An Ellipsis Approach to Contrastive Left-dislocation*

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Abstract

This paper proposes a novel analysis of Contrastive Left-dislocation (CLD), according to which the left-dislocated XP is a remnant of clausal ellipsis. This analysis makes sense of the otherwise paradoxical fact that the dislocated XP shows connectivity into the clause it precedes, while other properties betray its clause-external status. The paradox is resolved by analyzing CLD as a juxtaposition of two parallel clauses, the first of which is reduced by deletion at PF. Akin to recent treatments of sluicing, fragment answers, split questions, and other phenomena, the analysis reduces CLD to an interplay of \overline{A} -movement and ellipsis, thereby removing constructional residue from the theory of UG.

Keywords: dislocation, ellipsis, movement, fragments, connectivity

1 Introduction

In this paper I propose a novel analysis of Contrastive Left-dislocation (CLD), a construction in which a left-peripheral XP precedes a complete clause containing a resuming element.

(1) Den Peter, den habe ich gesehen. the Peter him have I seen 'I saw Peter.'

(German)

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For convenience I will henceforth refer to the "dislocated" XP ($den\ Peter\ in\ (1)$) as the dXP, to the resuming element ($den\ in\ (1)$) as the correlate, and to the clause containing the correlate as the $host\ clause$.

According to the analysis I will defend, the dXP is a remnant of clausal ellipsis. More specifically, my claim is that (1) derives from the following underlying biclausal structure:

(2)
$$[CP_1 \text{ [den Peter]}_i \text{ [habe ich } t_i \text{ gesehen]}] [CP_2 \text{ den}_k \text{ habe ich } t_k \text{ gesehen]}$$

In the mapping to phonetic form, CP_1 is reduced by deletion of the sister of the fronted XP, yielding (3), corresponding to the surface form in (1).

(3) $[CP_1 \text{ [den Peter]}_i \text{ [habe ich } t_i \text{ gesehen]}] [CP_2 \text{ den}_k \text{ habe ich } t_k \text{ gesehen]}$

The juxtaposed CP_1 and CP_2 are parallel, *modulo* the difference between dXP and correlate; as explained in section 3 below, this parallelism licenses ellipsis in CP_1 . As shown above, the dXP has \overline{A} -moved to the edge of CP_1 , enabling constituent deletion of the remainder of the clause.

This type of clausal ellipsis, in the wake of Merchant 2001 commonly implemented as PF-deletion of IP/TP,² has been argued to figure in a range of elliptical constructions, such as sluicing, fragment answers, and split questions.

- (4) Sluicing (Lasnik 2001; Merchant 2001; van Craenenbroeck 2010b)
 - a. John bought something, but I don't know what.
 - b. ... but I don't know [CP what_i [John bought t_i]]
- (5) Fragment answers (Merchant 2004a; Temmerman 2012)
 - a. A: Wie dacht Carl dat de wedstrijd zou winen? B: Kim. who thought Carl that the contest would win Kim A: 'Who did Carl think would win the contest?' B: 'Kim.'
 - b. $[CP \text{ Kim}_i | \text{dacht Carl dat } t_i \text{ de wedstrijd zou winen}]]$ (Dutch)

 $^{^{1}}$ Here and below, informal characterization of the correlate as "resuming" the dXP should not be taken to imply an equation of CLD and genuine cases of resumption. Some of the languages under discussion here (German, Dutch) lack resumptive strategies of the English/Hebrew type, in which the resumptive-binding element invariably appears without case-marking (see Merchant 2004b). As we will see in section 4.1 below, this is a crucial difference between resumption and CLD.

²Deviating from this tradition, I argue in Ott in progress that "IP-ellipsis" is a misnomer, and that what undergoes deletion in all relevant cases is in fact the derived sister of the fronted operator (as also proposed in Thoms 2010). This captures Merchant's (2001) Sluicing–COMP generalization, according to which no non-operator material can surface in CP when (in Merchant's terms) IP is elided. Since space precludes a thorough justification of this alternative implementation here, I will use the non-commital term clausal ellipsis in this paper to designate the relevant ellipsis pattern.

- (6) Split questions (Arregi 2010; Ott and de Vries 2012a)
 - a. Qué árbol plantó Juan, un roble? what three planted Juan an oak 'What tree did Juan plant, an oak?'
 - b. $[CP [qué árbol]_i plantó Juan t_i] [CP [un roble]_k [plantó Juan t_k]]$ (Spanish)

If my proposal is on the right track, CLD joins this family of constructions.³

Existing approaches to CLD variously analyze the dXP as moved to or as base-generated in its surface position, but analyses of either ilk suffer from empirical and conceptual short-comings. As I will show, the movement-and-ellipsis alternative avoids these problems and derives all core properties of CLD in a principled fashion, relying exclusively on the independently motivated operations of \overline{A} -movement and clausal ellipsis. In this way, the analysis eliminates a significant amount of constructional residue from the theory of UG.

The paper is organized as follows. In section 2, I outline the central empirical properties of CLD and the theoretical challenge emanating from them. I will then go on to outline the ellipsis-based approach in section 3. Section 4 shows how this account correctly predicts connectivity of the dXP into the host clause, despite its otherwise extra-sentential character. Various further predictions of the approach are shown to be borne out in section 5. Section 6 concludes.

2 Core Properties of CLD

This section summarizes the central empirical properties of CLD. The presentation will lead to the seemingly paradoxical conclusion that the dXP is clause-external and clause-internal at the same time; this is the main problem to be solved by the analysis proposed in the following section.

The type of left-dislocation discussed in this paper is found in all non-English Germanic languages, generally as a root phenomenon.⁴ Thráinsson (1979) introduced the term *Con-*

Icelandic has generalized embedded V2 while German permits embedded root domains for a subset of bridge verbs; embedded CLD obeys the same constraints. I will set aside embedded CLD here as it poses no problem for the present analysis (beyond general questions concerning embedded root phenomena, see Heycock 2006).

³See also van Craenenbroeck and Lipták 2006, Kluck 2011, and Holmberg forthcoming, among others, for recent analyses employing clausal ellipsis in other domains.

⁴This includes CLD in embedded contexts with root-like properties, as in the following:

 ⁽i) a. Jón segir að Þessum hring, honum hafi Ólafur lofað Maríu.
 Jon says that this ring, it has Olaf promised Mari.
 'Jon says that Olaf promised this ring to Mari.' (Icelandic; Thráinsson 2007)

Ich glaube den Hans, den kennt er kaum.
 I believe the Hans him knows he barely

^{&#}x27;I think he barely knows Hans.' (German; Bayer 2001)

trastive Left-dislocation to distinguish the construction from those involving "hanging topics," which differ in crucial respects from dXPs in CLD.⁵ In this paper, I will focus exclusively on CLD. Most examples will be drawn from German, however the syntactic properties of CLD surveyed in what follows appear to be by and large invariant across the (non-English) Germania (and see footnote 34).

Turning now to the distinctive properties of CLD, let us first consider the dXP, which typically has the pragmatic function of a (contrastive) topic or a focus.⁶ The dXP can be prosodically integrated into the host clause, but may alternatively be separated from it by an intonational break (signified by # below), or even by interjections (cf. Greenberg 1984).

- (7) a. Den Peter {# / ja / genau / verdammt} den habe ich gestern gesehen.
 the Peter yes exactly damn him have I yesterday seen
 'Peter, {#/yeah/exactly/dammit}, I saw him yesterday.' (German)
 - b. Daunen boek, toch wel, daunen ei Marie wel gelezen.
 that book PRT PRT that has Mary PRT read
 'Yes, Mary read that book.' (Wambeek Dutch; van Craenenbroeck 2010b)

This suggests that the dXP bears a rather loose structural relation (if any) to the host clause. This impression is reinforced more generally by the fact that the dXP is always omissible, preceding a syntactically complete clause, in apparent violation of the otherwise robust V2 pattern. Semantically, too, it is essentially vacuous, having no truth-conditional effect on compositional interpretation.

As noted in Zaenen 1997 for Dutch and Icelandic, CLD is virtually unrestricted with respect to the category of the dXP.

(8) a. [DP Peysuna sína], hana finnur Ólafur hvergi.
sweater self's it finds Olaf nowhere
'Olaf can't find his sweater anywhere.' (Icelandic; Zaenen 1985)

(i) Der Peter, ich kenne ihn nicht.
the.NOM Peter I know him.ACC not
'As for Peter, I don't know him.' (German)

Hanging topics are usually nominative DPs and do not show connectivity into the host clause (van Riemsdijk 1997; Frey 2004b; Grewendorf 2008). I will not be concerned with HTLD for purposes of this paper.

 6 On information-structural properties of CLD, see Altmann 1981; Frey 2004b; Shaer et al. 2008b. While CLD is sometimes taken to be a topic-marking construction, non-topical uses of dXPs, e.g. as narrow-focus answers to questions or in connection with only/even-type focus-sensitive operators, are clearly possible; see Hinterwimmer and Repp 2010; Repp and Drenhaus 2011. The information-structural realizations of dXPs in CLD are thus congruent with those of XPs fronted to the prefield, which can likewise be topical or focal. These facts are fully in line with the analysis proposed here.

⁵English left-dislocation as in *John, I like him* appears to pattern with what has been labeled *Hanging-topic Left-dislocation* (HTLD) in languages like Dutch and German, illustrated below.

- b. [AdvP Gisteren], toen heeft Jan dat boek snel terug gebracht.
 yesterday then has John that book quickly back brought
 'John quickly returned the book yesterday.' (Dutch; Zwart 1998)
- c. [VP Gemt den særligt godt], det tror jeg nu ikke de har.
 hidden it very well that think I now not they have
 'I don't think they have hidden it very well.' (Danish; Mikkelsen 2011)
- d. [CP Dass Peter seine Freundin geküsst hat], das glaube ich nicht.
 that Peter his girlfriend kissed has that believe I not
 'I don't believe that Peter kissed his girlfriend.' (German)
- e. [AP Schön], das ist sie wirklich nicht.
 beautiful that is she really not
 'She really isn't beautiful.' (German)

As shown by the above examples, CLD is not restricted to referential dXPs (pace Grewendorf 2008); in section 3 we will see that categories that cannot be anaphorically resumed by the correlate are excluded from CLD, at least in its standard form. My working assumption here will be that there are no inherent constraints on the category of the dXP.

Turning now to the correlate within the host clause, it is typically realized as a pronoun resuming the dXP.⁷ Leftward movement of this correlate out of an island induces deviance.

- (i) a. Dir und mir, uns sollten die mal lieber helfen! you.DAT and me.DAT us.DAT should they PRT rather help 'They should rather help you and me!'
 - b. Dir und deiner Frau, euch sollten die mal lieber helfen!
 you.DAT and your.DAT wife you.DAT should they PRT rather help
 'They should rather help you and your wife!' (German)

In light of such facts, it seems likely that the use of a particular type of pronoun in CLD is not a "deep" syntactic property of the construction, but rather an essentially stylistic choice based on information-structural factors. In spoken German, the preferred use of d-pronouns in CLD reflects a general preference for pronouns of this type when elements of the immediately preceding discourse (but outside of the domain of the matrix clause) are anaphorically resumed. Compare the following discourse:

(ii) A: Kennst du den Peter? – B: Ja, {den / ??ihn} kenne ich gut. know you the Peter yes d-him him know I well A: 'Do you know Peter?' – B: 'Yes, I know him well.'

Quoting analogous observations based on spoken Dutch, Hoekstra (1999) identifies d-pronouns as prototypical topic pronouns in spoken language, virtually absent in written language or formal registers. Given that CLD is predominently found in spoken language, it is therefore not surprising to find d-pronouns employed here as well, to the extent allowed by the lexical resources of the language.

Finally, it should be pointed out that CLD permits epithetic correlates as well:

 $^{^{7}}$ A reviewer wonders why German (like Dutch, Swedish, etc.) employs weak d-pronouns as correlates in CLD. Note, first, that the use of d-pronouns is not a universal property of the construction, since Icelandic, a language that lacks d-pronouns, productively employs personal pronouns as correlates in CLD (Zaenen 1997; Thráinsson 2007); see the relevant examples in the text. Even in German, personal pronouns are fully acceptable correlates in CLD when no d-pronoun is available, as with first and second person plural.

(9) *Den Peter, den_i kenne ich die Frau [die t_i zuletzt gesehen hat] the Peter that know I the woman that last seen has int.: 'I know the woman who was the last to Peter.' (German)

Notwithstanding customary claims to the contrary (e.g. in Altmann 1981 and Alexiadou 2006), leftward movement of the correlate is in fact not obligatory, although typically the more natural option.⁸ No decrease in acceptability can be detected specifically in case some other operator (such as a wh-phrase or a null polar-interrogative operator) occupies the edge of the host clause, precluding fronting of the correlate.

- (10) a. Seinem_i Doktorvater, jeder Linguist_i wird dem Geld ausleihen. his advisor every linguist will him money lend 'Every linguist will lend money to his advisor.' (German; Frey 2004b)
 - b. Den Käse, (wann) hat die Maus den gegessen? the cheese when has the mouse that eaten '(When) Did the mouse eat the cheese?' (German; Haider 2010)
- (11) Jan, waar heb je die gezien?
 Jan where have you him seen
 'Where did you see Jan?'
 (Dutch; Vat 1981)
- (12) Sina $_i$ böcker, varje student $_i$ hatar dem. his books every student hates them 'Every student hates his books.' (Swedish)

In situ occurrence of the correlate is at odds with analyses of CLD that crucially rely on its displacement, such as those proposed in Wiltschko 1997 and Grohmann 2003 (which

b. Maria, dat wijf vermoord ik nog eens.

Maria that bitch kill I one day

'I'm going to kill that bitch Mary some day'

'I'm going to kill that bitch Mary some day.' (Dutch; van Riemsdijk and Zwarts 1997)

c. Ólaf, þetta fifl elskar hún ekki. Olaf that idiot loves she not 'She doesn't love that idiot Olaf.'

(Icelandic; Zaenen 1997)

I will only use examples with pronominal correlates in the remainder of this paper, since CLD with an epithetic correlate does not seem to behave special in any relevant respect (as expected if epithets are concealed pronouns: see, e.g., Jackendoff 1972; Dubinsky and Hamilton 1998). Note, however, that epithetic correlates are lethal to Grohmann's (2003) "copy spell-out" approach to CLD, since in this case the lexical content of the correlate is not a mere subset of the formal features of the dXP; hence, such cases could be handled only by assuming massive violations of Inclusiveness (Chomsky 1995).

 8 This is also noted (for German) by Eisenberg (2006: 398), Frey (2004b), and Grewendorf (2008). The last two authors demonstrate that the dXP exhibits connectivity of the kind discussed in section 4.4 below regardless of the position of the correlate.

⁽iii) a. Den Peter, den Idioten habe ich gestern noch gesehen.
the Peter that idiot have I yesterday still seen
'I saw that idiot Peter yesterday.' (German)

moreover suffer from most of the problems noted below).

The facts reviewed so far strongly suggest that the dXP is generated externally to the host clause: it precedes a syntactically complete (gapless) V2 clause, including its left periphery.

Independence of the dXP from the host clause is also brought out by *Infinitivus pro participio* (IPP) effects and the interpretation of modal verbs.⁹ Consider the fact that the IPP is consistently judged to be more acceptable in (13a), a case of VP-fronting, than in (13b), a case of VP-dislocation; the acceptable participle version is given in (13c).

- (13) a. ?Griechisch lernen habe ich immer schon wollen.

 Greek learn have I always wanted.INF
 - b. *Griechisch lernen, das habe ich immer schon wollen. Greek learn that have I always wanted.inf
 - c. Griechisch lernen, das habe ich immer schon gewollt.
 Greek learn that have I always wanted.PRT
 'I've always wanted to learn Greek.' (German)

On the assumption that the dislocated VP originates in the host clause, (13b) ought to be as acceptable as (13a). By contrast, when analyzed as an extra-sentential constituent the deviance of (13b) follows straightforwardly from the unacceptability of the host clause, which in turn is due to the fact that VP-proforms generally obviate the IPP (Lange 1981).

Similarly, it has been noted (e.g. in Drubig 2001) that VP-proforms block epistemic readings of modal verbs, as illustrated by the following examples:

- (14) a. Maria muss die Aufgabe lösen können. [epistemic/deontic] Maria must the task solve can 'Maria should/must be able to solve the task.'
 - b. Maria muss die Aufgabe lösen können, und Hans muss das auch. [deontic]
 Maria must the task solve can and Hans must that too
 'Maria must be able to solve the task, and Hans must be, too.' (German)

If host clause and dXP are structurally independent, we expect VP-dislocation to pattern with (14b) rather than with (14a). This prediction is borne out.

- (15) a. Die Aufgabe lösen können muss auch Hans. [epistemic/deontic] the task solve can must also Hans 'Hans should/must be able to solve the task, too.'
 - b. Die Aufgabe lösen können, das muss auch Hans. [deontic] the task solve can that must also Hans 'Hans must be able to solve the task, too.'

(German)

⁹Thanks to Jason Merchant for drawing my attention to these empirical domains in the present context.

If (15b) were a transformational variant of (15a), as claimed by Grohmann's (2003) "copy spell-out" approach as well as analyses seeking to equate CLD and topicalization (e.g. Zwart 1998), we would not expect to see the discrepancy witnessed in (14) to be replicated in (15). As before, however, the facts fall into place once it is acknowledged that the dXP is not part of the host clause at any stage of the derivation.

The facts reviewed here thus strongly corroborate Zaenen's (1997) assumption that the dXP "is not in the same sentential domain as the rest of the sentence." However, despite these indications of the external, "add-on" nature of the dXP, connectivity effects ostensibly betray a clause-internal base position.

- (16) Seinen_i besten Freund, den sollte jeder_i gut behandeln. his.ACC best.ACC friend him.ACC should everyone well treat 'Everyone should treat his best friend well.' (German; Grohmann 2003)
- (16) illustrates two kinds of connectivity found in CLD (to be reviewed systematically in section 4 below): the dXP agrees in case with its correlate, and the pronoun it contains is bound by an element in the host clause (here, the quantified subject jeder 'everyone'). If, as standardly assumed, such connectivity effects have a syntactic basis, then some sort of syntactic relation between dXP and host clause must obtain after all.

3 Movement and Ellipsis in CLD

The simultaneous occurrence of clause-external and clause-internal properties of the dXP has spawned a wealth of proposals variously locating CLD on either side of the base-generation vs. movement dichotomy (see Alexiadou 2006 for an overview of the existing analyses).

Proponents of a base-generation approach to CLD, such as Frey (2004b), assume that the dXP is base-generated as a left-peripheral adjunct to the host clause (see (17)). To account for connectivity, this analysis is then supplemented with a specially devised chain-formation mechanism (inspired by Cinque 1990), reproduced in (18).

- (17) $\left[\operatorname{CP} dXP_{i} \right] \left[\operatorname{CP} \dots \operatorname{correlate}_{i} \dots \right]$
- (18) A CHAIN $\langle \alpha_1, ..., \alpha_n \rangle$ is a sequence of nodes sharing the same θ -role such that for any $i, 1 \leq i < n$, α_i c-commands and is coindexed with α_{i+1} .

The effect of (18) is a movement-like dependency (a CHAIN) between dXP and correlate, crucially in the absence of actual movement; similar mechanisms have been proposed by Anagnostopoulou (1997), Zaenen (1997), and Wiltschko (1997), among others.¹⁰

 $^{^{10}}$ Analyses of CLD of this kind bear some resemblance to non-structural analyses of sluicing (e.g. Chung et al. 1995), which resort to similar stipulations to account for movement properties of the wh-remnant.

It is evident that this kind of approach, whatever its descriptive merits, has little insight to offer: identity in θ -role between dXP and correlate and the resulting exceptional CHAIN-formation are simply stipulated, in violation of the θ -Criterion (Chomsky 1981); and while (18) descriptively captures connectivity effects, it amounts to little more than a restatement of the facts. Even when these concerns are set aside, however, the approach is still forced to countenance exceptional V3 structures in CLD, and it is indeed hard to see how this could be achieved without construction-specific stipulations, given the otherwise robust nature of the V2 requirement.

The V3 problem is inherited by monoclausal movement analyses of CLD, first proposed in Vat 1981.¹¹ In Grewendorf's (2008) updated implementation, dXP and correlate are originally composed in a "big DP" (of which the dXP is the specifier and the correlate is the head), which is split up in the course of the derivation: the big DP raises to the left periphery, followed by subsequent very local \overline{A} -movement of the dXP to an even higher left-peripheral position. Grewendorf is thus forced to assume a movement-derived V3 structure, restricted to CLD. This is clearly an unwelcome consequence, and a major advantage of the ellipsis approach developed below is its compliance with the strict V2 pattern.¹²

Moreover, as pointed out by Frey (2004b), CLD of adjuncts is necessarily problematic for any analysis that derives CLD from a "big XP." Consider (8b), repeated below:

(19) Gisteren, toen heeft Jan dat boek snel terug gebracht. yesterday then has John that book quickly back brought 'John quickly returned the book yesterday.' (Dutch; Zwart 1998)

In cases of this kind, extraction of the dXP from a phrase comprising it and the correlate in the base would invariably violate the Adjunct Condition. The big-XP analysis thus falsely excludes a large class of perfectly acceptable cases of CLD.

The movement theory also runs afoul of categorial mismatches between the dXP and the clause-internal gap, as in the following example:¹³

¹¹For critical discussion of various versions of the movement approach to CLD, see Hoekstra 1999; Frey 2004b; Grewendorf 2008.

 $^{^{12}}$ As far as I am aware, the only previous analysis of CLD that evades the V3 problem is the one proposed in de Vries 2009, 2010. According to his analysis, the correlate is a parenthetical element whose structural relation to the dXP is mediated by a functional head; consequently, it does "not count" for purposes of V2. This assumption is problematic in light of the fact that the correlate does not have the characteristic intonational properties of parenthetical material; it is also falsely predicted by this approach that the putative constituent composed of dXP and correlate can surface in situ. Furthermore, recall that dXP and correlate can be linearly separated (when the latter remains in situ); such syntactic separation of appositive DPs by leftward movement of either one is usually impossible, however.

¹³I thank Marika Lekakou for reminding me of these examples.

(20) Naar zijn_i promotie, daar_k kijkt iedere taalkundige_i naar t_k uit. to his defense there looks every linguist to out 'Every linguist looks forward to his defense.' (Dutch; van Craenenbroeck 2004)

Here, the dXP is a PP, whereas the trace in the host clause is of category DP, the preposition having been stranded by movement of the R-pronoun daar. As van Craenenbroeck concludes, the dXP cannot originate in the gap position, rendering the binding connectivity observed in (20) mysterious.

While space restrictions preclude a more comprehensive discussion of the literature on CLD, I think it is fair to say in light of the above observations that no hitherto proposed analysis manages to cut the Gordian Knot: both movement and base-generation approaches fail, as a matter of principle, to reconcile clause-internal and clause-external properties of the dXP in a non-stipulative way. Worse yet, given the highly idiosyncratic mechanisms stipulated by these analyses, CLD squarely falls within the domain of constructional residue, the class of unexplained phenomena stipulated in UG, and as such remains as an obstacle on the route to explanatory adequacy (Chomsky 1981, 1995).

Let us now turn to the ellipsis approach. Example (1) and its underlying structure is repeated in (21) below; (22) schematically represents the analysis of CLD proposed here.

- (21) a. Den Peter, den habe ich gestern gesehen.
 the Peter him have I yesterday seen
 'I saw Peter yesterday.' (German)
 - b. $[CP_1 \text{ den Peter}_i \text{ habe ich gestern } t_i \text{ gesehen}] [CP_2 \text{ den}_i \text{ habe ich gestern gesehen}]$
- (22) $\left[\operatorname{CP}_{1} dX \operatorname{P}_{i} \left[\dots t_{i} \dots \right] \right] \left[\operatorname{CP}_{2} \dots \text{ correlate } \dots \right]$

As shown above, I analyze CLD as derived from a juxtaposition of two clauses, the linearly first of which is reduced by clausal ellipsis at PF, leaving only the fronted dXP as a surface remnant.¹⁴ Note that, as predicted by the analysis, non-elliptical versions of the reduced structure in (22) are generally acceptable, while naturally (qua repetition) exhibiting a high degree of redundancy.¹⁵

 $^{^{14}}$ The sole (remote) antecedent of this approach I have been able to track down in the literature is a passage in Flämig et al. 1981: chapter 4, section 4.2.6.1 (written by Brigitta Haftka), where it is suggested in passing that dXPs are equivalent to reduced clauses.

¹⁵An anonymous reviewer feels that non-elliptical counterparts "sound unnatural/marginal," but—considering the unqualified acceptability of each clause in isolation—this marginality must be wholly and exclusively attributed to informational redundancy, hence pragmatic factors. It is therefore highly unlikely that non-elliptical versions of the repetition structures proposed here can be found in naturally-occurring speech or corpora, however this is equally true for many other cases of ellipsis. Consider the following:

⁽i) A: Welches Mädchen hat Hans gestern nacht am Bahnhof geküsst? which girl has Hans last night at the station kissed 'Which girl did Hans kiss at the station last night?'

(23) (#)Den Peter habe ich gestern gesehen. Den habe ich gestern gesehen.
the Peter have I yesterday seen him have I yesterday seen
'I saw Peter yesterday. I saw him yesterday.' (German)

Ellipsis in CP₁ eliminates the perceived redundancy, cataphorically linking the clause to CP₂. Note that backward clausal ellipsis of this type is a general possibility, as shown e.g. by backward sluicing (example from Coppock 2001; see also Giannakidou and Merchant 1998 for an analysis employing backward sluicing).¹⁶

- (24) a. I don't know what, but John will have something.
 - b. $[CP \text{ what}_i \text{ } [John \text{ will have } t_i]]$

It is a well-known fact that clausal ellipsis (like VP-ellipsis) is less constrained in this regard than other types of deletion, such as gapping and stripping, which cannot apply backwards.¹⁷ This freedom is expected, given that clausal ellipsis does not strictly require a linguistic antecedent at all (*pace* Hankamer and Sag 1976), as also pointed out by Roberts (2010). Consider the following illustrations:¹⁸

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B: Maria (*hat Hans gestern nacht am Bahnhof geküsst).

Maria has Hans last night at the station kissed

'It was Maria (*who Hans kissed at the station last night).'

(German)
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An unreduced version of B's response exhibits a high degree of redundancy and consequently borders on unacceptability under normal conditions, but clearly no *ungrammaticality* can be claimed here or in cases like (23).

 16 While literal "backward fragment answers" are pragmatically nonsensical for obvious reasons, backward ellipsis with non-wh remnants is often used in narrative contexts. Consider the following (invented) opening of a western novel:

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(i) Nur einen Schuss. Nur einen Schuss hätte er benötigt.
only one.ACC shot only one.ACC shot had he needed
'Only one shot. He would've needed only one shot.' (German)
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Note that like a dXP, the initial fragment agrees in case, indicating unpronounced clausal structure. In examples like the above, backward clausal ellipsis is used as a rhetorical device, relying on "delayed" ellipsis resolution; according to the analysis pursued here, CLD works analogously, except that the following CP_2 , introduced by the anaphoric correlate, resolves the ellipsis immediately; compare:

(ii) Nur einen Schuss, den hätte er benötigt.
only one.ACC shot it.ACC had he needed
'He would've needed only one shot.' (German)

¹⁷Impossibility of backward ellipsis is sometimes attributed to the *Backward-anaphora Constraint* (Langacker 1969; Hankamer and Sag 1976), which prohibits c-command from anaphor to antecedent in case the former precedes the latter. Regardless of whether or not this principle is valid for clausal ellipsis, it is clear that it is not violated in the representations proposed here for CLD, since no c-command obtains between ellipsis site and antecedent.

 18 The same point can be made on the basis of cases of clausal ellipsis with non-wh remnants. Merchant (2004a) persuasively argues that out-of-the-blue expressions like From Germany! involve limited additional

- (25)[John, presenting his girlfriend with a choice of DVDs to watch:] Which one?
 - A guy is standing in front of a make-shift monument on the sidewalk in front of a house where two neighborhood kids carried out a suicide pact earlier that week. Another neighbor comes up to stand beside him, also silently gazing at the monument. After awhile, one of them says:

I just cannot fathom why. (Roberts 2010)

Given that clausal ellipsis can be resolved pragmatically without an explicit antecedent, there is no reason to expect the linear-temporal order of antecedent (when present) and ellipsis in discourse to be inherently unidirectionally constrained.

Returning to the analysis summarized in (22), the most conspicuous advantage of this approach to CLD is that it avoids the V3 problem: each of the two CPs is a standard V2 clause, and V3 order arises only superficially, as a result of PF-deletion in CP₁. Therefore, the analysis does not imply any weakening of the structural V2 requirement. 19

Taking dXP and host clause to be separate clausal domains, each subject to regular well-formedness conditions, the analysis directly derives the facts noted in section 2 for IPP effects and modals. By the same token, it straightforwardly accommodates mismatches between dXP and the gap position in the host clause. The underlying structure of (20) is as follows:

```
[CP_1] [PP naar zijn promotie]<sub>i</sub> [kijkt iedere taalkundige t_i uit]
(26)
                                                 [CP_2 \text{ daar}_k \text{ kijkt iedere taalkundige}_i \text{ naar } t_k \text{ uit}] (= (20))
```

syntactic structure, allowing them to be used deictically (From Germany this is). Examples like the following suggest that more elaborate structures can likewise be elided on the basis of nonlinguistic context alone.

(i) John got word that some famous politician was arrested. When he gets home and checks the news, he discovers the politician is Tony Blair. John exclaims: Blair! Na endlich.

the ACC Blair well finally

'(They arrested) Blair! Finally.'

(German)

Note the case specification of the remnant DP, congruent with the case assigned by the elided predicate verhaften 'to arrest,' hence indicating that the underlying structure is identical to the parallel fragment answer to the question Who did they arrest?, licensed by nonlinguistic context.

¹⁹As Günther Grewendorf (pers. comm.) points out, verb-final subject clauses likewise permit dislocation, i.e. CP_2 need not be a V2 clause.

Den Peter, dass sie den geheiratet hat verstehe the Peter that she him married has understand I (German) 'I don't understand how she could marry Peter.'

Given that embedded and matrix clauses are equivalent for purposes of ellipsis licensing (as evidenced by sluicing and fragment answers, see Merchant 2001, 2004a), this possibility is expected and unproblematic for the current analysis.

Thus, no real antecedent—trace mismatch arises, since the dXP antecedes its (PP-)trace in CP_1 , whereas the R-pronoun has stranded its preposition in CP_2 . We need not conclude—as van Craenenbroeck (2004) does—that the dXP is base-generated as an adjunct to the host clause; it has moved, but internally to the parallel elliptical clause.

I will here assume that backward clausal ellipsis is licensed in the same way as its forward counterpart. Specifically, I adopt Merchant's (2001) implementation of ellipsis licensing in terms of a Focus Condition (27), based on a notion of givenness as defined in (28).²⁰

- (27) Focus Condition on Clausal Ellipsis

 The propositional sister α of a clause-initial XP can be deleted only if α is e-GIVEN.
- (28) e-GIVENness (Merchant forthcoming)
 An expression X counts as e-GIVEN iff X has a salient antecedent A and, modulo ∃-type shifting,
 - a. A entails E-clo(X), and
 - b. X entails E-clo(A).
- (29) The E-closure of α (E-clo(α)) is the result of replacing all E-marked subelements of α with variables of the appropriate type.

To adapt this approach to backward ellipsis it is necessary to construe the notion "antecedent" in (28) as including expressions that follow the ellipsis site in discourse. I take this move to be unproblematic, although space restrictions prevent a more detailed discussion of this matter here.²¹

In terms of the present analysis, and simplifying slightly, the Focus Condition requires the elided domain E in CP_1 and its overt counterpart A in CP_2 to denote mutually entailing propositions. To illustrate, (31) cannot be the source of deletion in (30), as entailment from the elided domain to its antecedent fails; as a result, the deleted constituent does not count as e-GIVEN according to the definition in (28), and ellipsis applies in violation of (27).

- (30) Den Peter, $[CP_2]$ den [A] habe ich t einen Idioten genannt]] the Peter him have [A] an idiot called 'I called Peter an idiot.' (German)
- (31) $[CP_1 \text{ den Peter } [E \text{ habe ich } t \text{ beleidigt}]]$ the Peter have I insulted

²⁰Merchant's original formulations are in terms of IP-ellipsis; I'm adapting (27) here slightly in light of the caveat mentioned in footnote 2.

²¹ Jason Merchant (pers. comm.) suggests that the notion of antecedent can be maintained on a quite literal interpretation when e-GIVENness is construed as a pragmatic (rather than narrowly semantic) notion, operating over discourse trees of the kind proposed in Büring 2003. I will leave an implementation of this idea to future work.

- a. E-clo(E): $\exists x$. I insulted x
- b. E-clo(A): $\exists x$. I called x an idiot
- c. $E\text{-clo}(E) \rightarrow E\text{-clo}(A)$

The net effect of (27) is thus that CP₁ and CP₂ are always semantically—and hence, largely syntactically—parallel; otherwise, ellipsis could not apply felicitously.²² The reader is referred to Merchant 2001, forthcoming for further details of this implementation of ellipsis parallelism (but see also footnote 36).

What are the predictions of the ellipsis analysis concerning the interpretive relation between the dXP and its correlate? Since each is part of a separate clause, ²³ the dependency between dXP and correlate is a simple inter-sentential anaphoric relation (cf. Zaenen 1997), equivalent in (21) and (23).

Assuming this to be correct, we expect categories that fail to antecede free pronouns to be excluded from CLD. Cases in point are QPs, nonspecific indefinites, and NPIs.

- (32) a. *Ich habe [keinen Studenten] $_i$ gesehen. Den $_i$ habe ich gesehen. I have no student seen him have I seen 'I saw no student. I saw him.'
 - b. *Ich habe [fast alle Studenten] $_i$ gesehen. Die $_i$ habe ich gesehen. I have almost all students seen them have I seen 'I saw almost all students. I saw them.'
 - c. *Ich habe [irgendeinen Studenten] $_i$ gesehen. Den $_i$ habe ich gesehen. I have some student seen him have I seen 'I saw some student. I saw him.'
 - d. *Ich habe hier noch nie [auch nur irgendeinen Studenten] $_i$ gesehen. Den $_i$ I have here yet never any student seen him habe ich hier noch nie gesehen. have I here yet never seen 'I've never seen any student here. I've never seen him here.' (German)

As expected, the elliptical CLD variants of these examples are equally deviant.

 $^{^{22}}$ In cases where the correlate remains in situ, the dXP is presumably interpreted in its base position, an option under the Copy Theory; existential closure applies vacuously, and (27) enforces co-construal/coreference of dXP and correlate. When CP₂ contains a wh-trace, as in (10b), (27) licenses a corresponding variable in CP₁, as in standard cases of sluicing/sprouting (but with reversed directionality).

 $^{^{23}}$ I will remain agnostic here about the option of a structural connection between the two clauses, for instance by means of adjunction of one to the other. CLD being a root phenomenon, there seems to be little evidence for dXP and host clause forming a single-rooted syntactic object; compare Arregi's (2010) analysis of split questions in similar terms. Nothing substantial hinges on this detail, however. Note also that ellipsis in CP_1 renders the relation between the two clauses in CLD "tighter" than that of two sequential non-elliptical clauses; cataphoric linkage by ellipsis explains why CLD, while underlyingly biclausal, is intuitively perceived by speakers as a single coherent utterance.

- (33) a. *Keinen Studenten, den habe ich gesehen.
 no student him have I seen
 intended: 'I saw no student.'
 - b. *Fast alle Studenten, die habe ich gesehen. almost all students them have I seen intended: 'I saw almost all students.'
 - c. *Irgendeinen Studenten, den habe ich gesehen. some student him have I seen intended: 'I saw some student.'
 - d. *Auch nur irgendeinen Studenten, den habe ich hier noch nie gesehen.

 any student him have I here yet never seen intended: 'I've never seen any student here.' (German)

Given this correspondence, there is no need for a syntactic constraint; CLD of QPs, nonspecific indefinites, and NPIs is deviant simply because no suitable antecedent is provided for the anaphoric correlate. (In fact, we will see in section 5.3 below that such categories can appear as dXPs in CLD, just in case they are not anaphorically related to the correlate.) The same conclusion is reached in Hoekstra 1999 for Dutch CLD and Wagner forthcoming for the related Clitic Left-dislocation construction (see footnote 34).

By the same token, we rule out wh-phrases, reflexives, and subparts of idioms as dXPs, all of which are inherently unable to antecede pronouns²⁴ and consequently make bad dXPs.²⁵

Recall from the schema in (22) that on the present analysis, the dXP is assumed to be topicalized, enabling constituent deletion of the remnant. CLD of NPIs, then, is thus doubly ruled out on this approach. Weak pronouns likewise resist topicalization and CLD:

(ii) *Ihn (den) habe ich gestern gesehen.
him.WEAK him have I yesterday seen
'I saw him yesterday.' (German)

Given their inability to undergo topicalization, then, the present approach correctly predicts that weak pronouns cannot figure as dXPs, just like they cannot occur as clausal fragments in general. Note, however, that in this case, too, there is a second reason for why weak pronouns are excluded from CLD: by definition, they are incompatible with the contrastive/focal import usually assigned to dXPs.

 $^{^{24}}$ Considerations of parallelism provide an additional reason for the unavailability of a idiomatic construal in CLD of idiom parts: since non-elliptical CP₂ permits only a compositional interpretation (it never contains the full idiom as a unit, the correlate taking the place of the dXP), semantic parallelism between CP₁ and CP₂ in effect dictates compositional interpretation of both CPs.

²⁵Note that all of these categories can undergo Ā-movement to the CP edge in monoclausal contexts. By contrast, NPIs generally resist such fronting (a fact which Merchant 2004a takes to explain their unacceptability as fragment answers; see den Dikken et al. 2000: 49f. on the generalization that NPIs must be licensed "at S-structure"). Witness:

⁽i) *Auch nur irgendeinen Studenten habe ich hier noch nie gesehen.

any student have I here yet never seen

intended: 'I've never seen any student here.' (German)

- (34) a. *Wen, den hat Peter gesehen?
 who him has Peter seen
 'Who did Peter see?' (German)
 - b. *Zichzelf, die heeft hij nog nooit overgeslagen.
 himself him has he yet never passed over
 'He hasn't ever passed himself over.' (Dutch; van Riemsdijk and Zwarts 1997)
 - c. *De spijker, die heeft Jan weer eens op de kop geslagen. the nail that has Jan again once on the head hit 'Jan hit the nail on the head once again.' (Dutch; Zaenen 1997)

The present analysis thus has a number of non-trivial empirical and conceptual merits: it circumvents the V3 problem (detrimental to both base-generation and monoclausal movement approaches); it solves the problem of apparent antecedent—trace mismatches in CLD; and it correctly accounts for the range of categories that can(not) be dislocated.

4 Connectivity

As noted above, the main theoretical challenge posed by CLD is to reconcile the extrasentential status of the dXP with concurrent indications of its connectedness to a clauseinternal position.²⁶ In this section, I will systematically discuss these indications and show how they are accounted for by the ellipsis approach.

4.1 Form Identity: Case and θ -Role

Obligatory case agreement between dXP and correlate in CLD was first noted by Ross (1973); the following examples from German and Icelandic illustrate:

- (35) a. Den Peter, den habe ich gesehen. the Peter.ACC him.ACC have I seen 'I saw Peter yesterday.'
 - b. Dem Peter, dem habe ich gestern geholfen. the.DAT Peter him.DAT have I yesterday helped 'I helped Peter yesterday.' (German)

(i) *Sein $_i$ Vorgarten, jeder $_i$ will ihn schönhalten. his.NOM front lawn everyone wants him.ACC pretty.keep *'As for his frontlawn, everyone wants to keep it pretty.' (German; Grohmann 2003)

The analysis of HTLD seems to depend crucially on the question of whether nominative case is a true nominativus pendens (see Merchant 2004b; McFadden and Sundaresan forthcoming for discussion) or requires functional structure. If the latter, one might pursue an approach not unlike that adopted in this paper for CLD, but with a different structure of CP_1 . For reasons of space, I will not pursue the matter here.

²⁶As noted in footnote 5, CLD and HTLD differ with regard to connectivity, which obtains in the former but not in the latter (as amply documented by Zaenen 1997; Frey 2004b; Grewendorf 2008, a.o.).

- (36) a. Peysuna sína, hana finnur Ólafur hvergi. sweater.ACC REFL it.ACC finds Olaf nowhere 'Olaf can't find his sweater anywhere.'
 - b. Þessum hring, honum hefur Ólafur lofað Maríu.
 this.DAT ring it.DAT has Olaf promised Marí
 'Olaf promised this ring to Mari.' (Icelandic; Zaenen 1997)

Thus, despite the fact that the dXP does not seem to have moved from the interior of the host clause (for the reasons given above), systematic covariance of correlate and dXP in case suggests that the latter, too, is case-marked in some way by the host-clause predicate (Merchant 2001 refers to such correlations as form-identity effects).

Form identity in case is a straightforward consequence of the parallel structure of CP_1 and CP_2 , enforced by the Focus Condition (27): the dXP and the correlate are case-marked by the same predicate.²⁷ To illustrate, in (35b) *helfen* 'to help' assigns dative case to both dXP in CP_1 and correlate in CP_2 .

(37)
$$[CP_1 \text{ dem Peter}_i \text{ [habe ich } t_i \text{ geholfen]}] [CP_2 \text{ dem}_k \text{ [habe ich } t_k \text{ geholfen]}] (= (35b))$$

This explanation for case matching is directly analogous to that proposed in Merchant 2001 for sluicing, where the sluiced wh-phrase is case-marked in the parallel reduced clause (Merchant's form-identity generalization I).

- (38) a. Peter hat jemandem geholfen, aber ich weiß nicht wem.

 Peter has someone.DAT helped but I know not who.DAT

 'Peter helped someone, but I don't know who.' (German)
 - b. $[CP wem_i [Peter t_i geholfen hat]]$

See also Merchant 2004a on case covariance in fragment answers.

By the same token, it follows that dXP and correlate bear the same θ -role. Recall that identity in θ -role was simply presupposed in (18), in violation of the θ -Criterion and as a prerequisite for exceptional CHAIN-formation. No such θ -theoretic problem arises on the present approach, where dXP and correlate are in separate but parallel clauses.

4.2 Form Identity: P-stranding

In his discussion of sluicing, Merchant (2001) establishes the following crosslinguistic generalization (his form-identity generalization II):

 $^{^{27}}$ The class of exceptional CLD constructions with an invariant singular neuter correlate discussed in Rullmann and Zwart 1996 poses no problem for the biclausal analysis: all and only those cases which permit this non-referential, set-denoting correlate are also permissible without ellipsis, i.e. with both CP_1 and CP_2 pronounced in full.

(39) A language L will allow preposition stranding under sluicing iff L allows preposition stranding under regular wh-movement.

As Merchant points out, this correlation is expected on an analysis of sluicing according to which the sluiced XP undergoes \overline{A} -movement prior to deletion of the remnant clause.²⁸ The following facts illustrate the difference between a non-P-stranding language like German and a P-stranding language like Norwegian described by (39).

- (40) a. Sie hat mit jemandem gesprochen, aber ich weiß nicht *(mit) wem. she has with someone spoken but I know not with who 'She talked to somebody, but I don't know who.' (German)
 - b. Per har snakket med noen, men jeg vet ikke ("med) hvem.

 Per has talked with someone but I know not with who

 'She talked to somebody, but I don't know who.'

 (Norwegian)

On a movement-*cum*-deletion analysis of sluicing, the difference follows from the (non-) availability of P-stranding: Norwegian, but not German, allows for the preposition to be stranded in the ellipsis site.

- (41) a. aber ich weiss nicht [CP [mit wem]_i [sie t_i gesprochen hat]] (= (40a))
 - b. man jeg vet ikke [CP hvem_i [Per hat snakked med t_i] (= (40b))

Mutatis mutandis, the analysis of CLD advanced here predicts the (im-)possibility of P-stranding in a given language to be reflected in these constructions as well, since the dXP \overline{A} -moves prior to deletion. This prediction is borne out: pied-piping of P by the dXP is obligatory in German but degraded in Norwegian, Swedish, and Icelandic.²⁹

- (42) a. {*(Auf)} den Peter, auf den habe ich lange warten müssen.

 for the Peter for him have I long wait must
 'I had to wait for Peter for a long time.'
 - b. {*(Mit)} meiner Schwester, mit der habe ich mich oft gestritten.

 with my sister with her have I REFL often quarreled

 'I often quarreled with my sister.'

 (German)

²⁸Several apparent counterexamples to (39) have been noted in the literature, but they do not seem to pose a credible threat to the validity of the generalization (see Rodrigues et al. 2009, van Craenenbroeck 2010a, and references cited there).

 $^{^{29}}$ The facts in Dutch are somewhat less clear-cut than they are in German, not surprisingly given the variability in judgments reported in Merchant 2001: 95 for P-stranding under sluicing in this language. I attribute this fact to interference from HTLD (see footnote 5): Dutch not providing any overt indication of case, surface strings are potentially ambiguous between CLD and HTLD. In the German examples used in the text, I control for this confounding factor by including elements bearing unambiguous case morphology in the dXP.

- (43) a. (??Med) søstera mi, ho krangla jeg ofte med.
 with sister my her quarreled I often with
 'I often quarreled with my sister.'

 (Norwegian)
 - b. (??Med) min syster, henne blev jag ofta osams med.

 with my sister her became I often upset with

 'I often got upset with my sister.' (Swedish)
 - c. (??Um) mömmu sína $_i$, hana talar hver einasti unglingur $_i$ illa um. about mother his.ACC her.ACC talks each single youngster badly about 'Every youngster talks badly about his mother.' (Icelandic)

Exactly as in the sluicing cases, the observed differences follow from the different respective stranding options in the languages.

- (44) a. $[CP_1 \text{ [m\"ommu s\'ina]}_i \text{ [talar hver einasti unglingur illa um } t_i]]$ $[CP_2 \text{ hana talar hver einasti unglingur illa um]} (= (42b))$ b. $[CP_1 \text{ [mit meiner Schwester]}_i \text{ [habe ich mich oft } t_i \text{ gestritten]}]$
 - $[CP_2 \text{ mit der habe ich mich oft gestritten}] (= (43c))$

4.3 Aux–V Relations

Mikkelsen (2011) observes that verbal morphology provides a further indication of connectivity in dislocation. Quite generally, auxiliaries control the form of the main verb they occur with; to illustrate with Mikkelsen's example, consider Danish *have*, which requires a participle.

```
(45) Jeg tror nu ikke de har {gem-t / *gemm-e / *gemm-er / I think now not they have.PRES hide-PPC hide-INF hide-PRES *gem-te} den særligt godt.

hide-PAST it very well

'I don't think they have hidden it very well.' (Danish)
```

Mikkelsen observes that this Aux–V relation is preserved under both topicalization (46a) and CLD (46b) of VP.

(46) a. $[VP \{Gem-t / *Gemm-e / *Gemm-er / *Gem-te \} den særligt godt]_i$ hide-PPC hide-INF hide-PRES hide-PAST it very well tror jeg nu ikke de **har** t_i think I now not they have.PRES

b. [VP {Gem-t / *Gemm-e / *Gemm-er / *Gem-te}] den særligt godt] det_i hide-PPC hide-INF hide-PRES hide-PAST it very well that tror jeg nu ikke de **har** t_i think I now not they have PRES 'I don't think they have hidden it very well.' (Danish)

As indicated in the above representations, Mikkelsen assumes (in line with the base-generation approach to CLD) that VP itself has moved from its base position in the topicalization case, whereas this direct-movement option is not available in the CLD case (due to presence of the correlate). The conclusion she draws from (46b) is that verbal morphology is not computed in a strictly local fashion (as standardly assumed³⁰), but can be determined at a distance—a conclusion that would require a wholesale re-evaluation of morphosyntactic relations of this kind. Luckily, however, the traditional picture can be maintained on the ellipsis analysis of CLD proposed here, according to which the dislocated VP undergoes simple topicalization in CP₁; as a result, verbal morphology can be computed equally locally in (46a) and (46b).

(47) $[CP_1]$ [VP gem-t den særligt godt]_i tror jeg nu ikke de har t_i] $[CP_2]$ det_k tror jeg nu ikke de har t_k] (= (46b))

4.4 Reconstruction: Binding and Scope

Reconstruction of the dXP into the host clause for purposes of binding has been amply documented in the literature on CLD (Vat 1981; van Riemsdijk and Zwarts 1997; Zaenen 1997; Grohmann 2003; Frey 2004b; Alexiadou 2006; Grewendorf 2008), so I will confine myself to providing a concise summary of the core facts.

The following examples show binding of a pronominal variable under reconstruction; a control relation is reconstructed in (49):

- (48) a. Seinen_i besten Freund, den sollte jeder_i gut behandeln. his best friend him should everyone well treat 'Everyone should treat his best friend well.' (German; Grohmann 2003)
 - b. $Zijn_i$ eerste artikel, dat berokkent een linguïst $_i$ vaak schade. his first paper that causes a linguist often harm 'A linguist's first article often harms him.' (Dutch; Vat 1981)
 - c. Sina $_i$ böcker, dem hatar varje student $_i$. his books them hates every student 'Every student hates his books.' (Swedish)

 $^{^{30}\}mathrm{See}$ Chomsky 1957 for an early implementation, and Adger 2003 for an updated approach.

(49) (PRO_i) sie $_k$ nicht zu vergessen, das hat Peter $_i$ jeder Frau $_k$ versprochen. her not to forget that has Peter every woman promised 'Peter promised every woman not to forget her.' (German; Grewendorf 2008)

The following examples illustrate satisfaction of Binding Conditions A and C under reconstruction:

- (50) a. Mit sich_i im Reinen, das war Peter_i schon lange nicht mehr. with himself in the pure that was Peter already long no more 'Peter hadn't been at peace with himself for a long time.' (German)
 - b. Stoltan afhor \ddot{o} drum_i, það tel ég þa_i ekki vera.

 proud of each other that believe I them not to be

 'I don't think they're proud of each other.'

 (Icelandic; Zaenen 1997)
- (51) a. *Der Tatsache dass Alex_i arm ist, der misst er_i keine Bedeutung bei. the fact that Alex poor is that attaches he no importance to *'He_i doesn't attach any importance to the fact that Alex_i is poor.' (German)
 - b. *Anneke_i d'r broer, die geloof ik dat ze_i wel aardig vindt.

 Anneke's brother him believe I that she sort of nice finds

 *'I doubt that she_i's fond of Anneke_i's brother.' (Dutch; Vat 1981)

The following example illustrates optional scope reconstruction in CLD:

(52) Von drei Linguistikartikeln, da kriegt jeder Kopfschmerzen von. $[\checkmark \forall > 3]$ of three linguistics articles there gets everyone headache of 'Reading three linguistics articles gives anyone a headache.' (German)

Note that material intervening between dXP and host clause does not block connectivity.

- (53) a. Seine_i Eltern, tja, die mag wohl kein Teenager_i.

 his parents well them likes PRT no teenager

 'I guess no teenager likes his/her parents.' (German)
 - b. $Zijn_i$ moeder, god, die haat iedere puber_i. his mother God her hates every teenager 'God, every teenager hates his mother.' (Dutch)

Topicalized XPs do not permit this kind of separation from the remainder of the clause.

What we find, then, is that the dXP (seemingly) reconstructs into the host clause, despite the fact that the structural relation between dXP and host clause appears to be very indirect at most (as concluded in section 2). On the present approach, the paradox does not arise: reconstruction, just like form identity, is a direct consequence parallelism of the two clauses involved, as required by the Focus Condition (27). Hence, connectivity in CLD reduces to ordinary reconstruction of the topicalized dXP internally to the elliptical CP_1 .

(54) a.
$$[CP_1 \text{ [seinen}_i \text{ besten Freund}]_k \text{ [sollte jeder}_i t_k \text{ gut behandeln}]]$$
 (= (48a)) b. $*[CP_1 \text{ [Anneke}_i \text{ d'r broer}]_k \text{ [geloof ik dat ze}_i t_k \text{ wel aardig vindt}]]$ (= (51b))

This explanation of connectivity in CLD is directly analogous to that presented in Merchant 2004a for fragment answers;³¹ on Merchant's analysis, the fragment answer in (55) is derived in the exact same way as the dXP in (48a) (viz., as shown in (54a)).

(55) A: Wen sollte jeder_i gut behandeln? – B: Seinen_i besten Freund.

who should everyone well treat his best friend

A: 'Who should everyone treat well?' – B: 'Their best friend.' (German)

4.5 Interim Summary: dXPs as Sentence Fragments

I have argued that a dXP in CLD, a fragment answer (Merchant 2004a; Temmerman 2012),³² the question tag in a split question (Arregi 2010), and the wh-remnant of sluicing (Ross 1969; Lasnik 2001; Merchant 2001) share a common derivational pattern—viz., movement to the clausal edge and subsequent ellipsis of the remainder of the clause. In all of these constructions, semantic parallelism of the underlying clauses enables ellipsis, as demanded by the Focus Condition (27). The two clauses juxtaposed in CLD wind up tightly linked, due to cataphoric ellipsis and anaphoric correlate.³³

Assuming that Koster is right (see also Alrenga 2005 for recent arguments), what this means in terms of the present analysis is that sentential subjects are always clausal fragments; in the host clause, the correlate undergoes optional topic drop.

(ii) $[CP_1 \ [CP \ dat \ hij \ komt]_i \ [t_i \ is \ duidelijk]] \ [CP_2 \ (dat) \ is \ duideljk]$

Note, though, that the result is somewhat paradoxical: CP₁ in (ii) has exactly the structure that Koster argues does not exist, with a squarely clause-internal sentential subject. This suggests either that whatever grammatical constraint bans sentential subjects from occurring clause-internally is suspended under ellipsis, or that there is no such grammatical constraint at all, and sentential subjects are instead standardly "expelled" to a peripheral position for performative reasons. I will leave a clarification of the issue to future work.

³¹The same reasoning based on 'covert reconstruction' into ellipsis sites is used by den Dikken et al. (2000) and Kluck (2011) to account for connectivity effects in (certain types of) pseudoclefts and sentence amalgams, respectively.

³²Merchant in fact assumes that fragment XPs move to the specifier of F(ocus)P, a minor detail I set aside here. Merchant's particular implementation is mainly based on certain assumptions about island sensitivity of fragment answers in English, an issue recently taken up—and shown to be more complicated than assumed by Merchant—by Griffiths and Lipták (forthcoming).

 $^{^{33}}$ According to Koster's (1978) satellite hypothesis, sentential subjects invariably occur clause-externally.

⁽i) a. Dat hij komt is duidelijk.

the he comes is clear

'That he will come is clear.'

b. [CP] dat hij $komt|_i [CP]$ (dat_i/e_i) is duidelijk]

(Dutch)

The analysis obviates the postulation of V3 structures in CLD, deriving the surface form from an underlying juxtaposition of V2 clauses. The paradox noted at the outset of this paper disappears: the dXP is external to the host clause because it is the surface remnant of a separate clause; since this separate clause and the host clause are underlyingly parallel, however, the fronted dXP behaves as if it were an integral part of the latter.³⁴

5 Predictions and Extensions

In this section, I investigate further predictions of the ellipsis analysis of CLD and adduce substantial additional evidence supporting the approach.

- (i) a. Ton Jani den ton ksero. the.ACC John.ACC NEG CL.ACC know.1sG 'I don't know John.'
- (Greek; Alexiadou 2006)

b. A {*?lei_i / se stessa_i}, Maria_i non ci pensa. of her herself Mary not there thinks 'Mary doesn't think of herself.'

(Italian; Cinque 1990)

As surveyed in Alexiadou 2006, there are serious problems for an assimilation of ClLD to clitic-doubling constructions, such as the non-congruent typological distribution of clitic doubling and ClLD as well as specific constraints on doubling that do not hold for ClLD. Therefore, a unified ellipsis analysis of CLD and ClLD, as sketched in Ott 2012, appears to be the more principled option. The dXP in ClLD is then taken to be the surface remnant of a separate, parallel clause.

(ii)
$$[CP_1 \text{ [a se stessa]}_i \text{ [Maria non } t_i \text{ pensa]}] [CP_2 \text{ Maria non ci pensa]}$$
 (= (ib))

As shown in detail for CLD above, this analysis directly predicts the observed facts concerning form identity/connectivity. At the same time, by locating the dXP and its correlate in separate clauses, it avoids the problems arising for a clitic-doubling analysis. If correct, this analysis undermines a central premise of the "cartographic" program (Rizzi 1997 $et\ seq.$), according to which dislocation and operator movement can co-occur within a monoclausal structure. See Ott 2012 for some preliminary remarks on these matters, which I am planning to address in more detail in future work.

The ellipsis approach to dislocation raises the general question to what extent left-peripheral constituents can be reanalyzed as sentence fragments. It is noteworthy in this connection that the literature contains a wealth of discussion of doubling-under-movement effects, e.g. VP-dislocation of the Spanish and Hungarian type discussed in Lipták and Vicente 2009. It will be interesting to see if these constructions can be shown to be amenable to an ellipsis analysis analogous to that proposed here for CLD. Even more speculatively, one might contemplate an extension of the ellipsis approach to polysynthetic languages, where it appears to be the case that all overt arguments are obligatorily dislocated (Jelinek 1984; Baker 1996). The plausibility of this extension will hinge crucially on the question to what extent arguments in these languages show properties of dXPs, as opposed to "unconnected" hanging topics.

³⁴ Although space restrictions preclude a thorough discussion of the matter here, it seems likely that the approach can be successfully extended to Clitic Left-dislocation (ClLD) of the Romance/Greek type, where the correlate is a clitic pronoun. As is well known, CLD and ClLD have many core properties in common (see Demirdache 1991; Anagnostopoulou 1997; Alexiadou 2006). dXPs in ClLD, just like their counterparts in CLD, match the case of the correlate and show connectivity for binding:

5.1 Islandhood of the dXP

The ellipsis analysis of CLD predicts that the dXP cannot contain a trace related to an element in the host clause. This is so because the dXP is the remnant of a separate clause; thus any movement into the host clause would imply interclausal rightward movement.

The relevant test cases involve CLD of VPs. First, however, consider the fact that VP-topicalization in German can strand arguments (Müller 1998).

(56) Zugegeben hat er nicht dass er falsch lag.
admitted has he not that he false laid
'He didn't admit that he had been mistaken.'

(German)

The CLD counterparts of these topicalizations are unacceptable; by contrast, no problem arises when the complement clause is pied-piped instead.

- (57) a. *Zugegeben, das hat er nicht dass er falsch lag. admitted that has he not that he wrong laid
 - b. Zugegeben dass er falsch lag, das hat er nicht.
 admitted that he wrong laid that has he not
 'He didn't admit that he had been mistaken.'
 (German)

There is no straightforward explanation for the deviance of (57a) on the assumption that CLD constructions are monoclausal structures, derived by movement of the dXP. Such an analysis would predict stranding of the complement clause to be equally acceptable in (57a) and (56), contrary to fact.

By contrast, the observed discrepancy is directly predicted by the ellipsis approach: to derive (57a), the stranded argument would have to be extracted from the dXP; but such cross-clausal movement dependencies are generally impossible.

(58)
$$[CP_1 \ [VP \ t_i \ zugegeben] \ [hat er nicht ...]] \ [CP_2 ... \ [CP \ dass er falsch \ lag]_i]$$

Note that the host clause of (57a) by itself is unacceptable (*Das hat er nicht dass er falsch lag) irrespective of context, the stranded complement clause being "host-less." Therefore, an alternative parse without movement from CP_1 into CP_2 is equally deviant.

5.2 Parallelism and Control Infinitivals

Infinitival control clauses provide additional evidence against a base-generation analysis of CLD, and for the ellipsis analysis; the argument is based on observations in Truckenbrodt

 $2012.^{35}$ The relevant fact is that controlled PRO, unlike overt proforms, cannot serve as a correlate of a dXP in CLD.

- (59) a. Peter hat angeordnet [PRO die Straße zu fegen]
 Peter has ordered the street to sweep
 - b. *Die Arbeiter $_i$, Peter hat angeordnet $[PRO_i$ die Straße zu fegen] the workers Peter has ordered the street to sweep 'Peter ordered the street to be swept.' (German)

The deviance of (59b) contrasts with (60), where the embedded clause is finite.

(60) Die Arbeiter, Peter hat angeordnet dass die die Straße fegen sollen. the workers Peter has ordered that they the street sweep should 'Peter ordered the workers to sweep the street.' (German)

Explaining the deviance of (59b) is no trivial task for proponents of a base-generation (adjunction) analysis relying on a CHAIN-formation mechanism like (18). By contrast, the present approach provides a principled explanation. For parallelism of CP_1 and CP_2 to be satisfied (and hence, for ellipsis in CP_1 to be licensed), the dXP in (59b) would be required to have the following underlying pre-deletion structure:

(61) $*[_{CP_1}$ [die Arbeiter]_i [hat Peter angeordnet [$_{CP}$ t_i die Straße zu fegen]]]

Subject dXPs resumed by PRO as in (59b) are ruled out because infinitival clauses fail to license an overt subject; consequently, parallelism cannot be satisfied in these cases.³⁶ By contrast, no conflict between parallelism and subject licensing arises in finite (60).³⁷ Note

b. $[CP_1]$ ich habe ihn gestern noch gesehen $[CP_2]$ [den Peter] $_i$ [habe ich gestern noch t_i gesehen]

The reader is referred to Ott and de Vries 2012a,b for details of this approach.

³⁵Truckenbrodt argues that right-dislocated XPs are remnants of ellipsis; in a very similar vein, it is argued in Ott and de Vries 2012a,b that the movement-*cum*-deletion approach derives right-dislocation as in (ia) in the same way as argued here for CLD, except that ellipsis occurs in CP₂ (ib).

⁽i) a. Ich habe ihn gestern noch gesehen, den Peter.

I have him yesterday still seen the Peter

'I saw Peter just yesterday.'

(German)

³⁶Note that this conclusion presupposes a slightly stricter notion of parallelism than what is assumed in section 3 (Merchant's Focus Condition, based on e-GIVENness), requiring identical case assigners in antecedent and ellipsis site. Such a condition, independently shown to be necessary by the sluice in (62a), is proposed in Chung 2013; see also Tanaka 2011 and Merchant 2013 (and sources cited there) for arguments that ellipsis requires at least some morphosyntactic identity.

 $^{^{37}}$ It could be objected that the overt version of the dXP in (60) contains an illicit extraction inducing a that–trace effect, as shown below:

⁽i) $*[_{\text{CP}_1}$ [die Arbeiter]_i hat Peter angeordnet [$_{\text{CP}}$ dass t_i die Straße fegen sollen]] the workers has Peter ordered that the street sweep should

that analogous effects obtain in sluicing, (62a) corresponding to (59b):

- (62) a. *Peter hat angeordnet die Straße zu fegen, aber ich weiß nicht wer.

 Peter has ordered the street to sweep but I know not who

 'Peter ordered someone to sweep the street, but I don't know who.' (German)
 - b. $*[CP_2 \text{ wer}_i \text{ [Peter angeordnet hat [CP } t_i \text{ die Straße zu fegen]]]}]$

5.3 Forward Ellipsis in CLD

So far, the discussion has focused on cases of CLD in which the directionality of ellipsis is backward: the antecedent within CP₂ linearly follows the ellipsis site in CP₁. The analysis leads us to expect that a reversal of ellipsis directionality ought to be possible, i.e. that similar constructions can be derived by means of forward ellipsis (as in regular sluicing and fragment answers).

This prediction is borne out. To see how, consider the following examples:

- (63) a. Maria fragte sich, welche seiner Freunde Hans heute getroffen hatte. **Den**Maria wondered which of his friends Hans today met had the **Peter, das wusste sie ganz sicher.** Aber auch den Otto?

 Peter that knew she certainly but also the Otto
 'Maria wondered which of his friends Hans had met today. Peter, that was clear. But Otto as well?'

 (German)
 - b. Maria vroeg zich af wie Hans allemaal had ontmoet. **Peter, dat was**Maria asked herself PRT who Hans all had met Peter that was **duidelijk.** Maar ook Otto? (Dutch)

 clear but also Otto

 'Maria wondered who (all) Hans had met today. Peter, that was clear. But

 Otto as well?' (Dutch)

Let us focus on the German example in (63a) (the Dutch case is equivalent). Here, the em-

(ii) It's probable that a certain senator will resign, but which_i [it's probable that t_i will resign] is still a secret.

Repair by ellipsis is thus expected for (i) as well. A second possibility is to assume that the elliptical clause is in fact "smaller" than (i); on this approach, only the embedded clause would antecede the elliptical CP_1 , obviating long-distance movement:

(iii) $[CP_1]$ [die Arbeiter]_i [sollen t_i die Straße fegen]] the workers should the street sweep

I will not attempt to decide between these two alternatives here, as either option appears to be unproblematic.

This objection can be countered in at least two ways. First, there is abundant evidence suggesting that that—trace violations are surface (PF) effects (see Kandybowicz 2006 and references therein), and Merchant (2001) shows that they are alleviated in sluicing (see also Bošković 2011).

bedded interrogative clause modulo the fronted wh-phrase (Hans heute [t] getroffen hatte) acts as the antecedent for ellipsis in the following clause: den Peter is the surface remnant of the clause den Peter hatte Hans heute getroffen 'Hans had met Peter today;' it is this proposition that is subsequently resumed by the propositional proform das. Thus, the underlying structure of the boldface part of (63a) is as follows:

(64) a. $[CP_1]$ den $Peter_k$ [hatte $Hans\ t_k$ getroffen]] $_i$ $[CP_2]$ das $_i$ wusste sie ganz sicher] \rightarrow b. $[CP_1]$ den $Peter_k$ [hatte $Hans\ t_k$ getroffen]] $_i$ $[CP_2]$ das $_i$ wusste sie ganz sicher]

This analysis accurately captures the meaning of the relevant part of (63a), satisfying the Focus Condition. The only difference to the cases previously discussed is that the antecedent here is located in the *preceding* discourse, and that the correlate resumes (not the dXP itself but) the entire proposition of which the dXP is the surface remnant.³⁸

Within the present framework, cases like (63a) thus fall within the purview of ellipsisderived dislocation. Note that such "forward CLD" shows apparent "backward reconstruction" into the antecedent clause, as in the following:³⁹

(65) Wen liebt jeder Mann_i? **Seine**_i **Mutter**, **das ist klar**. Aber wen noch? who loves every man his mother that is clear but who else 'Who does every man love? His mother, that's clear. But who else?' (German)

Binding of the pronoun inside the dXP is a standard reconstruction effect on the assumption that the underlying structure of the dXP in (65) is as shown in (66), corresponding directly to B's fragment response in (67).

- (66) $\left[\text{CP}_{1} \text{ [seine Mutter]}_{i} \right] \left[\frac{\text{mag jeder Mann } t_{i}}{\text{mag jeder Mann } t_{i}} \right]$
- (67) A: Wen liebt jeder $Mann_i$? B: $Seine_i$ Mutter. who loves every man his mother 'Who does every man love?' – 'His mother.' (German)

Notice that in cases of "forward CLD" the correlate resumes the entire CP_1 (more precisely, the proposition it denotes), rather than just the ellipsis remnant that is the dXP.

 $^{^{38}}$ As expected, a non-elliptical counterpart to (64a) is acceptable (redundancy aside) and identical in meaning.

³⁹The same is true for the English translation, suggesting that the analysis applies here as well despite the fact that English lacks regular "backward CLD."

⁴⁰If Holmberg's (forthcoming) analysis of yes/no replies is on the right track, cases like B's response in (i) involve the same kind of forward ellipsis.

⁽i) A: Hat Peter die Maria geküsst? – B: Ja, (das) hat er. has Peter the Maria kissed yes that has he 'Did Peter kiss Mary?' – 'Yes, he did.' (German)

Recall now from section 3 that dislocated QPs, wh-phrases and anaphors are unacceptable. Consider again the case of illicit anaphor dislocation:

(68) *Zichzelf, die heeft hij nog nooit overgeslagen.
himself him has he yet never passed over
'He hasn't ever passed himself over.'
(Dutch)

As expected, anaphors can figure as dXPs in cases of CLD in which the directionality of ellipsis is forward (the same is true for QPs and wh-phrases; see below on the latter case):

Van wie hield Peter eigenlijk? Van zichzelf, dat hebben we gemerkt. Maar of who loved Peter actually of himself that have we noticed but van wie nog meer?
of who else
'Who did Peter love, actually? Himself, that was clear enough. But who else?'
(Dutch)

The source of the discrepancy between (68) and (69) is evident: since the correlate's antecedent in (69) is the entire CP₁ rather than the dXP itself, the fact that anaphors cannot antecede pronouns, fatal to (68), is irrelevant here.

"Forward CLD" of wh-dXPs brings out deeper parallels between dislocation constructions and sluicing. Consider the fact that Bavarian complementizer agreement is bled by sluicing (as first discussed in Lobeck 1995; data from Günther Grewendorf, pers. comm.):

- (70) a. I woass net wo-ts ihr a Madl gseng hoabts. I know not where-2PL you.2PL a girl seen have 'I don't know where you saw a girl.'
 - b. I woass dass-ts ihr a Madl gseng hoabts, owa I woass net wo(*-ts).

 I know that-2PL you.2PL a girl seen have but I know not where

 'I know that you saw a girl, but I don't know where.'

 (Bavarian)

Whatever the reason for this bleeding effect of ellipsis, its application in both (70b) and (71) suggests that the wh-fragment is derived by deletion in both cases.

(71) Irgandwann werd-ts (es) des vasteh. Aber wann(*-ts), des wiss-ma net. sometime will-2PL 2PL that grasp but when that know-we not 'At some point you will understand this. But when, that we don't know.' (Bavarian)

Holmberg argues that yes/no replies are elliptical clauses, in which the affirmative/negative particle precedes a propositional domain containing a polarity variable that is elided under parallelism. On this analysis, the affirmative particle in B's response in (i) would then have an underlying clausal structure (= CP_1) parallel to that of A's question, resumed by das in CP_2 . Exploring these connections in more detail is evidently beyond the scope of the present paper.

Two further correlations point to the same conclusion. Dialectal Norwegian, like English, allows for inversion of the wh-remnant and a stranded preposition in sluicing, a phenomenon dubbed swiping in Merchant 2002.

(72) Per gikk på kino men jeg veit ikke hvem med.

Per went to cinema but I know not who with

'Per went to the cinema, but I don't know who with.'

(dial. Norwegian)

Dialects of Dutch allow for demonstrative pronouns to be stranded next to sluiced wh-phrases in certain contexts, a construction termed spading in van Craenenbroeck 2010b.

(73) A: Jef ei gisteren iemand gezien. – B: Wou da?

Jef has yesterday someone seen who that

A: 'Jef saw someone yesterday. – B: 'Who?' (Wambeek Dutch)

I will not attempt to analyze swiping or spading; see the above references for discussion. What matters here is that both swiping and spading are strictly confined to ellipsis configurations. The fact that both phenomena can be found with dislocated wh-phrases in "forward CLD" therefore lends support to my claim that these, too, are derived by deletion.

- (74) Marit visste at Per var gått på kino. **Men hvem med, det visste hun**Marit knew that Per was gone on theater but who with that knew she

 ikke.

 not

 'Marit knew Per had been to the theater. But who with, that she didn't know.'

 (dial. Norwegian)
- (75) Jef ei me Marie geklapt. **Mo wuiroem da, da weet ik nie.**Jef has with Marie spoken but why that that know I not.
 'Jef talked to Marie. But why, that I don't know.' (Wambeek Dutch)

5.4 Locality in CLD

As noted in section 2, CLD does not strictly require fronting of the correlate; the dXP shows connectivity regardless of this movement (recall (10a) above). Frey (2004b) observes that a dXP can be related to an $in\ situ$ correlate inside an embedded V2 clause with a filled edge, as in the following (note the reconstructed binding dependency):

(76) Seinem_i Vater, Maria glaubt [$_{CP}$ jeder_i wird dem Geld leihen] his.ACC father Maria thinks everyone will him.ACC money lend 'Maria thinks that everyone will lend money to his father.' (German)

Such cases pose a serious problem for monoclausal movement analyses of CLD. If the dXP had moved from a clause-internal position (as indicated by the reconstructed binding relation), it would have moved from the embedded V2 clause into the matrix. However, such extraction from a topic island is generally sharply deviant.

(77) *Wem_i glaubt Maria [CP jeder wird t_i Geld leihen]? who thinks Maria everyone will money lend int.: 'Who is such that Maria thinks everyone will lend money to him?' (German)

Advocates of a direct-movement analysis of CLD are hard put to explain the clear-cut discrepancy in acceptability between (76) and (77).

On the ellipsis analysis of CLD, the puzzle disappears. V2 and verb-final clauses are semantically parallel for purposes of e-GIVENness (28), as evidenced by standard cases of sluicing (Merchant 2001). Therefore, elliptical CP_1 can differ structurally from CP_2 such that the dXP undergoes long movement from a verb-final complement clause, not crossing any island boundary.

The extraction in CP₁ is licit; since the correlate remains *in situ* in CP₂, no movement violation arises.⁴¹ By contrast, fronting of the correlate out of the V2 clause induces deviance on a par with that of (77), as expected.

(79) *Seinem Vater, dem_k glaubt Maria, jeder wird t_k Geld leihen his.ACC father him.ACC thinks Maria everyone will money lend 'Maria thinks everyone would lend money to his father.' (German)

Thus, non-locality in CLD is illusory, a consequence of Merchant's (2001) semantico-pragmatic approach to parallelism adopted here, which allows for truth-conditionally vacuous differences between antecedent and ellipsis site. 42

The two options do not seem to differ in their predictions.

 $^{^{41}}$ Alternatively, the dXP could move via the embedded CP edge, the subject remaining low; this underlying structure, too, is licensed by e-GIVENness.

 $^{^{42}}$ In the case just discussed, I argued that extraction of the dXP from an island is illusory: the elided structure permits extraction. Given that clausal ellipsis has been argued to ameliorate island violations in the wake of Ross's (1969) seminal work (see Lasnik 2001; Merchant 2001 on sluicing and Temmerman 2012; Griffiths and Lipták forthcoming on fragment answers), one might expect to find further effects of this

6 Conclusion: Dislocation Subdued

"Is CLD derived by movement or base-generation of the dXP?"—this question is the common thread running through the literature on this recalcitrant phenomenon. Neither option offered by the traditional dichotomy turns out to be adequate, however, owing to the fact that different properties of the construction seem to support either conclusion. The novel analysis proposed in this paper allows us to have our cake and eat it, too: qua sentence fragments, dXPs are both clause-external and clause-internal, the reduced clause being underlyingly parallel to the host clause. The biclausal source of CLD is masked by PF-deletion, yielding a V3 pattern at the surface. The following schema summarizes the proposal:

(80)
$$\underbrace{ \left[\text{CP}_1 \ dXP_i \ \langle [\dots \ t_i \ \dots] \rangle \right]}_{\text{host clause}} \underbrace{ \left[\text{CP}_2 \ \dots \ \text{correlate} \ \dots \right]}_{\text{host clause}}$$
 ('\lambda \tau \rangle' = PF-deletion)

Having undergone regular \overline{A} -movement within CP_1 , the analysis correctly predicts the dXP to display the exact same grammatical properties it would have in the corresponding non-elliptical clause (θ -role, case, P-stranding, reconstruction), without having to resort to

kind. Examples like the following, suggested by Jason Merchant (pers. comm.) on the basis of similar cases discussed in Grewendorf 2008, might be a case in point:

(i) ?Ihre^k Kinder_i, wenn die_i keine Mutter^k mehr liebt geht die Gesellschaft unter. her children when them no mother anymore loves goes the society under 'When no mother loves her children anymore, society will go under.' (German)

Here, the dXP appears to have moved out of an adjunct clause, as indicated by the reconstructed binding relation. Grewendorf (2008) speculates that such cases might be acceptable because of the presence of the correlate inside the island, acting as a resumptive pronoun. This explanation is implausible, however, in light of the fact that German generally lacks island-obviating resumption strategies of the English type; moreover, as pointed out in footnote 1, it contradicts the crosslinguistic generalization that binders of resumptive pronouns bear invariant default case. An alternative option suggested by the ellipsis approach is to treat such cases as involving repair by ellipsis in CP_1 . Similar consideration would then apply to apparent violations of the Coordinate-structure Constraint, as in the following examples:

(ii) a. ?Ihren; Doktorvater, jede Studentin; hat den und dessen Frau schon mal zum Essen her advisor every student has him and his wife at some point for dinner eingeladen. invited

'Every student invited her advisor and his wife for dinner at some point.' (German)

b. ?Sina $_i$ böcker, jag vet inte var varje författare $_i$ går och köper dem. his books I know not where every author goes and buys them 'I don't know where every author goes and buys his books.' (Swedish)

Whatever the exact nature of "island amelioration" under ellipsis—literal repair, as assumed in Lasnik 2001; Merchant 2008; Fox and Lasnik 2003, or avoidance via non-island sources, as suggested by Merchant (2001) and Abels (2012)—the fact that the phenomenon exists might provide us with a handle on the relative acceptability of the above examples. I cannot settle this matter conclusively here and leave it to future research.

any special mechanisms. As I have shown, the analysis in (80) naturally extends to cases of CLD with forward deletion in CP₁, readily provides explanations for the apparent obviation of certain locality constraints and parallels with sluicing, and is likely to shed light on various related phenomena crosslinguistically (see footnotes 34 and 35).

Note that this ellipsis approach to CLD relies exclusively on the independently attested grammatical operations of \overline{A} -movement (topicalization⁴³) and clausal ellipsis. A grammar equipped with these operations is thus automatically predicted to generate the CLD pattern, given that clauses can be freely juxtaposed in discourse. Consequently, the construction labeled CLD is eliminated from the theory of UG.

References

Abels, Klaus. 2012. The Italian left periphery: A view from locality. *Linguistic Inquiry* 43:229–254.

Adger, David. 2003. Core syntax. Oxford: Oxford University Press.

Alexiadou, Artemis. 2006. Left-dislocation (including CLLD). In Everaert and van Riemsdijk (2006), 668–699.

Alrenga, Peter. 2005. A sentential subject asymmetry in English and its implications for complement selection. Syntax 8:175–207.

Altmann, Hans. 1981. Formen der 'Herausstellung' im Deutschen. Tübingen: Niemeyer.

Anagnostopoulou, Elena. 1997. Clitic left-dislocation and contrastive left-dislocation. In Anagnostopoulou et al. (1997), 151–192.

Anagnostopoulou, Elena, Henk van Riemsdijk, and Frans Zwarts, ed. 1997. *Materials on left-dislocation*. Amsterdam: John Benjamins.

Arregi, Karlos. 2010. Ellipsis in split questions. Natural Language & Linguistic Theory 28:539–592.

Baker, Mark C. 1996. The polysynthesis parameter. Oxford: Oxford University Press.

 $^{^{43}}$ One could postulate information-structural features as triggers of this movement, or stipulate that the dXP moves to some kind of 'ContrastP,' similar to what is assumed in Frey 2004a for topicalization of non-subjects. Such moves amount to little more than restatements of the observed facts, however; they provide no more insight than the assumption that pragmatic effects are functions of clausal edges (pragmatics only exploiting whatever options the syntax it presents it with), while additionally stipulating a descriptive feature, assigned in violation of Inclusiveness (cf. Fanselow 2006).

- Bayer, Josef. 2001. Asymmetry in emphatic topicalization. In *Audiatur vox sapientiae*, ed. Caroline Féry and Wolfgang Sternefeld, volume 52 of *Studia grammatica*, 15–47. Berlin: Akademie Verlag.
- Bošković, Željko. 2011. Rescue by PF-deletion, traces as (non-)interveners, and the *that*—trace effect. *Linguistic Inquiry* 42:1–44.
- Büring, Daniel. 2003. On D-trees, beans, and B-accents. *Linguistics & Philosophy* 26:511–545.
- Chomsky, Noam. 1957. Syntactic structures. The Hague: Mouton.
- Chomsky, Noam. 1981. Lectures on Government and Binding. Dordrecht: Foris.
- Chomsky, Noam. 1995. The minimalist program. Cambridge, MA: MIT Press.
- Chung, Sandra. 2013. Syntactic identity in sluicing: How much, and why. *Linguistic Inquiry* 44.
- Chung, Sandra, William A. Ladusaw, and James McCloskey. 1995. Sluicing and logical form. *Natural Language Semantics* 3:239–282.
- Cinque, Guglielmo. 1990. Types of \overline{A} -dependencies. Cambridge, MA: MIT Press.
- Coppock, Elizabeth. 2001. Gapping: in defense of deletion. In *Papers from the 37th meeting* of the Chicago Linguistic Society: The main session, 133–148. Chicago: CLS.
- van Craenenbroeck, Jeroen. 2004. Ellipsis in Dutch dialects. Doctoral Dissertation, Leiden University.
- van Craenenbroeck, Jeroen. 2010a. Invisible Last Resort: A note on clefts as the underlying source for sluicing. *Lingua* 120:1714–1726.
- van Craenenbroeck, Jeroen. 2010b. The syntax of ellipsis. Oxford: Oxford University Press.
- van Craenenbroeck, Jeroen, and Anikó Lipták. 2006. The crosslinguistic syntax of sluicing: Evidence from Hungarian relatives. Syntax 9:248–274.
- Demirdache, Hamida. 1991. Resumptive chains in restrictive relatives, appositives, and dislocation structures. Doctoral Dissertation, MIT.
- den Dikken, Marcel, André Meinunger, and Chris Wilder. 2000. Pseudoclefts and ellipsis. Studia Linguistica 54:41–89.

- Drubig, Hans Bernhard. 2001. On the syntactic form of epistemic modality. Ms., University of Tübingen.
- Dubinsky, Stanley, and Robert Hamilton. 1998. Epithets as antilogophoric pronouns. *Linquistic Inquiry* 29:685–693.
- Eisenberg, Peter. 2006. Grundriss der deutschen Grammatik, volume 2. Stuttgart: J.B. Metzler.
- Everaert, Martin, and Henk van Riemsdijk, ed. 2006. *The Blackwell companion to syntax*. Oxford: Blackwell.
- Fanselow, Gisbert. 2006. On pure syntax. In Form, structure, and grammar, ed. Patrick Brandt and Eric Fuß, 137–158. Berlin: Akademie Verlag.
- Flämig, Walter, Brigitta Haftka, Karl Erich Heidolph, Horst Isenberg, Fritz Jüttner, John Pheby, Renate Steinitz, and Wolfgang Ulrich Wurzel. 1981. *Grundzüge einer deutschen Grammatik*. Berlin: Akademie Verlag.
- Fox, Danny, and Howard Lasnik. 2003. Successive-cyclic movement and island-repair: The difference between sluicing and VP-ellipsis. *Linguistic Inquiry* 34:143–154.
- Frey, Werner. 2004a. A medial topic position for German. *Linguistische Berichte* 198:153–190.
- Frey, Werner. 2004b. Notes on the syntax and the pragmatics of German left-dislocation. In *The syntax and semantics of the left periphery*, ed. Horst Lohnstein and Susanne Trissler, 203–233. Berlin: Mouton de Gruyter.
- Giannakidou, Anastasia, and Jason Merchant. 1998. Reverse sluicing in English and Greek. The Linguistic Review 15:233–256.
- Greenberg, Gerald R. 1984. Left-dislocation, topicalization, and interjections. *Natural Language and Linguistic Theory* 2:283–287.
- Grewendorf, Günther. 2008. The left clausal periphery: Clitic left-dislocation in Italian and left-dislocation in German. In Shaer et al. (2008a), 49–94.
- Griffiths, James, and Anikó Lipták. forthcoming. Contrast and island-sensitivity in fragments. Syntax.
- Grohmann, Kleanthes K. 2003. Prolific domains. Amsterdam: John Benjamins.
- Haider, Hubert. 2010. The syntax of German. Cambridge: Cambridge University Press.

- Hankamer, Jorge, and Ivan Sag. 1976. Deep and surface anaphora. *Linguistic Inquiry* 7:391–428.
- Heycock, Caroline. 2006. Embedded root phenomena. In Everaert and van Riemsdijk (2006), 174–209.
- Hinterwimmer, Stefan, and Sophie Repp. 2010. Topics(?) in the left periphery. Paper presented at the 2nd International Workshop of the SFB 632 'Informationsstruktur', University of Potsdam.
- Hoekstra, Eric. 1999. On D-pronouns and the movement of topic features. *Folia Linguistica* 33:59–74.
- Holmberg, Anders. forthcoming. The syntax of answers to negative yes/no-questions in English. *Lingua*.
- Jackendoff, Ray. 1972. Semantic interpretation in Generative Grammar. MIT Press.
- Jelinek, Eloise. 1984. Empty categories, case, and configurationality. Natural Language and Linquistic Theory 2:39–76.
- Kandybowicz, Jason. 2006. COMP-trace effects explained away. In *Proceedings of WCCFL* 25, ed. Donald Baumer, David Montero, and Michael Scanlon, 220–228. Somerville, MA: Cascadilla Press.
- Kluck, Marlies. 2011. Sentence amalgamation. Utrecht: LOT.
- Koster, Jan. 1978. Why subject sentences don't exist. In *Recent transformational studies in European languages*, ed. Samuel Jay Keyser, 53–64. Cambridge, MA: MIT Press.
- Langacker, Ronald W. 1969. On pronominalization and the chain of command. In *Modern studies in English*, ed. David A. Reibel and Sanford A. Schane, 160–186. Englewood Cliffs, NJ: Prentice-Hall.
- Lange, Klaus-Peter. 1981. Warum Ersatzinfinitiv? Groninger Arbeiten zur germanistischen Linguistik 19:62–81.
- Lasnik, Howard. 2001. When can you save a structure by destroying it? In *Proceedings of NELS 31*, ed. Minjoo Kim and Uri Strauss, volume 2, 301–320. Amherst, MA: GLSA.
- Lipták, Anikó, and Luis Vicente. 2009. Pronominal doubling under VP-topicalization. Lingua 119:650–686.
- Lobeck, Anne. 1995. Ellipsis. Oxford: Oxford University Press.

- McFadden, Thomas, and Sandhya Sundaresan. forthcoming. Nominative case is independent of finiteness and agreement. In *Papers from BCGL 5: Case at the interfaces*.
- Merchant, Jason. 2001. The syntax of silence. Oxford: Oxford University Press.
- Merchant, Jason. 2002. Swiping in Germanic. In *Studies in comparative Germanic syntax*, ed. Jan-Wouter Zwart and Werner Abraham, 289–315. Amsterdam: John Benjamins.
- Merchant, Jason. 2004a. Fragments and ellipsis. Linguistics & Philosophy 27:661–738.
- Merchant, Jason. 2004b. Resumptivity and non-movement. Studies in Greek Linguistics 24:471–481.
- Merchant, Jason. 2008. Variable island-repair under ellipsis. In *Topics in ellipsis*, ed. Kyle Johnson, 132–153. Cambridge: Cambridge University Press.
- Merchant, Jason. 2013. Voice and ellipsis. Linguistic Inquiry 44.
- Merchant, Jason. forthcoming. Ellipsis. In Syntax: An international handbook, ed. Artemis Alexiadou, Miriam Butt, and Tibor Kiss. Berlin: Walter de Gruyter, 2^{nd} edition.
- Mikkelsen, Line. 2011. Verbal inflection at a distance. In *Morphology at Santa Cruz*, ed. Nick LaCara, Anie Thompson, and Matt A. Tucker, 85–96. Santa Cruz, CA: LRC Publications.
- Müller, Gereon. 1998. Incomplete-category fronting. Dordrecht: Kluwer.
- Ott, Dennis. 2012. Movement and ellipsis in Contrastive Left-dislocation. In *Proceedings of WCCFL 30*, ed. Nathan Arnett and Ryan Bennett, 281–291. Somerville, MA: Cascadilla Proceedings Project.
- Ott, Dennis. in progress. Generalized sluicing. Ms., University of Groningen.
- Ott, Dennis, and Mark de Vries. 2012a. Right-dislocation as deletion. Ms., University of Groningen.
- Ott, Dennis, and Mark de Vries. 2012b. Thinking in the right direction: An ellipsis analysis of right-dislocation. *Linguistics in the Netherlands* 29:123–134.
- Repp, Sophie, and Heiner Drenhaus. 2011. Working-memory effects of information structure in German left dislocation (GLD). Poster presented at *Architectures and Mechanisms for Language Processing* 17, University of Paris Descartes.
- van Riemsdijk, Henk. 1997. Left-dislocation. In Anagnostopoulou et al. (1997), 1–10.

- van Riemsdijk, Henk, and Frans Zwarts. 1997. Left-dislocation in Dutch and the status of copying rules. In Anagnostopoulou et al. (1997), 13–29.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In *Elements of grammar*, ed. Liliane Haegeman, 281–337. Dordrecht: Kluwer.
- Roberts, Craige. 2010. Retrievability and incomplete descriptions. Ms., Ohio State University.
- Rodrigues, Cilene, Andrew Nevins, and Luis Vicente. 2009. Cleaving the interactions between sluicing and P-stranding. In *Romance languages and linguistic theory 2006*, ed. Danièle Torck and W. Leo Wetzels, 175–198. Amsterdam: John Benjamins.
- Ross, John Robert. 1969. Guess who? In *Papers from the fifth regional meeting of the Chicago Linguistic Society*, ed. Robert I. Binnick, Alice Davison, Georgia M. Green, and Jerry L. Morgan, 252–286. Chicago: CLS.
- Ross, John Robert. 1973. A fake NP squish. In *New ways of analyzing variation in English*, ed. Charles-James N. Bailey and Roger W. Shuy, 96–140. Washington, DC: Georgetown University Press.
- Rullmann, Hotze, and Jan-Wouter Zwart. 1996. On saying dat. In Language and cognition 5. Yearbook 1995 of the Research Group of Theoretical and Experimental Linguistics of the University of Groningen, 179–194. Groningen: University of Groningen.
- Shaer, Benjamin, Philippa Cook, Werner Frey, and Claudia Maienborn, ed. 2008a. *Dislocated elements in discourse*. London: Routledge.
- Shaer, Benjamin, Philippa Cook, Werner Frey, and Claudia Maienborn. 2008b. Introduction. Dislocation: concepts, questions, goals. In Shaer et al. (2008a), 1–27.
- Tanaka, Hidekazu. 2011. Syntactic identity and ellipsis. The Linguistic Review 28:79–110.
- Temmerman, Tanja. 2012. The syntax of Dutch embedded fragment answers: On the PF-theory of islands and the WH/sluicing correlation. *Natural Language & Linguistic Theory* (published online Nov. 10).
- Thoms, Gary. 2010. 'Verb floating' and VP-ellipsis. Towards a movement account of ellipsis licensing. *Linguistic Variation Yearbook* 10:252–297.
- Thráinsson, Höskuldur. 1979. On complementation in Icelandic. New York: Garland.
- Thráinsson, Höskuldur. 2007. The syntax of Icelandic. Cambridge: Cambridge University Press.

- Truckenbrodt, Hubert. 2012. On the prosody and syntax of right-dislocation. Paper presented at DGfS 2012, Goethe University Frankfurt/Main.
- Vat, Jan. 1981. Left-dislocation, connectedness, and reconstruction. Groninger Arbeiten zur germanistischen Linguistik 20:80–103.
- de Vries, Mark. 2009. The left and right periphery in Dutch. *The Linguistic Review* 26:291–327.
- de Vries, Mark. 2010. Empty subjects and empty objects. In *Structure preserved*, ed. Jan-Wouter Zwart and Mark de Vries, 359–366. Amsterdam: John Benjamins.
- Wagner, Michael. forthcoming. Contrastive topics decomposed. Semantics and Pragmatics 6.
- Wiltschko, Martina. 1997. Parasitic operators in German left-dislocations. In Anagnostopoulou et al. (1997), 307–339.
- Zaenen, Annie. 1985. Extraction rules in Icelandic. New York: Garland.
- Zaenen, Annie. 1997. Contrastive dislocation in Dutch and Icelandic. In Anagnostopoulou et al. (1997), 119–148.
- Zwart, Jan-Wouter. 1998. Where is syntax? Syntactic aspects of left-dislocation in Dutch and English. In *The limits of syntax*, ed. Peter W. Culicover and Louise McNally, 365–393. San Diego, CA: Academic Press.

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