), Kiezdeutsch simply retained $[\text{+NOMINATIVE}]$ on C^1 , rather than C passing the feature on to T via inheritance; this follows from the position that T's features are inherited from the phase head C in different measure, e.g. $[\phi]$, $[\text{+D}]$, $[\text{+NOMINATIVE}]$ (e.g. Chomsky 2008; Ouali 2008, 2011; Biberauer and Roberts 2010; Miyagawa 2017). Typically, straightforward subject-related EPPs, e.g. English and French, are related to both $[\pm\text{D}]$ and $[\pm\text{NOMINATIVE}]$. However, Spec,CP¹ is not strict DP subject position because $[\text{+D}]$ requirements are inherited by T, which has parameterized phrasal movement of the entire $v\text{P}$ to Spec,TP (cf. Richards and Biberauer 2005; Biberauer and Richards 2006; Biberauer and Roberts 2010; Mohr 2005) to satisfy $[\pm\text{D}]$ on T; this allows a head-initial TP to give the impression of being head-final (Vikner 2001; Haider 2010; Walkden 2017), and b) explains why German and indeed Kiezdeutsch lack an English style subject-EPP in Spec,TP (Abraham 1993; Haider 1993, 2010; Biberauer and Roberts 2010; among others).⁹

8. For SG, we assume that nominative Case is assigned to the highest visible DP in the $v\text{P}$ -complex nested in spec,TP. One might argue that T cannot establish an Agree relation with a nested DP in Spec, $v\text{P}$. This is doable in several ways: i) M-command by TP of the subject DP in spec, $v\text{P}$, assuming percolation of T's features to the maximal projection; ii) feature percolation of DP's Case feature to the maximal projection $v\text{P}$, which then agrees in a simple head-spec configuration; iii) T's Case feature is assigned Case via C-command before $v\text{P}$ -raising, or iv) nominative case may even be assigned in situ by the v/Voice head via M-command (Schäfer 2008)

9. A reviewer asks how we explain the Wackernagel position in German, i.e. non-fronted pronouns follow the finite verb in C (see e.g. Lenerz 1977; Thiersch 1978; Haider 1986). Many competing and compatible analyses exist for Wackernagel effects, which are neither our focus nor reserved to German or V2 systems (see the discussion

Let us be explicit how this scenario blocks an accusative preverbal DP Spec,CP¹ but not in V2. Importantly, Case features are not movement triggers (Chomsky 2001; Alexiadou and Anagnostopoulou 2001). Thus, an accusative DP can be probed by C¹'s generalized EPP and/or aboutness feature, yet incompatibility between [\pm NOMINATIVE] on C¹ and the accusative DP is rendered only after movement, once the derivation is sent to PF. Explicitly, if Spell-Out attempts to realize an accusative DP in a nominative assigning position, the derivation will be rendered ungrammatical on account of Crash because interface conditions are prevented from fully converging (Chomsky 1995:§3-4). Consequently, an accusative DP cannot remain in spec,CP¹ and must evacuate it to the higher C projection, spec,CP² in order to save the derivation, yet this movement is not driven by a probe-goal Agree relation.¹⁰ Evacuation is not forced if the accusative DP is first probed by features on C²; thus, narrow-syntactic movement would bleed the clash before Spell-Out. Therefore, an accusative [+aboutness]-bearing DP can only appear in a V2 configuration under our suggestions. In contrast, since SG's C¹ is devoid of Case features, no Case-driven clash can occur in Spec,CP¹ and the position is totally flexible.

Our hypothesis thus raises the interesting possibility that evacuation of Spec,CP¹ by a non-D-linked accusative DP aboutness topic can plausibly be considered a case of PF-driven phrasal movement because the Case clash is a post-syntactic phenomenon, understanding the problem to emerge in Spec,C¹ when the C² Phase sends its complement to Transfer. Indeed, Chomsky (1995:358) has suggested that V2 relates to the phonological component, even claiming that much head movement may be PF-driven (Chomsky 2001:37). While we do not consider V2 or head movement to be exclusively reflexes of PF (see also Roberts 2010), we are open to PF-driven repair operations. We note also that although we employ Case features specified for nominative and accusative, a dependant-Case approach with computationally indistinct Case features (Chomsky 2001; Alexiadou and Anagnostopoulou 2001) is compatible with our proposals (for discussions see McFadden 2004; Bárány and Sheehan 2021). This would require that the object-DP, which is assigned syntactic Case before receiving accusative form at PF, cannot remain in the spec of a head whose Case feature associates with the unmarked Case at PF (i.e. nominative).

Moving on, we have explained why accusative DPs cannot surface in Spec,CP¹, but not why they are blocked from evacuation in V3. A preverbal accusative DP is impossible, we argue, because an XP merged in spec,CP², e.g. a framesetting adverbial (or innovative high central adverbs (Sluckin and Bunk 2023; Breitbarth 2023)), blocks evacuation of Spec,CP¹, thus preventing the derivation from converging. A condition is then necessary whereby preexisting PF-realization of Spec,CP² blocks such a post-syntactic repair. A solution is that satisfaction of the EPP feature on C² via (external) Merge of any XP in Spec,CP² deactivates its ability to probe downwards and build structure for moved items. This explanation allows multiple specifiers for external but not internal merge; therefore, it correctly allows stacking of adverbials and HTs in V3> (Sluckin and Bunk 2023) above SoP-like elements but not above others.

Finally, our proposal successfully derives bottleneck effects (cf. Haegeman 1996; Roberts 2004). Decomposing SoP allows CP¹ to function as a gateway to the higher CP, when aboutness and nominative Case are valued in situ, e.g. if some different category is scrambled closer to C¹'s EPP feature, or the SoP is nested in a focused vP structure. Since incompatibility with Case only arises after movement, Spec,CP¹ cannot block movement of a syntactic category.

of Slavic in Roberts 2010:§3). Several options exist: Reordering of (multiple) pronouns in the left periphery of the raised vP which now sits immediately below C¹, as either multiple projections (see Jayaseelan 2001; Belletti 2004) or multiple specifiers on the phase edge (cf. Müller 2002); some Wackernagel-related FP between CP and TP (cf. Rivero 1997; Bidese 2011), or simply, multiple specifiers of TP if the properties of such a phrase are features on T. 10. See work by Alexiadou and Anagnostopoulou (2001) and Bobaljik and Wurmbrand (2005) for spiritually similar but syntax internal accounts of forced DP evacuation from the VP for reasons of failed Case assignment.

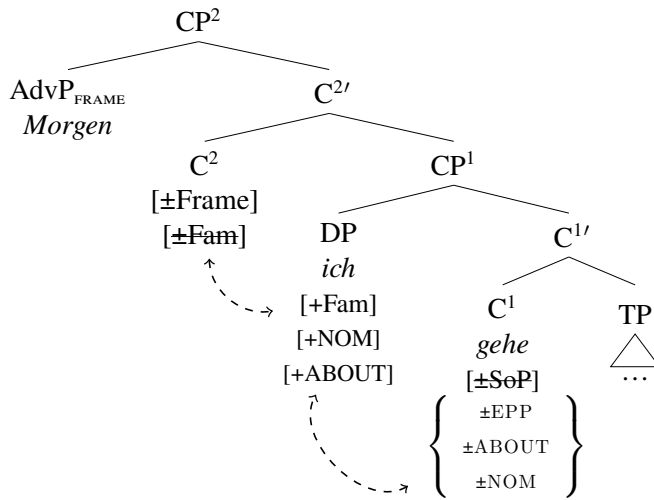
Non-SoPs XPs will either be probed C^2 or forced to evacuate Spec,CP^1 to Spec,C^2 , as set out. However, a preference for nominative subject DPs/pronouns arises through their tendency to encode aboutness; if an appropriate goal is a non-nominative SoP-element, e.g. spatio-temporal element, a situational argument, or a dative experiencer (although largely absent in our data), they can land in Spec,CP^1 without issue, assuming that i) they agree with C^1 's [+aboutness] feature and ii) nominative can be assigned downwards via Agree. Since dative DPs receive inherent Case, they are not banned in Spec,CP^1 , as structural Case requirements are blind to them (McFadden 2004; Woolford 2006). We now show how the proposals apply to different types of V2 and V3 with familiar topics before showing how Kiezdeutsch derives typical V2 clauses.

6.2.2 V3 with familiar topics

Familiar topics in V3 need not be reclassified as SoPs. Appropriate elements in Spec,CP^1 can simultaneously value aboutness, satisfy the EPP (but need not value nominative Case) on C^1 and $[\pm\text{Fam}]$ requirements on C^2 , because aboutness is a subset of Fam, i.e. $[\pm\text{Aboutness}] \subset [\pm\text{Aboutness}, +\text{D-linking}]$. If an appropriate familiar topic lands in Spec,CP^1 , we suggest it will freeze because either, a) a subject DP will value all of C^1 's features in a Spec-head configuration, e.g. EPP, $[\pm\text{Aboutness}]$ and $[\pm\text{Nom}]$; or b) caseless non DP-XPs, features relevant for movement enter into a spec-head Agree relationship, while the Case feature agrees downward with an appropriate DP. This is not unlike Criterion Freezing (Rizzi 2006, 2010; Rizzi and Shlonsky 2006); yet, we do not employ criterial heads with single characterizing features. A local agree relation between $[\pm\text{Fam}]$ on C^2 and the XP it C-commands in spec,C^1 is then necessary to avoid Crash. As stated above, forced evacuation of Spec,CP^1 result from a clash in structural Case features (or their PF realization). In such instances, Spec,CP^2 remains available for Merge of an adverbial in V3 (*pace* Walkden 2017). Thus, V3 is possible with SoPs and familiar topic subjects or any non-accusative D-linked topic.

(24)

V3 with familiar topics in Kiezdeutsch



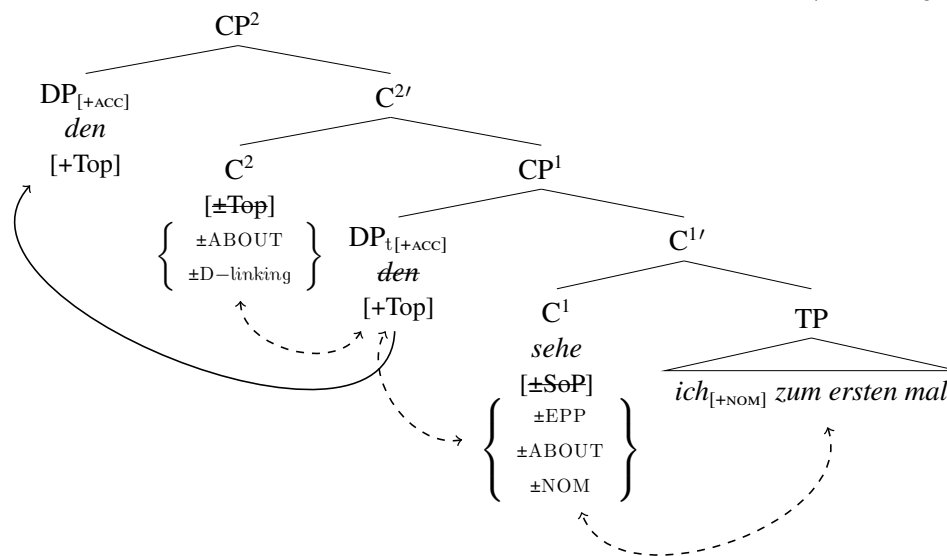
6.2.3 Deriving OV_{FIN} V2 in Kiezdeutsch

As documented by Wiese and Müller (2018), Kiezdeutsch speakers of all types produce V2. We now show how multilingual Kiezdeutsch speakers can still produce V2 sentences with preverbal objects. The key observation is that fronted accusative objects in V2 and framesetters in V3 appear in complementary distribution. We have already discussed that Spec,CP^1 is capable of acting as a gateway to the C-domain, regardless of its Case properties. This is important because, on the assumption that C-heads are Phase heads (Chomsky 2001, 2008), a fronted XP can neither be probed directly by C^2 nor move there directly by skipping C^1 , as this would violate the Phase Impenetrability Condition (PIC). Any DP that only satisfies EPP and fails to value C^1 's

PF/LF-legible features, or clashes with them, will be free (or forced) to move further. We show the derivation of such an object-initial V2 clause in (25) produced by a confirmed multilingual speaker.

(25)

V2 in Kiezdeutsch



him.ACC see I to.the first time
‘I see him for the first time.’
(MuP1MK, ex. 16 Wiese and Müller 2018:211)

Firstly, the generalized EPP and aboutness features of C^1 probe together and find an appropriate goal. The DP moves to Spec,CP¹, yet this goal is an accusative DP. While the nominative Case feature on C^1 is forced to agree long range with an inverted subject, CP¹ could not be successfully spelled out because interface requirements relating to the realization of structural Case cannot converge. Consequently, the accusative DP must evacuate; yet if the DP is D-linked, it will be probed by a corresponding topic feature on C^2 , [\pm Fam] in Walkden's (2017) terms, or indeed any other relevant feature, e.g. [\pm Foc] or [\pm Contr] before evacuation is forced. This course of operations values all features, rules out V3 with undesirable XPs, and preserves the bottleneck. In contrast, for infrequent V3 in stricter standard-aligning spoken German (cf. Schalowski 2015, 2017; Bunk 2020), we follow Sluckin and Bunk (2023) who consider these a last-resort operation when speakers omit the adverb(ial) in the initial numeration (see also Haegeman and Greco 2018; Greco and Haegeman 2020), merging them late in, Spec,FrameP (Spec,CP² for our purposes).

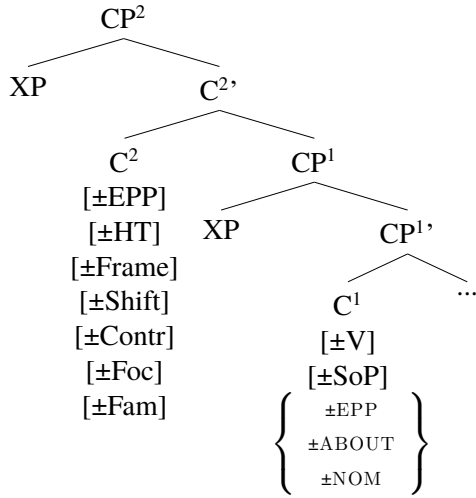
Finally, we assumed that satisfaction of Kiezdeutsch C²'s generalized EPP feature via (external) Merge in its spec deactivates its ability to probe downwards, thus producing a complementary distribution between framesetters and accusative DPs in V3. Given instances of stacked frame adverbials (26) and stacked HTs reported by Sluckin and Bunk (2023) leading to V4> orders, we consider that multiple specifiers on C² are a necessity. A Kaynian (1994) and cartographic single specifiers requirement can also model multiple merged elements in the high CP (e.g. Benincà and Poletto 2004; Hinterhölzl 2017; Wolfe 2019; Sluckin and Bunk 2023); however, this requires recursive FrameP or HT projections above Force and does thus not make significantly different predictions. We turn to the syntax of resumption in the next section.

(26) *Irgendwann in Schule ich fange an zu schlafen*
 some.when in school I start at to sleep

'At some point, at school, I start to sleep.' (KidKo, MuH9WT_06-1, Speaker 102)

An updated Kiezdeutsch C-domain is given in (27). The full range of possible information structural categories are listed as features on their respective probing C heads. In line with the examples above, $[\pm\text{SoP}]$ is illustrative with formal ingredients in large brackets.

(27) **The Kiezdeutsch C-domain**



This constellation overlooks operator-driven structures with *wh*-operators, comparatives, relatives, and equivative constructions, which we assume to occur via features/operators associated with specific clause typing C-heads (see e.g. Bacsikai-Atkari 2014, 2020, 2021), a necessarily non-cartographic assumption. Likewise, while their selectional properties may vary, the lexicalization of two CPs is a necessity in SG combinations such as *als ob* ‘as if’ or the colloquial *als wie* ‘than (how)’ (Bacsikai-Atkari 2014, 2021). In instances affecting only the low locus of V2, i.e. C^1 , e.g. certain *wh*-operators, framesetters are conceivably permissible above *wh*-items, if C^2 can be constant. This is a potential explanation for very rare examples of V3 in *wh*-contexts such as (28a) In contrast, following Walkden (2017), *why*-type interrogatives may have a higher locus, explaining rare instances of the type in (28b). We leave the exact syntax of a specific operator-related clause types in Kiezdeutsch for further research, yet it not theoretical necessity for us that such clause types must fall out from the CP of a typical indicative matrix clause.

- (28) a. *Danach was sehe ich Netlog?*
 afterwards what see I Netlog
 ‘And then what did I see on Netlog?’ (KiDKo, Mu9WT)
- b. *warum du machst DINGS*
 why you do thing
 ‘Why are you doing that?’ (KiDKo, MuH12MD; ex.17 Walkden 2017:57)

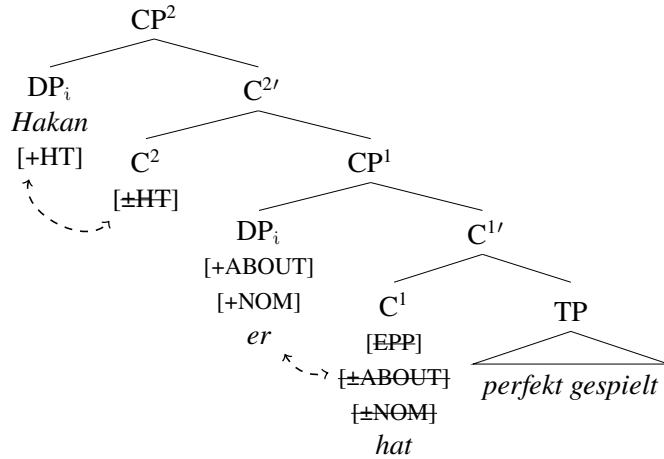
6.3 Applying the analysis to HTLD and LD

The proposed analysis also derives restrictions on preposed objects in Kiezdeutsch LD and HTLD. We first consider HTLD; HTs are unintegrated and externally merged above the CP locus of V2 (Grohmann 2003; Frey 2004b; Cinque 2008; den Dikken and Surányi 2017; Haegeman and Greco 2018; Wolfe 2019; Samo 2019), e.g. Grohmann’s (2003) in an adjunct CP or a Force-external frame-field (Benincà and Poletto 2004). We thus take HTs to merge in Spec,CP², producing a verb-third order without violating the bottleneck; we assume the basic structure in (29) for SG.

- (29) [CP²_{DP} *Otto*_i [C² [CP¹_{DP} *er*_i [C¹_v *wollte* [TP...*schlafen*]]]]] **HTLD in SG**
 Otto he.RP wanted sleep.INF
 ‘Otto, he wanted to sleep.’

Modifying (29) for Kiezdeutsch, the resumptive moves to Spec,CP¹ to value [\pm aboutness] and EPP requirements and the HT external merges in Spec,CP², valuing C²’s corresponding features (see 30). We omit the diacritic [\pm SoP], referring only to its subparts. C¹’s [+NOMINATIVE] feature prevents an accusative DP from being spelled out in Spec,CP¹, while the HT has no restriction against accusative objects, which is confirmed in our data.

- (30) **HTLD in Kiezdeutsch**



Hakan he.RP has perfect played
 ‘Hakan, he played perfectly.’

(KiDKo, MuH13MT_04)

Shifting to LD, the difference between LD and HTLD is the presence of XP movement to Spec,CP² (Grohmann 1997, 2000, 2003; Grewendorf 2002b,a, 2009). We adopt a big-DP analysis (cf. Grewendorf 2002a, 2009) in which both dislocate and RP merge in a complex XP (31a). This structure applies also to adverbial PPs (31b).

- (31) a. [DP [DP *den Studenten*] [D *den*]]
 b. [PP [PP *in der Schule*] [P *da*]]

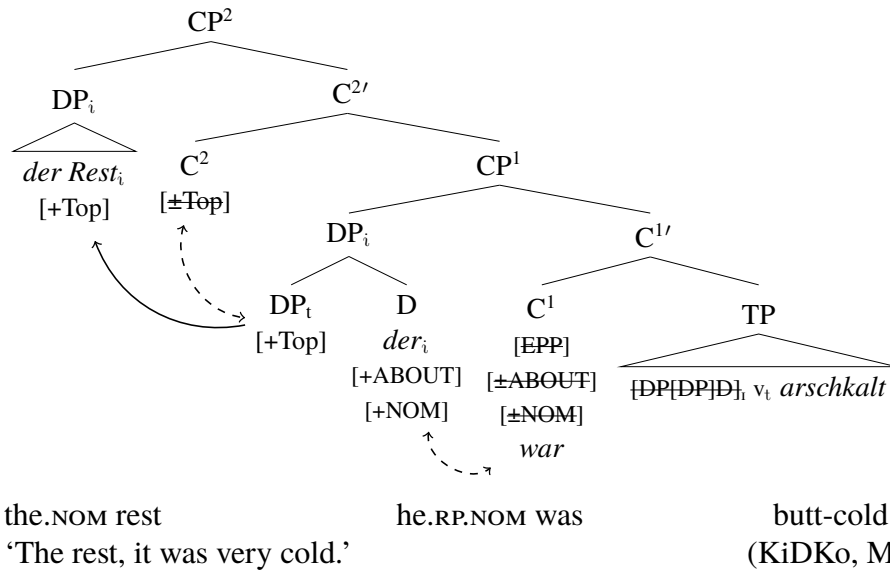
We assume the structure in (32) for SG LD; the big-DP moves to Spec,CP¹, the locus of the bottleneck (Spec,FinP for Grewendorf 2002a,b, 2009), yet two DPs are thus carried to the prefield. The DP (or PP/AdvP) in the specifier of the dominating DP then moves to a higher topic position.

- (32) [CP² [DP *den Studenten*_i] [C² [CP¹ [DP [DP_i] D *den*_i] [C¹ *mag* [TP...*ich*]]]]] **LD in SG**
 the.ACC student.ACC him.RP.ACC like I
 ‘The student, I like him.’

For Kiezdeutsch, the strong aversion to preverbal accusative objects in LD and HTLD among multilinguals/interlocutors indicates the permanency of nominative assigning properties of C¹ and not simply a conventionalized property only for noncanonical V3. A Kiezdeutsch LD derivation is given in (33a), which we describe stepwise below. For simplicity, we do not differentiate referential topic types because the interpretation of the dislocate is not fixed (see Frey 2004b) although often contrastive (cf. Grohmann 1997, 2000).

(33)

LD in Kiezdeutsch



In (33), $[\pm EPP]$ and $[+Aboutness]$ probe for a lower goal, the big-DP subject whose $[+Aboutness]$ feature is visible on DP_{MAX} . The big-DP moves to $Spec,CP^1$ where it both satisfies C^1 's generalized EPP and receives nominative Case. The maximal projection is frozen as all features of C^1 are valued in a spec-head configuration. The nested full-DP *der Rest* is then probed by the relevant $[\pm Top]$ feature on C^2 and extracted to $Spec,CP^2$.

This system cannot strictly prevent a fronted accusative object big-DP from moving to $Spec,CP^1$ and forcibly then evacuating higher. However, the contents of the big-DP cannot then be separated; if a big-DP is not split up, the processing or information-structural advantage of resumption is lost. If a complete big-DP occupied $Spec,CP^2$, two ϕ -indistinct but informationally distinct D-elements would occupy a position that we assume can only be associated with one informational category. Moreover, if a big-DP can remain intact, ungrammatical in-situ doubling of θ and ϕ -indistinct arguments as in (34) should be possible. We thus suppose that in a complete big-DP the featurally poorer pronoun argument is subject to deletion at PF on account of its overlapping D and ϕ content, thus producing a standard V2 clause.

- (34) **Gestern habe ich [den Jungen_i] [den_i] gesehen*
 Yesterday have I the.ACC boy.ACC him.RP.ACC seen
 Intended: ‘Yesterday I saw the boy.’

In sum, the following different feature specifications hold for Kiezdeutsch and SG:

	Kiezdeutsch	SG
C^2	$[\pm EPP]$ $[\pm Frame]$ $[\pm HT]$ $[\pm Foc]$ $[\pm Fam]$ $[\pm Contr]$	$[\pm EPP]$ $[\pm HT]$
C^1	$[\pm EPP]$ $[\pm Aboutness]$ $[\pm NOMINATIVE]$	$[\pm EPP]$ $[\pm Frame]$ $[\pm HT]$ $[\pm Foc]$ $[\pm Fam]$ $[\pm Contr]$ $[\pm Aboutness]$
T	$[\pm D]$ $[\pm EPP]$	$[\pm EPP]$ $[\pm D]$ $[\pm NOMINATIVE]$

Table 14: The distribution of formal features across C^1 , C^2 and T in Kiezdeutsch and SG

7 The emergence of V3 and the SoP requirement

If a) Kiezdeutsch is novel in possessing an SoP-like nominative and aboutness requirements in $Spec,CP^1$, and b) this is correlated with the grammars of speakers with home languages other than German, we require an updated account of change. We first critically address two opposing

diachronic views of Kiezdeutsch V3 before offering an alternative informed by demographic factors and different scenarios for bilingual CLA.

7.1 The continuity account

Some scholars consider V3 a historically consistent pattern inherited from a historical stage of the language (Demske and Wiese 2016; Schalowski 2017; Wiese 2013; Wiese and Rehbein 2016; Wiese and Müller 2018) which has somehow taken root in Kiezdeutsch.

“Having been hidden in vernacular language, this pattern might have gotten overlooked and had to be rediscovered via the more dynamic settings of multilingual speech communities.”
(Wiese and Müller 2018:16)

Two factors underpin this view; firstly, monolingual speakers of German appear to produce V3 rarely following the Adv→Subject→V_{FIN} (Schalowski 2015, 2017; Bunk 2020; Wiese et al. 2020)¹¹. Secondly, framesetter-initial V3 patterns in Early New High German (ENHG) (35) (Speyer 2008) and Middle Low German (MLG) (36) (Petrova 2012) purportedly demonstrate historical continuity.

- (35) [Jm 6886. Jar] [der Großfuerst DEMETRI] **hat**
In-the.DAT 6886 year the Grand Duke Demetri
den maechtigen Tatarischen Khuenig MAMAI geschlagen
the.ACC powerful Tartar King Mamai beat
‘In the year 6886, the Grand Duke Demetri defeated the powerful
Tartar King Mamai.’ (ex.36, Speyer 2008:481[115.B1r.11f.])

- (36) [By dersulven tyd] [de koning philippus van vrankriken] **was** in aquitanien
by the.same time the King Philippus of France was in Aquitania
‘By the same time King Philip of France was in Aquitania.’
(Petrova 2012:168 [LChr I 65,2])

We focus on ENHG data, as neither spoken German nor the relevant Berlin dialect syntactically derive from MLG (cf. Lasch 1928). V3 data from ENHG is not robust enough to support historical continuity into Modern German and Kiezdeutsch. Speyer (2008) finds that multiple occupation of the prefield was rare even in ENHG, 0.07% of his entire sample. Although Speyer (2008) finds that the preverbal element was usually a subject NP, the preverbal element could be either a topic or contrastive element. The initial element could be a framesetter or contrastive element. Speyer thus posits the left-periphery in (37).

- (37) frames > focus/contrast > aboutness topic > V_{FIN}

The example in (35) shows Frame > Contrast, which is not found for Kiezdeutsch, although our analysis cannot exclude a contrastive topic subject in V3. In contrast, (38a–b) show ENHG orders involving Frame > Topic (38a) and Contrast > Topic (38b) (see also Catasso 2021 for a review of V3> orders in Middle and Early New High German).

- (38) a. **Framesetter > Topic**
[Dar nach] [die edel kungin] fuer enhalb Ofen auf das Laslaes
after that the noble queen went beyond Ofen to the.GEN Laslae.GEN
Wans gueeter mit grossem kummer
Wan.GEN properties with great grief
‘After that, the noble queen left Ofen and went to the land of Mr Ladislaus, in great
mourning.’ (113.10.16; Speyer 2008:481)

11. See also supporting data but not argumentation by Breitbarth (2022, 2023)

b. **Contrast > Topic**

[anders] [ich] moehte sin nüt erlitten haben
 otherwise I can it-Gen not stand have

‘otherwise I would not have been able to resist it’ (231.16.17; Speyer 2008:481)

Moreover, although rare, $O>S>V_{FIN}$ orders such as (39) were possible, which are never found in Kiezdeutsch. The lack of OSV_{FIN} in Kiezdeutsch and rare SG V3 suggests a different syntax.

(39) vnd [alles das] [ich] weis
 and all that I know

‘And ALL THAT I know ’

(ex.33, Speyer 2008 [231.2.9])

While Kiezdeutsch shows a small subset of ENHG orders, linear similarity does not necessarily derive from systemic overlap; String similarity does not equate to grammatical continuity, especially if the V2-configuration has changed such that other historical “violations” are lost. The ENHG C-domain does not survive in modern German or Kiezdeutsch. The evidence from Kiezdeutsch V3, LD, HTLD suggest that its C-domain shows novel properties. Indeed, studies by Axel (2007), Speyer (2008), Fuß (2008), and Catasso (2021), to name a few, show that no historical stage of German showed the same restrictive properties as those in Kiezdeutsch across multiple $V3>$ orders. Moreover, the lack of any restriction on the initial constituent in SG LD and HTLD is further evidence that nominative properties were never a property of the lowest C head in the history of German.

Indeed, recently Breitbarth (2023) has argued that sparse V3 orders with central adverbials in SG-aligning spoken language do not result from historical continuity with ENHG or MLG, supporting our position. Breitbarth (2022, 2023) finds that such non-inverted V3 in spoken German is a marginal rare option, yet demonstrates information-structural and prosodic systematicity. She also notes the relative sparsity of the pattern in TüBa-D/S (see also Sluckin 2021:§7); overall V3 makes up 0.16% (not limited to central adverbials) of instances in TüBa-D/S (calculated from data reported by Bunk 2020 and 0.17% of the monoethnic youth language in KiDKo-mo, of which several instances are dubious (cf. Walkden 2017). Furthermore, Breitbarth’s (2023) experimental results show that despite low ratings, V3 is conditioned by Gender and Age; women under 40 are more accepting, while men were not. Breitbarth (2023:33) thus understand the low frequency overall as evidence of a change ‘under the radar of social awareness’. In contrast, Kiezdeutsch V3 is a sociolinguistic stereotype.

While rare instances of V3 in colloquial SG could have contributed to its pervasiveness in Kiezdeutsch, additional factors speak against this hypothesis. Since most Kiezdeutsch speakers are not from German-speaking homes and move in social networks characterized by different types of bi/multilingualism, it is unclear if speakers had adequate exposure to such a rare pattern. Given the sparsity of V3 in Spoken German, we doubt that these instances were frequent enough in the input of children with reduced contact with L1 monolingual/monoethnic German speakers in such urban contact situations, i.e. in GSLA (Cheshire et al. 2011). Indeed, Breitbarth (2023) entertains but does not commit to the possibility that monolingual speakers’ use of V3 with central adverbials could be affected by knowledge of L2 or potentially related to contact with speakers from multilingual backgrounds, noting that both the languages (Arabic, Turkish, Kurdish) and V3 associated with Kiezdeutsch speakers have existed in the German linguistic ecosystem for 50-60 years (see e.g. Barbour and Stevenson 1998; Keim 1984). Thus, Kiezdeutsch V3 cannot be examined outside the context of a known proclivity toward SV_{FIN} V3 by L2 German speakers (Clahsen and Muysken 1986; Platzack 2001; Meisel 2009, 2011b; Walkden 2017), even if Kiezdeutsch speakers clearly master V2. Moreover, children exposed to German later in childhood, i.e. after 4, also pass through a phase of producing more V3 (Jab-

noun 2006; Rothweiler 2006; Sopata 2010). These factors increase V3 in the linguistic ecology of multilingual/multiethnic speech communities. Hence, the impetus lies most plausibly in the nature of CLA in such multilingual/ethnic urban settings.

7.2 Walkden's competing PLD account

Walkden (2017) views V3 as an innovation stemming from children's attempts to reconcile PLD from adult SVO L2 grammars lacking comprehensive V2 (Clahsen and Muysken 1986; Meisel 2009, 2011b,a; Meisel et al. 2013) and the V2 grammars of L1 monolingual German-speaking peers. We briefly summarize his position before reexamining certain aspects.

7.2.1 A three-stage account

Walkden (2017:69ff) proposes a three-stage progression in which acquirers must reconcile L2 and L1 derivations in (40a, b), leading to the Kiezdeutsch grammar in (40c).

- | | | |
|---------|---|---------------------------|
| (40) a. | [_{CP} dann [_{TP} er [_T wäscht [_{VP}]]]] | L2 syntax: no V2 |
| | then he washes | |
| b. | [_{CP} dann [_C wäscht [_{TP} [_{VP} er]]]] | L1 syntax: V2 |
| | then washes he | |
| c. | [_{CP} ² dann [_C ² [_{CP} ¹ er [_C ¹ wäscht [_{TP} [_{VP}]]]]]] | Kiezdeutsch syntax |
| | ‘Then he washes.’ | |

These stages proceed as follows:

- i. **Stage 1: L2 speakers fail to posit V-to-C and produce V3 via CP adjunction** (see also Clahsen and Muysken 1986; Meisel 2011b). Walkden (2017) considers this the source of a necessary level of non-target-like PLD containing V3. This stage increases V3 in the German-speaking linguistic ecology (cf. Mufwene 2001; Cheshire et al. 2011; Wiese and Rehbein 2016) in multilingual/multiethnic communities.
- ii. **Stage 2: L1 acquisition by the children of L2 speakers.** Children are exposed to adult non-V2 L2 grammars, which is interpreted as evidence for a preverbal subject requirement, presumably in Spec,TP. Yet, these children are also exposed in their peer group to L1 V2 grammars with V-to-C movement to (a single) CP. Walkden (2017) argues that acquirers' attempts to reconcile these two grammars lead them to conflate features from both and thus posit the double-CP structure (40c).
- iii. **Stage 3: Propagation of %V3** among adolescents (circa 12 years of age), as it becomes a sociolinguistically salient in-group marker.

However, treating CLA as the locus of change, stage 1 simply creates the necessary conditions and stage 3 is a sociolinguistic consequence of the innovation. Kiezdeutsch speakers from monolingual German-speaking homes arguably produce stereotypical V3 as an E-language phenomenon. This prediction is supported by the fact that German monolingual Kiezdeutsch speakers more liberally employ fronted objects in LD and HTLD.

7.2.2 Reassessing the competing PLD account

Recall that 84% of the school population from which KiDKo collected spoke home languages other than German. This matches the conditions of GSLA suggested in Cheshire et al. (2011) in which both adult L2 and L1 adults features tend to be rejected. This may weaken the viability of adult L2 grammars with V3 as source context; although without credible alternatives, this is not yet compelling counter argumentation. However, 84% is greater than the national average for second-generation Germans who do not speak German at home, which is roughly 55-60% (Reiss

et al. 2016). Walkden's scenario for change entails primary caregivers and children interacting in the adults L2; this is perhaps overly speculative for non-mixed families. While children undoubtedly hear their parents speaking German in public, such exposure at home cannot be readily assumed. A competing PLD account also requires considerable interaction with L1 peers at an early stage of CLA. However, we lack information on the relevant speakers' early education; if the ethnographic make-up of preschools and elementary schools resembles the secondary school in these areas, L1 German speakers could comprise only around 15% of children. If so, instead of reconciling adult L2 German and peer L1 German, a majority of children will lack German PLD at home. This means that for many their first primary exposure to German takes place later than monolingual L1 German speakers and simultaneous bilinguals. Consequently, their main German input will come from a minority of L1 peers and teachers and a majority of 'very early L2' peers (see Unsworth 2016), acquiring German together from one another in GLSA.

There is reason to assume a) an ethnographic make-up in preschools in communities resembling the KiDKo population, and b) later exposure to German via later commencement of preschool. Becker (2010:23) reports that around 2010 monoethnic German children tended to begin preschool before age 3, yet children from the relevant migrant backgrounds often began after 3. Crucially, the V2 parameter is already set in L1 by around 2;5 years (Penner 1992). Moreover, Becker (2010) reports that children from a Turkish background more often attend preschools with a higher percentage of children from migrant backgrounds, mirroring the situation reported by Wiese et al. (2012). This is not only result of more non-ethnic Germans living in areas where Turkish populations concentrate, but also recommendations in these social networks play an important role in preschool selection Becker (2010); but only a quarter of parents from Turkish backgrounds in Becker's study reported having monoethnic German friends. This means members of the same social network send their children disproportionately to the same local preschools. These factors conspire to amplify the concentration of children from non-German-speaking backgrounds in preschools beyond the demographics of multiethnic areas.

In sum, many children from the relevant communities are likely exposed to German later and are disproportionately concentrated in environments with reduced L1 sources of German PLD. Notably, Biedinger and Becker (2010) found that children from Turkish-speaking homes who attended preschool longer performed better in German once school age is reached; notably, children from preschools with higher concentrations of multiethnic children were more likely to require extra support in German at school. This is unsurprising given the reduced L1 input from peers in situations of GLSA (Section 2). But how could these factors influence the emergence of V3?

7.3 Late bilingualism as a driver of change

We have argued that Kiezdeutsch-speakers' CLA is likely characterized by delayed exposure to German and a disproportionate concentration of such bilingual acquirers/speakers in early and later education. We thus propose that a potential overlooked source of change are speakers who lack rich exposure to L1 German PLD during (very) early childhood both at home or in peer-contexts in early education. We now inform such an approach by drawing on literature differentiating different modes of bilingual acquisition and related effects (Meisel 2009; Tsimpli 2014; Unsworth et al. 2014; Unsworth 2016), arguing that Kiezdeutsch V3 emerged from a combination of so-called input and onset effects.

7.3.1 Bilingual types and effects

Bilinguals can be divided into three groups according to the age of onset, i.e., age of first exposure to a language (Tsimpli 2014:284):

- i. Simultaneous Bilinguals (exposure to two or more languages from birth)
- ii. Early Successive Bilinguals (exposure before age 4)
- iii. Late Successive Bilinguals (exposure from age 4-8)¹²

Later exposure is associated with ONSET EFFECTS and interacts with general maturational effects in CLA (Tsimpli 2014). Building on observations from the Interface Hypothesis (cf. Sorace and Serratrice 2009; Sorace 2011) that the syntax-pragmatics interface presents challenges for bilingual acquirers, e.g. non-target use of null subjects, Tsimpli (2014) proposes that different parameters are acquired either early, late, or very late in L1 CLA. For example, narrow-syntactic and semantically vacuous (macro)parameters are acquired before those with interface conditions, e.g., OV/VO before V2. Thus, structures with higher interface requirements take longer to acquire. Consequently, the syntax-discourse/pragmatics interface is more vulnerable in the grammars of successive bilinguals. Indeed, while simultaneous bilinguals play catch-up only in obtaining the same amount of PLD as monolinguals (Tsimpli 2014), early and late successive bilinguals also have to catch up on the PLD for parameters typically acquired in earlier stages of acquisition.

For V2, simultaneous and early successive bilinguals match monolingual speakers for verb placement and finiteness; in L1 this occurs early around age 2 (Meisel 2011b; Tsimpli 2014). However, late subsequent bilinguals reportedly produce more V3 for longer; Kroffke and Rothweiler (2006) find that late successive German bilinguals with L1 Turkish (onset c.6;0) produce more V3 and uninflected forms in V2 positions. Sopata (2010) finds increased V3 for L2 German speakers with Polish L1 (onset between 3;8 and 4;7) although it reduced over time. Finally, Jabnoun (2006), found that late subsequent bilinguals produce Frame-SV_{FIN}, even reporting V3 with a temporal adverb followed by a preverbal locative (41) which is derivable via a low-CP SoP requirement.

(41) *Nächste morgen in die ei ist ein krokodil*
 next morning in the egg is a crocodil

‘the next morning, there was a crocodile in the egg.’

(Jabnoun 2006:191)

Yet, if increased V3 among late successive bilinguals is typically a phase lasting until V2 is fully acquired (Meisel 2011b:214), why do Kiezdeutsch adolescents retain V3 after successfully acquiring V2? We draw again on Tsimpli (2014) who argues that INPUT EFFECTS associated with quality/unambiguity of the input influence the duration needed to acquire a parameter. Input effects can mediate maturational effects. Thus, when the clarity or quantity of input is reduced, later acquisition of phenomena with higher interface requirements is predicated. Where onset is delayed, the richness of input is especially important for successive bilinguals to catch up. The combination of later onset and reduced or more ambiguous input received in challenging linguistic settings, e.g., a language-contact scenario, could facilitate the non-target-like acquisition of given phenomena. This is especially so if cut-off points for totally target-like acquisition exist between ages 4 and 7 (cf. Johnson and Newport 1989; Meisel 2011b). Put simply, the late successive bilingual child first encounters a parameter already acquired by similarly aged monolinguals and simultaneous bilinguals and must “catch up”; however, input and onset effects can conceivably combine in super-diverse multilingual/ethnic speech-communities. This child may thus never posit the same settings as monolinguals or simultaneous bilinguals, leading to an innovative grammar. Applied to V3, the input received by Kiezdeutsch speakers may have come too late and too ambiguous to rule out verb-third orders, which appear to be an emergent

12. Also referred to as child L2 (cf. Meisel 2009, 2011b; Meisel et al. 2013) or very early L2 by Unsworth (2016)

property (Wiese et al. 2020), while simultaneously sufficing to acquire a basic but more flexible V2 grammar; we expand on this in Section 7.3.3.

While we lack direct evidence, some Kiezdeutsch speakers in KiDKo do show effects associated with later successive bilingualism in V3 contexts. For instance, Meisel (2009, 2011b) and Meisel et al. (2013) argue that exposure to German after 4;0 can result in some non-target uses of morphosyntactic inflection, e.g. case, gender, and other ϕ -related agreement marking (see also Tsimpli and Hulk 2013; Tsimpli 2014; Unsworth et al. 2014; Unsworth 2016). We find several errors in gender-marking (42), finiteness inflection (43), and C/case morphology (44).

(42) **Tense error and Gender error: feminine instead of neuter**

*Gestern ich hole **mein-e** Passbild*
 yesterday I collect my-SG.FEM Passport-photo.SG.NEUT
 Yesterday I collected (KiDKo, SPK106, MuP6MD_17)

(43) **Verbal agreement error**

*So viele Türken **hab-e** sich gefreut*
 So many Turks.PL have-1SG REFL gladden.PTCP
 ‘So many Turks were happy’ (KiDKo, MuH9WT_12-2)

(44) **Missing dative after prepositions von, zu**

***von ander-e** Straßenseite, die gucken uns alle so an*
 from other.FEM.ACC/NOM Street-side.FEM.DAT, they look us all so at
 ‘From the other side of the road, they all look at us’ (KiDKo, MuH25MA_11)

We also find rare examples indicating competition between VO/OV, e.g. a post verbal particles after a nonfinite form (45), which is typically diagnostic of a left-headed VP (Fuß 2018).

(45) *Willst du probieren auf?*
 want you try.INF on
 ‘Do you want to try (it) on?’ (KiDKo, SPK101, MuH12MD_04)

7.3.2 The information-structural primitive behind V3

We have argued that multilingual Kiezdeutsch speakers acquired V2 later and in more difficult conditions than monolingual German speakers. However, this does not fully explain why the resilience of V3 which emerges repeatedly in the speech of L2 adults (Clahsen and Muysken 1986), late successive bilinguals (Rothweiler 2006; Jabnoun 2006; Sopata 2010), Heritage speakers of V2 varieties (Alexiadou and Lohndal 2018), speakers of Kiezdeutsch and similar urban vernaculars (Wiese 2013; Walkden 2017; Meelen et al. 2020), early L1 CLA (Tracy 1991; Platzack 2001; Tracy and Thoma 2009), and also in synchronic and historical V2 varieties which allow V3 micro-variationally (Haegeman and Greco 2018; Hinterhölzl 2017; Wolfe 2019). As noted in Section 7.1, infrequent examples are even found in spoken German (Bunk 2020; Breitbarth 2022, 2023). Consequently, the similarity of V3 across different linguistic scenarios is beyond coincidental and poses the question as to why such orders seem to emerge repeatedly.

Indeed, Wiese et al. (2020) on English, German, and Turkish, argue that V3 constitutes a natural order of information distinct from language-specific grammatical constraints. Where situations can be elicited which weaken normal grammatical constraints, a preference emerges for Framesetter > Subject_{TOPIC} > V_{FIN}. Although unproblematic in English, V3 and its specific discourse requirements is noncanonical in German and Turkish. Using experimental methodology, Wiese et al. (2020) find a preference for V3-ordering of information in non-verbal tasks, e.g. an experiment involving comics and the placement of items, e.g., clocks, verb cards, and

Playmobil. However, in a verbal task, German speakers resorted to V2. This purportedly shows V3 to be a basic natural order irrespective of V2. If Wiese et al. (2020) are correct, V3 equates to a pragmatic primitive. We suggest that such primitives can drive acquisitional biases; thus, the acquirer of a strict V2 language, like German, must posit a syntactic configuration excluding V3 during parametrization. This predicts V3 in early CLA, which German and Swedish (Tracy 1991; Tracy and Thoma 2009; Platzack 2001) speakers under age 3 produce, e.g. Platzack (2001) notes a Swedish example (age 2;2) with an initial locative adverb *där* ‘there’ (46).

- (46) *där han bor target: där bor han*
 there he lives there lives he
 ‘he lives there’

(ex. 13a Platzack 2001:370)

Since V3 encodes a particular information-structural configuration, it involves the syntax-discourse/pragmatics interface. Thus, if the syntax-pragmatics interface is particularly vulnerable in bilingual acquisition and production (Sorace and Serratrice 2009; Sorace 2011; Tsimpli 2014), bilinguals acquisition characterised by onset or/and input effects may well resort to “natural orders” of information more readily. From a language-change perspective, we propose that Kiezdeutsch V3 results from the parametrization of this default into the syntax. We now address how this takes place.

7.3.3 Minimal Defaults and Phase Heads: from default to novel syntax

The C-domain is central to the interfaces between syntax, pragmatics/discourse and semantics (Rizzi 1997; Platzack 2001; Benincà and Poletto 2004; Frascarelli and Hinterhölzl 2007; Miyagawa 2017; among others). Assuming that information structure is encoded syntactically, one must ask how natural orders of information are encoded as discourse/syntactic primitives and how they drive acquisition. Here, we propose an unfurling of discrete syntactic and information-structural settings in the C and T domains, presenting a middle ground between positions assuming early full competence in C/T (cf. Poeppel and Wexler 1993), i.e., all abstract principles of UG are accessible during CLA; and truncation of clausal layers (Rizzi 1993; Haegeman 1995).

We suggest that a Minimal Default Grammar (Roeper 1999:173) (MDG) available to the child acquiring language encodes a proclivity for V3 and preverbal subjects before the V2 parameter is fully acquired, i.e. a more basic structure containing less structure and, if Move is costly (cf. Westergaard 2009, less or no movement. Before proposing an exact structure, we draw on work on null-subjects and the acquisition of topic-drop in V2 languages, which provides context for MDG-defined subject and topic positions.

Firstly, adult German and Dutch permit V1 with dropped topic objects (e.g. 47) (cf. Cardinaletti 1990; Rizzi 1994; Müller and Hulk 2001).

(47) Object Topic Drop:

- Question: *kommst du mit zur Titanic?*
 come you with to-the.DAT.FEM titanic
 ‘Are you coming with to (see) Titanic?’
 Answer: *∅ hab ich schon gesehen.*
 \emptyset have I already seen
 ‘I’ve already seen it’

(ex.1, Müller and Hulk 2001:3)

However, children demonstrate a stage of non-target like topic/argument drop of both subjects and objects (see 48a,b), without obligatory V1, regardless of whether their L1 is a null or overt subject language (Rizzi 1994; Hamann 1996; Müller and Hulk 2001). This, in part, relates to a tendency for all children to (over)produce null-subjects (Rizzi 1986, 1994). Müller and Hulk (2001) argue that here children are utilizing universal pragmatic strategies in early CLA before

fully acquiring the correct language-specific rules.

- (48) a. *da reißt roudi ab.*
 there tears Baroudi off
 ‘Baroudi tears it off there..’

object drop

- b. *auch mach.*
 also make
 ‘I make it too.’

object and subject drop

(ex.2, Müller and Hulk 2001:4)

Based on mono- and bilingual German, Dutch, French, and Italian child data, Müller and Hulk (2001) propose that non-target-like argument drop derives from an MDG resembling (49).¹³ They find that Romance-German/Dutch bilingual children stay in this phase longer, arguing that fronted object clitics with dropped DP-objects in Romance provide indirect evidence of deviant topic-drop in German/Dutch. While community languages relevant for Kiezdeutsch do not behave like Romance, the important point is that the acquisition of the syntax-discourse interface appears disruptable by either other languages in speakers’ repertoire Müller and Hulk (2001) or a combination of onset and input factors (Tsimpli 2014; Unsworth et al. 2014).

(49) **MDG template for subject and object drop**

$[_{TP} pro_{OBJ} [_{TP} pro_{SUBJ} [_{T} V_{FIN} [_{VP} t_i [_{V} [_{VP} V t_j]]]]]]]$

(adapted from ex.9, Müller and Hulk 2001:8)

While Müller and Hulk (2001) omit a CP layer, we posit a maximally underspecified C-head for which the full set of features are yet to be posited, in line with Poeppel and Wexler’s (1993) Full Competence Hypothesis. Moreover, Rizzi (1994) argues that a UG-provided strategy in CLA includes null subjects in the root specifier, i.e., Spec,CP. That is, CP can be thought of as a default subject position for covert subjects in CLA. Consider also that T’s formal feature composition is ultimately inherited from C and that both C and T probe together (Chomsky 2008; Ouali 2008, 2011; Biberauer and Roberts 2010). If correct, the child acquiring language must tease apart T and C, rather than posit the phase head C, the source of T’s properties, after acquiring T. We thus update the MDG in (49) to (50), a collapsed C/T with a lower and higher specifier for which the full range of features and inheritance relations are yet to be posited¹⁴. This mirrors early suggestions by (Rizzi 1990), that C bears both $[\pm C]$ and $[\pm I]$ categorial features which, depending on the language type, can be set either positively or negatively; CP in a V2 language is set $[+C, +I]$. We omit a finite lexical verb on C/T in the MDG, as V raising must be acquired, as evidenced by its absence in English (Pollock 1989), Mainland Scandinavian (Holmberg and Platzack 1995; Vikner 1995), and German (Vikner 2005; Biberauer and Roberts 2010), yet Merge of auxiliaries is an inherent property of C/T.

(50) **Updated MDG template of the clausal spine:**

$[_{C/TP} pro_j [_{C/TP} pro_{SUBJ} [_{C/T} AUX_{FIN} [_{VP} t_i [_{V} [_{VP} V_{LEXICAL} t_j]]]]]]]$

Consequently, T’s EPP properties and the default null-subject position in Spec,CP are collapsed in the lower specifier of C/T, in line with Rizzi’s (1994) UG-provided position. Likewise,

13. We modify (49) from $[_{IP} PRO_j [_{IP} PRO_i [_{IP} t_i V_{LEX} t_j]]]$ for using TP and showing the source of the external argument in vP (see Chomsky 1995); we also employ *pro* instead of PRO. Müller and Hulk (2001) assume PRO following Chomsky (1981, 1982) that $[+anaphor, +pronominal]$ null arguments equate to PRO. While dropped objects have been considered PRO, a discourse bound operator, or a null constant (see discussions in Cardinaletti 1990; Rizzi 1994), covert subjects have been understood as *pro*, PRO, an NP-trace or some other null variable (see Chomsky 1982; Rizzi 1994). Since the clauses are finite, we treat null arguments as *pro* for simplicity.

14. It is not intended that German lacks a TP layer (see work by Haider 1993; Sternefeld 2006), but simply as an early stage in CLA.

if T is the typical nominative assigning head, [\pm NOMINATIVE] also resides on C/T. Tailoring the MDG in (50) for V3, we suggest that the higher specifier of C/T is a general position which can host not only null-objects but also adverbial adjuncts such as framesetters. Thus, the earliest instances of V3, which also appear in early monolingual grammars (see e.g. Platzack 2001; Tracy 1991), derive from the structure in (51); this produces the described complementary distribution between fronted framesetters and object DPs.

(51) **MDG template giving rise to V3:**

$[_{C/TP} \text{ FRAMESETTER/OBJECT } [_{C/T} \text{ SUBJECT}_i [_{C/T} (\text{AUX}) [_{VP} t_i [_V [_{VP} V_{\text{LEXICAL}}]]]]]]$

Nonetheless, children acquiring Kiezdeutsch and SG must decompose C/T into C and T and also separate the lower and higher specifiers of C/T into C^1 and C^2 , as to derive either both subject position effects and the V2 system in Kiezdeutsch or just the stricter V2 system in SG. When the child receives enough input to distinguish CP and TP, they will redistribute subject-associated properties of the lower Spec,C/T (i.e. [\pm EPP], [\pm Aboutness] [\pm D] [\pm NOMINATIVE]) to either C or T, which depending on the feature distribution can also remove a derived subject position if evidence in the input is absent. For example, since Spec,TP in German does not host DP subjects (Abraham 1993; Haider 1993, 1997, 2010; Richards and Biberauer 2005; Biberauer and Richards 2006; Biberauer and Roberts 2010), the child acquiring SG abandons the MDG subject position entirely for the adult grammar. Thus, monolinguals and simultaneous and early successive bilinguals abandon a subject relation in the C-domain for an informationally flexible position by positing [\pm NOMINATIVE] on T and most other discourse features on C^1 . However, for Kiezdeutsch, we argue that subject-associated SoP properties are redistributed so that Spec,CP¹ retains a loose association with subjecthood, i.e. [\pm EPP], [\pm Aboutness] [\pm NOMINATIVE]) on C, as proposed in Section 6. Thus, if the MDG underlying both V3 and non-target argument drop in CLA is correct, the Kiezdeutsch innovation can be summed up as containing the following parts:

- i. The failure to posit inheritance of [\pm NOMINATIVE] from C to T so that Case assignment remains a property of the phase head C^1
- ii. The positing of a [\pm Aboutness] on C^1 .
- iii. The generalization of all other information-structural features associated with D-linked topics, foci, and contrastive elements to the higher C^2 , largely following Walkden (2017).

Recall our suggestions that i) a link exists between V3 and delayed bilingual CLA, and ii) many Kiezdeutsch speakers are likely successive bilinguals with reduced early exposure to L1 German input leading to input and onset effects. We thus propose that Kiezdeutsch speakers lacked adequate evidence to entirely abandon the MDG-endowed V3. Considering the interaction between V2/3 and the syntax-pragmatics interface in the C-domain, onset and input effects may disrupt the typical course of acquisition as speakers attempt to map universal pragmatic strategies onto language-specific rules (Müller and Hulk 2001; Platzack 2001; Sorace 2011). We propose that the SoP requirement was innovated when sufficient numbers of speakers lacked clear counter-evidence against a default MDG-driven linearization. While the MDG is not simply adopted, it is incorporated into a coherent innovative syntax, as established by positing the MDG root-specifier subject position as a more general SoP position hosting both [\pm Aboutness] and [\pm Nom]

We assume that the split C/T-split occurs when children posit inheritance of ϕ , D from C-to-T (and for SG also Case features). This might coincide with full acquisition of V-final embedded

clauses with finite auxiliaries, as an auxiliary in the left-headed MDG C/T without parameterized vP-to-Spec,TP pied-piping (Richards and Biberauer 2005; Biberauer and Richards 2006; Mohr 2005) would produce an $AUX_{FIN} > V_{LEXICAL}$ preference in embedded contexts. Indeed, evidence supporting an early combined C/T projection comes from Swiss German embedded $Aux_{FIN} > V$ orders in early child data (Gawlitze-Maiwald et al. 1992; Schönenberger 2001) (52) before $V > Aux_{FIN}$ is fully acquired. Although such early phenomena could result from V-to-T movement (see e.g. Westergaard et al. 2019), an unfurling analysis accounts for this behaviour without requiring children to later unlearn an operation absent in adult German (Vikner 2005; Biberauer and Roberts 2010).

- (52) Embedded V2 in child Swiss German, 3;00 (Gawlitze-Maiwald et al. 1992:146–7)
Will die Meerjungfrau habe [dass du has net die Meerjungfrau]
 want the mermaid have that you have not the mermaid
 Target: ‘Ich will die Meerjungfrau haben [(so) dass du sie nicht hast].’
 ‘I want to have the mermaid so that you won’t get the mermaid.’

We cannot definitively say when C^1 and C^2 split into different projections, but for Kiezdeutsch this must at least coincide with full acquisition of other V2 patterns. While unambiguous V2 input provides evidence that the C-domain may host any XP, children in the relevant multiethnic communities will lack evidence to abandon MDG-endowed high framesetters in the upper Spec,C/T. Kiezdeutsch speakers interpret the complementary distribution of high framesetters and accusative DPs, but not subjects or potential SoPs, as evidence that Spec,CP² is an A’-position where a framesetter can merge. For SG speakers, this split may be later, as we argue that the higher projection is only really important for HTLD, LD, and perhaps CP-expletive *es*.

We consequently posit the following unfurling of structure during CLA from a single C/T projection to a two CPs and a TP projection:

- (53) a. **MDG + verb movement**
 $[_{C/TP} \text{Framesetter}/pro_{OBJ} [_{C/T} \text{Subject}_i [_{C/T} V_{FIN} [_{VP} t_i [_{\vee} [_{VP} \vee]]]]]]$
 b. **Kiezdeutsch grammar: double CP structure with V3**
 $[_{CP^2} \text{Framesetter} [_{C^2} [_{CP^1} \text{Subject}_i [_{C^1} V_{FIN} [TP [_{VP} t_i [_{\vee} [_{VP} \vee]]]][T \vee P]]]]]]]$

Finally, we have not explicitly discussed the acquisition of rare V3 in SG beyond Sluckin and Bunk’s (2023) proposed repair strategy. If incipient is evidence for a genuine V3 option in German (cf. Breitbarth 2023), then a possible point of microvariation is the generation point of high framesetters and adverbials; explicitly, in line with Breitbarth’s suggestions, this could be a high C-domain position. In our terms, SG speakers with this option can merge these items in spec,CP², yet they do not share the SoP-deriving aboutness and nominative properties on C^1 ; a preference for subjects in incipient SG V3 must thus necessarily derive via interface effects beyond the narrow syntax (e.g. in the sense of Wiese et al. 2020), yet they cannot be ruled out.

8 Conclusion

We have argued that the preverbal position in Kiezdeutsch V3 is neither a subject-DP position, nor one reserved for familiar or sentence topics. New data, however, indicates that a preference for $S > V_{FIN}$ in V3 extends to LD and HTLD. This tendency is strongest among speakers who are confirmed or very likely to be bi/multilingual, depending on the available metadata. However, most counterexamples come from speakers from German-speaking homes. We interpreted the data as relating to an innovative requirement low in the Kiezdeutsch C-domain on C^1 for [\pm Aboutness] and [\pm NOMINATIVE], leading to the impression of an SoP requirement (Cardinaletti 2004; Rizzi 2005, 2018; Bentley and Cruschina 2018; Sluckin et al. 2021; Cognola 2023).

This constellation acts as a filter on accusative object DPs cannot in V3 because they clash with C¹'s nominative-assigning properties at Spell-Out which prevents Convergence at the interfaces.

We further argued that the innovative grammar of speakers from non-German-speaking backgrounds reflects both input and onset effects in successive bilingual CLA (cf. Tsimpli 2014). In short, disproportionate concentrations of children from non-German L1 backgrounds in early education amplify such effects in GSLA (cf. Cheshire et al. 2011). We further proposed that Kiezdeutsch V3 is underpinned by an acquisitional bias for an informational primitive (cf. Wiese et al. 2020) based on a Minimal Default Grammar (cf. Roeper 1999). As the C-Phase unfurls into separate C- and T-domains, multilingual Kiezdeutsch speakers incorporate V3 into a V2 grammar, while monolingual SG-acquirers tend to reject it; yet, colloquial German may be following suit (Bunk 2020; Breitbarth 2022, 2023).

This approach could inform future work contact-induced change. While the role of L2-influenced PLD is important in such change (Winford 2003, 2005; Lucas 2012, 2015; Walkden 2017), interface effects and acquisitional biases in atypical acquirers or settings are expected to condition innovation (see also Meisel 2011a). This leads to the question of how rich default structures are and how the interfaces combine to create them. Future work should examine how input and onset effects in bilingual CLA and interface requirements (Meisel 2009, 2011b; Sorace 2011; Tsimpli 2014) affect change, and how they interact at different demographic thresholds.

References

- Abraham, Werner. 1993. Null subjects in the history of German: From IP to CP. *Lingua* 89:117–142.
- Alexiadou, Artemis, and Elena Anagnostopoulou. 1998. Parametrizing AGR : Word order, V-movement and EPP-checking. *Natural language and linguistic theory* 16:491–539.
- Alexiadou, Artemis, and Elena Anagnostopoulou. 2001. The subject-in-situ generalization and the role of case in driving computations. *Linguistic inquiry* 32:193–231.
- Alexiadou, Artemis, and Terje Lohndal. 2018. V3 in Germanic: A comparison of urban vernaculars and heritage languages. In *Non-canonical verb positioning in main clauses*, *Linguistische Berichte Sonderheft*, ed. Mailin Antomo and Sonja Müller, volume 25, 245–264. Hamburg: Helmut Buske Verlag.
- Altmann, Hans. 1981. *Formen der "Herausstellung" im Deutschen: Rechtsversetzung, Linksversetzung, freies Thema und verwandte Konstruktionen*. Tübingen: Max Niemeyer.
- Axel, Katrin. 2007. *Studies on Old High German Syntax*. Number 112 in *Linguistik Aktuell*. Amsterdam: John Benjamins Publishing Company.
- Bacskai-Atkari, Julia. 2014. *The syntax of comparative constructions: Operators, ellipsis phenomena and functional left peripheries*. Universitätsverlag Potsdam.
- Bacskai-Atkari, Julia. 2020. German V2 and doubly filled COMP in West Germanic. *The Journal of Comparative Germanic Linguistics* 23:125–160.
- Bacskai-Atkari, Julia. 2021. The syntax of functional left peripheries: Clause typing in West Germanic and beyond.
- Barbosa, Pilar. 1995. Null subjects. Doctoral Dissertation, MIT, Cambridge. URL <http://hdl.handle.net/11858/00-001M-0000-0012-7E30-1>.
- Barbour, Stephen, and Patrick Stevenson. 1998. *Variation im Deutschen: soziolinguistische Perspektiven*. Berlin: de Gruyter.
- Becker, Birgit. 2010. Ethnische Unterschiede bei der Kindergartenselektion: Die Wahl von unterschiedlich stark segregierten Kindergärten in deutschen und türkischen Familien. In *Vom Kindergarten bis zur Hochschule: Die Generierung von ethnischen und sozialen Disparitäten*

- in der *Bildungsbiographie*, ed. Birgit Becker and David Reimer, 17–47. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Belletti, Adriana. 2018. Objects and subjects in the left periphery: The case of a-topics. In *Structuring variation in romance linguistics and beyond. in honour of leonardo m. savio*, ed. Mirko Grimaldi, Rosangela Lai, Ludovico Franco, and Benedetta Baldi, 57–72. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Belletti, Adriana, and Luigi Rizzi. 1988. Psych Verbs and Theta-theory. *Natural Language and Linguistic Theory* 6:291–352.
- Belletti, Andrea. 2004. Aspects of the Low IP Area. In *The Structure of CP and IP: The Cartography of Syntactic Structures*, ed. Luigi Rizzi, volume 2 of *Oxford Studies in Comparative Syntax*, 16–51. Oxford: Oxford University Press.
- Benincà, Paola, and Cecilia Poletto. 2004. Topic, Focus, and V2. In *The Structure of CP and IP: The Cartography of Syntactic Structures*, ed. Luigi Rizzi, volume 2 of *Oxford Studies in Comparative Syntax*, 52–75. Oxford: Oxford University Press.
- Bentley, Delia, and Silvio Cruschina. 2018. The silent argument of broad focus: typology and predictions. *Glossa: a journal of general linguistics* 3.
- den Besten, Hans. 1983. On the interaction of root transformations and lexical deletive rules. In *On the formal syntax of the westgermania: papers from the 3rd groningen grammar talks, groningen, january 1981*, ed. Werner Abraham, *Linguistik aktuell*, 47–132. Amsterdam: John Benjamins.
- Biberauer, Theresa, and Marc Richards. 2006. True optionality: When the grammar doesn't mind. In *Minimalist essays*, ed. Cedric Boeckx, 35–67. Amsterdam: Benjamins.
- Biberauer, Theresa, and Ian Roberts. 2010. Subjects, tense and verb-movement. In *Parametric variation: null subjects in minimalist theory*, ed. Theresa Biberauer, Anders Holmberg, Ian Roberts, and Michelle Sheehan, 263–303. Cambridge: Cambridge University Press Cambridge.
- Biberauer, Theresa, and Ian Roberts. 2017. Parameter setting. In *The cambridge handbook of historical syntax*, ed. Adam Ledgeway and Ian Roberts, 134–162. Cambridge University Press.
- Bidese, Ermenegildo. 2011. Revisiting the *Wackernagelposition*. In *Studies on German-Language Islands*, ed. Michael T. Putnam, 347–368. Amsterdam/Philadelphia: John Benjamins. URL <https://doi.org/10.1075/slcs.123.13bid>.
- Biedinger, Nicole, and Birgit Becker. 2010. Frühe ethnische Bildungsungleichheit: Der Einfluss des Kindergartenbesuchs auf die deutsche Sprachfähigkeit und die allgemeine Entwicklung. In *Vom Kindergarten bis zur Hochschule: Die Generierung von ethnischen und sozialen Disparitäten in der Bildungsbiographie*, ed. Birgit Becker and David Reimer, 49–79. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Bobaljik, Jonathan, and Susi Wurmbrand. 2005. The domain of agreement. *Natural Language and Linguistic Theory* 23:809–865.
- Boeckx, Cedric, and Kleanthes K. Grohmann. 2005. Left dislocation in germanic. In *Focus on Germanic typology*, ed. Werner Abraham, 139–152. Berlin: Akademie Verlag.
- Bohnacker, Ute, and Christina Rosén. 2008. The clause-initial position in L2 German declaratives : Transfer of Information Structure. *Studies in Second Language Acquisition* 30:511–538.
- Breitbarth, Anne. 2022. Prosodie, Syntax und Diskursfunktion von V>2 in gesprochenem Deutsch. *Deutsche Sprache* 50.
- Breitbarth, Anne. 2023. V3 after central adverbials in German: continuity or change? *Journal of historical syntax* 7:1–46.

- Bresnan, Joan. 1994. Locative inversion and the architecture of universal grammar. *Language* 70:72–131.
- Bunk, Oliver. 2020. "aber immer alle sagen das" the status of V3 in German: Use, processing, and syntactic representation. Doctoral Dissertation, Humboldt-Universität zu Berlin, Berlin.
- Bunk, Oliver, and Margarete M. Blevins. 2017. *KiDKo Handbuch*. Humboldt-Universität zu Berlin. <https://www.linguistik.hu-berlin.de/de/institut/professuren/multilinguale-kontexte/korpora/kiezdeutschkorpus/haupt-und-ergaenzungskorpus>.
- Bunk, Oliver, and Maria Pohle. 2019. "Unter Freunden redet man anders": The register awareness of Kiezdeutsch speakers. In *The sociolinguistic economy of Berlin: Cosmopolitan perspectives on language, diversity and social space*, ed. Theresa Heyd, Ferdinand von Mengden, and Britta Schneider, 97–124. Berlin, Boston: De Gruyter Mouton.
- Bárány, András, and Michelle Sheehan. 2021. Challenges for dependent case theory. In *On the place of case in the grammar*, ed. Elena Anagnostopoulou, Christina Sevdali, and Dionysios Mertyris. Oxford: Oxford University Press.
- Cardinaletti, Anna. 1990. Subject/object asymmetries in German null-topic constructions and the status of specCP. In *Grammar in progress*, ed. Joan Mascaró and Marina Nespó, 75–84. Berlin, New York: De Gruyter Mouton.
- Cardinaletti, Anna. 2004. Towards a cartography of subject positions. In *The Structure of CP and IP: The Cartography of Syntactic Structures*, ed. Luigi Rizzi, volume 2 of *Oxford Studies in Comparative Syntax*, 115–165. Oxford: Oxford University Press.
- Catasso, Nicholas. 2021. Verbspäterstellungen, komplexe Vorfelder und die linke Satzperipherie im Mittel- und Frühneuhochdeutschen. *Sprachwissenschaft* 46.
- Chafe, Wallace. 1976. Givenness, contrastiveness, definiteness, subjects, topics, and point of view. In *Subject and topic*, ed. Charles N. Li, 25–55. New York: Academic Press.
- Cheshire, Jenny, Paul Kerswill, Sue Fox, and Eivind Torgersen. 2011. Contact, the feature pool and the speech community: The emergence of Multicultural London English. *Journal of Sociolinguistics* 15:151–196.
- Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, Noam. 1982. *Some concepts and consequences of the theory of government and binding*. Cambridge, MA: MIT press.
- Chomsky, Noam. 1995. *The minimalist program*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: the framework. In *Step by step: Essays on Minimalist syntax in honor of Howard Lasnik*, ed. Roger Martin, David Michaels, and Juan Uriagereka, 89–155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. Michael Kenstowicz, 1–52. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2008. On Phases. In *Foundational issues in linguistic theory. essays in honor of Jean-Roger Vergnaud*, ed. Robert Freidin, Carlos P. Otero, and Maria Luisa Zubizarreta, 133–166. Cambridge, MA: Cambridge, MA.
- Cinque, Guglielmo. 2008. Two types of non-restrictive relative clauses. In *Empirical issues in syntax and semantics* 7, ed. Olivier Bonami and Patricia Cabredo Hofherr, 99–138. Paris: CSSP. URL <http://www.cssp.cnrs.fr/eiss7/cinque-eiss7.pdf>.
- Clahsen, Harald, and Pieter Muysken. 1986. The availability of universal grammar to adult and child learners – a study of the acquisition of German word order. *Second Language Research* 2:93–119.
- Cochran, William G. 1952. The χ^2 Test of Goodness of Fit. *The Annals of Mathematical Statistics* 23:315 – 345. URL <https://doi.org/10.1214/aoms/1177729380>.
- Cochran, William G. 1954. Some methods for strengthening the common χ^2 tests. *Biometrics*

- 10:417–451. URL <http://www.jstor.org/stable/3001616>.
- Cognola, Federica. 2023. Free inversion in Old High German and Cimbrian: On the status of *tho/da* as CP-expletives and their connection with pro-drop. *Journal of Historical Syntax* 7:1–63.
- Delucchi, Kevin L. 1993. On the use and misuse of chi-square. In *A handbook for data analysis in the behavioral sciences: Statistical issues*, ed. Gideon Keren and Charles Lewis, 295–320. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Demske, Ulrike, and Heike Wiese. 2016. Vorfeld, das. In *Glossarium amicorum. festschrift für karin donhauser*, 54–70. Berlin: Institut für deutsche Sprache und Linguistik, Humboldt-Universität zu Berlin. URL <https://edoc.hu-berlin.de/handle/18452/616>.
- den Dikken, Marcel, and B. Surányi. 2017. Contrasting contrastive left-dislocation explications. *Linguistic Inquiry* 48:543–584.
- Fanselow, Gisbert. 2004. Münchhausen-style head movement and the analysis of verb second. *Linguistics in Potsdam* 22:9–49.
- Frascarelli, Mara, and Roland Hinterhölzl. 2007. Types of topics in German and Italian. In *On Information Structure, Meaning and Form*, ed. Kerstin Schwabe and Susanne Winkler, Linguistik Aktuell/Linguistics Today. Amsterdam: John Benjamins Publishing Company.
- Frey, Werner. 2003. Syntactic conditions on adjunct classes. In *Modifying adjuncts*, ed. Ewald Lang, Claudia Maienborn, and Cathrine Fabricius-Hansen, 163–210. Berlin: Mouton de Gruyter.
- Frey, Werner. 2004a. A medial topic position for German. *Linguistische Berichte* 199:153–190.
- Frey, Werner. 2004b. Notes on the syntax and the pragmatics of German left dislocation. In *The syntax and semantics of the left periphery*, ed. Horst Lohnstein and Susanne Trissler, 203–234. Berlin: Mouton de Gruyter.
- Freywald, Ulrike, Leonie Cornips, Natalia Ganuza, Ingvild Nistov, and Toril Opsahl. 2015. Beyond verb second – a matter of novel information-structural effects? evidence from Norwegian, Swedish, German and Dutch. In *Language, youth and identity in the 21st century: Linguistic practices across urban spaces*, ed. Jacomine Nortier and Bente A.Editors Svendsen, 73–92. Cambridge: Cambridge University Press.
- Fuß, Eric. 2008. Word order and language change: On the interface between syntax and morphology. Habilitation, University of Frankfurt/M.
- Fuß, Eric. 2018. The OV-VO alternation in early German. Diagnostics for basic word order. In *Clause structure and word order in the history of German*, ed. Gisella Ferraresi, Agnes Jäger, and Helmut Weiß, 230–262. Oxford: Oxford University Press.
- Fuß, Eric, and Roland Hinterhölzl. 2023. On the historical development of pronouns referring to situations: the rise of prefinite ‘expletives’ in German. *Journal of historical syntax* To appear.
- Féry, Caroline, and Manfred Krifka. 2008. Information structure: Notional distinctions, ways of expression. In *Unity and diversity of languages*, ed. Piet Sterkenburg, 123–135. Amsterdam/Philadelphia: John Benjamins.
- Gawlitsek-Maiwald, L., Rosemarie Tracy, and Agnes Fritzenschaft. 1992. Language acquisition and competing linguistic representations: The child as arbiter. In *The acquisition of verb placement. Functional Categories and V2 Phenomena in Language Acquisition*, ed. Jürgen M. Meisel, 139–179. Berlin: Springer.
- Giorgi, Alessandra, and Fabio Pianesi. 1997. *Tense and Aspect: From Semantics to Morphosyntax*. Oxford: Oxford University Press.
- Givón, Thomas. 1983. *Topic continuity in discourse: A quantitative cross-language study*. Amsterdam/Philadelphia: John Benjamins.
- Greco, Ciro, and Liliane Haegeman. 2020. Frame setters and microvariation of subject-initial

- verb second. In *Rethinking verb second*, ed. Rebecca Woods and Sam Wolfe, Rethinking Comparative Syntax, 61–89. Oxford University Press. URL <http://dx.doi.org/10.1093/oso/9780198844303.003.0004>.
- Grewendorf, Günther. 2002a. Left dislocation as movement. *Georgetown University Working Papers in Theoretical Linguistics* 2.
- Grewendorf, Günther. 2002b. *Minimalistische syntax*. Tübingen, Basel: Francke Verlag.
- Grewendorf, Günther. 2009. The Left Clausal Periphery: Clitic Left Dislocation in Italian and Left Dislocation in German. In *Dislocated elements in discourse: syntactic, semantic, and pragmatic perspectives*, ed. Benjamin Shaer, Philippa Cook, Werner Frey, and Claudia Maienborn, 57–102. New York, London: Routledge.
- Grohmann, Kleanthes K. 1997. On left dislocation. *GAGL: Groninger Arbeiten zur Germanistischen Linguistik* 1–33.
- Grohmann, Kleanthes K. 2000. Copy left dislocation. In *Proceedings of the nineteenth west coast conference on formal linguistics*, ed. Roger Billerey and Brook Danielle Lillehaugen, 139–152. Somerville, MA: Cascadilla Press.
- Grohmann, Kleanthes K. 2003. *Prolific domains: On the anti-locality of movement dependencies*. Amsterdam/Philadelphia: John Benjamins Publishing.
- Gundel, Jeanette K. 1985. ‘shared knowledge’ and topicality. *Journal of Pragmatics* 9:83–107.
- Haegeman, Liliane. 1995. Root infinitives, tense, and truncated structures in Dutch. *Language acquisition* 4:205–255.
- Haegeman, Liliane. 1996. Verb second, the split CP, and null subjects in early Dutch finite clauses. *GenGenP* 4:135–175.
- Haegeman, Liliane. 2012. The syntax of MCP: Deriving the truncation account. In *Main clause phenomena: New horizons*, ed. Lobke Aelbrecht, Liliane Haegeman, and Rachel Nye, 113–134. Amsterdam: Benjamins.
- Haegeman, Liliane, and Ciro Greco. 2018. West Flemish V3 and the interaction of syntax and discourse. *The Journal of Comparative Germanic Linguistics* 21:1–56.
- Haider, Hubert. 1986. Configurationality in disguise. In *Topic, focus and configurationality. papers from the 6th Groningen grammar talks, Groningen, 1984*, ed. Werner Abraham and Sjaak Meij. Amsterdam/Philadelphia: John Benjamins.
- Haider, Hubert. 1993. *Deutsche syntax, generativ: Vorstudien zur theorie einer projektiven grammatik*. Tübingen: Narr.
- Haider, Hubert. 1997. Typological implications of a directionality constraint on projections. In *Studies on universal grammar and typological variation*, ed. Artemis Alexiadou and Tracy Hall, 17–33. Amsterdam: John Benjamins.
- Haider, Hubert. 2010. *The syntax of German*. Cambridge: Cambridge University Press.
- Hamann, Cornelia. 1996. Null arguments in German child language. *Language Acquisition* 5:155–208.
- Hartmann, Jutta M. 2008. *Expletives in existentials. English ‘there’ and German ‘da’*. Utrecht: LOT.
- Hinrichs, Erhard W, Julia Bartels, Yasuhiro Kawata, Valia Kordoni, and Heike Telljohann. 2000. The Tübingen treebanks for spoken German, English, and Japanese. In *Verbmobil: Foundations of speech-to-speech translation*, ed. Wolfgang Wahlster, 550–574. Berlin: Springer.
- Hinterhölzl, Roland. 2017. Decomposing V2. *Stellenbosch Papers in Linguistics* 48:205–217.
- Hinterhölzl, Roland. 2019. Subjects, topics, and anchoring to the context. *Syntax* 22:199–228.
- Hitchcock, David B. 2009. Yates and contingency tables: 75 years later. *Electronic Journal for History of Probability and Statistics* 5:1–14.
- Holmberg, Anders. 2015. Verb Second. In *Syntax – an international handbook of contemporary*

- syntactic research*, ed. Tibor Kiss and Artemis Alexiadou, HSK Series. Berlin: Walter de Gruyter Verlag.
- Holmberg, Anders, and Christer Platzack. 1995. *The Role of Inflection in Scandinavian Syntax*. Oxford University Press.
- Hsu, Brian. 2017. Verb second and its deviations: An argument for feature scattering in the left periphery. *Glossa: a Journal of General Linguistics* 2.
- Iatridou, Sabine, and Anthony Kroch. 1992. The licensing of cp-recursion and its relevance to the germanic verb-second phenomenon. *Working Papers in Scandinavian Syntax* 50:1–24.
- Jabnoun, Latifa. 2006. Der Erwerb des Deutschen durch arabischsprachige Kinder. Eine Studie zur Verbstellung. Doctoral Dissertation, University of Heidelberg, Heidelberg.
- Jayaseelan, Karattuparambil A. 2001. IP-internal Topic and Focus phrases. *Studia Linguistica* 55:39–75.
- Johnson, Jacqueline S, and Elissa L Newport. 1989. Critical period effects in second language learning: The influence of maturational state on the acquisition of English as a second language. *Cognitive psychology* 21:60–99.
- Kayne, Richard S. 1994. *The Antisymmetry of Syntax*. Linguistic Inquiry Monographs; 25. Cambridge, Mass.: MIT Press.
- Keim, Inken. 1984. *Untersuchungen zum deutsch türkischer Arbeiter*. Tübingen: Gunter Narr.
- Krifka, Manfred. 2008. Basic notions of information structure. *Acta Linguistica Hungarica* 55:243–276.
- Kroffke, Solveig, and Monika Rothweiler. 2006. Variation im frühen Zweitspracherwerb des Deutschen durch Kinder mit türkischer Erstsprache. In *Variation in sprachtheorie und spracherwerb. akten des 39. linguistischen kolloquiums in amsterdam 2004*, ed. Maurice Vliegen, 145–154. Frankfurt a.M.: Peter Lang.
- König, Ekkehard, and Johan Auwera. 1988. Clause integration in German and Dutch conditionals, concessive conditionals, and concessives. In *Clause combining in grammar and discourse*, ed. John Haiman and Sandra A. Thompson. Amsterdam/Philadelphia: John Benjamins.
- Lahne, Antje. 2009. A multiple specifier approach to left-peripheral architecture. *Linguistic Analysis* 35:73.
- Lambrecht, Knud. 1994. *Information structure and sentence form: Topic, focus, and the mental representations of discourse referents*. Cambridge: Cambridge university press.
- Landau, Idan. 2010. *The locative syntax of experiencers*. Number 53 in Linguistic Inquiry Monographs. Cambridge, MA: MIT Press.
- Lasch, Agathe. 1928. *Berlinisch: eine berlinische Sprachgeschichte (Berlinische Forschungen II)*. Berlin: Fritz Behrend.
- Lenerz, Jürgen. 1977. *Zur abfolge nominaler satzglieder im deutschen*. 5. Tübingen: Narr.
- Lucas, Christopher. 2012. Contact-induced grammatical change: Towards an explicit account. *Diachronica* 29:275–300.
- Lucas, Christopher. 2015. Contact-induced language change. In *The routledge handbook of historical linguistics*, ed. Claire Bower and Bethwyn Evans, 519–536. New York: Routledge.
- McCloskey, James. 1997. Subjecthood and subject positions. In *Elements of grammar*, ed. Liliane Haegeman, 197–235. Dordrecht: Kluwer Academic Publishers.
- McFadden, Thomas. 2004. The position of morphological case in the derivation. Doctoral Dissertation, University of Pennsylvania, Philadelphia, PA.
- Meelen, Marieke, Khalid Mourigh, and Lisa Lai-Shen Cheng. 2020. V3 in urban youth varieties of Dutch. In *Syntactic architecture and its consequences ii*, ed. András Bárány, Theresa Biberauer, Jamie Douglas, and Sten Vikner, 327–355. Berlin: Language Science Press.

- Meisel, Jürgen, Martin Elsig, and Esther Rinke. 2013. *Language acquisition and change: A morphosyntactic perspective*. Edinburgh: Edinburgh University Press.
- Meisel, Jürgen M. 2011a. Bilingual language acquisition and theories of diachronic change: bilingualism as cause and effect of grammatical change. *Bilingualism* 14:121.
- Meisel, Jürgen M. 2009. Second language acquisition in early childhood. *Zeitschrift für Sprachwissenschaft* 28:5 – 34.
- Meisel, Jürgen M. 2011b. *First and second language acquisition: Parallels and differences*. Cambridge: Cambridge University Press.
- Miyagawa, Shigeru. 2017. *Agreement beyond phi*. Cambridge, MA.: MIT Press.
- Mohr, Sabine. 2005. *Clausal architecture and subject positions: Impersonal constructions in the germanic languages*. Amsterdam: John Benjamins.
- Mufwene, Salikoko S. 2001. *The ecology of language evolution*. Cambridge: Cambridge University Press.
- Müller, Natascha, and Aafke Hulk. 2001. Crosslinguistic influence in bilingual language acquisition: Italian and French as recipient languages. *Bilingualism: Language and Cognition* 4:1—21.
- Müller, Stefan. 2003. Mehrfache Vorfeldbesetzung. *Deutsche Sprache* 31:29–62.
- Müller, Stefan. 2005. Zur Analyse der scheinbar mehrfachen Vorfeldbesetzung. *Linguistische Berichte* 203:297–330.
- Müller, Gereon. 2002. Harmonic alignment and the hierarchy of pronouns in German. In *Pronouns – grammar and representation*, ed. Horst J. Simon and Heike Wiese, 205–232. Amsterdam/Philadelphia: John Benjamins.
- Nistov, Ingvild, and Toril Opsahl. 2014. The social side of syntax in multilingual Oslo. In *The sociolinguistics of grammar*, ed. Tor A. Åfarli and Brit Mæhlum, 91–116. Amsterdam: John Benjamins.
- Opsahl, Toril, and Ingvild Nistov. 2010. On some structural aspects of Norwegian spoken among adolescents in multilingual settings in Oslo. In *Multilingual urban Scandinavia*, ed. Pia Quist and Bente A. Svendsen, 49–63. Bristol: Multilingual Matters.
- Ouali, Hamid. 2008. On C-to-T-feature transfer: The nature of Agreement and Anti-Agreement in Berber. In *Agreement restrictions*, ed. Roberta D'Alessandro, Susann Fischer, and Gunnar Hrafn Hrafnbjargarson, 159–180. Mouton de Gruyter.
- Ouali, Hamid. 2011. *Agreement, pronominal clitics and negation in Tamazight Berber*. London: Continuum.
- Penner, Zvi. 1992. The Ban on Parameter Resetting, Default Mechanisms, and the Acquisition of V2 in Bernese Swiss German. In *The Acquisition of Verb Placement: Functional Categories and V2 Phenomena in Language Acquisition*, ed. Jürgen M. Meisel, 245–281. Dordrecht: Springer Netherlands.
- Pesetsky, David. 1987. Wh-in-situ: Movement and unselective binding. In *The representation of (in)definiteness*, ed. Eric J. Reuland and Alice G. B. ter Meulen, 98–129. Cambridge, Massachusetts: MIT Press.
- Petrova, Svetlana. 2012. Multiple XP-fronting in Middle Low German root clauses. *The Journal of Comparative Germanic Linguistics* 15:157–188.
- Pinto, Manuela. 1997. Licensing and interpretation of inverted subjects in Italian. Doctoral Dissertation, Utrecht University, Utrecht, NL.
- Platzack, Christer. 2001. The vulnerable C-domain. *Brain and Language* 77:364 – 377.
- Poeppel, David, and Kenneth Wexler. 1993. The full competence hypothesis of clause structure in early German. *Language* 1–33.
- Pollock, Jean-Yves. 1989. Verb movement, UG, and the structure of IP. *Linguistic Inquiry*

20:365–424.

- Quist, Pia. 2000. Ny københavnsk ‘multiethnolect’. om sprogbrug blandt unge i sprogligt og kulturelt heterogene miljøer [a new copenhagen ‘multiethnolect’. language use among adolescents in linguistically and culturally heterogeneous settings]. *Danske talesprog* 1:143–211.
- Rehbein, Ines, Sören Schalowski, and Heike Wiese. 2014. The KiezDeutsch korpus (KiDKo) release 1.0. In *Proceedings of the Ninth International Conference on Language Resources and Evaluation (LREC’14)*, 3927–3934. Reykjavik, Iceland: European Language Resources Association (ELRA). URL http://www.lrec-conf.org/proceedings/lrec2014/pdf/1081_Paper.pdf.
- Reinhart, Tanya. 1981. Pragmatics and linguistics: An analysis of sentence topics in pragmatics and philosophy I. *Philosophica anc Studia Philosophica Gandensia Gent* 27:53–94.
- Reiss, Kristina, Christine Sälzer, Anja Schiepe-Tiska, Eckhard Klieme, and Olaf Köller. 2016. *PISA 2015. Eine Studie zwischen Kontinuität und Innovation*. Münster, New York: Waxmann.
- Richards, Marc, and Theresa Biberauer. 2005. Explaining expl. In *The function of function words and functional categories*, ed. Marcel den Dikken and Tortora Christina, 115–153. Amsterdam: John Benjamins.
- Rivero, María-Luisa. 1997. On two locations for complement clitic pronouns: Serbo-Croatian, Bulgarian, and Old Spanish. In *Parameters of morphosyntactic change*, ed. Ans van Kemende and Nigel Vincent, 253–270. Cambridge: Cambridge University Press.
- Rizzi, Luigi. 1986. Null Objects in Italian and the Theory of pro. *Linguistic Inquiry* 17:501–557.
- Rizzi, Luigi. 1990. Speculations on Verb Second. In *Grammar in progress*, ed. Joan Mascaró and Marina Nespor, 375–386. Berlin: De Gruyter Mouton.
- Rizzi, Luigi. 1993. Some notes on linguistic theory and language development: The case of root infinitives. *Language Acquisition* 3:371–393.
- Rizzi, Luigi. 1994. Early null subjects and root null subjects. In *Language acquisition studies in generative grammar*, ed. Teun Hoekstra and Bonnie D Schwartz, 151–176. Amsterdam/Philadelphia: John Benjamins.
- Rizzi, Luigi. 1997. The Fine Structure of the Left Periphery. In *Elements of Grammar*, ed. Liliane Haegeman, 281–337. Dordrecht: Kluwer.
- Rizzi, Luigi. 2005. On some properties of subjects and topics. In *Contributions to the XXX Incontro di Grammatica Generativa*, ed. Laura Brugè, Giuliana Giusti, Nicola Munaro, Walter Schweikert, and Giuseppina Turano, 203–224. Venice: Cafoscarina.
- Rizzi, Luigi. 2006. On the form of chains: Criterial positions and ECP effects. In *Wh-movement: Moving on*, ed. Lisa Lai-Shen Cheng and Norbert Corver, 97–133. Cambridge, MA: MIT Press.
- Rizzi, Luigi. 2010. On some properties of criterial freezing. In *The complementizer phase: Subjects and operators*, ed. E. Phoevos Panagiotidis, 17–32. Oxford: Oxford University Press.
- Rizzi, Luigi. 2018. Subjects, topics and the interpretation of pro. In *Beyond the veil of maya. from sounds to structures*, ed. Roberto Petrosino, Pietro Cerrone, and Harry van der Hulst, 510–529. Berlin: Mouton de Gruyter.
- Rizzi, Luigi, and Uri Shlonsky. 2006. Satisfying the subject criterion by a non subject: English locative inversion and heavy NP shift. In *Phases of interpretation*, ed. Mara Frascarelli, 341–361. Berlin: Mouton de Gruyter.
- Roberts, Ian. 2004. The C-system in Brythonic Celtic Languages, V2 and the EPP. In *The Structure of CP and IP: The Cartography of Syntactic Structures*, ed. Luigi Rizzi, volume 2 of *Oxford Studies in Comparative Syntax*, 297–328. Oxford: Oxford University Press.
- Roberts, Ian. 2010. *Agreement and head movement: Clitics, incorporation, and defective goals*. MIT Press.

- Roeper, Thomas. 1999. Universal bilingualism. *Bilingualism: Language and Cognition* 2:169–186.
- Rothweiler, Monika. 2006. The acquisition of V2 and subordinate clauses in early successive acquisition of German. In *Interfaces in multilingualism*, ed. Conxita Lleó, 91–113. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Samo, Giuseppe. 2019. *A criterial approach to the cartography of V2*. Amsterdam/Philadelphia: John Benjamins.
- Schäfer, Florian. 2008. *The syntax of (anti-)causatives*. Amsterdam/Philadelphia: John Benjamins.
- Schalowski, Sören. 2015. *Wortstellungsvariation aus informationsstruktureller Perspektive: eine Untersuchung der linken Satzperipherie im gesprochenen Deutsch*. Potsdam: Universitätsverlag Potsdam.
- Schalowski, Sören. 2017. From adverbial to discourse connective: the function of German ‘dann’ and ‘danach’ in non-canonical prefields. *Arbeitspapiere „Sprache, Variation und Migration“: Studentische Arbeiten* 6.
- Schönenberger, Manuela. 2001. *Embedded V-To-C in Child Grammar: The Acquisition of Verb Placement in Swiss German*. Dordrecht: Springer.
- Schwabe, Kerstin, and Susanne Winkler. 2007. *On information structure, meaning and form: generalizations across languages*. Amsterdam: John Benjamins.
- Shaer, Benjamin, and Werner Frey. 2004. ‘Integrated’ and ‘non-integrated’ left-peripheral elements in German and English. *ZAS Papers in Linguistics* 35:465–502.
- Sluckin, Benjamin L. 2021. Non-canonical subjects and subject positions: locative inversion, V2-violations, and feature inheritance. Doctoral Dissertation, Humboldt-Universität zu Berlin, Sprach- und literaturwissenschaftliche Fakultät, Berlin.
- Sluckin, Benjamin L., and Oliver Bunk. 2023. Noncanonical V3 and resumption in Kiezdeutsch. In *Adverbial resumption verb second languages*, ed. Karen de Clercq, Liliane Haegeman, Terje Lohndal, and Christine Meklenborg, 327–354. Oxford: Oxford University Press.
- Sluckin, Benjamin L., Silvio Cruschina, and Fabienne Martine. 2021. Locative inversion in Germanic and Romance: A conspiracy theory. In *Germanic and Romance: Continuity and variation*, ed. Christine Meklenborg and Sam Wolfe, 165–191. Oxford: Oxford University Press.
- Sopata, Aldona. 2010. V2 phenomenon in child second language acquisition. In *Selected proceedings of the 2008 second language research forum*, ed. Matthew T. Prior, Yukiko Watanabe, and Sang-Ki Lee, 211–228. Somerville, MA.: Cascadilla.
- Sorace, Antonella. 2011. Pinning down the concept of “interface” in bilingualism. *Linguistic approaches to bilingualism* 1:1–33.
- Sorace, Antonella, and Ludovica Serratrice. 2009. Internal and external interfaces in bilingual language development: Beyond structural overlap. *International Journal of Bilingualism* 13:195–210.
- Speyer, Augustin. 2007. Die Bedeutung der Centering Theory für Fragen der Vorfeldbesetzung im Deutschen. *Zeitschrift für Sprachwissenschaft* 26:83–115.
- Speyer, Augustin. 2008. Doppelte Vorfeldbesetzung im heutigen Deutsch und im Frühneuhochdeutschen. *Linguistische Berichte* 2008:455–485.
- Sternefeld, Wolfgang. 2006. *Syntax: Eine morphologisch motivierte generative beschreibung des deutschen*. Mannheim: Stauffenburg.
- Thiersch, Craig L. 1978. Topics in german syntax. Doctoral Dissertation, MIT, Cambridge, MA. URL <http://hdl.handle.net/1721.1/16327>.
- Tracy, Rosemarie. 1991. *Sprachliche Strukturentwicklung: linguistische und kognitionspsychol-*

- ogische Aspekte einer Theorie des Erstspracherwerbs*. Tübingen: Narr.
- Tracy, Rosemarie, and Dieter Thoma. 2009. Convergence on finite V2 clauses in L1, bilingual L1 and early L2 acquisition. In *Functional categories in learner language*, ed. Christine Dimroth and Peter Jordens, 1–43. Berlin: De Gruyter.
- Tsimpli, Ianthi Maria. 2014. Early, late or very late?: Timing acquisition and bilingualism. *Linguistic Approaches to Bilingualism* 4:283–313.
- Tsimpli, Ianthi Maria, and Aafke Hulk. 2013. Grammatical gender and the notion of default: Insights from language acquisition. *Lingua* 137:128–144.
- Unsworth, Sharon. 2016. Early child L2 acquisition: Age or input effects? neither, or both? *Journal of child language* 43:608–634.
- Unsworth, Sharon, Frose Argyri, Leonie Cornips, Aafke Hulk, Antonella Sorace, and Ianthi Tsimpli. 2014. The role of age of onset and input in early child bilingualism in Greek and Dutch. *Applied Psycholinguistics* 35:765–805.
- te Velde, John R. 2017. Temporal adverbs in the Kiezdeutsch left periphery: combining late merge with deaccentuation for V3. *Studia Linguistica* 71:301–336.
- Vikner, Sten. 1995. *Verb movement and expletive subjects in the germanic languages*. Oxford: Oxford University Press on Demand.
- Vikner, Sten. 2001. Verb movement variation in Germanic and optimality theory. Habilitation, Universität Tübingen.
- Vikner, Sten. 2005. Immobile complex verbs in Germanic. *Journal of Comparative Germanic Linguistics* 8.
- Walkden, George. 2017. Language contact and V3 in Germanic varieties new and old. *Journal of Comparative Germanic Linguistics* 20:49–81.
- Westergaard, Marit. 2009. *The Acquisition of Word Order: Micro-cues, information structure, and economy*, volume 145 of *Linguistik Aktuell/Linguistics Today*. Amsterdam: John Benjamins Publishing Company.
- Westergaard, Marit, Terje Lohndal, and Artemis Alexiadou. 2019. The asymmetric nature of V2: evidence from learner languages. In *The sign of the V: papers in Honour of Sten Vikner*, ed. Ken Ramshøj Christensen, Johanna Wood, and Henrik Jørgensen, 709–733. Aarhus: Department of English – School of Communication and Culture – Aarhus University.
- Wiese, Heike. 2006. “ich mach dich Messer”: Grammatische produktivität in Kiez-Sprache (“Kanak Sprach”). *Linguistische Berichte* 2006:245–273.
- Wiese, Heike. 2009. Grammatical innovation in multiethnic urban Europe: New linguistic practices among adolescents. *Lingua* 119:782–806.
- Wiese, Heike. 2012. *Kiezdeutsch: Ein neuer Dialekt entsteht*. Munich: C. H. Beck.
- Wiese, Heike. 2013. What can new urban dialects tell us about internal language dynamics? In *Dialektologie in neuem Gewand: Zu Mikro-/Varietätenlinguistik, Sprachenvergleich und Universalgrammatik*, ed. Werner Abraham and Elisabeth Liess, volume 19, 207–245. Hamburg: Helmut Buske Verlag.
- Wiese, Heike, Ulrike Freywald, and Katharina Mayr. 2009. *Kiezdeutsch as a test case for the interaction between grammar and information structure*, volume 12 of *Interdisciplinary Studies on Information Structure*. Potsdam: Universitätsverlag Potsdam.
- Wiese, Heike, Ulrike Freywald, Sören Schalowski, and Katharina Mayr. 2012. Das KiezDeutsch-Korpus. Spontansprachliche Daten Jugendlicher aus urbanen Wohngebieten. *Deutsche Sprache* 40:97–123.
- Wiese, Heike, and Hans G Müller. 2018. The hidden life of V3: An overlooked word order variant on verb-second. In *Non-canonical verb positioning in main clauses*, ed. Mailin Antomo and Sonja Müller, 201–224. Hamburg: Helmut Buske Verlag.

- Wiese, Heike, Mehmet Tahir Öncü, Hans G Müller, and Eva Wittenberg. 2020. Verb Third in spoken German: A natural order of information? In *Rethinking Verb Second*, ed. Sam Wolfe and Rebecca Woods, 682–699. Oxford: Oxford University Press.
- Wiese, Heike, and Ines Rehbein. 2016. Coherence in new urban dialects: A case study. *Lingua* 172-173:45–61.
- Winford, Donald. 2003. *An introduction to contact linguistics*. Oxford: Wiley-Blackwell.
- Winford, Donald. 2005. Contact-induced changes: Classification and processes. *Diachronica* 22:373–427.
- Wolfe, Sam. 2015. Microvariation in Medieval Romance Syntax, A Comparative Study. Doctoral Dissertation, University of Cambridge, Cambridge.
- Wolfe, Sam. 2018. *Verb second in medieval Romance*. Oxford: Oxford University Press.
- Wolfe, Sam. 2019. Redefining the typology of V2 languages: The view from Medieval Romance and beyond. *Linguistic Variation* 19:16–46.
- Woolford, Ellen. 2006. Lexical case, inherent case, and argument structure. *Linguistic Inquiry* 37:111–130.
- Zifonun, Gisela, Ludger Hoffmann, Bruno Strecker, and Joachim Ballweg. 1997. *Grammatik der deutschen Sprache*, volume 7 of *Schriften des Instituts für Deutsche Sprache*. Berlin: De Gruyter. 3 vols.

Benjamin L. Sluckin
Germanistische Linguistik,
insb. Sprachgeschichte/historische Linguistik
Germanistisches Institut
Ruhr-Universität Bochum
Universitätsstr. 150
44801 Bochum
benjamin.lowellsluckin@rub.de

A List of corpus queries

A.1 Queries used in KiDKo

A.1.1 Resumption

LD:

(cat="LV" & POS=/\$ /& POS=/PDS|PPER|PDAT/& POS=/. *FIN/ .#2 .#3 .#4)

(cat="LV" & POS=/\$ /& POS=/PDS|PPER|PDAT/ .#2 .#3)

HTLD:

(cat="FT" & POS=/\$ /& POS=/PDS|PPER|PDAT/& POS=/. *FIN/ .#2 .#3 .#4)

(cat="FT" & POS=/\$ /& POS=/PDS|PPER|PDAT/ .#2 .#3)

(POS=/. *N/& POS=/\$ /& POS=/PDS|PPER/& POS=/. *FIN/ .#2 .#3 .#4)

(POS=/NN|NE/& POS=/\$ /& POS=/ADV/& POS=/. *FIN/

& POS=/PDS|PPER|PDAT/ .#2 .#3 .#4 .#5)

LD/HTLD:

(POS=/NN|NE/& POS=/\$ /& POS=/PDS|PPER|PDAT/& POS=/. *FIN/ .#2 .#3 .#4)

Adverbial resumption:

(cat="LV" > * C)

(cat="FT" > * C)¹⁵

(cat="LV" & POS=/\$ /& "da" & POS=/. *FIN/ .#2 .#3 .#4)

(cat="LV" & POS=/\$ /& "dann" & POS=/. *FIN/ .#2 .#3 .#4)

A.1.2 V3

Syntactically annotation query :(cat="LA" & cat="VF" .#2)

POS-based query: (POS=/ADV/ & POS=/PPER|. *N/& POS=/. *FIN/& v!=/also/ .#2 .#3 _ _#4)

A.2 Queries used in TüBa-D/S

[cat="LV"] was used to find all instances of dislocation as there is no annotational distinction between LD and HTs; results were manually checked.

15. This query failed to produce any reliable instances of HTLD