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An Anti-Local Account of Why Scrambled Datives in German Can't Bind Anaphors*

Abstract

This article provides the sketch of a novel analysis of the binding properties of scrambled DPs in German along purely syntactic terms. In contrast to accusative DPs, dative objects that scramble outside of the ν P cannot enter into licit binding relations with anaphora. Based on Hornstein's (2001) assertion that reflexives and reciprocals are generated in the derivation rather than existing as independent lexical items in the *Numeration*, I adopt Grohmann's (2000, 2003) *Anti-Locality* hypothesis (lower-bound restriction on XP-movement) to illustrate that dative objects are incapable of generating anaphora in the derivation due to the natural composition of ν P.

1. Introduction

Perhaps one of the most problematic issues connected with middle field scrambling in German is the fact that dative objects that scramble out of the ν P cannot enter into new anaphoric binding relationships whereas accusative objects can (cf. Grewendorf 1984, 1988).

(1) ...*dass* Fritz *die Gäste*_i *gestern* *einander*_i *t* *vorgestellt hat.*
...that Fritz_{NOM} the guests_{ACC} yesterday each introduced has
'...that Fritz introduced the guests to each other yesterday.'

(2) *...*dass* Fritz *den Gästen*_i *gestern* *einander*_i *t* *vorgestellt hat.*
...that Fritz_{NOM} the guests_{DAT} yesterday each other introduced has
'...that Fritz introduced one another to the guests yesterday.'

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- (3) ...weil der Hans_h der Maria_m sich_{h/*m} t auf dem Photo zeigte
 ...since the John.NOM the Mary.DAT self in the picture showed
 ‘...since John showed Mary himself/*herself in the picture.’

Example (1) demonstrates that the accusative object *die Gäste* ‘the guests’ can and does create a new binding relation with the anaphor *einander* ‘each other’. Assuming that the predicate adverbial adjunct *gestern* ‘yesterday’ is adjoined to *vP*, it is evident that some form of displacement outside of the *vP* has occurred. Conversely, the dative objects in (2) and (3) above show that the indirect objects *den Gästen* ‘the guests’ and *der Maria* ‘Mary’ cannot exist in a binding relation with the reflexive pronoun *sich* ‘self’. The exact Case of *sich* ‘self’ in German is difficult to determine, provided that both the dative and accusative reflexives share the same morpheme with no distinctions. These results are unexpected and puzzling given recent theoretical treatments of scrambling in West Germanic, especially given the fact that scrambled datives can exist in a co-referential binding relationship with full DPs.

- (4) ...dass der Jörg jedem [seinen Vater] gestern [t gezeigt hat].
 ...that the Jörg.NOM everyone.DAT his father.ACC yesterday shown has
 ‘...that Jörg has shown his(x) father to everyone(x) yesterday.’

Although scrambling the dative indirect object over the direct object can create a well-formed operator variable in German (4), it cannot create the anaphor reciprocal binding relation in (2) above.¹ The true nature of this restriction has escaped a sufficient explanation in minimalist syntax to date. If scrambling is the result of an overt movement process, it is most likely not linked to a morphological property of the attracting head. Scrambled DPs often show “rich” Case morphology, but there are languages with a rich Case system without scrambling (Icelandic), and languages with scrambling but lacking rich Case distinctions (Bulgarian) (cf. Alexiadou &

¹ McGinnis (1999) points out the contrast in the behavior of dative objects with regard to their binding properties, i.e., that a licit operator-variable relation can be established by moving a dative indirect object over an accusative object whereas forming binding relation with an anaphoric reciprocal is not isomorphic only to German. A similar contrast arises when an object scrambles over the subject in Hindi, Japanese, and Georgian.

Fanselow 2002).² Even within the West Germanic family of languages, dialects such as Swiss German that exhibit a four-Case distinction, do not license scrambling (cf. Kiparsky 1997). The lack of connection between the ability of a language to license scrambling and robust morphological Case is also attested in diachronic analyses of historical Germanic languages. Allen (1995:417) notes that almost a century after the loss of m-Case inflections word order freedom persisted from Old English into the Early Middle English period, i.e. for almost 200 years. In a similar light, Putnam (2006) observes the opposite pattern of a *loss* of scrambling preceding paradigmatic m-Case leveling in Pennsylvania German. Regardless of whether one wishes to interpret Case as an LF-interpretable phenomenon (Bobaljik 1995, Richards 2005) or remove the licensing of Case from the narrow syntax altogether (McFadden 2004, Bobaljik 2005), Case does not function as the impetus to this problem. Prescribing either a government-like account for Case assignment in the syntax or advocating movement to a functional projection cannot explain why dative objects cannot bind. Movement to a hierarchically superior specifier position will not disrupt any relevant c-command relations necessary to license Case. Likewise, scrambling viewed as adjunction to a higher position has been shown to not prevent anaphoric binding for accusative objects (Grewendorf & Sabel 1994, 1999, Mahajan 1990, 1994, Webelhuth 1989, 1992, 1995).

As originally noted by Lenerz (1977), middle field scrambling in German conforms to discourse and semantic requirements. Meinunger (1995, 2000), among others, classifies definite XPs that scramble from their base-position in the VP as discourse *themas* (i.e., discourse-old information). In contrast, definite objects that remain in the VP are read as discourse *rhemas* (i.e., discourse-new information) and are stressed. Indefinites exhibit the opposite syntactic behavior in comparison to their definite counterparts; whereas definite objects predominantly scramble and are defocused in the middle field, only indefinites that can be interpreted as generic and not existential may undergo displacement to the middle field (cf. Heim 1982, Diesing 1990, 1992).

Although an appropriate answer as to why scrambled dative objects cannot create new anaphoric binding relations seems to fall outside the borders of orthodox minimalist syntax, there is a way to explain this

² Although similar to scrambling, Object Shift in Icelandic displays unambiguous A-movement characteristics, whereas scrambling exhibits both A- and A'-movement properties.

phenomenon through Grohmann's (2000, 2003) *Anti-Locality Hypothesis*. Following Hornstein (2001), it is conceivable that reflexivization is generated through the course of syntactic derivation rather than existing as unique lexical items in the lexicon. Based on the predominant default base-argument order of the vP in German for full DPs (SUBJ >> IO >> DO), this article adopts both Hornstein's (2001) approach that reflexives are generated in the syntax and Grohmann's (2000, 2003) lower-bound restriction on XPs demanding that they must undergo a minimal distance of traversal (i.e., *Anti-Locality*). The remainder of the article adheres to the following schematic. In Section 2 I outline the basic tenets of *Prolific Domains* and *Anti-Locality*. Section 3 applies *Anti-Locality* to account for data from German involving anaphoric binding relations. Section 4 critiques McGinnis' (1999) Lethal Ambiguity as a theoretical construct that can account for the anaphoric binding restriction exhibited by scrambled dative objects. In Section 5 I address residual issues/data that potentially pose a threat to the analysis put forth in this article. Section 6 serves as a summary of arguments and proposes avenues of future research.

2. Prolific Domains and Anti-Locality

2.1 Prolific Domains

The relative cyclic units within the framework of orthodox minimalism are called *phases*, which are assumed to be the verb (vP) and complementizer (CP) in their strongest form and tense phases (TP) in the weakest. At these points where propositional units are completed, material at both strong phases (vP , CP) are regarded to be independent at the interfaces. Recent challenges to the concept of strong phases, however, have proven these constructions to not be optimal tools. For example, Epstein and Seely (2002) discuss at length why the specification of vP and CP as phases is potentially problematic. Chomsky (2000, 2001, 2004) attempts to motivate vP and CP as phases on the grounds that they are relatively independent at the interface levels. Although it is unclear exactly what Chomsky means by "relatively independent" in this context, Epstein and Seely (2002:78) raise the following key question: "How can we know that they are *relatively independent* at the interface if Spell Out applies *before* the interface is reached, and without access to interface properties?" Epstein and Seely (2002:78) comment further that "...it is a potential architectural paradox to

hypothesize that vP and CP are spelled out *cyclically, internal to the narrow syntax* by virtue of them having the property being later relatively independent *at the interface*.³

The ideal derivational system based on contextual information rather than mere ontological, structural commitments should include not only CP and vP as chief benchmarks of systematic evaluation, but also TP . Based on Chomsky's (1986) earlier conceptions of clause structure, Platzack (1986) and Grohmann (2000, 2003) elucidate the natural tripartite division of labor exerted by natural clauses, with the vP layer responsible for thematic relations, the TP layer licensing agreement and the CP -layer (cf. Rizzi 1997) available for discourse properties.

Grohmann's *Prolific Domains* (2000, 2003) function as the ideal units of evaluation for the construction of syntactic structure. Derivation qua *Prolific Domains* not only achieves a natural functional tripartite structure of clauses, but also establishes a tripartite structure of layers relevant to contextual information: thematic context (in terms of vP/VP or separate v/V -projections), agreement context (vis-à-vis split Infl: AspP, AgrP, TP etc.), and discourse context (viz. Split-CP: TopP, FocP, CP, etc.). The individual layers responsible for thematic, agreement and discourse contextual relations are referred to as *Prolific Domains* ($\Pi\Delta$):

(5) *Prolific Domain* (Grohmann 2003: 78)

Let a Prolific Domain $\Pi\Delta$ be a contextually defined part of C_{HL} :

- (i) Each $\Pi\Delta$ spells out its context information and
- (ii) Spell Out feeds the PF and LF interface levels

The generation of *Prolific Domains* and their existence in the C_{HL} is chiefly motivated due to their intimate connection with contextual information and its direct relation with phrasal hierarchy. We can understand the notion of context information as follows:

(6) *Context Information* (Grohmann 2003: 78)

Context Information is determined by context values:

- (i) $|\Theta|$ ranges over thematic relations;
- (ii) $|\Phi|$ ranges over agreement properties;
- (iii) $|\Omega|$ ranges over discourse information.

³ For further criticisms of phases see Grohmann & Boeckx (2004), Legate (2002), Epstein & Seely (2002), Bošković (2002), Matushansky (2004), Hiraiwa (2003), Bouchard (2002), Putnam (2006).

Grohmann employs the mnemonics Θ , Φ and Ω to be context values that are part of the information contained within each head. In order to stay consistent with previous work dealing within this theoretical framework, I, too, will adopt these symbols in this work. Accordingly, V and v , for example, come equipped with the context value $|\Theta|$, and Top or C with the context $|\Omega|$. This information is relevant in two respects: first, it groups various projections into a single $\Pi\Delta$; second, each $\Pi\Delta$ contextually identified in this way ships the information applicable for the specific context to the interfaces. This convention identifies a number of heads, and by extension projections, as part of the same context (Grohmann 2003: 78). In connection with introducing the context variables in (6), we can rename the phrasal units to conform to their interpretable identity; accordingly, the v P-layer is properly known as the Θ -domain, the IP-layer as the Φ -domain and lastly the CP-layer as the Ω -domain. *Prolific Domains* depart from orthodox minimalist desiderata in the stipulation that these contextually-valued metric units serve as the hierarchical units of evaluation that are cyclically assessed and shipped off to *Spell-Out*.

2.2 Anti-Locality

A chief motive in implementing *Prolific Domains* in the C_{HL} is its inherent ability to evaluate the displacement of items in the syntax in regards to their locality status. Locality is conceived as a restriction on the maximum distance that an element may move in the derivation in one cyclic step. Locality conditions are imposed on all relevant dependencies (i.e. those created by *Move/Attract*) and delimit the upper-bound of a well-formed dependency between two positions created by movement. Grohmann (2000, 2003) argues in favor of a lower-bound restriction on movement requiring displacement operations to travel a minimal distance that he labels *Anti-Locality*. Under this guise, *Anti-Locality* is violated when a particular movement chain is deemed to not move “far enough.” *Prolific Domains* serve as the ideal contextually defined units to evaluate *Locality* and *Anti-Locality*.⁴

⁴ Abels (2003) also discusses the ungrammaticality of movement from a complement-to-specifier movement chain involving *Merged* items of the same head that he also labels *Anti-Locality*. The reason for discarding this version of *Anti-Locality* from the current discussion is the fact that it is not sensitive to *Prolific Domains*. For an analysis of how both treatments of *Anti-Locality* can be integrated in the narrow syntax see Putnam (2006: Chapter 3).

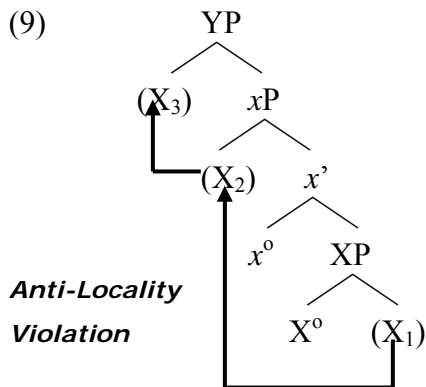
- (7) *Anti-Locality* (Grohmann 2000, 2003)
 $[\alpha\Delta \text{ XP } Y^0 \dots [\alpha\Delta \dots \cancel{\text{XP}} \dots]]$ (*anti-local movement*)
 $\{\alpha = \text{any Prolific Domain}\}$

Movement within any given *Prolific Domain* would violate *Anti-Locality*. In the event that anti-local movement occurs in the derivation, Grohmann (2000, 2003) proposes a repair mechanism that is implemented by the C_{HL} to prevent the derivation from crashing. Since the goal of the MP is to refine a system to include the least amount of exceptions and principles to achieve successful derivations, Grohmann reformulates the concept of “XP uniqueness” in regards to anti-locality effects through the *Condition on Domain Exclusivity* (CDE).

- (8) *Condition on Domain Exclusivity* (CDE) (Grohmann 2003: 80)
 For a given Prolific Domain $\Pi\Delta$, an Object O in the phrase-marker must receive an exclusive interpretation at the interfaces, unless duplicity of O yields a drastic effect on the output of that $\Pi\Delta$.

The object O refers to any element of the phrase-marker within a $\Pi\Delta$, i.e. all substantive and functional heads and projections.⁵ Pending a more detailed discussion of interface interpretation, the notion understood here regarding O is that O signals its presence to the interfaces in terms of a set of instructions that LF and PF pass on to the respective interfaces (Grohmann 2003: 81). The “drastic effect on the output” correlates to the PF-matrix of O at the PF-interface. In most cases, the higher copy will spell out at PF. This makes sense, given that higher copies of an object O will possess one less uninterpretable feature than its lower copies. If, however, a multiple occurrence of O involves two *phonetically distinct copies* of O, the CDE is not violated. Therefore, the CDE can be upheld if movement within a $\Pi\Delta$ takes place. The structural representation in (9) below illustrates the effects of *Anti-Locality* on movement chains qua the CDE.

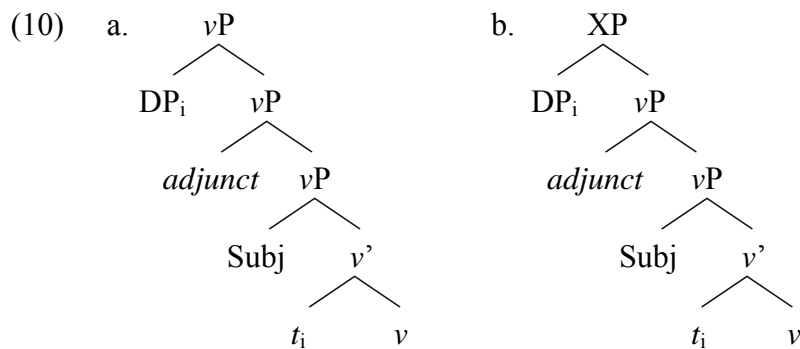
⁵ This lower-bound restriction on a minimal required distance of traversal is unique only to phrasal constituents and does not apply to minimal projections (X^0). Moving a head X^0 to adjoin to the next highest head Y^0 results in the creation of a complex head $[X^0-Y^0]$ rather than substitution and the building of new syntactic structures.



The movement chain (X_1, X_2) above occurs within the maximal projection xP . Assuming that xP represents a contextually defined *Prolific Domain*, this intra-domain movement chain (X_1, X_2) violates *Anti-Locality*. The higher link in the movement chain (X_2, X_3) targets a superior domain and therefore averts any potential violation of *Anti-Locality*.

An anonymous reviewer claims that the application of *Prolific Domains* (vP , TP , CP) as modular cyclic units that are shipped to the interfaces upon their completion is irrelevant for the current hypothesis. Rather, a phase-based notion of cyclic evaluation and *Anti-Locality* is all that is needed: as long as scrambling takes place from its base position to a multiple specifier of vP , i.e., to the edge of the phase, the derivation should proceed without crashing. What the reviewer fails to take into account is the distinct advantage *Prolific Domains* affords us in reducing the taxing complexity a phase-based system places on the human faculty of language. A view of syntactic composition along the lines of *Prolific Domains* eliminates the “escape hatch” necessitated in a phase-base system reminiscent of earlier stages in generative syntax (cf. Chomsky 1986). The infinite proliferation of phase edges can also be eliminated by *Prolific Domains*, thus regaining the distinction between unique specifiers and adjuncts that is currently not possible in a phase-based approach. Consequently, if the scrambled XP were to move to a multiple specifier of vP , according to the *Anti-Locality Hypothesis* it would inflict a lower-bound movement violation. As shown in example (1), if the scrambled DP *die Gäste* ‘the guests’ moves to structurally higher position than the predicate adverbial adjunct *gestern* ‘yesterday’, CDE effects forcing the phonological realization of both elements of the chain will not take place. Assuming that predicate adverbials are adjoined to vP in German, the scrambled DP *must* leave the contextually-defined domain for thematic

properties (vP). An intricate discussion of the motivation of scrambling in West Germanic falls outside the scope of this article; however, one thing is certain: scrambling is not driven by theta-considerations.⁶ If scrambling is not ubiquitous A-movement, the exact contextual composition of TP as an agreement domain requires reconsideration. Putting that argument aside, our concern is centered less on the exact properties of TP but rather the fact that scrambling is not movement to the “edge” of vP but rather to a functional projection outside of the thematic layer. The structures in (10a) and (10b) below illustrate the fundamental differences between scrambling in a phased-based account of syntax and one employing *Prolific Domains* respectively.⁷



Focusing our attention on the lower link of the movement chain, at this juncture of the derivation two outcomes are possible. Due to the CDE, which will force both the higher (X_2) and lower copy (X_1) of the first link in this multiple movement chain to be spelled out as two separate phonological entities at the PF-interface, the system can either accept the appearance of each individual object or the CDE will subsequently cause the system the crash. It may seem intuitive to posit that violations of *Anti-Locality* will unambiguously cause the system to crash. There are however instances in which the spelling out of both copies of the movement chain (X_1 , X_2) is required to generate fully grammatical structure interpretable at the interfaces. Hornstein (2001) puts forward the argument that anaphora

⁶ For a detailed account of the motivation of scrambling in West Germanic within a *Prolific Domains*-based system, see Putnam (2006).

⁷ Further evidence supporting the hypothesis that TP is indeed separately interpreted at the interfaces and a relevant domain delimiting the minimal distance of traversal XPs may go in the derivation can be found in Grohmann's (2003: Ch. 2) discussion and explanation of left-dislocated topic constructions.

are generated in the run of the derivation and are not present in the *Numeration*. This generalization is neatly captured and explained within the framework of *Anti-Locality* and the CDE. Example (11) represents a sample application of the CDE generating anaphora.⁸

- (11) a. * Sara likes.
 b. #_{[_{VP} Sara v^o [_{VP} likes (~~Sara~~)]]}
 [AG] ([TH])

Based on the assumption that *vP* is the layer in which thematic contextual information is both processed and accounted for (hence, $\Theta\Delta$), we know that any XP-movement within this *Prolific Domain* is illegal due to the fact that it violates the *Anti-Locality Hypothesis*, unless it is followed by Copy Spell Out of the lower XP qua the CDE. The only way to salvage (11b) is through the application of the CDE.

- (12) [_{$\Theta\Delta$} Sara v [_{VP} likes ~~Sara~~ \Rightarrow herself]]

In the derivation (12), the diacritic \Rightarrow represents the spelling-out of the lower copy of <Sara> at PF. *Sara* doesn't move far enough (i.e. outside of the $\Pi\Delta$ it is generated in, in this case $\Theta\Delta$), which is a clear violation of the *Anti-Locality Hypothesis*. Here we see that it is possible, and in this particular case, expected, that we have two PF-matrices within the same $\Pi\Delta$. This example suggests that this approach is indeed conceivable, in that it correctly predicts the possible ways of expressing reflexivization qua the *Anti-Locality Hypothesis* (cf. Hornstein 2001). Movement to another position within the Θ -domain would imply the existence of two distinct θ -roles. This is reminiscent of Lidz's (2001) *Condition R* constructed to account for the binding differences between anaphors and logophors.

- (13) Condition R (Lidz 2001: 14)
 $\lambda x [P(x,x)] \quad \Leftrightarrow \quad (\theta_1 = \theta_2)$
 semantics **theta-grid**

The condition states that if a predicate is semantically reflexive, then it must be lexically reflexive. Similarly, if a predicate is lexically reflexive,

⁸ The distinction between reflexives and reciprocals is not clearly spelled out in either Hornstein's or Grohmann's approach. Furthermore, it is unclear how the derivation makes the distinction between reciprocal and reflexive anti-local copies in a movement chain. I leave this issue open to future inquiry.

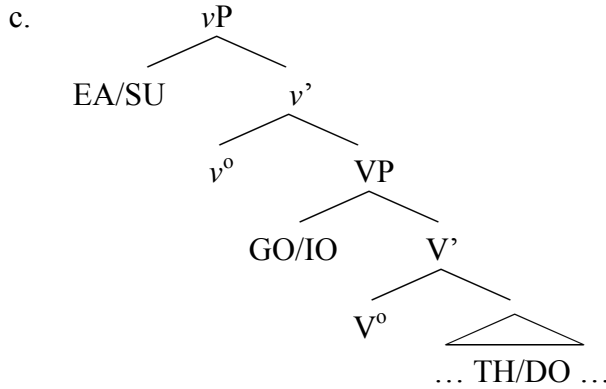
then it must be semantically reflexive as well. The desired result, namely, that movement within a given *Prolific Domain* will force the lower copy of the moved item to receive prominence at PF (qua the CDE), is achieved.

3. Why Datives Can't Bind Anaphors

Focusing on the internal structure of the vP -layer/ Θ -domain, similar to Larson (1988), I adopt a version of the light verb approach and take the structure of the thematic layer to consist of “shells” – in particular VP (hosting the lexical verb), usually dominated by vP (or the light verb). An issue of much debate, however, is the position of the direct (THEME) and indirect objects (GOAL) within the vP , or $\Theta\Delta$. The composition of the argument structure of ditransitive verbs theoretically need not occur in a set order given that the application of Merge is free and that vP is designated at the contextual domains responsible for thematic properties. Cross-linguistically, however, the general order of indirect (GOAL) objects being merged into a structural higher position than direct (THEME) objects is widely maintained (cf. Pykkänen 2002, Grohmann 2003, Miyagawa and Tsujioka 2004, among others). If we assume that Θ -features are the features that motivate *Merge*, it is possible to view the internal structure of vP / $\Theta\Delta$ as “unfixed” regarding the THEME \gg GOAL ordering. In other words, the verb – being the head of the VP – possesses a Θ -feature to be assigned to the object that merges with it, thus projecting further as VP. Under such assumptions, it would make little difference if the direct object or the indirect object were to merge as [CompVP]. Miyagawa and Tsujioka (2004) provide evidence counter to the idea that the order of objects in the vP is “unfixed”, maintain that the THEME \gg GOAL ordering is the result of optional scrambling. As will be demonstrated below, the ordering of GOAL \gg THEME on double object constructions is crucial to the hypothesis put forward in this article, therefore the internal structure of vP / $\Theta\Delta$ is illustrated below in (14):

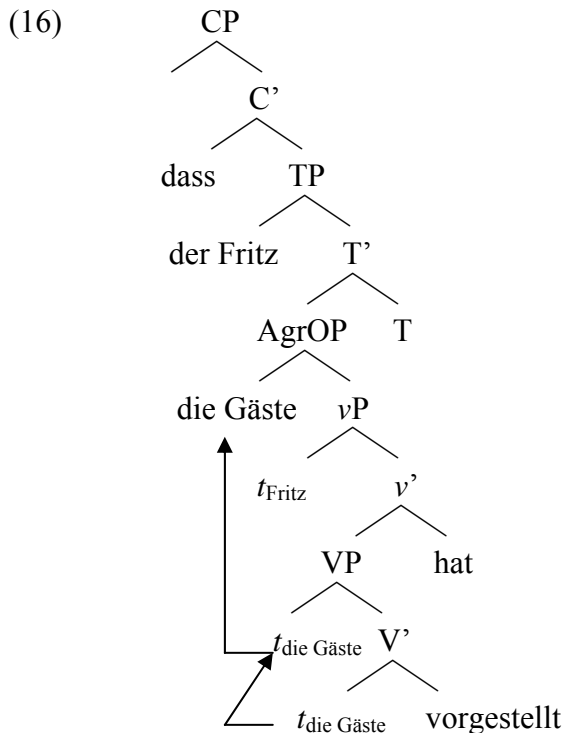
(14) a. [_{vP} Ext-Arg V-*v*⁰ [_{VP} GOAL *t_v* THEME]]

b. [_{vP} Ext-Arg V-*v*⁰ [_{VP} *t_v* GOAL]]



According to the structural outline of the *vP*-shell/ Θ -domain in (14c) above, arguments *Merge* into the thematic layer of the narrow syntax in the following positions: [CompVP], [SpecVP] or [Spec*v*P]. Based on Hornstein's assumption within the framework of *Anti-Locality* as conceived by Grohmann, in order for reflexives to be generated in the derivation, movement within the *vP*-layer must take place in one way or another. In this section the true nature of the problem regarding why scrambled indirect objects cannot bind anaphors is revealed: indirect objects (GOAL) are inaccessible to any potentially empty nodes within the *vP*-shell to generate reflexives. The sentences in (15) and (18) contrast the ability of displaced direct (THEME) and indirect (GOAL) objects and their ability (or lack thereof) of entering into licit binding relations with reflexives.

(15) ...dass der Fritz *die Gäste*_i einander *t_i* vorgestellt hat.



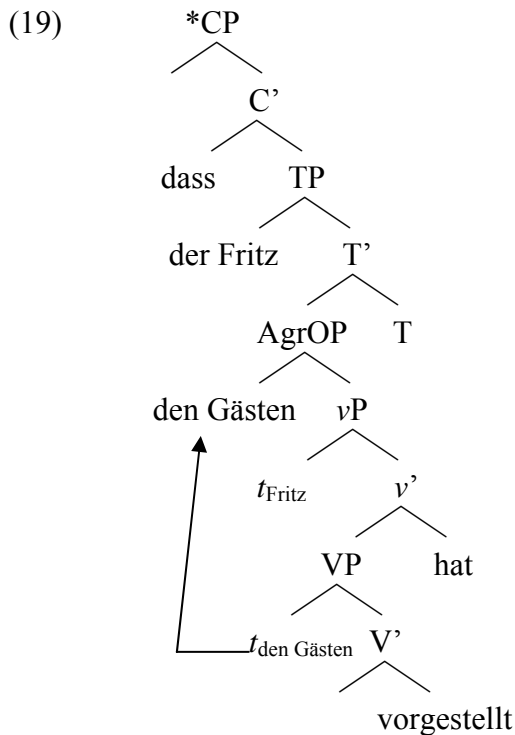
The movement chain involving the direct object (THEME) *die Gäste* ‘the guests’ violates *Anti-Locality* by moving from [CompVP] to [SpecVP]. Crucially, there is only one DP that scrambles possessing two distinct θ -roles, not two separate DPs that are extracted from the *Numeration*. Movement of a maximal projection within a contextually-defined domain responsible for thematic properties violates *Anti-Locality* and will be interpreted by the C_{HL} as movement to a Θ -position, resulting in both the lower and upper copy of the displaced XP being exclusively interpreted as independent objects at the interfaces. What makes this step in the derivation legal is the generated empty position [SpecVP]: The fact that no indirect object (GOAL) or its copy occupies this position makes it a desired landing site the subject *die Gäste* ‘the guests’. This operation then invokes CDE effects that in turn generate the reflexive anaphor *einander* ‘each other’.

(17) [Θ_{Δ} *die Gäste* v [$_{VP}$ ~~*die Gäste*~~ \Rightarrow *einander*]

Indirect objects (GOAL), however, are not afforded the same structural opportunities to generate reflexives as are their direct object (THEME)

counterparts. Consider the ungrammatical sentence in (18) and its subsequent derivational history in (19).

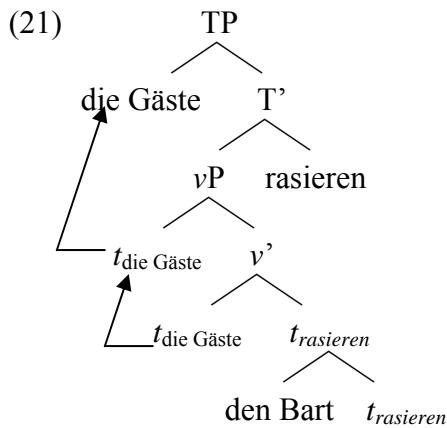
- (18) *...*dass der Fritz den Gästen_i einander t_i vorgestellt hat.*
 ...that the Fritz._{NOM} the guests._{DAT} each other introduced has
 ‘...that Fritz introduced each other to the guests.’



If indirect objects (GOAL) are base-generated (or adjoined) to [SpecVP], there does not exist any possibility for the indirect object (GOAL) to land in an open specifier in the vP -shell. The lower copy of the subject *der Fritz* ‘the Fritz’ remains in [Spec vP], thus thwarting any attempt of the indirect object (GOAL) of generating a reflexive anaphor by means of the CDE.

Equipped with the knowledge of how reflexives come into existence in the narrow syntax, this theoretical framework can also account for how subjects generate anaphors. Consider sentence (20).

- (20) *Die Gäste_i rasieren sich_i den Bart.*
 The guests._{NOM} shave self the beard._{ACC}
 ‘The guests shave their beards.’



The subject – which is usually base-generated in the canonical [SpecvP] position – is *Merged* into the derivation [SpecVP]. The rationale behind this unusual approach is as follows: the DP *die Gäste* ‘the guests’ bears two distinct θ -roles, i.e., GOAL/BENEFACTOR and AGENT. In order to exhaust both of them, the DP *die Gäste* ‘the guests’ originates in [SpecVP] to check its first θ -role (GOAL/BENEFACTOR) and then moves to [SpecvP] to discharge AGENT. The movement violates *Anti-Locality* and forces the lower copy in [SpecVP] to receive its own phonetic representation at PF as the anaphor *sich* ‘self’.

(22) [Θ_{Δ} die Gäste v [VP ~~die Gäste~~ \Rightarrow sich]

Once again, indirect objects (GOAL) have nowhere to move within the vP-shell/ Θ -domain, thus eliminating the possibility of generating reflexives qua *Anti-Locality* and the CDE.

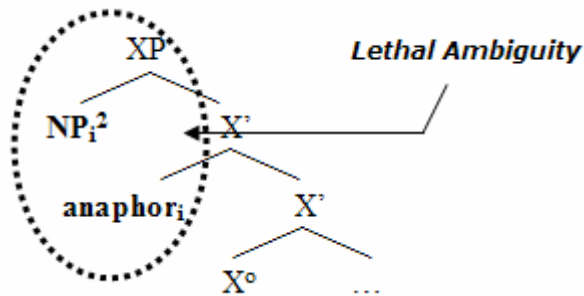
(23) **Die Freunde haben den Gästen_i sich_i den Bart rasiert.*
 The friends.NOM have the guests.DAT self the beard.ACC shaved
 ‘The friends shaved themselves the beards of the guests.’

4. Lethal Ambiguity

The theoretical approach put forward here has a distinct advantage over McGinnis’ (1999) approach to the contrastive binding behavior of scrambled dative indirect objects. McGinnis proposes that anaphoric dependencies cannot be established between two specifiers of the same head, a constraint that she labels *Lethal Ambiguity*.

(24) *Lethal Ambiguity* (McGinnis 1999:2)

An anaphoric dependency cannot be established between two specifiers of the same head.

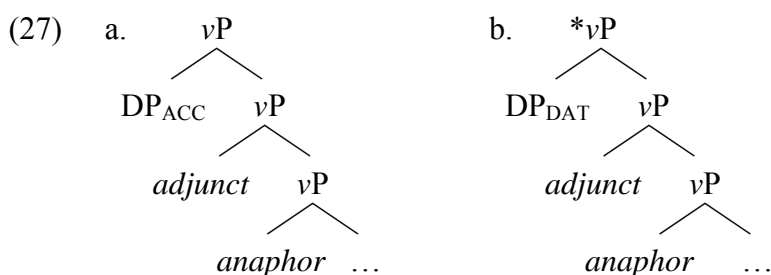


Although McGinnis comes close in her analysis to the proposal put forward here, her hypothesis faces shortcomings. First, the motivation for an anaphor such as *sich* ‘self’ in German to move to a multiple specifier position at the edge of a phase is not specified. Movement to the edge of a phase is to ensure that constituents are visible candidates to participate in operations accessible to the higher phase (in this case, CP). As elucidated earlier in this work, the Case of reflexives in German is rather difficult to ascertain; however, if Case is checked ν P-internally, the only potential motivation to move to [Spec ν P] would be an EPP feature. The existence of multiple specifiers destroys the contrast between specifiers and adjuncts. Movement solely to eliminate an EPP feature is illogical, provided that EPP is not interpreted at either the LF or PF-interface (see Epstein, Seely and Pires 2005, among others). Consequently, even if we accept multiple specifiers as licit constructions, it is unclear how *Lethal Ambiguity* can determine whether or not a scrambled DP can bind a lower anaphor. Following McGinnis’ proposition of *Lethal Ambiguity*, it should be the case that not only are dative objects unable to bind anaphors but also accusative objects should not be able to perform such a task in this model. If all multiple specifiers are considered to be equidistant from a given head, accusatives would also violate *Lethal Ambiguity*. To illustrate this crucial point, I turn once again to the initial data set at the beginning of this article, repeated below as (25) and (26) for the sake of the reader.

- (25) ...*dass* Fritz *die* *Gäste*_i *gestern* *einander*_i *t* *vorge stellt* *hat*.
 ...that Fritz_{NOM} the guests_{ACC} yesterday each other introduced has
 ‘...that Fritz introduced the guests to each other yesterday.’

- (26) *...*dass Fritz den Gästen_i gestern einander_it vorgestellt hat.*
 ...that Fritz.NOM the guests.DAT yesterday each other introduced has
 '...that Fritz introduced one another to the guests yesterday.'

Utilizing multiple specifiers, the structures in below in (27a) and (27b) – representing (25) and (26) respectively – illustrate that *Lethal Ambiguity* cannot account for the ungrammaticality of (26). The two structures are indistinguishable from one another, thus demonstrating the inability of *Lethal Ambiguity* in explaining these data.



This raises an important question as to how Case is assigned within this framework. Agreeing with McFadden (2004), I maintain the distinction between DP licensing and the assignment of morphological Case. With that said, what is important is that both the scrambled DP and the bound anaphor share the same Case. Under the assumption that reflexives and reciprocals are generated in the derivation as described in this article, this will happen by default based on the fact that the anaphor is a lower copy of the displaced XP with which it is bound. Perhaps the argument can be made that if dative is a structural Case in German, it is non-transferable to the lower copy of the same DP. Admittedly, the assignment of Case is a very important part of the system; however, it bears little relevance to the current argument. I leave this for future consideration.

Adopting the approach to anaphora and reciprocal binding relations outlined in this study obviates the shortcoming presented by McGinnis' proposal of *Lethal Ambiguity*. Movement to the "edge" is no longer needed in a system utilizing *Prolific Domains*. As established in the introduction of this work, agreement features are not responsible for licensing scrambling, therefore it is highly unlikely that A-movement of any kind is involved in middle field scrambling.⁹ Lastly, by allowing reflexives and reciprocals to

⁹ Constituents scrambled to the middle field in German can be iterative; both crossing and nesting paths are possible constructions. This is a crushing blow to any theory that interprets middle-field scrambling as A-movement based on Chomsky's (1995)

be generated in the derivation qua *Anti-Locality* and CDE effects, the theory need not develop a fixed canonical base-generated position for anaphora.

5. Residual Issues

This article proposes at the very least a sketch of a novel syntactic solution to the troublesome data dealing with why scrambled dative objects cannot bind anaphora. This solution stands in contrast to the pseudo-semantic accounts that currently abound in the literature. One reviewer proposed the following data set as potential evidence against a purely syntactic account of this phenomenon.

(28) ... *weil Hans_j [Maria_i ohne was an] sich_{i/j} auf dem Photo zeigte.*
 since Hans Maria.DAT without something on refl.ACC on the photo showed

(29) ... *weil Hans_j [Maria_i [sich_{i/j} ohne was an] auf dem Photo zeigte.*
 since Hans Maria.DAT refl.ACC without something on on the Photo showed
 ‘...since Hans showed Mary a picture of himself/herself without something on.’

The argument put forward is that the adjuncts such as *auf dem Photo* ‘in the photo’ as opposed to *im Spiegel* ‘in the mirror’ change the anaphoric reference dramatically, hence virtually excluding a generalization in only syntactic terms. The generation of the reflexive *sich* ‘self’ in both (28) and (29) above can be easily accounted for under the approach developed here. To generate the reflexive *sich* ‘self’, either DP (Hans, Maria) would merge into the derivation bearing the θ -role THEME. Movement would then take place either to [SpecVP] or [SpecvP] in order to discharge the second θ -role on the DP and generate the reflexive. The two possible derivational histories of *sich* ‘self’ in (28) are schematized below in (30a) and (30b).

(30) a. [θ_{Δ} Hans_j [Maria ...] ~~Hans~~ \rightarrow sich_j ...]
 b. [θ_{Δ} Hans [Maria_i [~~Maria~~ \rightarrow sich_i ...]]]

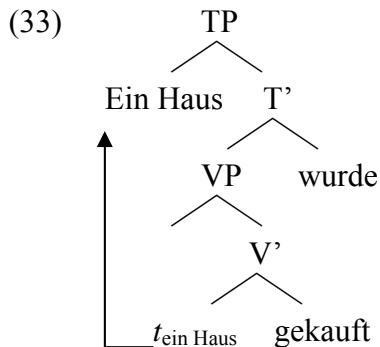
assertion that movement from a position responsible for Case to a higher position responsible for the same grammatical purpose is illegal.

Anti-Locality offers a suitable solution to these supposed problematic data, and as a result issues a feasible syntactic explanation to this movement type.

6. Conclusion

In this article I have illustrated why and how displaced dative indirect objects cannot enter into licit anaphoric binding relations. First, based on Hornstein's (2001) hypothesis that reflexives and reciprocals are generated in the syntax accompanied by Grohmann's (2000, 2003) introduction of a lower-bound movement constraint on XP-displacement (e.g., *Anti-Locality*), it is predicted that objects that are base-generated in [SpecVP] are not afforded the opportunity of moving within the v P-layer. The failure to violate *Anti-Locality* results in the inability for indirect objects to create anaphora. Second, whereas indirect objects that are base-generated cannot move to [Spec v P] because they are blocked from such a move by the presence of the lower copy of the subject, subjects that are base generated in [SpecVP] can and must move to [Spec v P] to ensure that both θ -roles are properly discharged. Third, based on the hypothesis that passive VPs lack the functional v^0 determining voice and Case, it stands to reason that reflexives should not be able to appear in passive sentences. The lack of the functional v^0 also means the lack of [Spec v P] within the Θ -domain, i.e., the specifier where the θ -role AGENT is assigned and deactivated. These facts are borne out in the data below.

- (31) **Frederik_i** hat **sich_i** ein Haus gekauft. (Wurmbrand 2002: 111)
 Frederic has self a house bought
 'Frederic bought himself a house.'
- (32) **Ein Haus_i** wurde (***sich_i**) gekauft.
 A house was (*self) bought
 'A house was bought (*oneself).'



The lower copy of *ein Haus* ‘a house’ cannot simultaneously be the THEME and AGENT of this collocation unit.

Admittedly, this article presents a sketch of a solution that should be extended to empirical data from typologically diverse languages. From a theoretical standpoint, although generating anaphora in the derivation qua *Anti-Locality* and the CDE is now a well-attested phenomenon established by Grohmann (2000, 2003), it remains to be seen if the same processes exist for the generation of logophors by means of the same constraints and procedures. Lidz (2001) defines logophors (e.g., near-reflexives: $\lambda x [P(x, f(x))]$) to function as semantically distinct elements, although the antecedent and the anaphor in such relations can be the same entity in the world. From a preliminary view, the generation of logophors through the similar processes afforded to anaphors under *Anti-Locality* is problematic due to the fact we would have to argue for an incomplete or errant Copy Spell-Out procedure. These topics remain open for further inquiry. In sum, this article solves an issue that has plagued the theory for quite some time: scrambled dative objects cannot bind anaphors, because they cannot create them.

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