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A MOVEMENT APPROACH TO CONTRASTIVE LEFT DISLOCATION*

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1 Introduction

Studies of left dislocation constructions in a number of languages seem to put a lot of emphasis on the evaluation of the nature of this phenomenon: movement or base-generation. With this paper I will undoubtedly add to these studies. By comparing two varieties of left dislocation in German, I propose a movement approach for one type of left dislocation and a non-movement account for the other, while also laying out the fundamental diagnostics of distinguishing the two types. I further propose spelling out of features to be a characteristic of the movement type.

While the well-known phenomenon of *clitic left dislocation* has enjoyed deep study and analysis (such as Cinque (1977, 1990), Aoun & Benmamoun (1998) and many references cited), non-clitic, *contrastive left dislocation* of the type as it appears in German lacks extensive coverage (but see Altmann (1981), van Haaften et al. (1983) and some papers in the collection by Anagnostopouolou et al. (1997)), not to mention a satisfactory account. In addition, recent studies of the former variety in non-Romance languages indicate interesting implications for a general approach. In the light of the results produced there, the question arises whether the analysis may hold cross-linguistically and even encourage a fresh look at the data. In particular, the hypothesis that in certain dialects of Arabic the (clitic) left-dislocated DP may be either base-generated or produced by movement seems to be an interesting starting point.

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* The preliminary version of this paper was originally written in the winter of 1996/97 and published as Grohmann (1997). Subsequently, my interest in the left periphery has continued and an understanding (?) of the structure of the C-domain has developed which necessitates extensive revisions of the earlier attempt. I am extremely grateful to Guglielmo Cinque for his interest in this work who basically inspired me to revamp the original paper. I have also profited from presentations of this and related material at the *UMD Student Conference* (College Park), *MALC 27* (Edwardsville), *ConSOLE VII* (Bergen), the University of Groningen and ZAS Berlin. For discussions and comments I am especially grateful to Werner Abraham, Joseph Aoun, Carlo Cechetto, Gennaro Chierchia, Ricardo Etxepare, Jack Hoeksema, Eric Hoekstra, Norbert Hornstein, André Meinunger, Alan Munn, Henk van Riemsdijk, Dominique Sportiche, Juan Uriagereka, Chris Wilder and Jan-Wouter Zwart. I also acknowledge a DFG-grant which principally enabled me to write this paper at ZAS and an EU-grant which allowed me to attend the 1999 *Thermi International Summer School in Linguistics*. All inadequacies are due to my own imperfection.

The void in the literature concerning German constructions of this sort may have two reasons: (i) there may nothing interesting to be found or (ii) the phenomenon has primarily pragmatic reasons. The first reason is supported by the fact that several authors mention contrastive left dislocation only briefly or in passing (such as Scherpenisse (1983), Wilder (1994) or Haegeman (1996), for example); the second path was explored by Geluykens (1992) and, more general, Gundel (1977, 1988), but also through a syntactic account under primarily presuppositional premises by Wiltschko (1995a,b). One possible explanation for holding this view is a mix-up of terminology: contrastive left dislocation is often equated with the *hanging topic* construction ("nominativus pendens"), and if not completely equated, both are often mentioned in the same breath.[1]

I will present a brief survey of past approaches to the phenomenon of LD and set out the problem for German with data from English, Italian and Arabic. With the means of an extensive database of possible and impossible LD-constructions in German, I pursue the intuitive assumption that (some types of) CLLD and CLD are not entirely different phenomena but rather realizations of one structural configuration: left dislocation via movement with resumption, where a notion of the resumptive pronoun in appropriate terms will be developed. In this respect, I extend the old dichotomy of LD-constructions into CLLD and LD (Cinque (1977, 1990)) and replace it with a typology of LD-structures that splits into base-generation vs. movement; here I introduce the concept of *feature spell-out*. I also make use of recent theoretical developments to analyse the syntax of German CLD. Here I am interested in the syntactic description compatible with minimalism (as Chomsky (1995)) as well as an analysis in terms of structural description, leaning on and supporting Rizzi's (1997) proposal of an articulate structure of the C-domain. I suggest that there is indeed something interesting to say about German LD-constructions, and it is of a syntactic rather than a(n overwhelmingly) pragmatic nature.

2 The Phenomenon of Left Dislocation

The aim of this paper is to account for essentially the following paradigm:[2,3]

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[1] To improve readability I will make use of the following shorthand notations: LD will stand for left dislocation and its variants (such as 'LDed' for 'left-dislocated'). The specific types of LD are abbreviated CLD for contrastive and CLLD for clitic left dislocation as well as HTLD for hanging topic constructions.

[2] The choice of German examples compared with Wiltschko's (1995a,b) immediately shows obvious similarities. The coincidence of this rather peculiar set of examples is purely accidental, though, which can be witnessed by my inaccurate recollection of the events as they took place in the original fairy tale.

[3] LDed/fronted constituent and (resumptive) pronoun are italicized throughout, indicating coreference; most displaced elements are bracketed. In German the Case of both plays a crucial role and I indicate NOMinative, ACCusative and DATive in the glosses where relevant. Subscripted indices as used later indicate the relation to a particular trace/copy position and underlining shows binding relations. Note that I bias the subsequent discussion by translating CLD as a topic construction and HTLD with RP, analogously to the cut between topicalization in HTLD we will see presently in English.

(1) a. [*Diesen Frosch*], *den* hat die Prinzessin gestern geküßt.
this frog-ACC RP-ACC has the princess yesterday kissed
'This frog, the princess kissed (it) yesterday.'
b. [*Dieser Frosch*], *den* hat die Prinzessin gestern geküßt.
this frog-NOMRP-ACC has the princess yesterday kissed
'This frog, the princess kissed it yesterday.'

The construction in (1a) is traditionally known as CLD: an XP is LDed into the left periphery of the clause and co-indexed with a pronominal element; in German, this element is a *d(emonstrative)*-pronoun; it is homomorphous with the determiner but used (demonstratively) as a pronoun. The standard label for these elements is resumptive pronoun (RP) which I employ in the glosses as such and interchangeably in the text. (1a) stands in direct contrast with the construction in (1b), where the LDed element and RP do not coincide in Case (glancing over apparent preferences for the RPs' position). This is an instance of HTLD. The remaining of the paper will be concerned with an adequate account for the different structures (and with them, derivations).

In this section, I review some of the literature that deals with all kinds of LD-constructions. In particular, I present Cinque's (1990) main arguments to distinguish CLLD from LD before pointing out that "LD" as such should be distinguished further, with different syntactic properties, into CLD and HTLD; a similar conclusion will be necessary for CLLD as well. But first I go over some properties of topicalization and left dislocation in general.

2.1 Topicalization vs. left dislocation

Chomsky (1977) observes similarities in the syntax of Wh-movement and topicalization. In this framework, both are derived by what we would now call A'-movement.

(2) a. [Which book] should we give to John?
b. [Who] did Mary see?

(3) a. [This book], we should give to John.
b. [John], Mary saw.

(4) a. [*This book*], we should give *it* to John.
b. [*John*], Mary saw *him*.

The derivational representation capturing to some extent (2)-(3), translated into more recent terminology, could in principle all look as shown in abstraction in (5):

(5) $[_{CP}$ [Wh-/Top-XP]$_i$ ... $[_{TP}$ ... (t'$_i$) ... $[_{VP}$ ... t$_i$ ...]]]

The pattern of (5) applied to Wh-movement and topicalization, where XP would be moved from its base-generated position (possibly from inside VP) to the sentence-initial position SpecCP (plausibly via an agreement-related position in between, as indicated by the parenthesized t') is, all things being equal, uncontroversial in current generative frameworks (ever since Chomsky (1977, 1981)). As Chomsky argues it is less plausible to derive LD in the same manner. He notes the relation between topicalization and LD; this is of relevance for us. Chomsky's (1977:94) contrasting paradigm is shown in the following, where I add the italics for expository purposes:

(6) a. * [This book]$_i$, to whom should we give t_i?
b. * [John]$_i$, who do you think saw t_i?

(7) a. [*This book*], to whom should we give *it*?
b. (As for) [*John*], who do you think saw *him*?

According to Chomsky, one is derived by movement, the other is not.[4] The examples in (6) are instances of topicalization. Here, movement of the topicalized element results in a doubly filled COMP and is hence ruled out, (6a), or in an extraction from a Wh-island, (6b), which is equally ungrammatical.[5] The analogous LD-cases in (7) with an LDed element are well-formed.

Abstracting away from topicalization for the time being, one result of Chomsky's study is that LD cannot involve movement as a number of principles assumed to be diagnostics for (non-)movement can be violated (Subjacency, the Complex Noun Phrase Constraint, Specified Subject Condition, and other islands; see Ross (1967) and more recently Postal (1998) on the importance of islands in syntactic derivations).

2.2 Movement vs. base-generation

Lasnik & Saito (1992), henceforth L&S, approach the problem differently. They point out correctly (L&S:76) that the framework following Chomsky & Lasnik (1977) and Chomsky (1981), in which the *that*-trace effect is accounted for by a constraint on traces, rules out the examples shown in (8a,b) by the ECP, in contrast to (8c).

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[4] To be precise, both constructions assume a base-generated topic. But in this framework, topicalization also involves a Wh-operator which moves to COMP where it is later deleted. For reasons of simplicity, I call this the "movement approach" to set it apart from LD-constructions (as it is commonly treated in minimalism, following Chomsky (1993, 1995); cf. Zwart (1997a), Grohmann (in progress) for Germanic).

[5] Chomsky shows convincingly that in the framework assumed at the time, topicalization does indeed involve Wh-movement. Despite initial appearance, this shall not be an issue for my study, though (see e.g., Müller & Sternefeld (1993) or Grohmann (1998) for lengthy—yet very different—discussions of the relation between topicalization and Wh-movement in German; also cf. Culicover (1996)).

(8) a. * [John]$_i$, I think that t_i won the race.
b. * [Who]$_i$ do you think that t_i won the race.
c. [*John*], I think that *he* won the race.

But then they reconsider Chomsky's (1977) analysis on the basis of a prediction which is not completely borne out empirically, namely that "under certain circumstances where LD is available, topicalization should be unavailable, for example, where Subjacency or the ECP would be violated. On the other hand, wherever topicalization is possible, LD should always be possible" (L&S:76). Especially the latter prediction does not seem to be accurate (L&S:76-77), though the ungrammaticality of (10a) may not be as severe as indicated by the star (L&S:193, fn. 7):

(9) a. I believe that [this book]$_i$, you should read t_i.
b. … that [this solution]$_i$, I proposed t_i last year is widely known.
c. The man to whom [liberty]$_i$, we could never grant t_i…

(10) a. * I believe that [*this book*], you should read *it*.
b. * … that [*this solution*], I proposed *it* last year is widely known.
c. * The man to whom [*liberty*], we could never grant *it*…

On the basis of such data, L&S propose that topicalization is adjunction to IP (as similarly proposed by Baltin (1982)). In particular, it is optionally movement to SpecCP in matrix topicalizations. By assuming that the position for topics (TP in L&S—also in Müller & Sternefeld (1993)—which I will call TopP, following Rizzi (1997)) in English is restricted to one base-generated TopP per sentence, L&S can account for the contrast of multiple topicalization versus multiple LD (L&S:78-79):

(11) a. [*John*], [Mary]$_i$, *he* likes t_i.
b. * [*John*], [*Mary*], *he* likes *her*.
c. * [Mary]$_i$, [*John*], *he* likes t_i.

And for fronting both objects (angled brackets indicate pronouncing either one):

(12) a. * [We]$_i$, [*this book*], t_i should give *it* to John.
b. * [<To> John]$_i$, [*this book*], we should give *it* <to> t_i.

The upshot of L&S's discussion with respect to the present issue is that LD may involve only one LDed element as there is only one TopP available to base-generated topics and involves base-generation. This crucially relies on assigning LDed elements a topic-like status, placed in TopP, albeit a position reserved for direct insertion only.

2.3 A first stab

Within the Principles-and-Parameter approach it is regarded relatively uncontroversial to assume that topicalization is derived by movement; especially with Rizzi (1997) and others we can further assume a topic-projection inside a more articulated C-domain, TopP.

If LD involves base-generation of the initial element in a left-peripheral position which necessarily precedes the placement of moved Wh-elements as well as topics, we would expect that embedding is impossible: especially following Kayne (1994) where adjunction to any maximal projection is excluded, the LDed element would be generated in a position that at best could be the specifier of the complementizer which is ruled out in English:

(13) a. * [*John*], [*Mary*], *he* likes *her*.
b. * I suggest (that) [*on your vacation*], [*the beers that you drink*], (that) you should keep a record of *them there*.

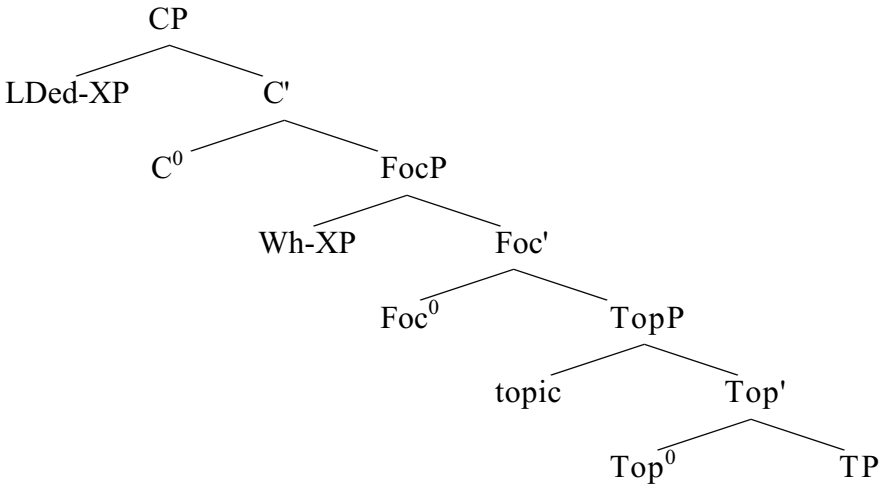
As (13) shows, embedding of LD is indeed ungrammatical, unlike topicalization, although it is somewhat marginal, at least in English. While there are good reasons to rule out (14a) with either topic as subject or object, (14b), also adopted from Culicover (1996), indicates that nothing in principle rules out embedded topics. Other languages allow embedded topics more freely, among them German.

(14) a. * $[\text{John}]_i$, $[\text{Mary}]_k$, $t_{i/k}$ likes $t_{k/i}$.
b. (?) I suggest ?(that) $[\text{on your vacation}]_i$, $[\text{the beers that you drink}]_k$, (*that) you should keep a record of t_k t_i.

With a more "modern" view of phrase structure let us equate CP with the extreme left-peripheral position (ForceP for Rizzi (1997) or Platzack (to appear)) and the position for moved topics as TopP. In between we place FocP, the target for moved focused constituents as well as Wh-elements (based on cross-linguistic mutual exclusivity of the two; see Rizzi (1997) and work by Agouraki (1990), Brody (1990), Grohmann (1998), Megerdoomian (1998), Turano (1998) and many others). Lastly, LDed elements and topics should be in different position, a hypothesis that might follow from the data so far but which will be properly justified in our discussion of German in section 3.

We can thus take (15a) as a first approximation of the structure of the C-domain we are interested in (and (15b,c) schematizes the established relations). While different from what the previously mentioned scholars had in mind, (15a) captures the properties of and constraints on the structures we have observed so far (where TP stands for the former 'IP', the part of the clause where agreement relations are established; cf. section 5.2).

(15) a.



b. * [topic [LDed-XP […]]]
c. [LD/*Top [Wh-XP […]]]

2.4 A bipartition of left dislocation constructions

Cinque (1990) proposes a dichotomy of LD-constructions involving resumptive elements. He distinguishes CLLD from LD on the basis of a number of typological characteristics.[6] The argument presented in the previous section is one of six characteristics that separate LD and CLLD as two distinct syntactic phenomena: as Cinque notes, CLLD may involve a (theoretically) unlimited number of LDed elements as opposed to LD, as already observed by Postal (1971:136, fn. 17). His examples follow where coreference is indicated by subscripted indices (from Cinque (1990:58)).

(16) [*Di vestiti*]$_i$, [*a me*]$_j$, [*Gianni*]$_k$, [*in quel negozio*]$_l$, non *mi*$_j$ *ce*$_l$
about clothes to me John in that shop not me there
ne$_i$ h*a*$_k$ mai comprati.
of-them have.3S ever bought
'*(As for) Clothes, for me, John, in that shop, he never bought them there for me.'

Another difference is the nature of the CLLDed element itself: whereas an XP qualifies in CLLD, LD only allows DPs. In addition to (16), this is illustrated below (from Cinque (1990:57-58)):

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[6] Cinque accredits the label *clitic left dislocation* to van Haaften et al. (1983) and argues in favour of it due to the difference in tonic strength between the referring pronouns, with one being a clitic (CLLD) and the other a full tonic pronoun (his "LD," here both CLD and HTLD). As I will not be concerned with an explicit analysis of CLLD, the role of the clitic shall play no further role; regarding the "full tonic pronoun," we might have to rearrange some beliefs as we go along.

(17) a. [$_{PP}$ *Al mare*], *ci* siamo già stati.
to the-seaside there have.1P already been
'*To the seaside, we have already been there.'

b. [$_{AP}$*Bella*], non *lo* é mai stata.
beautiful not it be.3S ever been
'*Beautiful, she never was it.'

c. [$_{VP}$*Messo da parte*], non *lo* é mai stato.
got from the-way not it be.3S ever been
'*Got out of the way, she never has it.'

d. [$_{QP}$*Tutti*], non *li* hò visti ancora.
all not them have.1S seen yet
'*All, I haven't seen them yet.'

e. [$_{CP}$ *Che bévi*], *lo* dìcono tutti.
that you-drink it say.3P all
'*That you drink, everybody says it.'

Thirdly, he shows that connectivity holds obligatorily between a pronoun in the LDed constituent and the non-pronominal subject (see also Cinque (1977), van Haaften et al. (1983)), indicated in (18) by underlining (Cinque (1990:59)); presumably, this holds only of CLLD, i.e. where the displaced constituent is resumed by a clitic.

(18) a. [*A* <u>*lei*</u>/*<u>*se stessa*</u>], <u>Maria</u> dice che non *ci* pensiamo mai.
of her/herself Mary say.3S that not there think.1P ever
'*Of her, Mary says that we should not think there.'

b. [*A* *?<u>*lei*</u>/<u>*se stessa*</u>], <u>Maria</u> non *ci* pensa.
of her/herself Mary not there think.3S
'*Of herself, Mary never thinks there.'

A fourth difference regards the nature of the pronominal element. In CLLD only a clitic pronoun may refer to the LDed element (taken from Cinque (1990:59)):

(19) a. [*In quella città*],non *ci* sóno mai stato.
in this city not there be.1S ever been
'*In this city, I have never been there.'

b. * [*In quella città*],non sóno mai stato *là*.
in this city not be.1S ever been there
'*In this city, I have never been there.'

c. [*Quella città*], non sóno mai stato *là*.
this city not be.1S ever been there
'This city, I have never been there.'

A fifth case of distinction comes from embedded clauses. As we have seen above, LD does not seem to be licensed in embedded clauses. In fact, Cinque notes that LDed elements may only appear in embedded contexts of some propositional attitude verbs, whereas CLLDed elements appear embedded freely (Cinque (1990:58) and references).

(20) L'unica persona che [*a Gianni*], non *gli* ha mai fatto un favore.
the-only person that to John not to-him be.3S ever done a favour
'*The only person that to John, he has never done him a favour.'

Lastly, he observes that CLLD is subject to island constraints, unlike LD, as shown for English in (7) above (Cinque (1990:58-59)):

(21) a. * [*A casa*], lo abbiamo incontrato prima che *ci* andasse.
to home him have.1P met before that there go.3S.PAST
'*Home, we met him before that he went there.'
b. * Se [*ricco*], credi che esser*lo* stato non gli giovi, ti sbagli.
if rich think.2S that have.INF-it been not him help you err.2S
'*If rich, you think that to have been it does not help, you are wrong.'

As Cinque's bipartition into LD and CLLD, and the arguments he advances in favour of it, will be of importance for my analysis, I will summarize them in Table 1:

	multiple	**any XP**	**connectivity**	**CL-only**	**embedded**	**islands**
CLLD	√	√	√	√	√	*
LD	*	*	*	*	*	√

Table 1: Defining characteristics of CLLD vs. LD

With regard to the present issue, Cinque himself went both ways, proposing movement of the CLLDed element (as in Cinque (1977), also Cecchetto (forthcoming))), but also its base-generation and subsequent operator movement (as in Cinque (1990), also Wiltschko (1995a); cf. fn. 4, yet Cinque's analysis comes over a decade later). Disregarding theory-internal arguments, the properties in Table 1 imply the following:

(22) a. Clitic left dislocation can plausibly involve movement.
b. Non-clitic left dislocation cannot possibly involve movement.

By first looking at data from an Arabic dialect, where clear diagnostics are laid out to distinguish a movement from a base-generation analysis, I will expand on the conjecture that when(ever) such diagnostics are met, we find movement. In particular, if reconstruction can take place (in LD), it implies that the LDed element must have moved.

2.5 Two types of clitic left dislocation

Aoun & Benmamoun (1998), henceforth A&B, extend the concept of CLLD on the basis of Arabic dialect(s).[7] They argue in detail that one construction is derived by movement of the CLDDed element, while the other involves a base-generated element in the left periphery of the clause. The latter case, then, is analogous to the kind of LD as described by Cinque (1990). The former, however, is distinct from present accounts to (CL)LD (but not from Cinque (1977), van Haaften et al. (1983)). A&B look in some detail at Lebanese Arabic and their findings can be summarized as follows.

Like in Italian,[8] these dialects exhibit CLLD (A&B:570-571).

(23) [*Naadya*] _eef-*a* Kariim mbeeri_.
Nadia saw.3SM-her Karim yesterday
'Nadia, Karim saw her yesterday.'

(24) a. [*Naadya*] _u _aal_t-*la* l-m_allme?
Nadia what said.3SF-her.DAT the-teacher
'Nadia, what did the teacher say to her?'
b. _u [*Naadya*] _aal_t-*la* l-m_allme?
what Nadia said.3SF-her.DAT the-teacher
'What Nadia, did the teacher say to her?'

(25) a. Fakkart __nno [*Naadya*] _eef-*a* Kariim mbeeri_.
thought.IS that Nadia saw.3SM -her Karim yesterday
'I thought that Nadia, Karim saw her yesterday.'
b. * Fakkart [*Naadya*] __nno _eef-*a* Kariim mbeeri_.
thought.IS Nadia that saw.3SM -her Karim yesterday
'I thought Nadia, that Karim saw her yesterday.'

A&B observe that CLLD may take place in matrix, (23)-(24), as well as embedded clauses, (25a); it may even follow, (24a), or precede, (24b), the C-head when in matrix clauses (versus (25b)). Moreover, the clitic may be direct object or indirect object, both attached to the verb, or genitive object attached to a preposition, or even an adnominal clitic attached to the head noun (not shown here).

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[7] In an earlier manuscript, A&B also discuss Morocan Arabic alongside Lebanese which exhibits the same phenomena; these data did not appear in the published version, though. A note on the following examples: most of these are ill-formed in English, so I dispense with marking the translations for grammaticality.

[8] That CLLD is not a phenomenon unique to Italian, or indeed Romance languages only, is shown in a variety of recent papers in Anagnostopoulou et al. (1997) and references cited.

As expected under standard views of base-generating the LDed element in the left periphery, the relation between CLLDed element and clitic may violate island conditions (Adjunct Condition, Complex Noun Phrase Constraint, Wh-Island Constraint; see A&B:571-572). Wh-phrases (and topics) may precede the CLLDed element, but only if it does not violate any islands (A&B:575-576), even across clauses (A&B:577-579); this is puzzling as the Wh-element does not originate inside the island: it would be expected that the Wh-element can legitimately move in the latter case as well. (For expository reasons, I will not reproduce their topic-examples but the correlation is clear; see also section 2.1).

(26) a. _u [*Naadya*] (sm__to __nno) xabbaruw-*a*?
what Nadia (heard.2SF that) told.3P-her
'What Nadia, did (you hear that) they tell/(told) her?'
b. * _u [*Naadya*] xabbaro SSabeyalli _eef-*a*?
what Nadia told.3P the-boy that saw.3SM-her
'What Nadia, did they tell the boy who saw her?'

The generalizations A&B arrive at are given below, where the subscripted indices indicate coreference (adapted from A&B:576):

(27) a. $[(\text{Wh/Top})\text{-NP/PP}]_j \ldots \text{CLLDed-NP}_i \ldots \text{V} + \text{Clitic}_i \ldots t_j$
b. * $[(\text{Wh/Top})\text{-NP/PP}]_j \ldots \text{CLLDed-NP}_i \ldots [_{\text{Island}} \ldots \text{Clitic}_i \ldots] \ldots t_j$

A&B account for the difference in (27) by two different underlying processes. In one, the process is the same as in the Italian examples under Cinque's (1990) analysis: the CLLDed element is base-generated in its surface position, (27b). In the other, (27a), the CLLDed element could be derived by movement. The latter could thus be derived in either of the following two ways (A&B:579):

(28) a. $\text{CLLDed-NP}_i \ldots \text{pro}_i \text{-X} + \text{Clitic}_i$ *(base-generation)*
b. $\text{CLLDed-NP}_i \ldots t_i \text{-X} + \text{Clitic}_i$ *(movement)*

As we will see below, A&B's findings will be crucial for my proposal. But even more relevant to what the situation is in German, A&B further support their analysis empirically with facts from binding and reconstruction. The upshot of the discussion is that only the moved CLLDed element may reconstruct. This is expected if and only if there really is movement (e.g., Chomsky (1995), Hornstein (1995) or Fox (1999)).

Consider one such case of reconstruction (A&B:580):

(29) a. [*T_lmiiz-a __itaan*] bta_rfo __nno k_ll m_allme _aaSaSt-*o*.
student-her the-naughty.MS know.2P that every teacher-F punished.3SF-him
'Her naughty student, you know that every teacher punished him.'

b. * [*T_lmiiz-a ___itaan*] fallayto _ablma k_ll m_allme t_aaS_S-*o*.
student-her the-naughty.MS left.2P before every teacher-F punished.3SF-him
'Her naughty student, you left before every teacher punished him.'

We can see that reconstruction may or may not take place; this depends on the nature of the CLLDed element: if it is derived by movement, as (29a), it may reconstruct and if it is base-generated, it may not, as in the case of (29b), where extraction from an island would have to take place. This is only expected. The novelty of A&B's findings are the data: given our previous discussion of CLLD, reconstruction would not even be predicted, as it is a purely base-generated phenomenon.

A similar picture forms with respect to blocking and coreference. The following examples show that one cannot be coreferent, (30), while the other can, indicating that no reconstruction takes place, as in (31); (non-)coreference is shown in this illustrative sample by (absence of) italics (A&B:585).

(30) _aTit SSabeyalli Naadya htammit fii _irweel.
gave.3SF the-boy that Nadia cared.3SF for-him pants
'She gave the boy that Nadia took care of pants.'

(31) [*SSabe yalli Naadya htammit fii*] _aT_t-*o* _irweel.
the-boy that Nadia cared.3SF for-him gave.3SF-him pants
'The boy that Nadia took care of him, she gave him pants.'

In this context, two final examples (A&B:585) will show that disjoint reading may render a sentence grammatical. As A&B note, the following—a Wh-question and a topic construction—are ungrammatical with coreference (i.e. where *Naadya* is coreferent with the main clause subject pronoun) but well-formed under disjoint reference which follows directly given that CLLDed elements that do not reconstruct intercept Wh-movement and topicalization (A&B:582-585):

(32) a. _u [*SSabe yalli Naadya htammit fii*] _aT_t-*o*?
what the-boy that Nadia cared.3SF for-him gave.3SF-him
'What the boy that Nadia took care of him, she gave him?'
b. _irweel [*SSabe yalli Naadya htammit fii*] _aT_t-*o*.
pants the-boy that Nadia cared.3SF for-him gave.3SF-him
'Pants, the boy that Nadia took care of him, she gave him.'

Lebanese Arabic offers thus a very clear diagnostic for when movement of the LDed element is plausible; at the same time we have evidence that in other cases movement is not even possible (absence of coreference, island-boundedness etc.).

2.6 Summary

The data so far have shown a number of things. For one, LD-structures differ with respect to reconstruction. This and related properties suggests that movement may or may not be involved: if an element can reconstruct, it should at some point have been in a c-command relationship with that position; movement here is a plausible, if not the only, solution. But there are also instances when an LDed element cannot reconstruct, namely when reconstruction would have to take place into an island; on the assumption that islands are barriers to movement (though see Postal (1998) for refinements), this precludes movement of the LDed element. (Sportiche (1999) makes also the claim that all cases of reconstruction can only be the result of previous, overt movement.)

In short, there is good reason to believe that CLLD in Arabic (dialects) comes in two types, thus extending observation (22a):

(33) a. Some instances of clitic left dislocation involve movement.
b. Other instances of clitic left dislocation involve base-generation.

In how much (33) applies to other languages will have to remain open for the present. With A&B's study in mind, it might now be worthwhile to go back to Italian and reconsider Cinque's (1990) arguments against movement proper. While this seems an interesting and presumably promising endeavour, it necessitates are detailed study which is beyond the scope of this paper which shall serve to clear up the situation in German.

Right now we can assume that movement and base-generation may both be involved in the type of LD that is traditionally known as CLLD, the type where the LDed element is resumed by a clitic. I am not concerned with the technical details of the various analyses presented above. Rather I will capitalize on the empirical findings and distributional differences, and extend this approach to German LD-constructions.

Concerning the variety of LD found in German, the previous discussion is relevant in that we can find arguments for both movement and base-generation as well, thus possibly extending (22b) according to (33). Unlike CLLD, presumably, a distinction of the two types can also be made on formal grounds into a dichotomy along the lines of CLD vs. HTLD. This distinction matches Cinque's (1977) original proposal and lends further support to van Haaften et al.'s (1983) analysis of Westgermanic CLD and HTLD.

3 Left Dislocation Constructions in German

In this section, I finally address the German constructions. I first present data from the relevant types of LD-constructions. I will compare these with Cinque's (1990) findings and show discrepancies with his typology. I then elaborate on the (im)possibilities in German LD-constructions, and differences between CLD and HTLD in particular.

3.1 A first distributional description

I begin with a presentation of the data. (34)-(36) show the classical types of German LD.

(34) a. [*Diesen Frosch*], *den/*ihn* hat [$_{TP}$ die Prinzessin geküßt].
this frog-ACC RP-ACC/him has the princess kissed
'This frog, the princess kissed (him [it]).'
b. [*Dieses Buch*], *das/*es* sollten [$_{TP}$ wir Martin geben].
this book-ACC RP-ACC/it should we Martin give
'This book, we should give (it) to Martin.'

(35) a. [*Dieser Frosch*], *den/?ihn* hat [$_{TP}$ die Prinzessin geküßt].
this frog-NOM RP-ACC/him has the princess kissed
'This frog, the princess kissed him.'
b. [*Dieses Buch*], *das/*es* sollten [$_{TP}$ wir Martin geben].
this book-NOM/ACC RP-ACC/it should we Martin give
'This book, we should give it to Martin.'

(36) a. [*Diese-r/-n Frosch*], [$_{TP}$ die Prinzessin hat *den/ihn* geküßt].
b. [*Dieses Buch*], [$_{TP}$ wir sollten *das/es* Martin geben].

In some cases, the LDed element and the RP agree in Case, in others they do not. Moreover, in the structures (34), where both agree, the RP is outside TP if we take the subject position to demarcate the boundary between C-domain and T-domain (see especially section 5.1). We can observe the same in (35) and (36), with the difference that (i) the personal pronoun may be used for resumption (presumably as in English) and (ii), if clearly a weak pronoun, like *es*, it may not occur in high position, but it is fine low.[9] For our purposes, as we will see soon, the variant with a low RP, as in (36), shall not be of present importance, but this fact will create crucial evidence for our structural assumptions; I will return to the issue concerning the nature of the RP in later sections.

In this section, I will show that LD in German should in fact be analysed on a par with CLLD in Lebanese (and Moroccan Arabic), according to A&B's analysis; it comes in two types. Part of my proposal is indeed that classic CLLD and HTLD involve base-generation of the LDed element, in a clause-initial topic-like position. But CLD involves movement, just as one type of CLLD does in Arabic. Before providing the evidence, we will have to make the connection to CLLD first. Remember that I declared in the outset that Cinque's (1990) bipartition of LD-constructions was inadequate.

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[9] Cardinaletti & Starke (1994) show that weak pronouns may not be topicalized (also Grohmann (1999a)); the question mark in (35a) indicates the ambiguous status of the pronominal structure (while *es* is unambiguously weak). I cannot confirm apparent (Case-)preferences for (36), as Altmann (1981) claims.

Evidence comes from German. If we compare characteristics of German LD with those attributed to CLLD and LD (see Table 1), we can see that they are split: some characteristics of CLLD apply to German LD, while others do not, at least not clearly at first glance (see van Haaften et al. (1983) and extended data sets in sections 3.3 and 6.1).

3.2 The role of a bipartition

Let us now turn to Cinque's (1990) properties distinguishing CLLD from LD. The first, multiple LD, may apply to German, although with an extreme grade of awkwardness.[10,11]

(37) a. # [*Diesen Frosch*], [*die Prinzessin*], *den* hat *die* geküßt.
'?This frog, the princess, <him,> she kissed <*him>
b. # [*Diesen Frosch*], [*die Prinzessin*], *die* hat *den* geküßt.
'?This frog, the princess, she kissed him.'

(38) a. # [*Die Prinzessin*], [*diesen Frosch*], *die* hat *den* geküßt.
'?The princess, this frog, she kissed him.'
b. # [*Die Prinzessin*], [*diesen Frosch*], *den* hat *die* geküßt.
'?The princess, this frog, (*him), she kissed.'

We can observe that if there are two LDed elements, subject and object, either order is equally "awkward," though not clearly "ungrammatical:" (37) shows the order object-subject and (38) the inverse; for either structure, RPs may be ordered freely, too.

However, the RP referring to the second LDed element may be left out, as in (39), while the RP referring to the first one may not be left out, shown in (40). In other words, of course, LD and topicalization go hand in hand, as we have observed for English in (11) above, but only if the topic precedes the LDed element.

(39) a. [*Diesen Frosch*], die Prinzessin hat *den* geküßt.
'This frog, the princess kissed him.'
b. [*Die Prinzessin*], diesen Frosch hat *die* geküßt.
'This princess, this frog, she kissed.'

(40) a. * Diesen Frosch, [*die Prinzessin*] hat *die* geküßt.
b. * Diesen Frosch, [*die Prinzessin*], *die* hat geküßt.
'*This frog, the princess, she kissed.'

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[10] These sentences could be improved with a certain intonation contour (see Grohmann (in progress)); Altmann (1981:229) rules these cases out completely. I will return to this issue later (section 6.1).

[11] I accommodate the translation-type used throughout (topicalization vs. HTLD; see sections 2.1 and 2.2) by angled brackets which indicate that one of the two must be pronounced.

Even an equivalent of (16) can be constructed—though even more awkward (indicated by two hash marks) and certainly not as smooth as (apparently) in Italian (cf. fn. 10); it becomes more (yet by no means completely) acceptable with a different order:

(41) a. ## Kleider^{i}, für mich^{j}, Hans^{k}, in dem Geschäft^{l}, die^{i} hat dafür^{j} der^{k} da^{l} gekauft.
b. # Kleider^{i}, Hans^{k}, in dem Geschäft^{l}, für mich^{j}, der^{j} hat da^{l} dafür^{k} die^{i} gekauft.
'#Clothes, John, in that shop, for me, he never bought (*there for me) them.'

Note that I refer to the German constructions as LD, i.e. in the neutral term. I will address the issue whether we have instances of HTLD or CLD in section 3.3 below. Recall that for Cinque, the six characteristic properties recreated here for German should (sufficiently) distinguish one type of construction from the other.

The second characteristic of CLLD clearly is a property of LD in German. Whereas so far an LDed direct object- or subject-DP was coreferent with the RP, the following shows that indeed any XP may be LDed. I gloss the relevant elements in (42d-f) as RP because these forms seem to be demonstrative correlates not (always) available in English as such (see also fnn. 12, 15, section 6.3 and Grohmann (in progress)).

(42) a. [*Dieser Frosch*], *der* hat die Prinzessin verführt.
*this frog-*NOMRP*-*NOM *has theprincess seduced*
'This frog, (he) seduced the princess.'
b. [*Diesem Frosch*], *dem* hat die Prinzessin einen Kuß gegeben.
*this frog-*DAT RP*-*DAT *has theprincess a kiss given*
'This frog, the princess gave (him) a kiss.'
c. [*An diesen Frosch*], *an den* hat diePrinzessin den ganzen
*at this frog-*ACC *at* RP*-*ACC *has theprincess thewhole*
Tag gedacht.
day thought
'<Of> this frog, the princess thought all day <of> (*him).'
d. [*Auf diesen Brunnen*], *da(rauf)* hat diePrinzessin den
*on this well-*ACC RP*-there(on) hat theprincess the*
Frosch zurückgelegt.
frog put-back
'<On> this well, the princess put back the frog <on> (*it).'
e. [*Morgen*], *dann* wird die Prinzessin den Frosch wieder küssen.
tomorrow RP*-then will theprincess thefrog again kiss*
'Tomorrow, the princess will kiss (*then) the frog again.'
f. [*Aus Hoffnung*], *darum* hat sie den Frosch geküßt.
out hope RP*-therefore has she thefrog kissed*
'Out of hope, she kissed the frog (*therefore).'

We can observe that subject, indirect object, prepositional object and adverbial as well as prepositional adjunct are all possible candidates to be LDed; moreover, each of these elements may have a corresponding *d*-pronoun. This shows, among other things, that the RP is not bound to human reference, not even to animate reference. What (34) and (42) also show is that the LDed element and the RP agree in Case-marking (if Case-marking is possible); I will come back to the relevance of this observation below. As we can observe in (42), the nature of the RP needs to be investigated thoroughly, too, as it can be more than a mere demonstrative pronoun.[12] The English translations indicate the split into topicalization (for CLD) and English LD (German HTLD) again.

Thirdly, connectivity is assumed to be obligatory for CLLD in contrast to LD. The following are translations from (18) above and we can see that LD in German also shows connectivity effects (cf. sections 3.3 and 4 for discussion):

(43) a. [*Über* sie/*sich], *da(rüber)* sagt Maria, daß wir niemals denken sollen.
'<Of> her, Mary says that we should never think <of> (*her).'
b. [*Über* *sie/sich], *da(rüber)* denkt Maria nicht.
'<Of> herself, Mary never thinks <of> (*herself).'

Fourthly, clitics are obviously not employed in either construction and it remains to be seen how relevant this distinguishing property is for German (see section 3.3).

Regarding the fifth property, (im)possibility of embedding, it has become quite clear in the data so far that one of the requirements on German LD seems to be that the V2-constraint must be satisfied in a special sense. The standard case of LD in German requires that the part of the clause following the LDed element(s)—the "associate(d) clause" (per Duarte (1987), Raposo (1996))—, which is introduced by either the RP or the subject, must conform to a well-formed V2-structure:[13]

(44) a. [*Diesen Frosch*], *den* hat die Prinzessin gestern geküßt.
b. [*Diesen Frosch*], die Prinzessin hat *den* gestern geküßt.
c. * [*Diesen Frosch*] hat *den* die Prinzessin gestern geküßt.
d. * [*Diesen Frosch*] hat die Prinzessin *den* gestern geküßt.
'This frog, the princess kissed (him) yesterday.'

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[12] It is not my attention to investigate the morphological nature of the *d*-pronoun in this paper. It suffices to say that at least all arguments may be resumed by a morphologically determined pronominal form.

[13] I call this the V2-constraint. One might, however, turn it around and argue that LD in German is an (exceptional) case of V3. This has virtually no bearing on my analysis as I will not at all be concerned with the derivation of V2 nor with head movement in general. As I am mainly concerned with high occurrences of the RP, all that is crucial here is that (i) the LDed element is part of the clause and (ii) the RP is in a clear topic position, exactly because it precedes the finite verb (see (34)-(36) and especially section 5). In Grohmann (1998, 1999b, forthcoming a) I note exceptional cases that deal with (multiple) Wh-interaction.

LD is possible in certain embedded contexts in German but restricted in that it must occur in the context of embedded V2, related to so-called "bridge-verbs" (e.g., Müller & Sternefeld (1993)).[14] I will return to the relevance of the parenthesized b-examples.

(45) a. [*Diesen Frosch*], *den* glaubt der Bauer, hat sie geküßt.
this frog-ACC RP-ACC believes the farmer has she kissed
'The farmer believes this frog, she kissed (*him).'
b. [*Diesen Frosch*], *(den)* glaubt der Bauer, *(den)* hat sie geküßt.

(46) a. [*Diesen Frosch*], *den* weiß der Bauer, mag der König nicht.
this frog-ACC RP-ACC knows thefarmer likes theking not
'This frog the farmer knows, the king doesn't like (*him).'
b. [*Diesen Frosch*, *(den)* weiß der Bauer, *(den)* mag der König nicht.

(47) shows the ungrammaticality of LD in embedded verb-final contexts (cf. (43)).

(47) a. * Der Bauer glaubt, daß [*diesen Frosch*], *den* sie geküßt hat.
the farmer believes that this frog-ACC RP-ACC she kissed has
'The farmer believes that this frog, she kissed (*him) yesterday.'
b. [*Diesen Frosch*], *den* glaubt der Bauer, daß sie gestern geküßt hat.

On the other hand, (48) shows (some of) the restricted possibilities. The LDed element may be extracted out of an *ob*-clause but only if the RP remains within the *ob*-clause. Topicalization is presumably ill-formed in these cases (as in (48e)).

(48) a. [*Diesen Frosch*] fragt sich der Bauer, ob *den* der König mag.
this frog-ACC asks himself the farmer if RP-ACC the king likes
'This frog the farmer wonders, whether the king likes (*him).'
b. [*Diesen Frosch*] fragt sich der Bauer, ob der König *den* mag.
c. [*Diesen Frosch*], *den* fragt sich der Bauer, ob der König mag.
d. * [*Diesen Frosch*] fragt sich der Bauer, *den* ob der König mag.
e. (?) [*Diesen Frosch*] fragt sich der Bauer, ob der König mag.

Likewise, some dialects allow extraction out of a *daß*-clause (e.g., Grewendorf (1993:1302)). Similar to these case, the LDed element must precede the complementizer element, *daß*; overall, these data show restricted embedding of LD, as for Cinque (1990).

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[14] There are some doubts on the status of the *believe*-type part: Reis (1996) argues that it is a parenthetical expression. I cannot discuss this complex issue here (cf. Grohmann (1999b) and fn. 13), but for the sake of the argument let us adopt the traditional assumption that in cases such as (45) we do indeed have embedding under a bridge verb (e.g., von Stechow & Sternefeld (1988), Müller & Sternefeld (1993)).

(49) a. Der Bauer glaubt, [*diesen Frosch*], daß sie *den* gestern geküßt hat.
b. Der Bauer glaubt, [*diesen Frosch*], daß *den* sie gestern geküßt hat.
c. Der Bauer glaubt, daß [*diesen Frosch*], *(daß) sie *den* gestern geküßt hat.
'The farmer believes that this frog, she kissed (*him) yesterday.'

Cinque's last point in his dichotomy is the different behaviour of CLLD and LD with respect to islands. We have seen that CLLD is sensitive to islands, while LD is not. German LD allows violation of a Wh-island, but crucially only if the RP is low. (Topicalization is sensitive to Wh-islands, at least in English, as indicated by the translations for the construction with a high RP; the angled brackets indicate one of two possible high positions, one of which should be filled in LD but neither is good.)

(50) a. [*Diesem Frosch*], was hat die Prinzessin *dem* gegeben?
this frog-DAT what has the princess RP-DAT given
'This frog, what did the princess give to (*him)?'
b. [*Diesen Frosch*], wer glaubt der Bauer hat *den* geküßt?
this frog-ACC who believes the farmer has RP-ACC kissed
'This frog, who does the farmer believe kissed (*him)?'

(51) a. * [*Diesem Frosch*], <*dem*> was <*dem*> hat die Prinzessin gegeben?
'*This frog, what did the princess give to?'
b. * [*Diesen Frosch*], <*den*> wer <*den*> glaubt der Bauer hat geküßt?
'*This frog, who does the farmer believe kissed?'

Finally, strong islands pattern alike:

(52) a. * [*Den schönen Mann*] *den* haßt Martin **die Tatsache**
the handsome man-ACC RP-ACC hates Martin the fact
daß die kluge Frau geküßt hat.
that the smart woman kissed hat
'*The handsome man, Martin hates the fact that the smart woman kissed.'
b. [*Der schöne Mann*] Martin haßt **die Tatsache** daß *den*
the handsome man-NOM Martin hates the fact that RP-ACC
die kluge Frau geküßt hat.
the smart woman kissed hat
'The handsome man, Martin hates the fact that the smart woman kissed him.'
c. [*Der schöne Mann*] Martin haßt **die Tatsache** daß die
the handsome man-NOM Martin hates the fact that the
kluge Frau *ihn* geküßt hat.
smart woman him kissed hat
'The pretty man, Martin hates the fact that the smart woman kissed him.'

3.3 CLD vs. HTLD

So far, we have seen classical approaches to LD and the line of distinction drawn by Cinque (1990) to classify two types. I will argue that one type of German LD, CLD, is derived by movement, while the other, HTLD, is not. The idea is to correlate the movement type with the movement variety of Arabic CLLD (and by extension, possibly Romance CLLD) and the base-generation type with the non-movement variety of Arabic CLLD (and Romance (non-CL)LD).

Cinque's properties (Table 1) allows a two-way distinction into types of LD. A&B show that one of these two types, CLLD, comes in two varieties in Arabic dialect(s). German shows that the other type, non-CLLD, comes also in two varieties, namely CLD and HTLD. Following the preceding discussion, I take the possibility of movement being involved in one construction as a given and will show in the next section, how A&B's diagnostics can be used to determine that German CLD, but not HTLD, can and, according to economy principles, must result from movement of the LDed element.

Given that English LD (HTLD) patterns unanimously with Cinque's diagnostics for LD (as can be witnessed in the translations) and given that it does not involve movement, we have good reasons to believe that CLLD differs in its derivation from HTLD. Given further that one type of (Arabic) CLLD must involve movement and that German has both HTLD and CLD, it would be nice if we could show that CLD patterns with movement-driven CLLD and German HTLD patterns with the non-movement type and other instances of HTLD (English, Romance; also epithets, see section 6.3). But first we have to show which construction qualifies as CLD and which as HTLD.

We have so far seen two dimensions where German LD-constructions differ: Case-marking of the LDed element and position of the *d*(emonstrative)- or *p*(ersonal)-RP.

(53) a. [*Diesen Frosch*], *den* hat die Prinzessin gestern geküßt. [ACC-ACC; CLD]
b. [*Dieser Frosch*], *den* hat die Prinzessin gestern geküßt. [NOM-ACC; HTLD]

(54) a. [*Diese-r/-n Frosch*], die Prinzessin hat *den* geküßt. [low *d*-RP; HTLD]
b. [*Diese-r/-n Frosch*], die Prinzessin hat *ihn* geküßt. [low *p*-RP; HTLD]

A first stab at distinguishing the two would thus be Case-agreement. In this case, we would expect that one type differs from the other in a number of properties. The most crucial ones will be presented in section 4, where, following A&B, a number of tests will show that Case-agreeing LD-constructions only show diagnostics of movement. But this leaves the question open regarding (54): are both constructions of the same type, or do they belong to CLD and HTLD, respectively? In Grohmann (1997) I argued that Case-agreement solely was the distinguishing characteristic. Below I will rectify this position, however. While there are cases where the low RP does not go well with Case-marked LDed element, it is considerably worse to replace the *d*-pronoun with a *p*-pronoun.

I will thus argue that German CLD has two main properties. The first property of is obligatory Case-agreement between LDed element and the RP; the second one is the obligatory high occurrence of the RP, (53a). This means that all instances of nominative-marked LDed elements, such as (53b) and (54), low occurrences of RPs (as in (54)) and the occurrence of a personal pronoun as resumption, (54b), do not mark CLD, but rather HTLD; the crucial tests will be presented in section 4.

Given that this dichotomy is on the right track, it would be worthwhile to see its consequences for Cinque's properties from Table 1. In section 3.2 we have seen that German LD (in its neutral form) patterns with CLLD. The predictions are clear: if CLD as defined here consistently patterns with CLLD in Romance and Arabic, we would have a clear argument in favour of one over the other; if, on the other hand, some of the properties could be ascribed to CLD, others to HTLD, the line of distinction would be not so clear anymore. Moreover, if both constructions overlapped in their properties, we would have to seriously think over our line of argument.

Let us reconsider multiple occurrences of LD. Obviously, there is only one possible construction for CLD, namely where all RPs are high (in topic position, preceding the subject), and where the first RP satisfies the V2-constraint:

(55) a. * Einen Kuß$_i$, dem Frosch$_j$, gestern$_k$, den$_i$ dem$_j$ da$_k$ hat die Prinzessin gegeben.
b. # Einen Kuß$_i$, dem Frosch$_j$, gestern$_k$, den$_i$ hat dem$_j$ da$_k$ die Prinzessin gegeben.
'#A kiss, to the frog, yesterday, the princess gave (*it).'

As the hash mark in (55b) indicates, this construction is not very good at all, but it is not as obviously ungrammatical as (55a), and while stylistically (extremely) awkward, it holds other tests as well such as intonation (see also fn. 16, Grohmann (in progress)).

(55) fares much better, however, than its non-Case-marked HTLD-equivalent:

(56) a. * Ein Kuß$_i$, der Frosch$_j$, gestern$_k$, den$_i$ hat dem$_j$ da$_k$ die Prinzessin gegeben.
b. * Ein Kuß$_i$, der Frosch$_j$, gestern$_k$, die Prinzessin hat ihn$_i$ ihm$_j$ dort$_k$ gegeben.

Moreover, the construction is out if the RP occurs low in either form:[15]

(57) a. * Einen Kuß$_i$, dem Frosch$_j$, gestern$_k$, die Prinzessin hat den$_i$ dem$_j$ da$_k$ gegeben.
b. * Einen Kuß$_i$, dem Frosch$_j$, gestern$_k$, die Prinzessin hat ihn$_i$ ihm$_j$ dann$_k$ gegeben.

I will not discuss cases of multiple fronting any further. Admittedly, they do not sound very good which may, however, have other reasons, Case-marking as an 'address-pointer' of an element within the clause structure, for example, which is absent in Italian.

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[15] It is not clear to me whether *dann* really is the fully pronominal counterpart of *gestern*; it might not be. But for the sake of accuracy, there is no doubt that *auf dem Brunnen* kann be resumed by *da* or by *dort*.

One last example, though, shows an interesting direction for directly comparing CLD and HTLD (where only the relevant glosses are given):

(58) a. [*Der Frosch*]$_i$, [*einen Kuß*]$_k$, *den*$_k$ hat die Prinzessin *ihm*$_i$/*dem*$_i$ gegeben.
NOM *ACC* *RP-ACC* *him/RP-DAT*
'The frog, a kiss, (*it) the princess gave him (*it).'

b. * [*Dem Frosch*]$_i$, [*ein Kuß*]$_k$, *dem*$_i$ hat die Prinzessin *ihn*$_k$/*den*$_k$ gegeben.
DAT *NOM* *RP-DAT* *it/RP-DAT*
'*The frog, a kiss, (*him) the princess gave it to (*him).'

To the extend that two elements may be LDed, the HTLDed element must precede the CLDed one (which can be further witnessed in the English translation where I present CLD in the form of topicalization). This suggests that if we can make the case that the CLDed-XP is moved (or the topic, in English), the HTLDed element is base-generated and occupies the leftmost position in a clause (see also (37)-(40)).

Concerning the second characteristic, non-DPs can obviously not be Case-marked, hence we cannot test for the first property of CLD. But we can test with low vs. high occurrence of the resumptive, and its form (as *da* vs. *dann* resuming *gestern* in (57b)).

(59) a. [*Auf dem Brunnen*], *da* hat die Prinzessin den Frosch geküßt.
b. * [*Auf dem Brunnen*], *dort* hat die Prinzessin den Frosch geküßt.
'<On> the well, the princess kissed the frog <on> (*there).'

(60) a. * [*Auf dem Brunnen*], die Prinzessin hat *da* den Frosch geküßt.
b. * [*Auf dem Brunnen*], die Prinzessin hat *dort* den Frosch geküßt.
'*On the well, the princess kissed the frog there.'

These data suggest that on the one hand any XP may be LDed, on the other it may only be resumed by a *d*-, not a *p*-pronoun, and it must be in high position. In other words, LD of non-DPs shows the characteristics of CLD, not HTLD.[16]

For connectivity, we can apply the same tests. Further instances of connectivity will be discussed in the next section (binding relations, weak crossover, reconstruction and idiomatic expressions), but even a preliminary set of cases lets us distinguish CLD from HTLD, like (43) from above, repeated as (61):

[16] In Grohmann (in progress) I also deal with the role that prosodic patterns and intonation contour play which cannot be included here for space reasons: CLD typically does not show a break in between the CLDed element and the (high) *d*-pronoun. HTLD, on the other hand, forces a clear break in these cases (one further piece of evidence to distinguish CLD from HTLD even if the RP is high in both), and forces a break between the HT and the associate clause in cases of low occurrence of *d*- or *p*-pronoun. Moreover, only in HTLD is prominent stress on the RP obligatory, whether *d*- or *p*-pronoun and whether high or low.

(61) a. [*Über* sie/*sich], *da(rüber)* sagt Maria, daß wir niemals denken sollen.
'<Of> her, Mary says that we should never think <of> (*her).'
b. [*Über* *sie/sich], *da(rüber)* denkt Maria nicht.
'<Of> herself, Mary never thinks <of> (*herself).'

(62) a. * [*Über* sie], Maria sagt, daß wir *da(rüber)* niemals denken sollen.
'Of her, Mary says that we should never think about it.'
b. * [*Über* sich], Maria denkt *da(rüber)* nicht.
'Of herself, Mary never thinks about it.'

After having established previously which pronominal element must be inside the LDed constituent in which case, (62) shows that the RP must be in the for CLD typical high position, otherwise the reading where all underlined material is coreferent is not possible. (Technically, (62a) is not ungrammatical, but the LDed element refers to someone else but Maria; (62b) is of course ungrammatical under any reading.)

Regarding the fourth point, neither CLD nor HTLD involve clitics. However, the point can be made that the construction in question employs a particular resumptive element, whether the least marked or an otherwise established default element. Under this view, it just happens to be clitics in one case (Italian) and demonstrative pronoun in the other (German). A line of reasoning to distinguish CLD from HTLD in this respect would be to reformulate the condition in that one type allows only one particular element, in a particular position (verb-related clitic and topic-related *d*-pronoun, respectively), while the other allows more (such *d*- or *p*-pronoun in high or low position, epithets etc.).

The fifth point regards embedding. Given that bridge verbs allow full embedding (cf. fn. 14 on the parenthetical-alternative), it remains to be seen whether CLD and HTLD pattern differently. Indeed, they do, as (63) shows. Embedding is restricted (in "bridge verb"-context), and extraction is only possible with CLD, not with HTLD as can be witnessed by the ungrammaticality of a low RP (see also (49) above and section 6.1).[17]

(63) a. [*Diesen Frosch*], *den/*ihn* weiß der Bauer hat die Prinzessin geküßt.
b. [*Diesen Frosch*] weiß der Bauer, *den/*ihn* hat die Prinzessin geküßt.
c. * [*Diesen Frosch*] weiß der Bauer, die Prinzessin hat *den/ihn* geküßt.
'This frog, the farmer knows the princess kissed (*him).'

Lastly, concerning islands, we have seen above already that to the extent that a dependency between LDed element and RP may cross an island, it can only do so if the RP is in a low position, i.e. in the case of HTLD.

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[17] This reveals that while in discrepancy with the literal interpretation of this property, there is symmetry: Italian CLLD may be embedded across the board, (HT)LD only in a limited number of cases; German CLD may be embedded in only a limited number of cases, HTLD, crucially though, not at all.

4 Arguments in Favour of a Movement Approach

I have at various points anticipated this section by classifying one construction as CLD and another as HTLD with respect to German. In section 3.3 I showed *that* these two constructions are different, in this section I will show *how* they are different and in section 5 I will suggest an analysis for *why* they are different. A&B propose a movement analysis for certain CLLD-constructions in dialectal Arabic. Those constructions which should involve movement differ from the base-generated ones in a number of aspects, predominantly with respect to reconstruction and coreference.

The relevant German LD-constructions show similar behaviour. Thus we can distinguish unambiguously the syntax of LD-construction where we find Case-agreement and a high RP (CLD) from those lacking Case-agreement and allowing a low RP (*d*- or *p*-pronoun, as in HTLD). On the basis of their behaviour regarding reconstruction, weak crossover, coreference and idiomatic expressions we have thus an arsenal of movement-diagnostics for CLD and the absence thereof for HTLD which will motivate the analysis of CLD in section 5.

4.1 Weak Crossover

Wasow (1972) distinguishes two types of "cross-over" (cf. Postal (1971)): weak cross-over (WCO), where two co-indexed elements are moved over another (the first a pronoun, the second a quantified or R-expression) and strong crossover, where a c-command relation holds between the two (not relevant here). Thus in a typical WCO configuration, the pronominal element is inside a more complex expression:

(64) a. * His mother loves every boy.
b. * [Which boy]$_i$ does his mother love t_i?

Crucially, WCO configurations are ruled out in base positions (as in (64a)), hence if a surface representation is derived by moving the quantified expression over the expression that contains the pronominal element to be bound, the moved quantifier cannot reconstruct (cf. (64b)). In German, quantifiers must move past a higher expression containing a pronoun in order to bind that pronoun, but this cannot be an instance of operator movement (see Frank et al. (1996) for detailed data and discussion). Likewise, if the pronoun-containing element precedes the originally higher quantifier, it must "reconstruct," which I take to mean loosely that (i) its surface position is derived by movement from a lower position, lower than the quantifier, and (ii) there are means to interpret the lower copy (such as the minimalist copy theory at LF of Chomsky (1995), elaborated by Hornstein (1995, to appear) and Nunes (1995), among many others).

The first of these cases is shown in (65); an instance of the latter in (66):

(65) a. Mädchen verstehen nicht, daß [jeden Jungen]$_i$ sein Vater t_i mag.
b. # ... [$_{VP}$ sein Vater mag jeden Jungen]
'*Girls don't understand that every boy, his father likes.'

(66) a. [Seinen Vater]$_i$ mag jeder t_i.
b. [$_{VP}$ jeder mag seinen Vater]
'His father, everyone likes.'

In order to not violate WCO, any structure such as (66a) must be derived by movement. With respect to LD, the prediction is that if we can construct a configuration where the LDed element contains a pronominal element which gets bound by a lower quantificational expression, it must reconstruct to be bound which, in turn, means that the LDed element must have moved to the peripheral position.[18]

Sticking in a *d*-pronoun yields the following results for (66):[19]

(67) a. [*Seinen Vater*], *den* mag jeder.
his father-ACC RP-ACC likes everyone
'His father, everyone likes.'
b. * [*Sein Vater*], *den* mag jeder.
his father-NOM RP-ACC likes everyone
'*His father, everyone likes him.'
c. * [*Sein(en) Vater*], jeder mag *den*.
his father-NOM(ACC) everyone likes RP-ACC
'*His father, everyone likes him.'

Given that the LDed element must reconstruct in order to escape a WCO-effect, we have now a first piece of evidence that Case-agreement between LDed element and RP does indeed play a role.[20] (68) shows that the position and nature of the RP are also relevant:

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[18] (66) is a clear instance of "topicalization," to use the traditional term for non-subject-initial matrix clauses in German; the status of (65) is not so clear, though I will return to this briefly below. Frank et al. (1996) only discuss embedded clauses, presumably so as to not to bias the reader with respect to the nature of movement. Their paper dealt with the question whether scrambling is A- or A'-movement, a question that I do not address here (but see Grohmann (in progress)). To the extent, however, that topicalization and LD are information-structurally related (though not identical; cf. Birner & Ward (1998)), these data show immediately that topicalization at least, established to be derived by movement, allows reconstruction.

[19] See Grohmann (in progress) on quantifier-interaction and section 5.3 for a discussion of (65) in LD.

[20] Note that not all of the starred examples are ungrammatical; some of those used here and in the following are perfectly well-formed, yet lack the reading of a bound pronoun (adopted in the translations). As a deictic pronoun does not tell us anything about the derivation, I will disregard these cases. Stars indicate impossibility of binding, hence no role of WCO and consequently no import to the current issue.

(68) a. * [*Sein(en)* *Vater*], jeder mag *den*.
NOM(ACC) *father* *everyone* *likes* *RP-ACC*
b. * [*Sein(en)* *Vater*], jeder mag *ihn*.
NOM(ACC) *father* *everyone* *likes* *him*

We can also show absence of WCO-effects in CLD in more complex structures which, as Chris Wilder (p.c.) notices, show further that the expected additional pronoun in WCO-constellations does not improve the reading (cf. Hornstein (1995).

(69) a. [*Seinen* *Vater*], *den* glaubt jeder, kann er nachahmen.
his *father-ACC* *RP-ACC* *believes* *everyon e* *can* *he emulate*
b. * [*Sein* *Vater*], *den* glaubt jeder, kann er nachahmen.
c. * [*Sein(en)* *Vater*], jeder glaubt, er kann *den* nachahmen.
d. * [*Sein(en)* *Vater*], jeder glaubt, er kann *ihn* nachahmen.
'His father, everyone believes he can emulate (*him).'

In (69a), the LDed element and its Case-agreeing demonstrative resumptive in high position are extracted out of a lower clause and the pronoun inside the LDed element is bound by both, the quantificational subject of the matrix clause and the pronominal subject of the embedded clause, which, in turn, is coreferent with the matrix subject. (69b) shows that this is not possible with non-agreement in Case, (69c) shows the same for a low *d*-pronoun and (69d) for a (low) *p*-pronoun.[21]

A possible reading of (69a) is (70a); (69b-d), in their unbound reading, would receive an interpretation like (70b):

(70) a. For x's father, x = everyone, x believes x can emulate x's father
a'. A believes A can emulate A's father, B believes B can emulate B's father…
b. For z's father, z = deictic, x believes, x = everyone, x can emulate z's father
b'. A believes A can emulate Z's father, B believes B can emulate Z's father…

The previous data have shown that only CLD should derive from movement of the CLDed element for reasons of reconstruction in order to escape the WCO-configuration.

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[21] There is a variant to the grammatical (69a), namely the case where the RP is in the topic position of the lower clause. Henk van Riemsdijk (p.c.) points out, though, that in this case the intonational break after the LDed element is obligatory. Given that the parenthetical status is not completely cleared up yet either (cf. fn. 14), I leave an exact analysis of this type of construction open at this point (but see section 6.1). To the extent that a bound reading is accessible in (ia), it fails once Case-agreement disappears.

(i) a. ? [*Seinen* *Vater*], jeder glaubt, *den* kann er nachahmen.
b. * [*Sein* *Vater*], jeder glaubt, *den* kann er nachahmen.
'His father, everyone believes he can emulate (*him).'

All the data above, however, involve LDed DPs where we can assign Case. Given that CLD as understood here may also involve non-DPs, it needs to be tested how these fare with respect to WCO. The following examples show that even non-DPs, arguments and (appropriate) adjuncts alike, may be CLDed but not HTLDed, i.e. they all show the same lack or absence of WCO-effects as we have seen above.

An indirect PP-object may be LDed, and we can even add another binding of a pronominal element contained in a more complex DP. Only the construction with high RP (CLD) is perfectly well-formed under the desired binding and coreference relations:[22]

(71) a. [*Für* <u>*seine*</u> *Freundin*], *für die* gibt <u>jeder</u> <u>sein</u> Letztes her.
for his girlfriend for RP gives everyone his last PRT
b. * [*Für* <u>*seine*</u> *Freundin*], <u>jeder</u> gibt *für die* <u>sein</u> Letztes her.
for his girlfriend everyone gives for RP his last PRT
'His girlfriend, everyone goes to [his] extremes for (*her).'

The reading of (71a) is something like 'for y, where y is x's girlfriend and x everyone, x goes to [x's] extremes for y', while the only reading possible for (71b) is 'for y, where y is z's girlfriend, x, where x is everyone, goes to [x's] extremes for y'.

Another case is that of locative adjuncts (or other semi-arguments).

(72) a. [*In* <u>*seinem*</u> *Bett*], *da* schläft <u>jeder</u> am besten.
in his bed RP sleeps everyoneat-the best
b. * [*In* <u>*seinem*</u> *Bett*], <u>jeder</u> schläft *da/darin* am besten.
in his bed everyon e sleeps RP/therein at-the best
'<In> his bed, everyone sleeps best <in> (*there).'

The interpretation of (72) should by now be trivial. The reader may also be curious whether these data may be embedded and will be pleased to see that they may indeed be:

(73) a. [*Für* <u>*seine*</u> *Freundin*], *für die* sagt <u>jeder</u>, daß <u>er</u> <u>sein</u> Letztes hergibt.
b. * [*Für* <u>*seine*</u> *Freundin*], <u>jeder</u> sagt, daß <u>er</u> *für die* <u>sein</u> Letztes hergibt.
'His girlfriend, everyone says that he goes to [his] extremes for (*her).'

(74) a. [*In* <u>*seinem*</u> *Bett*], *da* sagt <u>jeder</u>, daß <u>er</u> am besten schläft.
b. * [*In* <u>*seinem*</u> *Bett*], <u>jeder</u> sagt, daß <u>er</u> *da* am besten schläft.
'<In> his bed, everyone says that he sleeps best <in> (*there).'

I will present further data supporting the results in section 6.1.

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[22] Note that the resumption of PPs is not (always) a simple *d*-pronoun, but it repeats the preposition. I will come back to this in the analysis in section 5.

4.2 Principle A

Another example of a displaced element that must reconstruct in order to be interpreted properly (namely, be bound) is the reflexive *sich* 'self'. In order to not violate Principle A of the Binding Theory (following Chomsky (1981, 1986, also 1995)), anaphors must be bound in a local domain. Hence we would expect that an LDed-XP containing an anaphoric reflexive must be derived by movement and allow for reconstruction.

The following examples are of this kind. Employing an LDed DP with the reflexive inside, we can see the difference that Case-agreement makes, both for simple clauses and for extraction out of an embedded clause of the type familiar by now:[23]

(75) a. [*Den Wagen von sich*], *den* hat er verkauft.
the car-ACC of self RP-ACC has he sold
'The car of himself, he sold.'

b. * [*Der Wagen von sich*], *den* hat er verkauft.
the car-NOM of self RP-ACC has he sold
'*The car of himself, he sold it.'

(76) a. [*Den Wagen von sich*], *den* sagte Martin, hat er verkauft.
the car-ACC of self RP-ACC said Martin has he sold
'The car of himself, John said he sold.'

b. * [*Der Wagen von sich*], *den* sagte Martin, hat er verkauft.
the car-NOM of self RP-ACC said Martin has he sold
'*The car of himself, John said he sold it.'

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[23] Evidence from Dutch shows similar effects with respect to the Dutch equivalent of *each other*, which German does not have, as shown by van Haaften et al. (1983:139) who also assign the bracketed LD-type status in (i). As Chris Wilder (p.c.) points out to me these examples do also not employ *von sich* in non-complement environments which might be problematic in German to start with, a fact that I cannot discuss here further. An instance from German where we actually have a reflexive inside a nominative comes from copular constructions; while (iib) is presumably the preferred way, (ia) is by no means ungrammatical.

(i) a. [*Elkaars jassen*], *die* dragen ze niet graag. (CLD)
each-other's coats RP wear they not willingly

b. * [*Elkaars jassen*], *ze* dragen ze niet graag (HTLD)
each-other's coats them wear they not willingly
'Each other's coats, they don't like to wear (*them).'

(ii) a. ? Der Martin ist der beste Lehrer von sich (?selbst).
the Martin is the best teacher of self self

b. Der Martin ist (sich selbst) sein bester Lehrer.
the Martin is self self his best teacher
'Martin is the best teacher for himself.'

These two examples shall suffice to make the point: after reconstruction to escape a WCO-violation, we have now seen that reconstruction may also take place to bind a reflexive. CLD, as I define it here, allows all intended binding configurations and hence shows reconstruction effects which can only stem from it being moved; HTLD, on the other hand, fails all tests so that there is no reason to assume a movement analysis.

4.3 Principle C

Coreference possibilities shall be our last piece of evidence, in line with A&B's findings. When LDed element and RP agree in Case, coreference of the R-expression inside and subject pronoun is impossible, but when there is no Case-agreement, coreference is fine.

(77) a. * [*Der Freundin, die Martin geholfen hat*], *der* gab er einen Kuß.
the friend-DAT who Martin helped has RP-DAT gave he a kiss
'*The friend who helped Martin, he gave a kiss.'

b. [*Die Freundin, die Martin geholfen hat*], *der* gab er einen Kuß.
the friend-NOM who Martin helped has RP-DAT gave he a kiss
'The friend who helped Martin, he gave her a kiss.'

Given that CLD involves movement, there would be a Principle C violation if the CLDed element could reconstruct in (77a). The R-expression in the base-generated HT may freely be coreferent with the lower pronoun as it would never be in its domain.

The same can be witnessed in the cases of long-distance LD for Case-agreement or absence thereof as well as high and low RPs.

(78) a. * [*Der Freundin, die Martin geholfen hat*], *der* sagte sein Freund,
the friend-DAT who Martin helped has RP-DAT said his friend
gab er einen Kuß.
gave he a kiss
'*The friend who helped Martin, his friend said he gave a kiss.'

b. [*Die Freundin, die Martin geholfen hat*], *der* sagte sein Freund,
the friend-NOM who Martin helped has RP-DAT said his friend
gab er einen Kuß.
gave he a kiss
'The friend who helped Martin, his friend said he gave her a kiss.'

c. [*Die Freundin, die Martin geholfen hat*], sein Freund sagte, er
the friend-NOM who Martin helped has his friend said he
gab *ihr* einen Kuß.
gave her a kiss
'The friend who helped Martin, his friend said he gave her a kiss.'

Replacing the masculine pronoun with the feminine form creates a second binding relation (dotted underlining). The only (relevant) binding relations possible are:

(79) a. [*Der Freundin, die Martin geholfen hat*], *der* sagte ihr Vater,
the friend-DAT who Martin helped has RP-DAT said her father
gab er einen Kuß.
gave he a kiss
'The friend who helped Martin, her father said he gave a kiss.'

b. [*Die Freundin, die Martin geholfen hat*], *der* sagte ihr Vater,
the friend-NOM who Martin helped has RP-DAT said her father
gab er einen Kuß.
gave he a kiss
'The friend who helped Martin, her father said he gave her a kiss.'

c. [*Die Freundin, die Martin geholfen hat*], ihr Vater sagte, er
the friend-NOM who Martin helped has her father said he
gab *ihr* einen Kuß.
gave her a kiss
'The friend who helped Martin, her father said he gave her a kiss.'

All binding relations are as expected. In (79a), thus, the father must be of someone else but the friend who helped Martin, given that the LDed constituent is moved (CLD). This is indeed the case. In both (79b) and (79c), the father can be of the friend who helped Martin. In all cases, only the father is a possible (bound) kisser, not Martin.

In this section I have shown the other side of movement, namely that it may not violate Principle C. The predictions are clear and the data, if one can find his way through them, confirm them. All in all, we have seen quite an amount of data that suggests not only that CLD and HTLD are really two (formally/syntactically) different phenomena, but also that one is derived by movement, the other one not.

While the last case does not force movement of one type of LD over the other, it suggests that the two types identified as CLD and HTLD are inherently (really) different.

(80) a. [*Seinem Vater*], *dem* hat sein Freund aufs Maul gehauen.
his father-DAT RP-DAT has his friend on-the mouth hit
'His father, his friend hit in the face.'

b. * [*Sein Vater*], *dem* hat sein Freund aufs Maul gehauen.
his father-NOM RP-DAT has his friend on-the mouth hit
'*His father, his friend hit him in the face.'

c. * [*Sein Vater*], sein Freund hat *ihm* aufs Maul gehauen.
his father-NOM his friend has him on-the mouth hit
'*His father, his friend hit him in the face.'

In (80a), the two possessive pronouns may refer to the same person, that is a possible interpretation obtained is 'Peter's friend hit the same Peter's father in the face'. This reading is unavailable to (80b) and (80c); here, the sentence can only be interpreted as 'Peter's father's friend hit the same Peter's father in the face'. (Of course, this reading is also available to (80a) and there is a third, more natural, reading common to all three cases where the pronouns refer to two different people.)

These examples show that the two constructions must be different—why else would they differ in their interpretation in such a way? The interpretation follows, of course, if we assume movement of the LDed constituent in the first but not the second and third case: being base-generated higher than the DP containing the second possessive pronoun, the entire LDed DP may be coreferent with the lower pronoun. If we assume movement of the LDed constituent in the first case, however, we can also account for the possible coreference of the two pronominals, given that TP constitutes a binding domain.[24]

4.4 Idioms

Cinque (1990) also cites data from Italian where reconstruction may take place in CLLD-constructions, yet argues in favour of a base-generation analysis (cf. (18)). In view of this, one might refrain from using solely data as given above to argue in favour of a movement analysis of CLD in German. However, as these involve WCO, Principle A and Principle C effects, this may not be such an easy task.[25] In any case, one interesting set of data in addition to the above involves the behaviour of idioms.

Although idioms are notorious for not undergoing displacement easily, hence the assumption that they are base-generated in chunks (e.g., Marantz (1984)), it may be topicalized out of idiomatic expressions. This can be shown with one example:

(81) a. Er hat dem Professor bei jeder Gelegenheit die Zähne gezeigt.
he has the professor at every opportunity the teeth shown
'He showed the professor his teeth at every opportunity.'
b. [Dem Professor]$_i$ hat er t_i bei jeder Gelegenheit die Zähne gezeigt.
c. [Bei jeder Gelegenheit]$_i$ hat er dem Professor t_i die Zähne gezeigt.
d. [Die Zähne]$_i$ hat er dem Professor bei jeder Gelegenheit t_i gezeigt.

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[24] I cannot treat binding and domains from a minimalist perspective in any detail. There are many side issues which have to remain open. I believe, though, that the present part is coherent.

[25] For obvious reasons, Principle B does not tell us much: bare pronouns make extremely bad targets for LD, and are fully ungrammatical as HTs, as can be witnessed in the following English example:

(i) a. ?? [*Him*], I like *him*.
b. * [*He*], I like *him*.

What we are interested in, of course, is the last case. Given that such chunks can only have moved when they are displaced—as opposed to being base-generated there—, we would expect that if an idiom chunk can undergo LD, it better does so by movement.

Now, as it turns out, these may indeed be LDed, and we now have good reasons to assume something like the base position of the LDed element, indicated as 't(race)':[26]

(82) a. [*Die Zähne*], *die* hat er dem Professor bei jeder Gelegenheit *t* gezeigt.
b. * [*Die Zähne*], er hat *die/sie* dem Professor bei jeder Gelegenheit *t* gezeigt.
'His teeth, he showed (*them) the professor at every opportunity.'

These examples show that LD is grammatical for (some) German idioms with a high RP, but not with a low one or the *p*-pronoun.[27] This is, of course, the first test that suggests that even with idioms, CLD and HTLD differ, and that they differ according to our predictions. But with respect to the other property that distinguishes the two types, we also have evidence. While a plural noun does not show much, an idiomatic expression containing a clearly Case-marked DP would do. (83) is one such case, as (84) shows:

(83) Der Martin hat der Maria den Kopf verdreht.
the Martin has the Maria the head twisted
'Martin turned Maria's head.'

(84) [Den Kopf]$_i$ hat der Martin der Maria t_i verdreht.

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[26] Grewendorf (1993:1293-1294) cites Haider (1990) who apparently shows that a number of elements cannot be LDed in German, among them idioms. Haider does not actually give any data on this, and Grewendorf only illustrates with one example which does not sound too bad to me or other native speakers I consulted. Van Riemsdijk & Zwarts (1997:18-19) provide data from Dutch but note that we do not yet know enough about the syntax of idioms; hence a difficulty arises for their (un)grammaticality in certain contexts. The data from German above gain further support from a more acceptable CLD of an idiom chunk as opposed to a HTLD (adopted from Vat (1997:80)) as well as the note that some types of idioms can be LDed in Dutch (also Vat (1997:72)); I will not discuss Dutch resumptives (see Hoekstra (1998)):

(i) [*?Den größten/*Der größte Aufschwung*], *den* haben die japanischen Kleinwagen genommen.
'?The biggest increase in popularity, the Japanese small cars achieved (*it).'

(ii) [*Mijn hand*], *die* hebik gebrand.
myhand RP/that have I burned
'My hand, I burned it.'

Moreover, Anagnostopoulou (1997:155) shows the possibility of CLD-constructions of idioms as opposed to HTLD in Greek and Richards (1997:79-81) discusses scrambling of idiom chunks in Japanese.

[27] Ricardo Etxepare (p.c.) informs me that in Spanish, idioms may not be CLLDed. This is only expected, given that to some extent the low pronoun is in a position closer to the clitic in CLLD (see section 5).

And yes, here we can left-dislocate the idiomatic expression:

(85) a. [*Den Kopf*], *den* hat der Martin der Maria *t* verdreht.
b. * [*Der Kopf*], *den* hat der Martin der Maria *t* verdreht.

(86) a. * [*De-r/-n Kopf*], der Martin hat *den* der Maria verdreht.
b. * [*De-r/-n Kopf*], der Martin hat *ihn* der Maria verdreht.

And lastly an example found in a non-linguistic journal, just to show that these kinds of idiom-LD are actually used in spoken language (from *Academix*, a German university publication, May 1999 issue, p. 41; emphasis mine—KKG):

(87) "Denn *den letzten*," und das sagt er jetzt einfach mal so, "*den* beißen die Hunde."
'"Because the last one," and he just says it like this, "the dogs bite."'

Needless to say that in this example, the LDed element is marked accusative, agrees with the RP and the RP is in what we refer to here as the high position. In sum, I believe to have shown (i) that CLD and HTLD are two *different* phenomena, exhibiting different properties and also different derivational histories, (ii) that CLD *must* be analysed as involving movement of the LDed expression from its theta-marked base position to the left periphery, while HTLD *cannot* involve movement, and (iii) that the defining properties of CLD are *Case-agreement* and a *demonstrative pronoun* in *high position* as resumption, while HTLD does not need to agree in Case, may employ a personal pronoun instead and also allows for low occurrence of the resumptive element.

The data from idioms suggest that the LDed element as well as the RP are related to a trace/copy position even lower in the structure, presumably in the base-generated, thematic position due to the nature of idiomatic generation (as per Marantz (1984)).

The analysis in the following section will incorporate these criteria and I will argue for movement from the base position to a topic position, including subsequent movement to the peripheral position (CLDed element, here idiomatic expression) and simultaneous spelling out of the features in topic position (demonstrative RP).

5 A Movement Analysis for CLD

After a thorough foundation of (cross-linguistic) LD-structures and the battery of tests that suggest movement of the LDed phenomenon in CLD, it is now time to provide a satisfactory account for the facts within a theoretical framework. The framework I adopt is a healthy mix of minimalist ideas, outlined by Chomsky (1993, 1995, 1998), Uriagereka (1998), Lasnik (1999), Hornstein (to appear) and many others. The analysis consists of moving the LDed element and spelling out its highest copy as the resumptive.

5.1 Clause structure

In order to easily read and understand all subsequent derivational histories, I will briefly outline my basic assumptions regarding German clause structure. Zwart (1993, 1997a), following to some extent Kayne's (1994) proposal that all languages are head-initial and movement can only take place leftwards, provides some evidence that all phrases in Dutch are indeed head-initial, crucially, thus, also VP and IP (for him AgrSP, here TP); the surface order SOV is derived by obligatory movement of all arguments to a position outside VP, such as AgrOP.

I apply these assumptions to German and assume further that not only are all phrases head-initial, but also that subject-initial matrix clauses are realized as TP, not as CP (the "asymmetric view of V2" of Zwart (1991, 1993, 1997a)) and that in general, the (specific) subject indicates the boundary of TP; everything to the left of the subject is obligatorily fronted to the C-domain which consists of a more articulate functional layer akin to Rizzi's (1997) proposal (see Grohmann (1996, 1998), and for detailed analysis, exposition and justification, especially Grohmann (in progress)).

Moreover, I adopt copy theory and checking theory of Chomsky (1995). Under this conception, merged elements are copied and moved, and subsequently the lower copy is deleted (presumably for PF-reasons, such as linearization; cf. Nunes (1995)). The operation Move takes place solely for the purpose of feature-checking (and, per Chomsky (1998) or especially Hornstein (1999, to appear), Merge also). Whether, and how, this applies to head movement shall not be my concern; for purposes of illustration, I will indicate (all) possible positions that the relevant phrases and heads may go through in (88). For expository reasons, I often dispense with indicating these positions in subsequent representations as copies, or even as traces. As a notational shorthand, I indicate all features to be checked in brackets, such as [Wh], [Top] etc.; rather than using AgrOP as the label for the phrase containing objects, I use φP to indicate a position where "grammatical relations" are checked (see Grohmann (to appear b, in progress).

These assumptions combined yield the following picture for VP, TP and CP:[28]

(88) a. $[_{VP}$ subject $[_{V'}$ verb object$]]$
[θ] [θ]

b. $[_{TP}$ subject $[_{T'}$ verb $[_{\varphi P}$ object $[_{\varphi'}$ ~~verb~~ $[_{VP}$ ~~subject~~ $[_{V'}$ ~~verb~~ ~~object~~$]]]]]]$
[EPP/φ] [φ] [~~θ~~] [~~θ~~]

c. $[_{TopP}$ Ob $[_{Top'}$ V $[_{TP}$ Su $[_{T'}$ ~~verb~~ $[_{\varphi P}$ ~~object~~ $[_{\varphi'}$ ~~verb~~ $[_{VP}$ ~~subject~~ $[_{V'}$ ~~verb~~ ~~object~~$]]]]]]]]$
[Top] [~~EPP/φ~~] [~~φ~~] [~~θ~~] [~~θ~~]

Applied to real language, (88) corresponds to the following German derivation(s):

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[28] Strikethrough indicates lower copies as well as previously checked features; for illustration, I employ the shorthand notation *Su*bject, *Ob*ject and *V*erb.

(89) a. $[_{VP}$ die Prinzessin geküßt hat den Frosch]
b. $[_{TP}$ die Prinzessin$_i$ hat$_k$ $[_{\varphi P}$ den Frosch$_j$ t_k $[_{VP}$ t_i geküßt t_k $t_j]]]$
c. $[_{TopP}$ den Frosch$_j$ hat$_k$ $[_{TP}$ die Prinzessin$_i$ t_k $[_{\varphi P}$ t_j t_k $[_{VP}$ t_i geküßt t_k $t_j]]]]$

These, in turn, are a subject-initial matrix clause, represented in (89b), and a topicalization through a fronted object, as in (89c):

(90) a. Die Prinzessin hat den Frosch geküßt.
'The princess kissed the frog.'
b. Den Frosch hat die Prinzessin geküßt.
'The frog, the princess kissed.'

I further expand on the traditional assumption that non-subject constituents in first position denote the "topic" of a sentence (its theme, so to speak) by (i) identifying all pre-subject material as belonging to the C-domain and (ii) by associating these elements as "topics" in the same loose sense as traditional accounts do, unless marked otherwise (e.g., interrogative); this follows a further, not unreasonable, assumption that a sentence may have more than one "topic."[29]

Relevant for our present concerns is that under feature-checking in minimalism, topics raise to SpecTopP to check [Top] in received spec-head configuration, and more than one element may do so, allowing a number of XPs that precede the subject and, by our definition, TP—all difficulties aside (cf. discussion around (65)).[30]

5.2 Prolific domains

Apart from the technical assumptions for the derivation of German (matrix) clauses just outlined, I propose a further modification regarding clause structure, this time more drastic and of note across languages. The idea is still tentative and is explored in detail in current work (such as Grohmann (to appear b, in progress)). It concerns an elaboration on structures like (88). I would like to take (88a), (88b) and (88c) more literal and refer to each of these as their own "prolific domains," i.e. clausal areas which serve a certain purpose and at the same time allow for more intricate structure. As such, I distinguish three such domains, the V-domain, the T-domain and the C-domain.

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[29] As opposed to more than one focus. Apparently, languages make available only one position for structural, contrastive focus; other possible foci tend to be of emphatic nature which, in turn, is presumably closely related to the notion of "topic" (e.g., Etxepare (1995), È. Kiss (1995) and much related work).

[30] One way to remove the quotation marks around the notion "topic" is to carefully study the syntactic, semantic, pragmatic and also phonological properties ascribed to various fronted elements. It may, and probably will, turn out that we have to refine our topic-definition; this intuition underlies Beghelli & Stowell's (1997) approach to quantifier positions who distinguish a number of quantificational phrases. It may turn out that we have to assume the same for topic-related material such as Ref(erential)P, Dis(course)P or the infamous "FP" of Uriagereka (1995a,b), also Grohmann & Etxepare (forthcoming).

Each of these domains has specific properties, roughly as shown in (91):

(91) a. *V-/θ-domain*: thematic relations (θ: theta-features ['proto-roles'] of all types)
b. *T-/φ-domain*: grammatical relations (φ: nominal & verbal agreement, EPP…)
c. *C-/ω-domain*: information relations (ω: clause type, [Wh], [Foc], [Top]…)

Throughout a derivation, prolific domains (abbreviated as Δ) are built successively (cf. the notion of 'phase' in Chomsky (1998) and the critique of not incorporating the notion of T-domain as explored by Castillo et al. (in press); also Epstein & Seely (1999)).

We can thus work with the following conditions, generalizing (91) above:[31]

(92) *Prolific Domain (Δ)*
We say that a domain is prolific, i.e. it becomes a *prolific domain Δ*, when:
i. all *θ-properties* within a sub-part of the derivation are satisfied (*V-domain*);
ii. all *φ-properties* within a sub-part of the derivation are satisfied (*T-domain*);
iii. all *ω-properties* within a sub-part of the derivation are satisfied (*C-domain*).

The details of this framework do not play a role here. One consequence, however, does: it seems that languages do not exhibit movement from one position inside an area referred to here as "prolific domain" to another position within the same domain. Thus no R-expression is merged into the object position of the verb ("receiving" a role auch as "patient"), copied and subsequently merged into subject position (e.g., to check [agent]). In other words, (93a) is not the underlying structure that would then yield (93b):

(93) a. # [$_{VP}$ John [$_{V'}$ likes ~~John~~]]
b. John likes himself.

Likewise, "scrambling" of the sort observed in German, where free word order exists among arguments and adverbs, does not involve movement from one position inside the T-domain to another such as (94a) where the indirect object moves to all possible positions (only relevant points of the derivation illustrated) and spells out that copy, correlating to the particular surface order, indicated by angled brackets in (94b):

(94) a. # [$_{TP}$ … [$_{φ3P}$ der Maria [gestern [$_{φ2P}$ der Maria [$_{XP}$ das Buch [$_{φ1P}$ der Maria…]]]]]]
b. Peter hat <der Maria> gestern <der Maria> das Buch <der Maria> gegeben.
'Peter gave the book to Mary.'

[31] The concept of "prolific domain" is, of course, a simple return to earlier days of generative grammar with the addition that functional layers exist and play a crucial role. In how far this is just a notational variant or whether it turns out that the concept of Δ has a proper place in the grammar, remains to be seen.

In the same vein, we do not want to assume a derivation such as (95a) to underlie Wh-movement, (95b), given that Wh-elements typically exhibit focal and interrogative properties (where 'XP' could stand for 'WhP', 'ForceP' or simply 'CP') nor (96a) for (96b) on the assumption that D-linking involves topicalization (cf. Comorovski (1996) to some extent, but especially Grohmann (1998) and follow-ups, Hornstein (to appear)):[32]

(95) a. [$_{XP}$ who did [$_{FocP}$ ~~who~~ [$_{TP}$ you see ~~who~~]]]
b. Who did you see?

(96) a. [$_{FocP}$ which men did [$_{TopP}$ ~~which men~~ [$_{TP}$ Maria kiss ~~which men~~]]]
b. Which of these men did Maria kiss?

In other words, a natural restriction on prolific domains could be "Don't move within a domain." This "Condition on Domain-Exclusivity" (CDE) could plausibly be a condition on legibility at the interfaces, if we take linguistic expressions to be 'address-points' in a given derivation: each feature-checking anchors the expression's address, and an expression may be (maximally) anchored for thematic role (agent, patient, theme etc.), grammatical function (nominative vs. accusative, subject vs. object, masculine vs. feminine etc.) and information relation (topic, focus, interrogative, imperative etc.).[33,34]

Let us understand addresses as follows:

(97) *Address-Identifcation (AI)*
An XP, XP a maximal phrase, is anchored with the interfaces when its domain-relevant properties are satisfied; it now has a unique address in the derivation.

The reader may notice that I only refer to maximal phrases with respect to the notion of 'address' and the CDE (to be revised). This has good reasons. First, it is not clear at this point how to integrate heads in a minimalist derivation (for example, with respect to the Head Movement Constraint or to successive-cyclic movement) and second, X^0-elements do not tend to underlie the same CDE. Thus, we do not observe that verbs, for example, are marked according to a particular theta-role they assign or according to information-relevant properties (topic, focus etc.)—at least, not to my knowledge.

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[32] Incidentally, I assumed something like (96a) for so-called 'Wh-topics' in German, Bulgarian and Chinese in Grohmann (1998). However, I noted already that this assumption was not especially fortunate and revised it according to the development of "prolific domains" (Grohmann (to appear b, in progress)).

[33] Precursors to the concept of 'address' as understood here can be found in the works of Manzini (1992) and Uriagereka (forthcoming).

[34] This line of reasoning may sound representational. In view of recent debates over the nature of the grammar (such as representational vs. derivational approaches to sentence formation; cf. Brody (1995), Johnson & Lappin (1997), Chomsky (1998), Epstein et al. (1998), Castillo et al. (in press) and relevant references), this may have consequences; however, it can easily be integrated into a derivational system, as assumed here throughout (cf. (92)).

Moreover, as verbs may bear a number of agreement markers, it is unlikely that they should be confined to one particular position inside the T-domain (given an appropriate implementation of head movement).

On the other hand, CDE as approximated above might be too strong, given recent proposals on reflexivization within a minimalist version of Move and feature-checking as explored by Hornstein (to appear). Hornstein notes a number of merits that an old proposal by Lees & Klima (1963) on the transformational introduction of reflexive pronouns has. Rather than repeating the arguments, let me briefly present the analysis, as this is crucial for an understanding of domain-exclusivity and, as may not come as a surprise, for my analysis of CLD.

If we want to introduce reflexives derivationally, yet rule out (93a) as a possible candidate, we have (at least) one more option to explore. Given that thematic roles are at best 'proto-roles' (e.g., Dowty (1991), Arad (1998)) and better understood as formal features like everything else (as Hornstein (to appear) suggests, crucially arguing contra Hale & Keyser (1993) and Chomsky (1998), for example), nothing should prevent an argument to check two such features (see also Hornstein (1999) for elaboration). Apparently, something does prevent this, however, otherwise (93a) should be ruled in.

In cases of reflexivization in English, such as (93b), we do not only find a simple reflexive form—such as *sich* in German, for example—but a reflexive pronoun. Hornstein (to appear) capitalizes on this fact and declares pronouns as "default objects."

In particular, pronouns are introduced in the derivation whenever Move cannot take place. Hornstein (to appear, ch. 5) proposes (98) to underlie structures such as (93b):

(98) a. [$_{V'}$ likes John-self]
b. [$_{VP}$ *John* [$_{V'}$ likes *John*-self]]
c. [$_{VP}$ *John* [$_{V'}$ likes ~~*John*~~-self]]
d. [$_{VP}$ *John* [$_{V'}$ likes *him*-self]]

A reflexively marked verb (possibly as a lexical entry, parameterized among languages) selects for a DP of the appropriate type which forms a constituent with the reflexive marker (such as an R-expression plus *self*, whether by adjunction or some other word-formation process) and the two merge, as in (98a). We then copy the R-expression *John* and merge it with V', yielding (98b). At this point, *John* has checked two theta-features, something like 'patient' and 'agent'. The lower copy must subsequently delete, as indicated in (98c), but this is not enough, given our preliminary version of CDE. As borne out empirically, the lower copy is not completely deleted but replaced, or "spelled out," by the default form that the particular grammar makes available; in the case of English reflexivization, this is a pronominal form, matching the original copy in all relevant aspects (Case, φ-features etc.). The result is (98d), or (93b), and the structure is well-formed; this implies that the derivational history is well-formed, which, in turn, suggests that our condition is too strong.

If we want to assume that this analysis of English reflexivization is on the right track, we better find evidence of other cases of "feature spell-out," and preferably in other languages. It comes as no surprise, then, that I will apply this mechanism to account for the movement nature of CLD.[35] In order to do so, I will assume the following revised definition of CDE:

(99) *Condition on Domain-Exclusivity (CDE)*
No element may have more than one address identification AI per prolific domain Δ, unless it has a drastic effect at PF.

CDE as per definition (99) translates into the following: no maximal projection may move from one position within a given domain to another within the same domain. The only exception is when this move affects interpretation at the interfaces. Obviously, moving within one domain would always have an effect at the LF-interface: after all, if movement takes place to satisfy relational properties ("check features"), the effect at LF is that of an additional relation (such as a second theta-role). Crucially, though, CDE refers to an effect at the PF-interface, i.e. in order to move within Δ, the XP must phonetically realize its copy. Presumably, for reasons of interpretation, no object may be spelled out twice in the exact (phonological) form (following to some extent ideas by Nunes (1995, forthcoming)); the phonological shape of such instances of feature spell-out are presumably linked to "default forms" available to languages.[36,37]

5.3 Feature spell-out

The remainder of the analysis should follow straightforwardly. If the reader accepts the assumptions from section 5.1 and the proposal in section 5.2—at least for the purposes of an academic exercise—, we now face a clear path towards an analysis of those LD-constructions that exhibit all the properties ascribed to movement, even though they exhibit a displaced LDed-XP in the most left-peripheral position and an RP in a C-related position identified as TopP.

The analysis I propose for (1a) and all other cases of German CLD contains the following derivation ('t' for 'traces' as shorthand notation for full featural copies):

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[35] The original paper contained a preliminary version (Grohmann (1997)). Aoun et al. (1998) explore this idea further concerning other (resumptive) pronominal elements in Arabic.

[36] Considering the already vicious exploitation of valuable printing space, I leave the question for such default manifestations (across languages, maybe even more than one per language) for future research.

[37] And given that the feature spell-out is not phonologically identical to the original object, nothing prevents multiple spelling out of the default form, under the condition that it does not take place within the same domain. This may be an implementation of this idea to cases of "partial Wh-movement" of the sort it occurs in German or Romani, for example (see McDaniel (1989) and much subsequent work).

(100) $[_{\omega\Delta}$ [LDed-XP]$_i$ [RP$_i$ V … $[_{\varphi\Delta}$ … t'$_i$ … $[_{\theta\Delta}$ … t$_i$ …]]]]

This abstract representation reads as follows. The LDed element is base-generated inside the V-domain (θΔ) where it satisfies whatever it has to (thematic relations). It then moves to the T-domain (φΔ) to do the same (grammatical relations). The nature of these relations shall not play a role here. The next movement targets the C-domain (ωΔ) to check its information relations; we can identify this with the feature [Top], given that LD is (formally) an expanded variant of topicalization.[38] It then moves further, within the same domain, to the extreme left-peripheral, clause-initial position where it is spelled out. According to CDE it must spell out its copy in topic position and does this with the one default form available, namely as the demonstrative pronoun in German CLD.

The evidence in favour of movement provided in section 4 entails two major points. First, it is the LDed element that is fronted by movement, and second, its base position (from where it moves) must be the originally merged position (i.e. VP-internal for LDed arguments, lowest point of adjunction for certain LDable adjuncts etc.). The reason for the former consequence was the topic of that section; the reason for the latter consequence is at least the fact that the reconstruction-relevant data involve possible coreference with an element that c-commands the LDed element at the point of initial Merge (inside the V-domain), and only there. (The nature of adverbial generation does not play a role; see Alexiadou (1997) or Cinque (1999), and for a modified implementation to German free word order Grohmann (to appear b, in progress).)

(101) a. * Sein Vater schlägt [jeden meiner Freunde].
hisfather hits each of-my friends
'*His father hits each of my friends.'
b. Ich weiß, daß [jeden meiner Freunde] sein Vater schlägt.
'I know that for each of my friends, his father hits him.'
c. [Jeder meiner Freunde] wird von seinem Vater geschlagen.
'Each of my friends gets hit by his father.'

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[38] To repeat, the close relation between topicalization and instances of LD is one of the reasons why the question of movement vs. base-generation for LD was raised in the first place, and we can further observe this by translating German CLD, but not HTLD, in terms of topicalization in English.

Presumably, topicalization and LD differ functionally. Birner & Ward (1998), paying special attention paid to information structure, distinguish topicalization from LD, where a resumptive pronoun serves as a place-holder of the fronted constituent's original position. As I say in Grohmann (forthcoming b), "[t]he preposed constituent [in topicalization] provides a link to the discourse (roughly capturing 'old' or 'given' information) where in one case it is the focused part of the sentence and in the other the non-focused part. (No such requirement holds for left dislocation which accounts for the functional difference.)."

The base order of (101a) yields a WCO-violation; for the particular use of the quantified expression, see Grohmann (in progress). Embedded "scrambling" creates a new binding possibility, and passivization does so too. (See Frank et al. (1996) for more.)

Now, not surprisingly, matrix topicalization and LD of the quantified object are ungrammatical under coreference with the pronoun inside the subject (because both are arguably instances of operator A'-movement as per Frank et al. (1996)). However, LD of the passivized quantified expression is well-formed:

(102) a. * [Jeden meiner Freunde] schlägt sein Vater.
'Each of my friends, his father hits.'
b. * [*Jeden von meinen Freunden*], *den* schlägt sein Vater.
'For each of my friends, his father hits him.'
c. [*Jeder meiner Freunde*], *der* wird von seinem Vater geschlagen.
'For each of my friends, he gets hit by his father.'

This suggests that the LDed element does indeed move from its base-position. Moreover, we get a contrast with HTLD. Sticking in an adverbial which in the case of LD may be topicalized, (103a) shows that this is grammatical in the case of LD of a passivized element, while HTLD shows its ungrammaticality when the RP occurs low:

(103) a. [*Jeder meiner Freunde*], *der* wurde gestern von seinem Vater geschlagen.
'For each of my friends, he was hit by his father yesterday.'
b. * [*Jeder meiner Freunde*], gestern wurde *der* von seinem Vater geschlagen.
'*For each of my friends, yesterday he was hit by his father.'

We now have not only a further case of contrast between HTLD and CLD, we also have good reason to believe that the CLDed element moves through the entire clause structure, while the HT is base-generated in its surface position. The former conclusion thus supports the proposed structure in (100), under which the LDed element undergoes all relevant operations (roughly, checking in V- and T-domains, then topicalization, subsequent LD and spelling out of the topic copy).

Once merged into the V-domain, the next step of the derivation for LDed elements is the same as for any other element, namely movement into the T-domain to check the relevant φ-relations (grammatical properties such as Case, specificity, EPP etc.). Piggy-backing on the formal resemblance between topicalization and LD, it then moves to SpecTopP where it formally checks [Top]. I will not provide any more evidence for the high RP to be in topic position (see also Hoekstra (1998)), thus it suffices to say that up the point marked "RP_i" in (100), the derivation is well-formed and everything to the right of this point in (100) can be deduced from the current framework.

Naturally, the next step follows as well under my proposal: if the XP moves from SpecTopP to its final position SpecCP, it violates CDE—unless this move has a drastic

effect on the (PF-)output. The lower copy in the same domain now has to find its address point, spells out and the move is licit. The result is the LDed element in SpecCP and the spelled out topic-features of its copy, the resumptive *d*-pronoun, in SpecTopP.

As far as I can see, there are only two (immediate) issues to be resolved. The first one is the question what motivates movement of the XP to be LDed from the specifier of TopP to the specifier of CP; the second question concerns the obligatory adjacency between CP (LDed-XP) and TopP (RP) that we have observed for CLD all along.

A satisfactory answer to the latter question has to wait until the next section. Regarding the former question, a formal feature must be evoked to motivate further movement.[39] Under the conception of prolific domains and the identification of the C-domain as that part of the derivation that licenses information relations, it is not at all unreasonable to assign information-related properties the status of "formal features" that require checking. [Top] is one, [Foc] and [Wh] are presumably others.[40] The observation that LD is "functionally different" from topicalization (as shown by Birner & Ward (1998); cf. fn. 38) can thus be argued to have a syntactic reflex as well: let us assign the (admittedly, arbitrary) feature [Dis](course) to C^0 in cases of LD. Formal motivation for movement from TopP to CP in terms of feature-checking now comes from the need of the by now topicalized element to check [Dis] in order to create a syntactically well-formed and pragmatically interpretable (C)LD-construction.[41,42]

(104) is a sample of derivations that contain the crucial pieces of the analysis; for convenience, the most relevant parts are marked in boldface type:

(104) a. [$_{CP}$ **dieser Frosch** [$_{TopP}$ **der** hat [$_{TP}$ **t'** die Prinzessin [$_{VP}$ **t** verführt]]]]
'This frog, (**he**) seduced the princess.' [cf. (42a)]

b. [$_{CP}$ **den Frosch** [$_{TopP}$ **den** hat [$_{TP}$ die Prinzessin [$_{\varphi P}$ **t'** [$_{VP}$ geküßt **t**]]]]]
'The frog, the princess kissed (**him**)' [cf. (34a)]

c. [$_{CP}$ **in seinem Bett** [$_{TopP}$ **da** schläft [$_{TP}$ jeder [$_{XP}$ **t**$^{(\prime)}$ am besten [$_{VP}$ **(t)**]]]]]
'In his bed, everyone sleeps (**there**) best.' [cf. (72a)]

d. [$_{CP}$ **morgen** [$_{TopP}$ **dann** wird [$_{TP}$ die Prinzessin [$_{XP}$ **t** den Frosch küssen]]]]
'Tomorrow, the princess will kiss the frog (**then**)' [(cf. 42e)]

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[39] I do not bother with the distinction between interpretable and non-interpretable features, as crucial as it may be in the framework of Chomsky (1995). Recent criticism casts serious doubt on this conception and I silently approve of this by not employing the distinction here (e.g., Roberts & Roussou (1999), Brody (1997), Manzini & Roussou (to appear), Moro (to appear)).

[40] A side remark: one related case is Wh-movement. In the same vein, I argue that overtly moved Wh-phrases do this not to check the clause type (i.e. interrogative/question) but to check an information-identification requirement of the particular language (e.g., Grohmann (1998, in progress)); clause types are checked in CP (through a [Q]-feature; cf. Baker (1970) and more recently, Roberts & Roussou (1999)).

[41] It does not play a role whether [Dis] is part of C^0 which attracts the relevant element or whether this LDed-XP in spe bears an additional [Dis] driving its next movement; the role of "Move" vs. "Attract" is critically examined by Hornstein (to appear), to name just one source.

[42] This formulation presupposes that semantically, i.e. with respect to their truth-conditions, topicalization- and LD-constructions do not differ. Whether this is really the case shall not play a role for the discussion.

6 Some Remaining Issues

I presented the basic facts of German LD-constructions, their comparison to Cinque's (1990) typology and their distinction into CLD and HTLD in section 3. I offered an arsenal of evidence in favour of movement for CLD based on the behaviour with respect to weak crossover, binding and idiomatic modification in section 4. Finally, I proposed an analysis in terms of movement of the CLDed element to TopP and subsequent movement to CP with simultaneous, independently motivated spelling out of the topic-features as the RP in section 5. Now it is time to address further issues that have arisen along the way, such as cross-linguistic consequences of this approach; many other issues are addressed in Grohmann (in progress), but in the interest of space have to be left out.

6.1 CLD vs. HTLD revisited

First, however, I would like to revisit the distinction into CLD and HTLD. If CLD is derived by movement of the LDed element and HTLD is not, and given that the analysis of CLD as presented above has some merit and approximates (105a), (102b,c) should be the expected equivalents of HTLD as we loosely understand it here.

(105) a. $[_{CP}$ **XP**$_i$ $[_{TopP}$ *d*-**RP**$_i$ V … $[_{TP}$ … ~~[XP]~~$_i$ … $[_{VP}$ … (~~[XP]~~)$_i$ …]]]]
b. $[_{CP}$ **XP** $[_{TopP}$ *d*-/*p*-**RP**$_i$ V … $[_{TP}$ … ~~RP~~$_i$ … $[_{VP}$ … (~~RP~~)$_i$ …]]]]
c. $[_{CP}$ **XP** $[_{TopP}$ ZP V … $[_{TP}$ … *d*-/*p*-**RP**$_i$ … $[_{VP}$ … (~~RP~~)$_i$ …]]]]

If movement of the LDed element takes place in CLD only, but if all other constellations are equivalent, we would expect the HTLDed element to be base-generated in the same position that the CLDed element moves to, namely SpecCP. The only (relevant) element that moves in HTLD is the RP which may either be a *d*- or a *p*-pronoun and as (105b,c) show it may be high or low. On a par with CLD, the high RP topicalizes (i.e. moves to SpecTopP), while the low RP moves to the regular argument position in the T-domain, such as φP as identified in sections 5.1 and 5.2, and another XP occupies the "first" position of the V2-structure of the associate clause.

(106), then, is an illustration of (105) with real language:

(106) a. [**Den Frosch**], **den** hat die Prinzessin geküßt.
'The frog, the princess kissed.' [cf. (34a)]
b. [**De-r/-n Frosch**], **den/ihn** hat die Prinzessin geküßt.
'The frog, the princess kissed him.' [cf. (35a)]
c. [**De-r/-n Frosch**], die Prinzessin hat **den/ihn** geküßt.
'The frog, the princess kissed him.' [cf. (36a)]

One remark comes to mind when looking at LD-data, CLD or HTLD. If the RP is left out, the sentence remains grammatical; in particular, the reading is that of common topicalization:

(107) a. Diesen Frosch hat die Prinzessin geküßt. [cf. (34a)]
this frog has the princess kissed
'This frog, the princess kissed.'
b. An diesen Frosch hat die Prinzessin gedacht. [cf. (42c)]
at this frog has the princess thought
'Of this frog, the princess thought.'

As already observed by Cinque (1990:60ff.), there is a relation between (left) dislocation and topicalization (but see Birner & Ward (1998) and fn. 38 for functional differences). Note also that the LDed element may be left out, with a pronoun that is highly referential.

(108) a. (Du meinst den Frosch?) *Den* hat die Prinzessin geküßt.
you mean the frog RP-ACC has the princess kissed
'(You're talking about the frog?) Him, the princess kissed.'
b. (Du meinst den Frosch?) *An den* hat die Prinzessin gedacht.
you mean the frog at this has the princess thought
'(You're talking about the frog?) Of him, the princess thought.'

(109) a. (Du meinst den Frosch?) Die Prinzessin hat *den/ihn* geküßt.
b. (Du meinst den Frosch?) Die Prinzessin hat *an den/an ihn* gedacht.

While (108) lists the equivalent constructions of (107) without the LDed element and the RP in its high position, (109) shows that the RP may also appear low. This is only expected, if there is indeed a connection between unmarked clause structure, topicalization and various forms of LD-constructions, and if furthermore our current assumptions about clause structure are on the right track.

But we have also seen that LD and topicalization may interact in German (such as (39) above) and also that HTLD and CLD may interact (cf. (58)). What we could observe is that two LDed elements become acceptable if only the lower one is immediately followed by its resumption:

(110) a. [*Dieser Frosch*]$_i$,[*gestern*]$_j$, *da*$_j$ hat die Prinzessin *den*$_i$ geküßt.
this frog yesterday RP has the princess RP kissed
'This frog, yesterday the princess kissed him.'
b. * [*Gestern*]$_j$, [*dieser Frosch*]$_i$, *den*$_i$ hat die Prinzessin *da*$_j$ geküßt.

It thus seems that to the extent that we can have multiple LDed elements—namely, one HT and one CLDed XP—the HT has to precede the CLDed element.

(111) a. [*HTLDed-XP*$_i$ [*CLDed-XP*$_j$ [*RP*$_j$ V … [… *RP*$_i$ …]]]]
b. * [*CLDed-XP*$_j$ [*HTLDed-XP*$_i$ [*RP*$_{i/j}$ V … [… *RP*$_{j/i}$ …]]]]

Unless we want to go back to a structure of the grammar where transformational operations are ordered, there are only three ways to derive this strict ordering relation:[43] (i) HTLDed XP and CLDed XP are not in the same position, not even part of the same projection; (ii) both elements are (multiple) specifiers of the same projection, here CP; (iii) one element is the specifier of and one an adjunct to the same head, here C.

If we want to maintain that C is the most peripheral head, equating it with the force-indicating head of a clause to which LD makes some contribution, option (i) is not desirable. The second option (ii) can be discarded under a conception of syntactic structure that does not allow multiple specifiers (contra Koizumi (1994), Chomsky (1995, 1998), Richards (1997) and others)—whether due to a strict version of the LCA (such as Kayne (1994)), a moderate version of the LCA applying at Spell-Out (i.e. Moro (to appear)), conceptual issues (cf. Zwart (1997b) or empirical reasons (see Hornstein (to appear), Grohmann (to appear a)); there are probably a myriad of further issues to be considered but I adopt the standpoint that multiple specifiers are not permitted. That leaves us option (iii), and I thus assume that HTLDed and CLDed elements both appear inside CP where the latter moves to SpecCP and the former is generated adjoined to C.[44]

This assumption might have further consequences for the awkwardness of multiple LD (i.e. with even more than two elements). One speculation might be that just as one XP must precede the finite verb to derive V2 in matrix clauses, just one XP may precede the associate clause and by LDing more than one element the "V3-structure" is jeopardized. This would rule out (110a) only if both LDed elements are specifiers of the same head. A more detailed, and technically explicit study should then address the different inputs of specifiers and adjoined elements on the syntax. Another option, to rule in some extremely uncomfortable constructions as presented in section 3.2, would be that those elements that are fronted via CLD form a complex specifier. These are just possible ways to revisit the (im)possibility of LDing more than one or even two elements and shall be left open for the time being.

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[43] We could, for instance, say that (high) base-generated elements are inserted after all (relevant) movement up to that point has taken place. Still, this has little to say regarding the position that HTLDed and CLDed elements occupy.

[44] I am well aware of the fact that this approach is not tenable with the LCA either. In Grohmann (to appear b, in progress) I develop an implementation of Cinque's (1999) adverb hierarchy that does not involve a high number of functional projections of which adverbs are the sole specifiers, but a relatively contained set of projections to which adverbs are adjoined. As such, I assume adjunction to be well-formed, even in conjunction with—hence, in addition to—specifiers.

A more stringent question one might ask at this point is why there seems to be a condition that the CLDed XP must be immediately followed by an RP which, in turn, must be immediately followed by the finite verb. Again, a deeper and satisfactory discussion will need to be addressed elsewhere, but a first stab would be an implementation of the CDE (see section 5.3) along the lines that it need to apply immediately. That is to say, if an expression moves within a domain and thus creates an additional address through its copy, the two address points need to be adjacent; intermediate positions cannot be skipped (which reminds of an implementation of Relativized Minimality à la Rizzi (1990)). If such an implementation were fruitful, clear predictions regarding the (im)possibilities of creating reflexives as spelled out copies would exist.

To return to the interaction of CLD and HTLD one last time, the b-examples of (45) and (46) seem to give a good argument against the parenthetical approach to apparent embedding under bridge verbs of Reis (1996). I elaborate as (112):

(112) a. [*Diesen Frosch*], *den* glaubt der Bauer, *den* hat sie geküßt.
this frog RP believes the farmer RP has she kissed
'The farmer believes this frog, she kissed.'

b. [*Diesen Frosch*], *den* weiß der Bauer, *den* mag der König nicht.
this frog RP knows the farmer RP likes the king not
'This frog the farmer knows, the king doesn't like (*him).'

In this variant of CLD, the RP appears in two positions. The first occurrence would be SpecTopP of the matrix clause and the second one some position of the embedded clause, given that we really have embedding. Given that neither occurrence may be low, as (113) and (114) show, we must have to high, i.e. topic-like, positions in both parts of the structure, which would be rather difficult to implement under a parenthetical approach.

(113) a. * [*Diesen Frosch*], *den* glaubt der Bauer, sie hat *den* geküßt.
b. * [*Diesen Frosch*], der Bauer glaubt *den*, *den* hat sie geküßt.
c. * [*Diesen Frosch*], der Bauer glaubt *den*, sie hat *den* geküßt.

(114) a. * [*Diesen Frosch*], *den* weiß der Bauer, der König mag *den* nicht.
b. * [*Diesen Frosch*], der Bauer weiß *den*, *den* mag der König nicht.
c. * [*Diesen Frosch*], der Bauer weiß *den*, der König mag *den* nicht.

Unless we are dealing with two clauses, both headed by an RP, we cannot accommodate these facts. For convenience, possible parenthetical structures are illustrated in (115) and we can safely assume that we have true extraction in (45)-(46).

(115) a. * [*Diesen Frosch*], glaubt der Bauer, *den*, *den* hat sie geküßt.
b. * [*Diesen Frosch*], *den*, *den* glaubt der Bauer, hat sie geküßt.
c. * [*Diesen Frosch*], *den*, *den* hat, glaubt der Bauer, sie geküßt.
d. * [*Diesen Frosch*], *den*, *den* hat sie, glaubt der Bauer, geküßt.

(116) a. * [*Diesen Frosch*], *den*, so glaubt der Bauer, *den* hat sie geküßt.
b. * [*Diesen Frosch*], *den*, so glaubt der Bauer, sie hat *den* geküßt.

Reis shows that true parentheticals may be placed virtually anywhere in the relevant constructions. In these cases, however, there is no liberty for placing the material in question (which hence is the matrix clause); at least not with the simultaneous occurrence of the RP in two positions, as (117) shows:[45]

(117) a. [*Diesen Frosch*], (so) glaubt der Bauer, *den* hat sie geküßt.
b. [*Diesen Frosch*], *den*, (so) glaubt der Bauer, hat sie geküßt.
c. [*Diesen Frosch*], *den* hat, (so) glaubt der Bauer, sie geküßt.
d. [*Diesen Frosch*], *den* hat sie, (so) glaubt der Bauer, geküßt.

We can thus see that LD-extraction out of an embedded clause is only possible with CLD, not HTLD (RP must be *d*-pronoun in high position), as we also saw in (63) above, which is expected if CLD is not a root phenomenon (in the sense of Emonds 1970). Embedded occurrence of LD, on the other hand, can only take place in a HTLD-construction, as we have seen for (49) where the RP is obligatory in low position and may optionally take the form of the *p*-pronoun. For convenience, consider (118) here:

(118) a. * Der Bauer glaubt, (daß) [*diesen Frosch*], *den* daß sie geküßt hat.
the farmer believes that this frog RP that she kissed has
'The farmer believes that this frog, she kissed yesterday.'
b. Der Bauer glaubt, (daß) [*diesen Frosch*], daß sie *den* geküßt hat.
the farmer believes that this frog that she RP kissed has
'*The farmer believes that this frog, she kissed him yesterday.'
c. Der Bauer glaubt, (daß) [*diesen Frosch*], daß sie *ihn* geküßt hat.
the farmer believes that this frog that she him kissed has
'*The farmer believes that this frog, she kissed him yesterday.'

This is unexpected both from a Cinquean perspective of distinguishing properties (cf. Table 1, where embedding is only possible with CLD, not with HTLD) and from the point of view of English (cf. (10) where the equivalent construction in English—which, in turn, is presumably of the HTLD-type—is ungrammatical).

[45] (116) shows that even if we emphasize the parenthetical part (by inserting *so* 'so, thus') two RPs are bad, unless the intonational pattern of (116a) is radically different; see Grohmann (in progress) for details.

Again, if HTLD, but not CLD is a root phenomenon it would be expected that it could not be embedded; as it turns out, German LD seems to work the other way round. One problem this poses regards the character of either construction. One might brush these data away with the reasoning that embedding possibilities crucially depend on a certain type of context (namely, under bridge verbs). On the other hand, we have seen that extraction works as expected. For the present purposes I assume that in this point CLD and HTLD diverge from the otherwise relatively stable adoption of the properties from Table 1 which is presented in Table 2; I added the distinction between embedding and extraction as we have just seen in the relevant column:

	multiple	**any XP**	**connectivity**	***d*-p-only**	**embedded**	**islands**
CLD	(√)	√	√	√	*/√ extr.	*
HTLD	(*)	*	*	*	√/* extr.	√

Table 2: Defining characteristics of CLD vs. HTLD

The values and notation in Table 2 should be obvious, given the wealth of data and discussion so far. For what it is worth, the distinction between CLD and HTLD follows Cinque's (1990) distinction quite accurately, all things being equal.

6.2 Movement revisited

I would now like to consider Hoekstra's (1998) attack on the movement approach to CLD which is based on apparently relevant constructions from Dutch. Note that Case-agreement plays a crucial role to decide whether CLD or HTLD takes place, and Dutch does not mark Case morphologically; the second indication for CLD is that the RP, exclusively of the *d*-variety, occurs in high, topic position.

Firstly, apparently (119), Hoekstra's (15), holds with the judgements indicated:[46]

(119) a. * Ik doe niet [boeken lezen].
I do not books read
'I don't read books.'

b. [*Boeken lezen*], *dat* doe ik niet.
books read RP do I not
'Read books, I don't.'

c. Ik doe dat niet.
I do RP not
'I don't do that.'

[46] I copied Hoekstra's example verbatim except that I glossed *dat* as RP, not as T(opic)P(ronoun), as he does; I also italicize LDed element and RP for coreference, as I have done throughout.

What this paradigm is supposed to show is that while the RP may be directly selected (as in (119c)), the LDed XP in spe may not (cf. the ungrammatical (119a)), even if the corresponding LD is fine (shown in (119b)). There are two immediate replies from the perspective of German for which, after all, the current proposal is supposed to apply. For one, the equivalent of (119a) is grammatical in German. While possibly not acceptable in high ('standard') German, it is a construction that is often used colloquially.

(120) a. Ich tu nicht (gerne) [Bücher lesen].
I do not (with-pleasure) books read
'I don't read books (with pleasure).'

b. Mein Freunde tun nicht [viel arbeiten], die gehen lieber feiern.
my friends do not much work they go preferably party
'My friends don't like to work very much, they rather go partying.'

Moreover, the constituent in question may also be topicalized in German:[47]

(121) a. [Bücher lesen] tu ich nicht (gerne).
books read do I not with-pleasure
'Read books, I do not (with pleasure).'

b. [Viel arbeiten] tun meine Freunde ja nicht gerade.
much work do my friends PRT not exactly
'Work much, my friends do not exactly.'

If there is no doubt, all other things being equal, that topicalization is derived by movement, we would have to find an alternative account for (121) under the assumption that the infinitival complement could not be "selected" by the verb *tun/doen* 'do'.

Hoekstra's second argument against a movement analysis also involves "selection," but this time it concerns selection of PP over DP in Frisian (his example (16)):

(122) a. Reduzem dêr woe ik wol wenje.
Reduzem RP-there would I sure live
'In Reduzem, I sure would like to live.'

b. * Ik woe wol Reduzem wenje.
I would sure Reduzem live
'I sure would like to live *(in) Reduzem.'

c. Ik woe wol dêr wenje.
I would sure RP-there live
'I sure would like to live there.'

[47] Jan-Wouter Zwart (p.c.) informs me that (121) is as well-formed in Dutch. Moreover, (120) is frequently used by Dutch speakers as well, especially in the Limburg area and in other Southern dialects.

Here I agree with Hoekstra: it is unlikely that the DP is left-dislocated by movement. On the other hand, nothing rules out the LDed element in (122a) to be base-generated, i.e. a HT. Hoekstra considers this option but, on the basis of Dutch again, rules it out immediately. Thus his third argument against the movement approach is that even in Dutch, a language where Case-agreement is not morphologically marked, coreference between an anaphor within an LDed constituent and RP is possible.

However, given that in the present paper I extended the criteria for CLD by obligatory high RP, cases such as (123) can be accounted for, given that the equivalents in Dutch are as bad as in German (cf. (61)-(62) for German and (i) in fn. 23 for Dutch).

(123) [*Elkaar* *helpen*] *dat* doen ze hier niet.
each-other help *RP* *do* *they* *here* *not*
'Help each other, they don't do (that) here.'

The same goes for related examples. At this point it might be worthwhile to point out that the variations of (75a) and (76a) above with low RP are ungrammatical also:

(124) a. * [*Den Wagen* *von* *sich*], er hat *den* verkauft.
the car-ACC *of* *self* *he* *has* *RP-ACC* *sold*
'*The car of himself, he sold it.'
b. * [*Den Wagen* *von* *sich*], Martin sagte, er hat *den* verkauft.
the car-ACC *of* *self* *Martin* *said* *he has* *RP-ACC* *sold*
'*The car of himself, John said he sold it.'

I believe that the current characterization of CLD as Case-agreeing with a high *d*-pronoun as resumptive is sufficient and satisfactory. To also implement this approach to Dutch LD-constructions is really beyond the scope of this paper, though I would think that a lot of Hoekstra's problems with the movement account can be accommodated under this conception of the movement variety.

To sum up this section, we have seen that the distinction between the two types still holds, and should hold, characterized as we have throughout (obligatory Case-agreement where possible and high RP of the *d*-variety on top of it, as well as in all other cases). On an empirical basis I suggest that HTLDed elements are adjoined to CP, while CLDed elements are in SpecCP. We can take (125), adopted from (105) above, as a final structural representation for the two, giving us the only possible ordering relation HTLDed-XP followed by CLDed-XP:

(125) a. $[_{CP}\ \mathbf{XP}_i\ [_{TopP}\ d\text{-}\mathbf{RP}_i\ V\ \ldots [_{TP}\ldots\ \sout{[XP]}_i\ \ldots [_{VP}\ldots\ (\sout{[XP]})_i\ \ldots]]]]$
b. $[_{CP}\ [_{CP}\ \mathbf{XP}\ [_{TopP}\ d\text{-}/p\text{-}\mathbf{RP}_i\ V\ \ldots [_{TP}\ldots\ \sout{RP}_i\ \ldots [_{VP}\ldots\ (\sout{RP})_i\ \ldots]]]]$
c. $[_{CP}\ [_{CP}\ \mathbf{XP}\ [_{TopP}\ ZP\ V\ \ldots [_{TP}\ldots\ d\text{-}/p\text{-}\mathbf{RP}_i\ \ldots [_{VP}\ldots\ (\sout{RP})_i\ \ldots]]]]$

6.3 Some consequences

The analysis I proposed in section 5.3 and subsequently elaborated on has a number of consequences for cross-linguistic accounts of LD-constructions. Put aside topicalization, there seem to be three constructions cross-linguistically that involve an LDed element and a coreferent (resumptive) pronoun: CLLD, CLD and HTLD.[48] All three constructions (presumably) express the same semantic content of a given sentence (roughly that of topicalization; see Wiltschko (1995a,b) on the issue of interpretation, following observations by Iatridou (1993/94)) but differ in their syntactic behaviour. (And, as Birner & Ward (1998) note, they also differ in their pragmatic properties with regard to topicalization; see also fn. 38 above.)

In the analysis of CLD-constructions, I thus include A&B's findings with respect to a movement option for CLLD in certain Arabic dialects. In a way, we can distinguish three types of LD: CLLD where resumption involves a clitic (e.g., Italian, Arabic), CLD where resumption takes place with a demonstrative pronoun in topic position (such as studied here for German) and HTLD where resumption may involve all kinds of elements (as in German, but also English and presumably across languages; see fn. 48). In fact, if we really have a tripartitional analysis of LD-constructions, we might want to look at other languages and try to fit the respective constructions into our typology.

The typology as presented here in short raises some immediate questions. What exactly, for example, is the difference between topicalization created by movement and movement-derived types of LD (such as German CLD, one type of CLLD in Arabic dialects etc.)? As alluded to in the analysis above, the obvious formal difference is that in one case the copy of the LDed element spells out (CLD). This we can capture with CED, a condition independently needed, if the approach to clause structure presented in section 5.2 bears any merit. But how can this analysis deal with CLLD where resumption is expressed lower in the structure, presumably inside the T-domain?

Also, especially when some instances of CLLD are derived by movement but not others (within one language), the problem arises for the learner how to know which construction is an instance of which type. In general, if a language makes available more than one type of LD, how are these acquired?

To address the latter question first, it might basically be a matter of acquiring certain default forms: such as pronoun for English reflexives (as for Hornstein (to appear)), accusative for citation form (and non-finite subjects, as in Grohmann & Etxepare (forthcoming)), but also the demonstrative for German CLD and the clitic for Romance and Arabic CLLD in cases of movement. Given that we want to encode domain-internal movement (and the CDE), the only extra step is to realize the copy as its own address and assign it with a (possibly predetermined) default form.

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[48] As noted elsewhere, I use HTLD as a shorthand for all those constructions that involve a base-generated LDed element and resume it somehow, be it via an epithet or pronominal element; this also includes the *as for*-HT-constructions which also exist across languages.

Bridging on the former question, one may ask whether this apparent tripartition could be further cut down to a bipartition. Rather than formally distinguishing CLLD from CLD and HTLD (and possible sub-classes), the partitioning of LD-constructions can be made along the movement criterion: movement vs. base-generation types of LD.

One possible representation for such a cut is shown in Table 4; note that we could not discuss all the types of LD in this paper and that the list is by no means exhaustive. For completeness' sake, I include (two possible types of) topicalization; the integration of topicalization shall be fodder for future research as well as the exact classification, empirical establishment and theoretical analysis of the rest.

Movement-derived	**Base-generated**
Contrastive Left Dislocation (CLD)	*Hanging Topic Left Dislocation* (HTLD) • resumptive HTLD • epithet HTLD • *nominativus pendens* • *as for*-HTLD
Clitic Left Dislocation (CLLD)	*Clitic Left Dislocation* (CLLD)
Emphatic/Contrastive Topicalization	*Frame-setting topicalization*

Table 3: A bipartition of left-peripheral topic constructions

In order to show that the classification of Table 3 holds cross-linguistically in a satisfactory manner, it might be useful to employ a number of criteria. An obvious starting point is Cinque's (1990) typology of distinguishing properties. It remains to be seen how the projected generalization of this distinction, from Table 1, can be applied cross-linguistically, such as the suggestion in Table 4:[49]

	multiple	**any XP**	**connectivity**	**RP-only**	**embedded**	**islands**
MVT	√	√	√	√	√	*
B-G	*	*	*	*	*	√

Table 4: Defining characteristics of movement vs. base-generation types of LD

In this section I laid open some of the issues related to applying the results of this study more generally. Obviously, there are many more puzzles to be solved.

[49] Naturally, MVT stands for those types of LD that are the result of moving the LDed element (such as CLD in German, one type of CLLD in Arabic dialects, possibly Romance CLLD etc.) and B-G for those that base-generate the LDed element in (left-peripheral) position (such as HTLD in German and English, Romance LD, the other type of Arabic CLLD etc.; presumably, this class contains also epithet constructions and other, clearly base-generated, instances of LD in a number of languages). The label of the fourth column shall indicate that a special resumptive element is employed (clitic, *d*-pronoun etc.).

7 Conclusion

Types of LD, as first studied by Ross (1967), are interesting for a variety of reasons. For one, they seem to express the same semantic, i.e. truth-conditional relation that topicalization does, thus are formally similar to the latter construction. But unlike topicalization, LD involves resuming the LDed element somewhere lower in the clause. This strategy presumably accounts for the pragmatic, functional differences observed between the two phenomena (as Birner & Ward (1998) show).

With regard to resumption, languages either express this with a clitic (such as Romance languages and Arabic) or with a different pronominal element which is specially marked; in German, this is canonically the demonstrative form. Aside from the form of resumption, the position of the resumptive element varies. In CLLD, the resumptive clitic is (presumably) in the "normal" clitic position. In German, the language of our main focus, the resumptive is either in a high position or in a low position. We identified the high position with a topic position and the low position with the canonical argument position for pronominal elements.

However, apart from these descriptive outset, types of LD also pose a real problem: there seem to be different strategies of LDing elements, not only cross-linguistically but also within a given language, so how can we distinguish the two; and if we can, what does this show us? From a minimalist perspective, we obviously want to be able to distinguish different types of LD formally, i.e. syntactically because otherwise we would face a serious burden on (conceptual and derivational) economy: if there is no difference in resuming high or low, why do languages not always choose the "cheaper" option?

The main issue this paper addresses is the derivation of LD, whether the LDed element moves to its peripheral position or whether it is base-generated there. Picking up the pieces from Cinque's (1977) initial approach, A&B's discussion of CLLD in Arabic and Cinque's (1990) set of distinguishing properties, I set out and investigated German LD under the premise that if we can distinguish two formally different types, they should both pattern differently, preferably according to the works just cited.

The findings were unambiguous. We have evidence that one type of LD obligatorily involves a *d*-pronoun in high (topic) position as resumptive element which agrees in Case-marking with the LDed element, according to the grammatical role this element plays. This type, CLD, is crucially different from the type that I refer to collectively as HTLD where the resumptive may also take the form of a regular *p*-pronoun which, moreover, may and sometimes must appear in low position. Both constructions differ with respect to the distinguishing properties and also in their intonational contour. Most crucially, however, only the former type involves movement of the LDed element. The data relating to WCO, Principle A and C effects as well as idioms speak for themselves. I propose that the LDed element moves and spells out its topic-features as the resumptive, within a technical framework that I justified all along.

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