

On Left Dislocation*

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1 Introduction

While the well-known phenomenon of *clitic left dislocation* (CLLD) has enjoyed deep study and analysis (Cinque 1977, 1990, Aoun and Benmamoun 1996 and many references cited there), non-clitic *left dislocation* (LD) of the type as it appears in German lacks extensive coverage (Altmann 1981, van Haaften *et al.* 1983), not to mention a satisfactory account (but see fn. 1). In addition, recent studies of CLLD in non-Romance languages (e.g. Aoun and Benmamoun 1996 for some Arabic dialects) show interesting implications for CLLD. In more general terms, 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, henceforth (CL)LDed, DP may be either base-generated or produced by movement seems to be an interesting starting point. 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 LD only briefly or in passing (e.g. Scherpenisse 1983, Wilder 1994, Haegeman 1996); the second option was explored by Geluykens (1992) and, within a syntactic account under presuppositional premises, by Wiltschko (1995a, 1995b). One possible explanation for holding this view is a mix-up of terminology: LD is often equated with *hanging topic*-constructions (HT), also known as *thema pendens* or *nominativus pendens*.

In this paper, I will make the attempt to approach German LD under new empirical and theoretical insights. I will present a brief survey of past analyses and set out the problem with data

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from English, Italian and Arabic (section 2). With the means of an extensive database of possible and impossible LD-constructions in German (section 3.1), I will pursue the intuitive assumption that CLLD and LD are not entirely different phenomena but rather realizations of one structural configuration: left dislocation with a resumptive pronoun (section 3.2). I will attempt to classify this notion of resumptive pronoun in appropriate terms. In this respect, I will propose a tripartitional typology of LD-constructions (section 3.3): rather than drawing the line between CLLD and LD (Cinque 1990), I will distinguish CLLD-, LD- and HT-constructions. Also, I will make use of recent theoretical developments to analyse the syntax of German LD. Here I am interested in the syntactic description in terms of the Minimalist Program (MP) as proposed by Chomsky (1993, 1995; also Chomsky and Lasnik 1993) as well as an analysis in terms of structural description, leaning on and supporting Rizzi's (1995) proposal of a Split-CP and recent extensions to the Westgermania (*cf.* Grohmann 1996, Haegeman 1996). I thus assume that there is indeed something interesting to say about German LD-constructions, and it is of a syntactic rather than a pragmatic nature.¹

2 Left Dislocation: A Brief History of Analyses

In this section, I will review some of the literature that deals with all kinds of LD-constructions. In particular, I will present Cinque's (1990) main arguments to distinguish CLLD from LD. Then we will subject his analysis to some criticism and propose an alternative typology which will be tripartited: CLLD, LD and HT. This tripartition will be augmented by an analysis in section 3 and the relevant data from German (and cross-linguistically).

2.1 Chomsky (1977): Topicalization is Wh-movement, LD Base-Generation

Chomsky observes similarities in the syntax of Wh-movement and topicalization. In this framework, both are derived by Wh-movement (where the Wh-element is deleted in the case of topicalization). He also notes the relation between topicalization and LD. This is of relevance in the present context.

- (1) a. * This book, to whom should we give (Chomsky 1977: 94)

¹ Here I must note that the excellent collection of papers in Anagnostopoulou *et al.* (1997) came too late to my attention. I regret that I was not able to implement the rich background of the issue as well as the new material as offered by van Riemsdijk (1997) and many papers in that book into the present study.

- b. * John, who do you think saw (Chomsky 1977: 94)
- (2) a. This book, to whom should we give it (Chomsky 1977: 94)
 b. (As for) John, who do you think saw him (Chomsky 1977: 94)

According to Chomsky, one is derived by movement, the other not.² The examples in (1) are instances of topicalization. Here, movement of the topicalized element results in a Doubly-filled COMP and is hence ruled out (1a) or in an extraction from a Wh-island (1b), which is ruled out.³ The analogous cases with an LDed element (2a-b) are fine.

Abstracting away from topicalization for the time being (but see fn. 3), one result of Chomsky's study is that LD does not involve movement as a number of principles assumed to be diagnostics for movement are violated (Complex Noun Phrase Constraint, Specified Subject Condition, Wh-Islands, Subjacency etc.).⁴

2.2 Lasnik And Saito (1992): One Base-Generated Topic Position Per Clause

Lasnik and Saito (henceforth L&S) approach the problem differently. They point out (L&S: 76) correctly that the framework following Lasnik and Chomsky (1977) and Chomsky (1981), in which the *that*-trace effect is explained by a constraint on traces, rules out the examples shown in (3a-b) by the ECP, in contrast to (3c).

- (3) a. * John_i, I think that t_i won the race (L&S: 76)
 b. * Who_i do you think that t_i won the race (L&S: 76)
 c. John, I think that he won the race (L&S: 76)

But then they reconsider Chomsky's (1977) analysis on the basis of a wrong prediction. One of Chomsky's predictions would be 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). The latter prediction is not borne out, however, as shown in (4) and (5):

- (4) a. I believe that this book, you should read (L&S: 76)

² To be precise, both constructions assume a base-generated topic. But 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.

³ Chomsky (1977) shows convincingly that in the framework as assumed at that time, topicalization does indeed involve Wh-movement. Despite initial appearance, this shall not be an issue for I study, though (see Müller and Sternefeld 1993, Grohmann in preparation for lengthy discussions of the relation between topicalization and Wh-movement in German; also cf. Culicover 1996 for interesting observations).

⁴ The insight that LD freely violates island constraints goes back to Ross (1967), as so many observations.

- b. ... that this solution, I proposed last year is widely known (L&S: 77)
 - c. The man to whom liberty, we could never grant... (L&S: 77, from Baltin 1982)
- (5) a. * I believe that this book, you should read it (L&S: 77, but see p.193, fn. 7)
- b. * ... that this solution, I proposed it last year is widely known (L&S: 77)
 - c. * The man to whom liberty, we could never grant it... (L&S: 77, from Baltin 1982)

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 which I will call TopP, following Rizzi 1995) in English is restricted to one base-generated TopP per sentence, L&S can account for the contrast of multiple topicalization versus multiple LD:

- (6) a. John, Mary, he likes t_i (L&S: 78)
- b. * John, Mary, he likes her (L&S: 79)

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 (crucially differing from German, as we will see below), and LD involves base-generation, rather than movement.

2.3 Cinque (1990): CLLD vs LD

Cinque proposes a dichotomy of LD-constructions involving resumptive pronouns. He distinguishes CLLD from LD on a number of typological characteristics.⁵ The argument just presented is one of six characteristics that separate LD and CLLD as two distinct syntactic operations. As Cinque (1990: 58) notes, CLLD may involve a (theoretically) unlimited number of LDed elements as opposed to LD, as already observed by Postal (1971: 136, fn. 17).

- (Cinque 1990: 58)
- (7) Di vestiti, a me, Gianni, in quel negozio, non mi ce ne ha mai comprati
about clothes to me John in that shop not me there of-them he-has 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 (7), this is illustrated below (contrast with translations):

⁵ Cinque (1990: 56) 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 (LD).

- (8) a. [PP Al mare], ci siamo già stati (Cinque 1990: 57)
to the-seaside there-CL we-have already been
 ‘*To the seaside, we have already been there’
- b. [AP Bella], non lo è mai stata (Cinque 1990: 58)
beautiful not it-CL she-was ever been
 ‘*Beautiful, she never was it’
- c. [VP Messo da parte], non lo è mai stato (Cinque 1990: 58)
got from the-way not it-CL she-was ever been
 ‘*Got out of the way, she never has it’
- d. [QP Tutti], non li ho visti ancora (Cinque 1990: 58)
all not them-CL I-have seen yet
 ‘*All, I haven’t seen them yet’
- e. [CP Che bevi], lo dicono tutti (Cinque 1990: 58)
that you-drink it-CL says everybody
 ‘*That you drink, everybody says it’

Thirdly, Connectivity supposedly holds between the LDed element and the pronoun only in CLLD (for more, see Cinque 1977, Van Haaften *et al.* 1983), obligatorily:

- (9) a. A lei/*se stessa, Maria dice che non ci pensiamo mai (Cinque 1990: 59)
of her/herself Mary says that not there-CL we-think ever
 ‘*Of her, Mary says that we should not think there’
- b. A *?lei/se stessa, Maria non ci pensa (Cinque 1990: 59)
of her/herself Mary not there-CL thinks
 ‘*Of herself, Mary never thinks there’

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

- (10) a. In quella città, non ci sono mai stato (Cinque 1990: 59)
in this city not there-CL I-have ever been
 ‘*In this city, I have never been there’
- b. * In quella città, non sono mai stato là (Cinque 1990: 59)
in this city not I-have ever been there
 ‘*In this city, I have never been there’
- c. Quella città, non sono mai stato là (Cinque 1990: 59)
This city not I-have 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 (see Ross 1967: 424, Emonds 1970: 19-20, Postal 1971: 136, fn. 18, Gundel 1975, Baltin 1982, as cited by Cinque 1990: 58) and in matrix clauses, whereas CLLDed elements may appear freely in either.

- (11) L'unica persona che a Gianni, non gli ha mai fatto un favore (Cinque 1990: 58)
the-only person that to John not to-him he-has ever done a favour
 '*The only person that to John, he has never done him a favour'

Lastly, Cinque (1990: 58) observes that CLLD is subject to island constraints (*cf.* (2)):

- (12) a. * A casa, lo abbiamo incontrato prima che ci andasse (Cinque 1990: 59)
to home him we-have met before that there-CL he-went
 '*Home, we met him before that he went there'
- b. * Se ricco, credi che esserlo stato non gli giovi, ti sbagli (Cinque 1990: 59)
if rich you-think that to-have-it-CL been not him help you are-wrong
 '*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 the bipartition, will be of importance for my analysis, I will summarize them in Table 1:

(13) Table 1: Defining characteristics of CLLD vs LD

	multiple	any XP	Connectivity	CL-only	embedded	islands
CLLD	+	+	+	+	+	-
LD	-	-	-	-	-	+

2.4 Aoun and Benmamoun (1996): Two Types of CLLD (One by Movement)

Aoun and Benmamoun (henceforth A&B) extend the definition of CLLD with respect to two Arabic dialects. They argue in detail that one construction is derived by movement of the CLDDed element, while the other involves a base-generated element. The latter case, then, is analogous to the kind of CLLD as described in Cinque (1990) and others. The former, however, is distinct from present accounts to (CL)LD (but *cf.* Cinque 1977, van Haaften *et al.* 1983). A&B look in some detail at Moroccan and Lebanese Arabic and their findings can be summarized as follows. (Note: due to technical difficulties, not all characters can be displayed as in A&B.)

Like in Italian,⁶ these dialects exhibit CLLD.

- (14) a. **naadya** sheefa kariim mbeerih (Lebanese Arabic, A&B: 2)
Nadia saw-her-CL Karim yesterday
 'Nadia, Karim saw her yesterday'
- b. **naadya** tlaqaaha kariim lbareh (Moroccan Arabic, A&B: 2)
Nadia, met-her-CL Karim yesterday
 'Nadia, Karim met her yesterday'

⁶ That CLLD is not a phenomenon unique to Italian, or indeed Romance languages only, is shown *inter alia* by Iatridou 1990, Demirdache 1991, Ouhalla 1992, Schneider-Zioga 1994, Zubizarreta 1995, cited in A&B.

- (15) a. **naadya** shu ?aaletla l-m-*ǰ*allme?⁷ (A&B: 2)
Nadia what said-he-to-her-CL the-teacher
 ‘*Nadia, what did the teacher say to her?’
- b. shu **naadya** ?aaletla l-m-*ǰ*allme? (A&B: 2)
what Nyadia said-he-to-her-CL the-teacher
 ‘*Nadia, what did the teacher say to her?’
- (16) a. fakkart ?enno **naadya** sheefa kariim mbeerih (A&B: 3)
thought-I that Nadia saw-her-CL Karim yesterday
 ‘*I thought that Nadia, Karim saw her yesterday’
- b. * fakkart **naadya** ?enno sheefa kariim mbeerih
 (A&B: 3)
thought-I Nadia that saw-her-CL Karim yesterday
 ‘*I thought that Nadia, Karim saw her yesterday’

A&B observe that CLLD may take place in matrix (14-15) as well as in embedded clauses (16a); it may even follow (15a) or precede (15b) COMP when in embedded clauses (versus (16b)). Furthermore, the clitic may be direct object or indirect object (dative), both attached to the verb, or genitive object attached to a preposition, or even an adnominal clitic attached to the head noun.

As expected under standard views, the relation between CLLDed element and clitic may violate island conditions (Adjunct Condition, Complex Noun Phrase Constraint, Wh-Island Constraint; see A&B: 4). Wh-phrases may precede the CLLDed element, but only if that does not violate any island condition (A&B: 5-7), even across clauses (A&B: 8-10); this is rather puzzling: it would be rather expected that the Wh-element be legitimately to move in the latter case, too.

- (17) a. shu **naadya** (sme_ǰto ?enno) xabbaruwa? (A&B: 5)
what Nadia (heard-you that) told-they-her-CL
 ‘*What did (you hear that) Nadia, they tell/(told) her?’
- b. * shu **naadya** xabbaro Ssabe yalli sheefa? (A&B: 5)
what Nadia told-they the-boy that saw-he-her-CL
 ‘*What, Nadia, did they tell the boy who saw her?’

A&B’s generalizations are shown below:

- (18) a. Wh-(NP/PP)_i ... CLLDed-NP_i ... V + Clitic_i ... t_j (A&B: 11)
- b. * Wh-(NP/PP)_i ... CLLDed-NP_i ... [_{Island} ... Clitic_i ...] ... t_j (A&B: 11)

⁷ Commencing (15), all examples from A&B will be Lebanese Arabic data, for expository reasons. I will also follow A&B by indicating the clitic and the associated CLLDed element in boldface type.

A&B account for the difference in (18) by two different underlying processes. In one, the process is the same as in the Italian examples: the CLLDed element is base-generated in its surface position (18a). In the other, however, the CLLDed element is derived by movement (18b). This would yield the following representations, corresponding to the apparent paradox in (19):

- (19) a. CLLDed-NP_i ... pro_i -X + Clitic_i (base-generation) (A&B: 12)
 b. CLLDed-NP_i ... t_i -X + Clitic_i (movement) (A&B: 12)

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 give their analysis further empirical support by facts from binding and reconstruction. The conclusion to be drawn is that only the moved CLLDed element may reconstruct. This is expected, if and only if there really is movement.

- (20) a. **tleemizun z-zyaar kell l-m_iallmeet bifaDDluwun** (A&B: 15)
students-their the-small all the-teachers prefer-they-them-CL
 '*Their young students, all the teachers prefer them'
 b. **tleemizun z-zyaar kell l-m_iallmeet ?aaSaSo l-wleed yalli**
students-their the-small all the-teachers punished-they the-children that
Darabuwun (A&B: 15)
hit-they-them-CL
 '*Their young students, all the teachers punished the children that hit them'

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, it may reconstruct (20a) and if it is base-generated, it may not, as in a case of (20b) 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 on CLLD, reconstruction would not even be predicted, as it is a purely base-generated phenomenon.

A&B further observe that movement of a Wh-phrase may be blocked by the CLLDed element if this is base-generated. A last representation is shown in (21):

- (21) a. * ... (P)Wh_j ... [_{CP} ... CLLD-NP_i ... [_{Island} ... Clitic_i ...] ... t_j (A&B: 17)
 b. ... (P)Wh_j ... [_{CP} ... CLLD-NP_i ... V + (DAT/acc)-Clitic_i ... t_j (A&B: 17)

A similar picture forms with respect to blocking and coreference. The following examples show that one cannot be coreferent (22a) and the other can, indicating that no reconstruction

takes place (22b); the resulting (co)-reference is shown by superscription.

- (22) a. ε aTit SSabe yalli naadya htammit fii shirweel (A&B 18)
 gave-she the-boy that Nadia cared for-him-CL pants
 ‘She gave the boy that Nadia took care of pants’
 b. **Ssabe yalli naadya htammit fii** ε aTito shirweel (A&B 18)
 the-boy that Nadia cared for-him-CL gave-she-him-CL pants
 ‘The boy that Nadia took care of, she gave him pants’

In this context, one last example will show that disjoint reading may render a sentence grammatical. As A&B note, the following is ungrammatical under intended coreference:

- (23) shu SSabe yalli naadya htammit fii ε aTito? (A&B 19)
 what the-boy that Nadia cared for-him-CL gave-she-him-CL
 ‘*What the boy that Nadia took care of him, she gave him?’

In this paper I will argue against Cinque’s (1990) classification. On the basis of A&B’s findings and the situation in German, I will forward a tripartition into CLLD-, LD- and HT-constructions. For this endeavor, I will not be concerned with the technical details of the various analyses presented above. Rather, I will capitalize on the descriptive findings and distributional differences. We will implement parts of what we have seen so far in my generalized analysis.

3 An Analysis Towards a Tripartition

In this section, I will first present data from the relevant German LD-constructions. These will be compared with Cinque’s (1990) findings and general discrepancies with his typology will be shown. I will then propose an analysis of the syntax involved in German LD. This will lead towards a typology of cross-linguistic LD-constructions (CLLD, LD, HT) in section 3.3 below.

3.1 The Facts: A Distributional Description

I will begin with a presentation of the data. (24) shows the classical LD-construction in German:⁸

- (24) a. Diesen Frosch¹, *den*¹ hat die Prinzessin geküßt⁹
 this-ACC frog the-ACC has the princess kissed

⁸ The *d*-pronoun is italicized and the coreference is shown by superscription in (24) and in the following

⁹ The choice of German examples compared with Wiltschko’s (1995a, 1995b) immediately shows obvious similarities. The coincidence of this rather peculiar set of examples is purely accidental, though

- 'This frog, the princess kissed'¹⁰
 b. Diesen Frosch', die Prinzessin hat *den'* geküßt¹¹

LD involves one element clause-initially which refers to a demonstrative pronoun (*d*-pronoun) lower in the clause. Before we can say anything about these elements and their syntactic properties within a theoretical framework, we will have to ensure that we know the distributional options and restrictions of both, LDed element and *d*-pronoun, sufficiently.

We have seen some related structures in section 2. 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. Part of my proposal is indeed that classic CLLD and HT involve base-generation of the LDed element, in a clause-initial topic position. But LD involves movement, as we will show in the following.

Before doing so, 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 — into CLLD and LD — was inadequate. Evidence comes from German. If we compare characteristics of German LD to those attributed to CLLD and LD (see Table 1 in (13)), we can see that they are split: the first three characteristics of CLLD are certainly typical of German LD, while (to some extent) the last three characteristics of LD also apply (also see van Haaften *et al.* 1983 on this).

3.1.1 In Response To Cinque (1990)

Let us then turn to Cinque's characteristics of CLLD and LD. The first, multiple LD in CLLD-constructions, clearly applies to German.

- (25) a. Diesen Frosch', diese Prinzessin', *den'* hat *die'* geküßt
 b. Diesen Frosch', diese Prinzessin', *die'* hat *den'* geküßt
 c. Diesen Frosch', diese Prinzessin' hat *den'* geküßt
- (26) a. Diese Prinzessin', diesen Frosch', *die'* hat *den'* geküßt
 b. Diese Prinzessin', diesen Frosch', *den'* hat *die'* geküßt
 c. Diese Prinzessin', diesen Frosch' hat *die'* geküßt
- (27) a. * Diesen Frosch', diese Prinzessin' hat *die'* geküßt
 b. * Diesen Frosch', diese Prinzessin', *die'* hat geküßt

¹⁰ In the following, the translation will be given in the form of topicalization for ease of parsing. Note that verbatim translations of most cases would result in ungrammaticality in English (*cf.* my starred translations for Cinque's data as well as A&B's above).

¹¹ (24b) is traditionally labelled a HT-construction. See the following (section 3.2) for some clarification.

We can observe that if there are two LDed elements¹², subject and object, both orders are fine: (25) shows the order object-subject and (26) the inverse. Here we can further see that for either order relation, the *d*-pronouns may be ordered freely, too (25a-b, 26a-b), and the *d*-pronoun referring to the second LDed element may be left out (25c, 26c); but the *d*-pronoun referring to the first one may not be left out (27).

Even a translation of Cinque's example (cf. (7)) is possible; it becomes more acceptable with a different order:¹³

- (28) a. (?) Diese Kleider^l, für mich^l, Hans^k, in dem Geschäft^l, *die'* hat *dafür'* *der^k* *da'* gekauft
 b. Diese Kleider^l, Hans^l, für mich^k, in dem Geschäft^l, *die'* hat *dafür'* *der^k* *da'* gekauft

The second characteristic of CLLD is also an attribute of LD in German. Whereas (24) contains an LDed direct object connected to a *d*-pronoun which may either occur in a high or in a low position, the following shows that the nature of the LDed element may indeed be any XP:

- (29) a. Dieser Frosch^l, *der'* hat die Prinzessin verführt
 this-NOM frog the-NOM has the princess seduced
 'This frog, the princess seduced'
 b. Diesem Frosch^l, *dem'* hat die Prinzessin einen Kuß gegeben
 this-DAT frog the-DAT has the princess a kiss given
 'This frog, the princess gave a kiss'
 c. An diesen Frosch^l, *an den'* hat die Prinzessin den ganzen Tag gedacht
 at this-ACC frog at the-ACC has the princess the whole day thought
 'Of this frog, the princess thought all day'
 d. Auf diesen Brunnen^l, *da(rauf)'* hat die Prinzessin den Frosch zurückgelegt
 on this-ACC well on-there has the princess the frog put-back
 'On this well, the princess put back the frog'
 e. Gestern^l, *da(nn)'* hat die Prinzessin den Frosch geküßt
 yesterday then has the princess the frog kissed
 'Yesterday, the princess kissed the frog'
 f. Aus Hoffnung^l, *darum'* hat sie den Frosch geküßt
 out hope for-that has she the frog kissed
 'Out of hope, she kissed the frog'

We can observe that subject (29a), indirect object (29b), prepositional object (29c,d) and

¹² If we assume that LDed element and topic denote one and the same syntactic object, the subject can indeed be shown to be an LDed element: it is topicalized by virtue of the demonstrative determiner.

¹³ This is probably due to difficulties in parsing with respect to the order of indirect object and subject; an aspect that may vary across dialects.

adverbial (29e) as well as prepositional adjunct (29f) 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 *d*-pronoun is not bound to human reference, not even to animate reference. What (24) and (29) also show is that the LDed element and the *d*-pronoun are Case-marked and agree in this Case (if Case-marking is possible for the *d*-pronoun); I will come back to the relevance of this observation below. As we can observe in (29), the nature of the *d*-pronoun needs to be investigated thoroughly, too, as it can be more than a mere demonstrative pronoun (*cf.* (29c-f)).

Thirdly, Connectivity is assumed to be obligatory for CLLD in contrast to LD. The following are translations from (9) above:

- (30) a. Über sie'/*sich', *da(rüber)*' sagt Maria, daß wir niemals denken sollen
 b. Über *sie'/sich', *da(rüber)*' denkt Maria nicht

With respect to the last three characteristics, German LD parallels with Cinque's typology of LD-constructions, although with a few exceptions. What has become quite clear in the data so far is the presence of Verb Second (V2). Indeed, one of the requirements seems to be that the V2-constraint must be satisfied. It remains to be seen, however, in how far we can account for apparent violations (see below). For the time being, V2 denotes the one alternative construction to Verb Final, as in German embedded clauses.

The standard case of LD in German requires V2. The V2-constraint is activated in the part of the clause following the LDed element(s), the associated clause (Duarte 1987, Raposo 1996) which is introduced by either the *d*-pronoun (when in high position) or the subject:

- (31) 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

LD is also possible in certain embedded contexts. Here, the requirement is that it must be in the context of embedded V2, related to so-called "bridge-verbs" (e.g. Müller and Sternefeld 1993).

- (32) a. Diesen Frosch' glaubt der Bauer, *den'* hat sie gestern geküßt
this-ACC frog believes the farmer the-ACC has she yesterday kissed
 'The farmer believes this frog, she kissed'
 b. Diesen Frosch', *den'* glaubt der Bauer, hat sie gestern geküßt

- (33) a. Diesen Frosch' weiß der Bauer genau, *den'* mag der König nicht
this-ACC frog knows the farmer exactly the-ACC likes the king not
 'This frog the farmer knows well, the king doesn't like'
 b. Diesen Frosch', *den'* weiß der Bauer genau, mag der König nicht

(34) shows the ungrammaticality of LD in embedded Verb Final-contexts.

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

On the other hand, (35) shows the restricted possibilities. The LDed element may be extracted out of an *ob*-clause but only if the *d*-pronoun remains within the *ob*-clause (35a-b).

(35e) shows that this restriction also applies to topicalization.

- (35) a. Diesen Frosch' fragt sich der Bauer, ob der König *den'* mag
this-ACC frog asks himself the farmer whether the king the-ACC likes
 'This frog the farmer wonders, whether the king likes'
 b. Diesen Frosch' fragt sich der Bauer, ob *den'* der König 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 1992: 14).

Similar to the case above, the LDed element must precede *daß* (36c).

- (36) 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

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 (topicalization is sensitive to islands; cf. English translations in (37) which are bad in German, too).

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

Summing up this section, German LD displays three of Cinque's characteristics for CLLD: it allows multiple LD, it allows any XP to be LDed and it requires Connectivity between

LDed element and *d*-pronoun; these characteristics do not apply to HT-constructions in German (which I cannot show for reasons of space). On the other hand, German LD does not require clitics only (this is a somewhat tricky issue; see examples (47) and (48) below). Also, in general it is not possible in embedded contexts (with “bridge-verbs” being the exception). Finally, LD in German is not sensitive to island constraints and thus differs from CLLD and topicalization.

3.1.2 More on German LD

Next, we will see whether LD and Wh-elements go hand in hand.

- (38) a. Dieser Frosch', wo kommt *der'* denn her?
 this-NOM frog where comes the-NOM PRT from
 ‘This frog, where does *(it) come from?’
 b. Dieser Frosch', *der'* kommt wo her?
 c. * Dieser Frosch', wo *der'* kommt her?

(38) shows that the LDed element must precede the moved Wh-phrase. The *d*-pronoun may either occur in the low position (38a) or in the high (38b); in this case, however, the Wh-element remains *in situ* (see Grohmann 1997 on some remarks on Wh-movement), as (38c) shows.

- (39) a. Diesen Frosch', warum hat sie *den'* denn bloß geküßt?
 this-ACC frog why has she the-ACC PRT PRT kissed
 ‘*This frog, why did she kiss?’
 b. Diesen Frosch' glaubt der Bauer, *den'* hat sie wann geküßt?
 c. Diesen Frosch', *den'* glaubt der Bauer, hat sie wann geküßt?
 d. (*) Diesen Frosch', *den'* glaubt der Bauer, daß sie wann geküßt hat?

Again, the LDed element may precede the Wh-item if the *d*-pronoun is low (39a), which can also be extended to long movement (extraction out of an embedded V2-clause, as in (39b-c)). (39d) shows that in this context, extraction out of a *daß*-clause is subject to dialectal variation.

One special case, though predictable under certain considerations, is the behaviour of quantifiers. The following shows the different possibilities with respect to LD of strong quantifiers (40-41) versus weak ones (42-43).

- (40) a. Diesen Frosch', niemand hat *den'* geküßt
 this-ACC frog nobody has the-ACC kissed
 ‘This frog, nobody kissed’
 b. Diesen Frosch', *den'* hat niemand geküßt
 c. * Diesen Frosch', niemand *den'* hat geküßt

- (41) a. * Niemandenⁱ, *denⁱ* hat sie geküßt
 nobody-ACC the-ACC has she kissed
 ‘*Nobody, she kissed’
 b. * Niemandenⁱ, sie hat *denⁱ* geküßt
 c. * Niemandⁱ, *derⁱ* hat den Frosch geküßt
- (42) a. Irgendeinen Froschⁱ, *die* Prinzessin hat *denⁱ* geküßt
 Some-ACC frog the princess has the-ACC kissed
 ‘Some frog, the princess kissed’
 b. Irgendeinen Froschⁱ, *denⁱ* hat die Prinzessin geküßt
- (43) a. Irgendeine Prinzessinⁱ, *dieⁱ* hat den Frosch geküßt
 some-NOM princess the-NOM has the frog kissed
 ‘*Some princess, she kissed the frog’
 b. Irgendeine Prinzessinⁱ, diesen Frosch hat *dieⁱ* geküßt
 some-NOM princess this frog has the-NOM kissed
 ‘*Some princess, this frog, she kissed’

One remark comes to mind when looking at the data in (29). If the *d*-pronoun is left out, the sentence remains grammatical; in particular, the reading is that of common topicalization:

- (44) a. Diesen Frosch hat die Prinzessin geküßt
 this frog has the princess kissed
 ‘This frog, the princess kissed’
 b. An diesen Frosch hat die Prinzessin gedacht
 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 dislocation and topicalization. This observation will be crucial in the analysis presented in the following section. Note also that if the LDed element were left out, the sentence remained grammatical, with a pronoun that is highly referential.

- (45) a. *Den* hat die Prinzessin geküßt
 the-ACC has the princess kissed
 ‘This one, the princess kissed’
 b. *An den* hat die Prinzessin gedacht
 at this has the princess thought
 ‘Of this one, the princess thought’
- (46) a. Die Prinzessin hat *den* geküßt
 b. Die Prinzessin hat *an den* gedacht

While (45) lists the equivalent constructions of (44) without the LDed element and the *d*-pronoun

in its high position, (46) shows that the *d*-pronoun 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.

A last property of the *d*-pronoun concerns its nature. We have seen so far that it can be any of the demonstrative pronouns as well as certain adverbs, and it may even be a PP. But LD-construction do not necessarily require a mere *d*-pronoun; (47) shows that instead, an entire XP may be employed, not making use of a pronoun altogether.

- (47) a. Diesen Bauern', *den Halunken'* hat die Prinzessin nicht geküßt
 this-ACC farmer the-ACC rascal has the princess not kissed
 'This farmer, the rascal, the princess didn't kiss'
 b. Diesen Bauern', die Prinzessin hat *den Halunken'* nicht geküßt

Constructions like these, however, differ from the kind of LD-constructions I am concerned with here. The analysis below will show that these involve actually a HT (cf. van Haaften *et al.* 1983). A more clear-cut case of HT-constructions is illustrated below:

- (48) a. Dieser Frosch', *den'* hat die Prinzessin geküßt
 this-NOM frog the-ACC has the princess kissed
 'This frog, the princess kissed'
 b. Dieser Frosch', die Prinzessin hat *den'* geküßt
 c. Dieser Bauer', *den Halunken'* hat die Prinzessin nicht geküßt
 d. Dieser Bauer', die Prinzessin hat *den Halunken'* nicht geküßt

On analogy, I am not concerned with cases where there is a full pronoun (*strong*, in the sense of Cardinaletti and Starke 1995, possibly even weak ones;¹⁴ see Grohmann 1996) instead of the *d*-pronoun, where we also assume a HT-construction.¹⁵

- (49) a. Diesen Frosch, die Prinzessin hat ihn geküßt
 this-ACC frog the princess has it kissed
 'This frog, the princess kissed it'
 b. Dieser Frosch, die Prinzessin hat ihn geküßt

In GB approaches, the LDed element is taken to be a topic and as such base-generated in a clause-initial position (e.g. Scherpenisse 1983). The *d*-pronoun is then presumably the base-

¹⁴ The main distinction relevant here is stress. When a full pronoun (as opposed to a *d*-pronoun) appears, it does not necessarily bear stress. It thus differs prosodically from the *d*-pronoun which is always emphasized.

¹⁵ In this sense, then, Cinque's attribute of "clitic-only" may also apply to German, as "*d*-pronoun-only". I cannot go into more detail at this point, for reasons of space.

generated element and moves for the usual reasons (Case, agreement, phi-features etc.). Alternative approaches derive their analyses from Chomsky's (1977) original discussion on topicalization and propose an empty (Wh-)operator.

Within the MP, this approach is not desirable, hence not tenable. All syntactic (*i.e.* overt) movement must be motivated by the need to check a strong feature. The application of a rule Move Alpha in the grammar has thus shifted towards Move F(eature). If this is a requirement for movement, we might ask what to do with topic constructions, and especially with LD-constructions. We thus have immediate motivation to look into the present issue at some detail under syntactic considerations. In the following I will propose an analysis of the data I have presented above.

3.2 The Analysis: A Tripartitional Approach to LD-Constructions

So far, the discussion revolved around classic analyses of topicalization, CLLD and LD. The previous section contained an extensive (though by no means exhaustive) presentation of some distributional properties of German LD. I have at various points anticipated this section by classifying one construction as LD and another as HT, with respect to German. In this section, I will show that the syntax of these two constructions is different and should hence be subject to reanalysis. Part of the analysis is a more general classification which will be presented in section 3.3 below. Crucial for the analysis are facts from binding and reconstruction; in spirit, this is very similar to A&B's approach. The claims will be further strengthened by evidence from the behaviour of idioms.

3.2.1 CLLD vs HT: The Binding Facts

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 those constructions in which the LDed element agrees in Case with the coreferent *d*-pronoun and those in which it does not. Let me repeat the paradigm:

- (50) a. Diesen Frosch', *den'* hat die Prinzessin geküßt (= (24))
 b. Diesen Frosch', die Prinzessin hat *den'* geküßt

- (51) a. Dieser Frosch', *den'* hat die Prinzessin geküßt (= (48))
 b. Dieser Frosch', die Prinzessin hat *den'* geküßt

In (50), the LDed element and its associated *d*-pronoun agree in Case (accusative); in (51), the LDed element is nominative, while the associate *d*-pronoun is marked for accusative. The question arises whether this is coincidental or whether it has further reaching consequences.

Evidence from reconstruction shows that it has indeed consequences, in line with A&B's findings. Thus, (52) shows that only in the Case-agreeing examples, the LDed element and its associated *d*-pronoun can be coreferent.

- (52) a. [Seinen' Vater]', jeder' glaubt, *den'* kann er' nachahmen
 his-ACC father everyone believes the-ACC can he imitate
 '*His father, everyone believes he can emulate him'¹⁶
 b. [Seinen' Vater]', jeder' glaubt, er' kann *den'* nachahmen
- (53) a. * [Sein' Vater]', jeder' glaubt, *den'* kann er' nachahmen
 his-NOM father everyone believes the-ACC can he imitate
 '*His father, everyone believes he can emulate him'
 b. * [Sein' Vater]', jeder' glaubt, er' kann *den'* nachahmen

If the pronoun within the LDed element can be coreferent with the subject pronoun in one configuration but not in the other, these constructions are likely to be syntactically different. I will thus assume with some confidence that in one case, the LDed element moves (52) while it is base-generated in the other (53).

The paradigm in (52) and (53) has three further consequences. First, in (52) there is a weak cross-over (WCO) configuration which does not render the sentence ungrammatical. This is in line with independent research in scrambling (*cf.* Frank *et al.* 1992 and references there). Assuming a topicalization analysis to pre-subject scrambling (Grohmann 1996), this gives further evidence in favour of such an approach. Another example of WCO in this context is shown below:

- (54) a. Seinem' Vater, sein' Freund sagte, *dem'* hat das Spiel gefallen
 his-DAT father his friend said the-DAT has the match pleased

¹⁶ In the English translations of (52-55), I use LD and mark them ungrammatical. Native speakers inform me that it is not necessarily ungrammatical, not even under a coreferent reading; but they also judge the coreferent reading as not the most natural one for either (among others, Jeff Lilly, p.c.). This would be in line with van Haaften *et al.* (1983: 136), who argue that a coreferent reading would not be available for the following:

i) The first of his' papers, I think [every linguist]' would qualify it as a failure

- b. *His father, his friend said the match pleased him'
 Seinem' Vater, sein' Freund sagte, das Spiel hat *dem'* gefallen
 (55) a. * Sein' Vater, sein' Freund sagte, *dem'* hat das Spiel gefallen
 his-NOM father his friend said the-DAT has the match pleased
 *His father, his friend said the match pleased him'
 b. * Sein' Vater, sein' Freund sagte, das Spiel hat *dem'* gefallen

Second, it gives rise to the assumption that in (52), the Case-agreeing LDed element reconstructs, as shown by A&B. Another indicator for reconstruction might be reflexivization, as shown in (56-57).¹⁷

- (56) a. [Den Wagen von sich']', *den'* hat er' verkauft
 the-ACC car of himself the-ACC has he sold
 'His car, he sold'
 b. [Den Wagen von sich']', er' hat *den'* verkauft
 (57) a. * [Der Wagen von sich']', *den'* hat er' verkauft
 the-NOM car of himself the-ACC has he sold
 *The car of himself, he sold (it)'
 b. * [Der Wagen von sich']', er' hat *den'* verkauft

The third consequence of the above is that both configurations are part of one syntactic construction, the *d*-pronoun in a high position as well as in a low position.

3.2.2 Further Evidence: Idioms¹⁸

Cinque (1990) also cites data from Italian where reconstruction may take place in CLLD-constructions, yet argues in favour of a base-generation analysis. In view of this, one might refrain from using solely data as given above to argue in favour of a movement analysis of LD in German. But one interesting set of data involves the behaviour of idioms.

Idioms may be topicalized. This is shown with one example in the following:

¹⁷ One possible answer, however, might be that reflexivization cannot target nominative DPs; but 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) in their discussion of LD vs HT (*ze* is the full lexical pronoun):

i) Elkaars jassen, *die* dragen *ze* niet graag
 each-other's coats those-ones wear they not willingly
 'Each other's coats, they don't like to wear'

ii) Elkaars jassen, *ze* dragen *ze* niet graag
¹⁸ I am very grateful to Rikardo Etxepare for bringing this possibility to my attention and for discussion.

- (58) a. Er hat ihm deswegen die Zähne gezeigt
he has him for-that-reason the teeth shown
 'That's why he showed him his teeth'
 b. Die Zähne hat er ihm deswegen gezeigt
 c. Deswegen hat er ihm die Zähne gezeigt
 d. Deswegen hat die Zähne er ihm gezeigt

Now, as it turns out, these may also be LDed:¹⁹

- (59) a. Die Zähne', *die'* hat er ihm deswegen gezeigt
 b. Die Zähne', er hat ihm *die'* deswegen gezeigt

These examples show that LD is grammatical for German idioms with a high and a low *d*-pronoun.²⁰ But with respect to my second claim, we also have evidence. Recall that I also argue that those LD-constructions with Case-agreeing LDed element and *d*-pronoun are different from the non-agreeing ones. (60) shows the normal and the topicalized construction for an idiom where we can construct both cases; these follow in (61) and (62).

- (60) a. Der schöne Mann hat der klugen Frau den Kopf verdreht
the handsome man has the smart woman the head twisted
 'The handsome man turned the smart woman's head'
 b. Den Kopf hat der schöne Mann der klugen Frau verdreht
 (61) a. Den Kopf', *den'* hat der schöne Mann der klugen Frau verdreht
 b. Den Kopf', der schöne Mann hat der klugen Frau *den'* verdreht

¹⁹ Grewendorf (1992: 11) cites Haider (1990) who apparently showed 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 uses one example which does not sound too bad to me or other native speakers consulted. Van Riemsdijk and Zwarts (1997: 18-19) give data from Dutch and note that we do not yet know enough about the syntax of idioms; hence a difficulty arises for their (un)grammaticality in certain context. But the data from German I present above gain further support from a more acceptable LD of an idiom chunk as opposed to a HT-construction in German (Vat 1997: 80) as well as the note that some types of idioms can be LDed in Dutch (Vat 1997: 72):

- i) ?Den'/*Der' größten Aufschwung, *den'* haben die japanischen Kleinwagen genommen
the-ACC/NOM biggest increase the-ACC have the Japanese small-cars taken
 'The small Japanese cars achieved the biggest increase in popularity'
 ii) Mijn hand', *die'* heb ik gebrand
my hand that have I burned
 'My hand, I burned it'

The German equivalent of (ii) is also grammatical, as I will show presently. Also, Anagnostopoulou (1997: 155) shows LD-constructions of idioms as opposed to HT in Greek and Richards (1997: 12-13) discusses scrambling of idiom chunks in Japanese.

²⁰ This is presumably not the case in Romance; Rikardo Etxepare (p.c.) informs me that in Spanish, idioms may not be CLLDed. See also fn.18.

- (62) a. * Der Kopf, *den'* hat der schöne Mann der klugen Frau verdreht
 b. * Der Kopf, der schöne Mann hat der klugen Frau *den'* verdreht

Even if these examples do not always show (see fn. 18), some certainly do (see some papers in Anagnostopoulou *et al.* 1997). There is thus further evidence for my claims. There are now six observations to be taken care of in the analysis.

- (63) a. German LD is different from German HT
 b. German LD is different from Romance CLLD
 c. Cross-linguistically, LD is different from CLLD and HT
 d. German LD is similar to some variant of Arabic CLLD
 e. *d*-pronoun is different from full lexical pronoun
 f. high *d*-pronoun is not very different from low *d*-pronoun

My analysis will propose the following answers to (63):

- (64) a. German LD involves movement, German HT base-generation
 b. German LD involves movement, Romance CLLD base-generation
 c. Cross-linguistic LD involves movement, CLLD and HT base-generation
 d. German LD and Arabic CLLD (= LD) involve movement
 e. *d*-pronoun involves trace-Spell Out and copy, full lexical pronoun does not
 f. high *d*-pronoun involves higher trace-Spell Out than low *d*-pronoun

The first step is to present a movement-based analysis for (German) LD. This will in turn take care of (63a-d), before I tackle the nature of the *d*-pronoun within such an approach (63e-f).

3.2.3 The Analysis

From the outset, it is conceivable to equate topicalization and LD up to a certain point. The movement-based analysis assumes a movement process analogous to topicalization; it then assumes more (*d*-pronoun, see below). With respect to topicalization, I assume that a topic is base-generated in its respective argument- or adjunct-position.²¹ All (definite) arguments in German leave VP (see for example Zwart 1993, following Diesing 1992). This is presumably so that the argument can check its strong D-feature in a relevant configuration in the Agr-complex where the Agr-head bears a D-feature to be checked off (spec-head agreement). Topics are further endowed with a strong Top-feature (see Grohmann 1996 on the relevance to scrambling), driving them to move further. I thus assume a TopP above IP (also see Müller and Sternefeld 1993, Haftka 1995, 1996). Crucial in the literature is that TopP is below the head that carries the Wh-feature. Here I adopt an articulated structure of CP, in line with Rizzi's (1995) recent

²¹ In the following, I will mainly be concerned with arguments, for sake of simplicity.

proposal. The relevance will become clear presently. Furthermore, the verb moves through the Agr-heads and T_ up to Fin_ in matrix (V2) clauses. Following Haegeman (1996), I assume the EPP to be a feature-requirement on FinP. It follows that in subject-initial matrix clauses, the subject raises to SpecFinP in order to check the EPP and in topic-initial clauses, the topic moves through SpecFinP.²²

To sum up the assumptions so far, (65) shows a bracketed representation of the clause structure for German,²³ while (66) gives a possible derivation of matrix topicalization and (67) one of embedded topicalization (where TopP is recursive, indicated by the asterisk).²⁴ The structures put into practice will be presented below.

(65) ForceP - TopP* - FocP - TopP* - FinP - AgrSP - TP - AgrOP - AgrOP - VP

(66) *TopP** Top_ *FinP* Fin_ *AgrSP* AgrS_ *TP* T_ *AgrOP* AgrO_ *AgrOP* AgrO_
Top_i V t_i t_v SU t_v — t_v t_i t_v OB t_v

(67) *ForceP* *TopP** *FocP* *TopP** *FinP* *AgrSP* *TP* *AgrOP* *AgrOP*
— C Top_i Wh_j Adv t_i SU — t_i t_j
(no overt verb movement, hence no head-positions indicated)

In cases of multiple (matrix) topicalization,²⁵ the highest topic is the one that moves through SpecFinP (EPP) and takes the verb along to TopP. This is motivated by the intimate relation between topic and verb (EPP); hence, the V2-constrained is satisfied. The Wh-feature is taken to sit on Foc_ (pace Rizzi 1995, Haegeman 1996). But we can see in (67) that there is a TopP preceding FocP, too; this can account for cases where the topic in fact precedes the Wh-element, as shown in (39), repeated below for convenience as (68a), as well as in (68b) for embedded contexts.

²² At this point, it is not crucial to identify the EPP completely (whether it is a simple D-feature or related more generally to predication, for example). There is no unanimous consent on this issue in the literature, and it remains an open question for future research. Let us now simply assume that there is an 'EPP-feature' on Fin_ which can be checked by any XP in German.

²³ I will not supply a deeper structure of VP. The only relevant note regards the assumption that all arguments leave VP (possibly only if they are definite; cf. Diesing 1992). With respect to AgrOP: I assume here the possibility of AgrIOP and AgrDOP to be ordered freely (hence AgrOP in both cases), following Haeblerli (1995); see also Grohmann (1996). This issue is still unresolved in technical terms (see Grohmann in preparation) and might be subjected to a reanalysis under the theory of multiple specifiers (e.g. Chomsky 1995).

²⁴ In contrast to some accounts in the literature, I assume that topicalization is possible in German embedded clauses (cf. Müller and Sternefeld 1993 for a different view, and the response in Culicover 1996).

²⁵ I should note that we assume all XPs preceding the subject to be topicalized (unless Wh-movement, maybe; but see Grohmann 1996, 1997).

- (68) a. Diesen Froschⁱ, warum hat sie *den'* bloß geküßt? (= (39))
 b. Der Bauer glaubt, daß diesem Frosch was die Prinzessin gegeben hat?
the farmer believes that this frog what the princess given has
 'The farmer believes that the princess gave what to this frog?'

In (68a), a case of LD, the LDed element precedes the Wh-element; anticipating the analysis of LD, I assume the LDed element to sit in SpecTopP. (68b) is an example of embedded topicalization, with the Wh-element in SpecFocP (see Grohmann 1997 for related evidence).

A movement analysis of LD, then, accounts for the data relevant to coreference. If the LDed element moves from a lower position, it can reconstruct to this position at LF and be in an appropriate position to be coreferent with the full pronoun. This contrasts with a generalized base-generation account of LD-constructions.

But simply stipulating movement of the LDed element is not enough for a substantial argument. I will have to account for the nature of the *d*-pronoun to make my assumptions viable. What is at stake here is that we have a full lexical LDed element — a topic, under our assumptions — which is associated with a pronoun that is not fully lexical, a *d(emonstrative)*-pronoun. However, this *d*-pronoun seems to occupy a position which otherwise would be occupied by the non-topicalized argument or its trace, *i.e.* in SpecAgrS/OP (when occurring low) or SpecFinP (when high), respectively. An immediate reaction to this observation would be to argue against a movement analysis; rather, the LDed element would be base-generated in SpecTopP while the *d*-pronoun is the base-generated argument, moving higher for feature-checking (this would be in line with most proposals in the literature, to my knowledge).²⁶

I will take a different stance here. In order to establish a syntactic relation between LDed element and *d*-pronoun on the one hand, and a generation-account for the *d*-pronoun on the other, I propose that the *d*-pronoun is both, trace-Spell Out and copy.

First things first, the LDed element is part of the array that enters the initial numeration. At this point, there is no *d*-pronoun present. Following Chomsky (1995), the array consists of all lexical items of the sentence to be produced, fully inflected, plus all functional heads that bear relevant features.

²⁶ This position would further be supported by the fact that the *d*-pronoun cannot possibly be a head, as it i) carries heavy stress and ii) may involve a deeper structure including a preposition. Norbert Hornstein points out to me that with respect to i), the issue is not as clear as it seems; also, ii) could be countered by proposing a complex structure of the sort proposed by Chomsky (1995), *i.e.* it could be an X^{0max} (which was earlier proposed in Hoekstra 1995, as Jan-Wouter Zwart informs me). Though the original idea could involve such a structure of the *d*-pronoun, I will deviate from a pure Agr-Spell Out idea and propose an alternative along these lines.

As the derivation unfolds, a fully lexical argument-DP, for example, moves to the Agr-complex to check its feature(s); the subject moves to the specifier of AgrSP, objects move to the specifier of the respective AgrOP. But it may also bear an additional Top-feature which they must check off against the Top-feature of the head of TopP. Let us assume, then, that Top^0 is part of the initial numeration, bearing a strong Top-feature. Some argument of the array also bears a Top-feature. To take an example, the initial numeration of (24a) will look approximately as follows, where *Prinzessin* bears a Top-feature in addition to all others (ϕ , Case, D):

- (69) $N = \{\text{hat, diesen, Frosch, die, Prinzessin, geküßt, AgrO}^0, \text{AgrS}^0, \text{T}^0, \text{Fin}^0, \text{Top}^0\}$

From the array (69), we take out the verb *hat geküßt* and merge it with the object *diesen Frosch* (both are derived by further applications of Merge independently, presumably). Next, the subject *die Prinzessin* will be taken from the array and merged with what we have so far, and the entire object will be a full VP. Next, AgrO^0 will enter the derivation and attract the object (ϕ -features, Case) as well as inflected verb (*hat*) to check its strong V-feature. T^0 is the next item from the array: it will presumably attract the verb to check Tense. AgrS^0 , then, will do the same for the subject as AgrO^0 has done for the object. So far, the sentence is a full AgrSP. But let us follow Haegeman (1996) and assume that the EPP needs to be satisfied in FinP. Thus Fin^0 comes in and should attract both, verb and object (which bears the Top-feature).

But here, a problem arises. Consider the (simplified) structure so far:

- (70) $[_{\text{FinP}} \text{Fin}^0 [_{\text{AgrSP}} \text{die Prinzessin hat } [_{\text{AgrOP}} \text{diesen Frosch geküßt}]]]$

On the one hand, the EPP-feature should be general enough to be checked off by a number of elements such as arguments, adjuncts etc. — basically, it needs to be checked by an XP, that seems to be the generalization of V2-analyses. Thus in a normal, subject-initial clause — without any further movement such as topicalization or Wh-movement going on — the subject should raise to SpecFinP to check the EPP-feature. This seems fine under standard restrictions on movement: movement must be local, determined by the Shortest Movement Requirement (SMR, Chomsky 1993: 181), the Minimal Link Condition (MLC, Chomsky 1995: 296) or any combination or variant (see among many others Kitahara 1994, Zwart 1997 and a number of papers in Abraham *et al.* 1996 such as the contributions by Ferguson, Groat and O’Neil, Zwart).

On the other hand, by the same logic, Fin^0 should not be able to attract the object in (70).

Clearly, this is what we want, however: the idea is that the topic has to check the EPP-feature as it is the XP which precedes the verb in V2 contexts such as this. We thus have to retreat to the notion of “global economy”: by virtue of the strong Top-feature in Top^0 and the object-DP, the subject is not allowed to raise further; instead, the object raises to SpecFinP and checks the EPP-feature. Then we take Top^0 from the array whose strong feature needs to be checked, motivating further movement of object plus verb.²⁷

In a pure topic-construction, this is all that happens in the syntax (71a). In the case of LD, however, one of two traces may be spelt out phonetically (71b-c):

- (71) a. $[\text{TopP Diesen Frosch}_i \text{ hat } [\text{FinP } t_i t_V [\text{AgrSP die Prinzessin } t_V [\text{AgrOP } t_i t_V \text{ geküßt}]]]]$
 b. $[\text{TopP Diesen Frosch}_i [\text{FinP } den_i \text{ hat } [\text{AgrSP die Prinzessin } t_V [\text{AgrOP } t_i t_V \text{ geküßt}]]]]$
 c. $[\text{TopP Diesen Frosch}_i [\text{FinP die Prinzessin}_j \text{ hat } [\text{AgrSP } t_j t_V [\text{AgrOP } den_i t_V \text{ geküßt}]]]]$

In general, then, topics move from SpecAgrS/OP to SpecTopP (one of the topics, if there are more than one, has to move via SpecFinP for EPP-reasons). In the case of topicalization, they leave a trace behind (71a). In the specifier of FinP, the topic can check the EPP-feature. It then moves further to SpecTopP and takes the verb along, an instantiation of the link between V2-constraint (*i.e.* of the form ‘XP-V...’) and EPP.²⁸ Both leave traces behind in FinP and are spelt out in TopP.

LD with a *d*-pronoun in high position (71b) can be accounted for by the following steps in the derivation. The object raises from SpecAgrOP to SpecFinP under the same assumptions as topics do. But rather than taking the verb with it, the object moves to the specifier of TopP alone to check the Top-feature. For some reason, the trace in SpecFinP gets spelt out. I want to propose that the reason lies in the tight relation between TopP and FinP: the topicalized element bears the feature that satisfies the EPP (whatever that may be) and wants to be spelt out with the verb. This is why the verb moves along in cases of topicalization. In the case of LD, however, the verb remains in Fin^0 and induces the trace of the LDed element to be spelt out.

But in case of LD with a low *d*-pronoun (71c), the object raises to SpecTopP directly. The EPP is satisfied by the subject, *i.e.* we have an alternative to the above case (which remains to

²⁷ There is a tight relationship between TopP and FinP: in case of more than one topics, the highest takes the verb with it. This may support the view of an instantiation of “global economy”. Notice that in cases of multiple topicalization, only one topic needs to move through SpecFinP; and incidentally, this topic takes the verb along. All other topics would satisfy SMR/MLC by virtue of being the closest element bearing a Top-feature. This analysis needs to be worked out in more detail (to be done in Grohmann in preparation, I hope).

²⁸ The exact formulation of the conceptual and empirical depth of this link remains to be shown in future work. For the present purposes, let us assume that this link exists and works roughly in the way outlined here.

be formalized without the unwanted flavour of “optionality”). The direct movement to SpecTopP leaves a trace behind in the specifier of AgrOP. As I have just argued, the LDed element is a possible satisfier of the EPP which I will take as the reason for spelling out the trace.

One possible approach to account for the spelling out of traces, yet sketchy at this time, is to say that the traces are incomplete. Let us assume that the feature responsible for EPP-satisfaction is of such a character that it needs to be phonetically realized. This is feasible, taking into account that whatever checks the EPP-feature in the standard case is the first element satisfying the V2-requirement. Thus in one case, the lexical item with its appropriate feature bundle (EPP, Top) is separated from the verb and thus cannot serve as the XP that is directly followed by the verb (V2). In the other case, this element does not even pass through SpecFinP to check the EPP so that this feature may still remain with the trace forcing some phonetic realization, *i.e.* an Agr-Spell Out.

A number of possible derivations for some of the cases I have presented are shown below (with only the most relevant steps of the derivations indicated):

- (72) a. [_{TopP} Dieser Frosch_i [_{FinP} *der_i* hat [_{AgrSP} t_i [_{AgrOP} die Prinzessin verführt]]]]
 b. [_{TopP} Diesen Frosch_i [_{FinP} *den_i* hat [_{AgrSP} die Prinzessin [_{AgrOP} t_i geküßt]]]]
 c. [_{TopP} Diesem Frosch_i [_{FinP} *dem_i* hat [_{AgrSP} die Prinzessin [_{AgrOP} t_i [_{AgrDOP} einen Kuss gegeben]]]]]²⁹
 d. [_{TopP} Gestern_i [_{FinP} *da(nn)_i* hat [_{AgrSP} die Prinzessin [_{AgrOP} den Frosch geküßt]]]]
- (73) a. [_{TopP} Dieser Frosch_i [_{TopP} diese Prinzessin_j hat [_{FinP} t_i [_{AgrSP} *der_i* [_{AgrOP} t_j verführt]]]]]]
 b. [_{TopP} Diesen Frosch_i [_{FinP/AgrSP} die Prinzessin hat [_{AgrOP} *den_i* geküßt]]]
- (74) a. [_{TopP} Seinen Vater_i [_{FinP/AgrSP} jeder glaubt [_{TopP} *den_i* kann [_{FinP} t_i [_{AgrSP} er [_{AgrOP} t_i nachahmen]]]]]]
 b. [_{TopP} Seinen Vater_i [_{FinP/AgrSP} jeder glaubt [_{TopP} t_i [_{FinP/AgrSP} er kann [_{AgrOP} *den_i* nachahmen]]]]]]

In (72) I show the structure for (29a), (24a), (29b) and (29e), respectively. Here, the *d*-pronoun occurs high, *i.e.* as a Fin-Spell Out. In (73), it is a Spell Out in Agr. (52), the crucial distinction between case-agreeing and non-agreeing LD-constructions is repeated in (74).

From the discussion and the analysis presented above, one would predict that LDed adjuncts (*i.e.* in topic position) could not be coreferent with a “low” pronoun. The rationale behind this is simple: if high pronouns denote a Spell Out in FinP and low pronouns a Spell Out

²⁹ It is not important for the present purposes whether *einen Kuß* is the direct object of *geben* or whether they form a complex verb. For sake of simplicity and exposition, I adopt the former interpretation in the structure (74c).

in AgrP, no adverbial or prepositional adjunct should be expected to leave a pronoun in AgrP behind. Under the assumption that adjuncts may move, a feasible movement targets the specifier of FinP (EPP). High pronouns can thus be spelt out via further movement to SpecTopP. But as low pronouns invariably mean Agr-Spell Out, no low pronoun can be the result of a Spell Out of an adjunct, as these never pass through AgrP.

Interestingly, this prediction turns out to be true:

- (75) a. * Gestern', die Prinzessin hat den Frosch *da(nn)*' geküßt (cf. (29e)
 b. * Aus Hoffnung', die Prinzessin hat den Frosch *darum*' geküßt (cf. (29f)

To summarize the analysis, I propose that LD in German is derived by movement. There are two possibilities: the LDed element can be co-referent with a *d*-pronoun in high position (clitics alike) or in low position (arguments only). I identified the high position with the specifier of FinP and the low position with the specifier of AgrP. In the former case, the LDed element first raises to SpecFinP to satisfy the EPP. Bearing a Top-feature, it then moves to the specifier of TopP to check this and leaves the verb behind (unlike in pure topicalization). The “tight” relation between Top and EPP forces the trace in SpecFinP to be spelt out, by virtue of the presence of the verb in Fin⁰, I argue. In the latter case, the subject satisfies the EPP and the Top-feature bearing object moves from SpecAgrOP directly to SpecTopP. This forces the trace left behind in SpecAgrOP to be spelt out; again on the grounds of the tight relation between EPP and Top (with the object bearing a feature that would normally satisfy the EPP, like the subject).

This is a preliminary sketch of an analysis that leaves various questions open. I hope to pick some of them up and refine the approach appropriately (Grohmann in preparation).

3.3 Consequences for Cross-Linguistic Left Dislocation

The analysis as proposed above 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. All three constructions express the same semantic content of a given sentence (presumably that of topicalization; see Wiltschko 1995a, 1995b on the issue of interpretation, following observations by Iatridou 1993/1994) but differ in their syntactic behaviour.

In the analysis of LD-constructions, I thus include A&B's findings with respect to a movement option for CLLD in certain Arabic dialects. In fact, if we have a tripartitional analysis,

we might want to look at other languages and try to fit the respective constructions into our typology. Also, we might want to categorize similar constructions and label them for the sake of a typology. Thus, CLLD as a movement operation should simply be called LD, with “LD” standing for those LD-constructions that involve movement. Many so-called LD-constructions (German, English) fall then into the category “HT”, characterized by a base-generation analysis and by either a *d*-pronoun or a full lexical pronoun, as well as the last category, “CLLD”, crucially (but not uniquely) containing a clitic pronoun. This attempt of a typology could be represented as follows:

(76) Table 2: *Classification of LD-constructions*³⁰

	Left Dislocation <i>movement</i>	Clitic Left Dislocation <i>base-generation</i>	Hanging Topic <i>base-generation</i>
German	yes	no	yes
English	no	no	yes
Romance	no	yes	yes
Arabic	yes	yes	no

The typology as presented here in short raises three immediate questions. First, what exactly is the difference between topicalization and left dislocation, as both derive from movement? As alluded to in the analysis above, the obvious difference is that in one case the trace of the topic spell out (LD) — for reasons yet to be satisfactorily accounted for.

Second, the data from German seem to suggest that agreement and Case play a crucial role in determining what kind of syntactic process underlies a given LD-construction, whether it is movement (LD) or base-generation (HT). Chomsky (1995: 285, section 4.10 among others) diverges from the prevalent view since the structure of IP became more articulated that Case and agreement must be dissociated; data as shown above and the analysis proposed may in fact lend further support for this view, as well as one of the consequences: maybe we should dispense with Agr-projections and implement a system of multiple specifiers where Case and agreement are checked within one projection. Some work on this issue has been done (e.g. Koizumi 1994, Richards 1997) but much more will be needed.

Third, especially when some instances of CLLD should be analysed as LD (e.g. Lebanese

³⁰ The table in (76) does not claim completeness. The values for each language represent merely the data I have presented in this study; it is hence conceivable that Arabic, for example, also has HT-constructions (*i.e.* some value ‘no’ should actually be ‘yes’). What is proposed, however, is that German has no CLLD while English has neither CLLD nor LD.

and Moroccan Arabic), the problem arises for the learner how to know which construction is an instance of which type. For lack of space and time, I cannot address this issue here; this problem exists for all kinds of syntactic phenomena, especially when there seem to be different constructions all expressing the same information.

A further issue that remains for future research, possibly aside from a number of other matters, is an in-depth study of more LD-constructions of the languages under consideration here, as well as extending the corpus. It yet needs to be verified that Case really plays a role. What we can get out of this study, however, is further support for the “autonomy of syntax”: we now have evidence for three semantically equal constructions that all differ syntactically.³¹

4 Conclusion

In this paper I have proposed an analysis of LD-constructions in German and compared them with relevant analogues from other languages. It turns out that LD in German involves an LDed element which is coreferent to a so-called *d*-pronoun. Moreover, both agree in Case. This sets them apart from comparable constructions without Case agreement. That the syntax involved in these two constructions differs, too, can be seen from coreference and reconstruction. Only the Case-agreeing variant allows reconstruction. I thus propose a distinction for German LD and call one LD, the other HT (in accordance with traditional grammar and recent generative accounts). Syntactically, I propose a movement analysis for the Case-agreeing construction, while HT is best analysed as base-generation of the LDed element. In the latter case, the *d*-pronoun is base-generated as a pronoun and moves for reasons of feature-checking. In the former case, the main theme of this study, the pronoun is not present in the initial numeration but is generated as a combination of Agr-Spell Out and copy of the LDed element which moves to check features.

I also propose a cross-linguistic tripartition of LD-constructions: under the view presented here, we distinguish LD from CLLD and HT. CLLD is not available to German but is well-accounted for in Romance and Arabic, among other languages. The classical analysis is that of base-generation. But recent studies have shown that sometimes, movement is involved. These cases incidentally involve one of our reasons to propose a movement analysis for LD in German, namely coreference and reconstruction. Tying these results in with our analysis of the German

³¹ Four, actually, if we count topicalization. Thanks to Norbert Hornstein for pointing this out to me.

data, I propose that these cases of CLLD are in fact instances of LD. The relation between these two is asymmetric: CLLD crucially employs clitics, while LD may have a clitic or a *d*-pronoun. (Additionally, HT may involve full lexical pronouns or even full lexical XPs.) The main goal of this study was to show that syntactic differences underlie distributional differences of a number of semantically equal constructions.

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