1 Introduction

Traditional grammars typically manage to describe imperatives in just a few pages, suggesting there is not much to be said about them, nor to be learned from them. After a somewhat slow start, work on imperatives has really taken off, and many interesting properties of imperatives have now been uncovered (see van der Wurff, this volume, for an overview). Imperatives are relatively short and occur frequently in the primary data directed to children. What general properties of the target language can be fixed on the basis of imperatives? What role, if any beyond figuring out imperatives, could imperatives play in the acquisition process? Within the modular approach to constructions that characterizes modern syntax, the question arises how exactly imperatives differ from other clause types and how apparent construction-specific properties should be accounted for.

This paper examines two aspects of imperative constructions in Dutch from this perspective. First, right-peripheral objects are possible in Dutch imperatives, as shown in (1). This seems to be a unique property of imperatives, since declaratives and interrogatives do not allow it (Den Dikken 1992)

(1) Dutch Imperatives allow for right-peripheral objects
  Leg neer dat boekje!
  ‘Put that book down!’

I will show that, contrary to appearances, the occurrence of right-peripheral objects is not a construction-specific property.

Secondly, this paper examines difference between imperatives and (root) declaratives with respect to how many and what kind of elements may be present in the left periphery. As Rizzi (1997, 1999) shows, the left periphery (i.e. the CP layer) universally consists of a highly structured hierarchical set of projections:

(2) Force> Topic*> Int> Focus> Topic*> Fin

Here, Force expresses clause type and Fin relates to the finiteness of IP. Topics and Focused constituents are in designated projections, Top and Focus, at spell-out. Int (interrogative) is a projection that can host certain interrogative elements. The LF interpretation and PF intonation are directly read off from these configurations. Given this view of the left periphery, the Dutch

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left periphery is a bit of a mystery: not all these projections can cooccur in the left periphery in Dutch root declaratives, which are verb second. Root declaratives minimally require one overt (or covert) topic or focus, and maximally tolerate an overt Topic/focus and an overt resumptive D pronoun preceding the finite verb. The finite verb is in the left periphery, i.e. the finite verb is at least as high as Fin, and precedes what is standardly assumed to be IP, as shown in (3).

(3) Dat boekje dat heb [pik even neergelegd]
    that book that have I adv downput
    ‘That book I just put it down’

A first puzzle then is how the verb second constraint should be expressed, given the universal availability of a number of projections and possible iterations (Top*) in the left periphery. The answer can be no longer take the form of a simple X-bar theoretic account, with declarative C requiring a single overt specifier, and V moving to C. A second related puzzle concerns the fact that Dutch (covert subject) imperatives are “verb first”: imperatives neither require nor tolerate an overt Topic or Focus in the left periphery, as shown in (4), even though imperatives are clearly CPs, with the imperative V raising at least to Fin:

(4) a. *Dat boekje dat leg even neer!
    that book that put adv down

A first puzzle then is how the verb second constraint should be expressed, given the universal availability of a number of projections and possible iterations (Top*) in the left periphery. The answer can be no longer take the form of a simple X-bar theoretic account, with declarative C requiring a single overt specifier, and V moving to C. A second related puzzle concerns the fact that Dutch (covert subject) imperatives are “verb first”: imperatives neither require nor tolerate an overt Topic or Focus in the left periphery, as shown in (4), even though imperatives are clearly CPs, with the imperative V raising at least to Fin:

(4) a. *Dat boekje dat leg even neer!
    that book that put adv down

b. *dat leg even neer
    that put adv down

Moreover, Dutch imperatives do appear to allow for topic drop and therefore allow for a silent topic in the left periphery:

(5) leg eens even neer!
    put adv adv down
    ‘Put it down’

Hence, there appears to be no principled problem with the presence of a leftperipheral Topic projection in imperatives. The verb first restriction cannot be simply written off as the absence of an EPP feature on Top, the imperative V or C. The impossibility of an overt topic in the left periphery does not appear to be related to any inherent property of imperative constructions, either. German allows leftperipheral topics in imperatives (Reis and Rosengren 1992):

(6) das Buch gib mal zurück
    that book give adv back
    lit: that book give back

How then should these patterns be captured? How exactly should the difference between Dutch imperatives and declaratives be accounted for? What exactly is the difference between Dutch and German imperatives? Or more broadly, why is only a subset of Rizzi’s left periphery possible, i.e. how should the problem of crosslinguistic variation be approached?

---

1 The Top* FP series recurs more fully in the Dutch Middle field (Koopman and Szabolcsi 2000). There are several intriguing facts about the left periphery in (2), which I will not be able to address in this paper. The presence of the Top projection between Fin and Focus is odd given the fact that topics do not seem to be allowed below Focus in the Middle Field. It might be the case that Top* and Focus should be decomposed into “fields”, i.e. of consisting of different projections with specific interpretations, and specific intonations. Int and Focus for example might present different types of Focus.
1.1 The basic facts

1.2 Den Dikken 1992.

Den Dikken (1992) shows that imperatives are exceptional within Dutch in allowing for right-peripheral objects.

(7) Leg neer dat boekje
    Put down that book

Other clause types disallow right-peripheral objects, a well-known fact, and puzzle, about Dutch. Dutch by and large seems to lack “heavy NP shift”, though PPs and CP may appear in the right periphery.

(8) a. *Ik leg nu neer dat boekje
    I put now down that book

b. *Nu leg ik neer dat boekje
    Now put I down that book

c. *wie legt neer dat boekje?
    who puts down that book

Since right-peripheral objects license parasitic gaps, the derivation involves A’ movement (Den Dikken 1992:(12a) and (12b)).

(9) Leg (zonder pg in the kijken ) neer (dat boek)
    Put without in to look down that book
    ‘Put that book down without looking into it’

Den Dikken 1992 motivates the following analysis:

(10) a. The right-peripheral DP is base generated;

b. An empty operator associated with the right-peripheral DP
    undergoes A’ movement;

c. The landing site for the empty operator is available only in imperatives.

Den Dikken establishes that the right-peripheral object construction shares properties with empty operator constructions, in support of (10b). These shared properties are to be attributed to restrictions on the type of A’ moved element, in particular on empty operators. The fact in (10c), a relatively minor point in Den Dikken’s paper, means that right-peripheral objects are restricted to imperatives: the landing site for the empty operator is provided by a clausal head that only occurs in imperatives. Notice that (10c) makes an interesting typological prediction. If correct, imperatives cross-linguistically should allow for right-peripheral objects, all other things being equal. This prediction does not seem to be borne out, as I show in section 2.3. The availability of right-peripheral objects seems to correlate with topic drop.

1.3 Right dislocation, left dislocation, and topic drop.

Dutch has two types of right dislocation constructions, one in which the dislocated constituent is related to a resumptive pronoun (11a), and one in which it is related to a demonstrative pronoun,
henceforth a D-pronoun. D-pronouns can occur in the left periphery or within the clause (11b,c). Right-dislocated DPs have a typical destressed (i.e. low toned) intonation, associated with backgrounded material. This intonation also holds for right-peripheral objects in imperatives.

(11) Right dislocation with a resumptive personal pronoun:
   a. Ik leg ‘t, even neer (,) dat boekje,
      I put it adv down, that book
      ‘I’m just putting it down, that book’
   Right dislocation with a leftperipheral D pronoun:
   b. dat, leg ik even neer (,) dat boekje
      that put I adv down that book
   Right dislocation with an clause internal D-pronoun:
   c. Ik leg dat, even neer (,) dat boekje,
      I put that adv down that book
      ‘I’m just putting that down, that book’

The rightperipheral constituent can be preceded by a pause or not, depending on factors that I understand poorly. I will take the relevant generalization to be that no pause is necessary when the rightperipheral DP immediately follows the element receiving main sentence stress as in (11), and that this holds for both declaratives and imperatives. Pauses are necessary (or strongly preferred) after unstressed material, as in the following example (main stress on the particle, the participle carries no stress):

(12)  Ik heb dat even néegelegd, dat boekje
       I have that adv down put that book

The question arises is if right dislocation with or without comma intonations behave otherwise in an identical fashion. I will not address this issue in this paper (but see footnote 15).

Right-dislocated constituents are always definite. Furthermore, there is a very strong preference for rightdislocated elements to contain a demonstrative determiner (dit ‘this’, dat ‘that’, deze ‘these’, die ‘those’). I take this to be due to a form of D-agreement between the D-pronoun and the rightdislocated DP.

(13) a. Dat leg ik even neer dat/??het/??elk/??een boekje
      That put I adv down that/ the each a book
   b. Dat leg ik even neer ??Jan’s boekje/dat boekje van Jan
      That lay I adv down John’s book/ that book of John
   c. Die leg ik even neer al deze/??de boekjes
      Those lay I adv down all those/ the books

Leftdislocation with D-pronouns basically mirrors (11b) and (11c), suggesting that these two constructions are intimately related. We will see that this is indeed the case.

(14) Left dislocation with a leftperipheral D pronoun:
   a. Dat boekje, dat, leg ik even neer
      dat book that put I adv down
   Left dislocation with a clause internal D-pronoun:
   b. Dat boekje, ik leg dat, even neer,
      That book I put that adv down

---
2 Left dislocation with a personal pronoun is not very felicitous in Dutch.
There are however restrictions on right-dislocated DPs that do not hold for left-dislocated DPs. In particular, right-dislocated DPs cannot be related to stranded Ps (see 2.1 and 2.2) and there are restrictions on datives related to silent D-pronouns. Right dislocation shares this property with English Heavy NP shift. As we will see, this property does not appear to be related to any specific property of Dutch, but may hold quite generally cross-linguistically (see 2.2).

The basic analytical idea in this paper is that the distribution of right-peripheral objects falls out from the right-dislocated construction cum fronted D-pronoun in (11b). This immediately will account for the fact that right-dislocated objects in imperatives show the same D-agreement (13) as right-dislocated DPs with an overt D-pronoun. The latter construction in turn is derived from the left dislocation construction in (14), in conjunction with general properties of topic drop (for the same conclusion on this last point, see Barbiers this volume).

(15) Topic drop:
   a.  (Dat) leg ik wel even neer
       (that) put I yes adv down
   b.  Ik leg *(dat) even neer
       I put that adv down

As is well-known, only topics which can independently front to a position preceding the verb in C can be dropped, hence the contrast in (15).

1.4 Preview

In this paper, I will argue for a modular approach. The occurrence of right-peripheral objects does not follow from a specific property of imperatives, but arises through the interaction of one specific type of right dislocation in conjunction with general properties of topic drop (see section 1.3). I will present the basic distribution of right-peripheral objects, and systematically compare left and right dislocated structures in root declaratives and imperatives. I will show that both topic drop and a particular type of right dislocation are involved in the derivation of right-peripheral objects (section 1.3). Consequently, right-peripheral objects should not be restricted to imperatives, but should and do occur in other clause types as well, as long as the conditions on right dislocation and topic drop are met. This account allows for a better typological fit of when right-peripheral objects are possible in imperatives cross-linguistically and when they are not (section 2.3). On the basis of reconstruction effects with right dislocation (section 3), I will argue against the standard base generation account for right dislocation, and in favor of a movement analysis. Assuming, with Kayne 1994, that only leftward movement is available, implies a derivation that involves at least leftward movement of a DP to a designated position in the left periphery (say, Topic), followed by fronting of the (remnant) imperative clause to some higher position.
This is in essence the analysis I pursued in Koopman 1997. This analysis turns out to be too simplistic however. As we will see in section 4, the derivations and structures must be further enriched, and this further enrichment should be responsible for the differences between left and right dislocation. The imperative declarative contrast is to be related to an implementation of the verb second constraint and verb first constraints in imperatives as particular filters on Spec, Force (in the spirit of Koopman and Szabolcsi 2000, and Koopman 2001); These filters conspire to give the restricted distribution of elements in the left periphery. A slight difference in the formulation of the filter on Force in imperatives, yields the Dutch/German imperative contrast. Finally, in section 4, I sketch the basics for a new proposal for right dislocation, which involves backgrounding and a type of predicate inversion. This analysis suggest a new way to capture general differences between left and right dislocation.

2 The distribution of peripheral objects.

Let us systematically compare left-dislocation, right dislocation and topic drop for accusative objects in declaratives and imperatives. Within left dislocation, we restrict the discussion to (non-contrastive) left-dislocated topics with D-pronoun fronting, and topic drop. These are closest semantically and formally to right-peripheral objects, and therefore might involve the same set of projections. Right-peripheral objects in imperatives are restricted to accusative DPs (Den Dikken 1992). Restrictions on datives DP and P stranding are discussed in 2.1 and 2.2.

Leftwards topicalization in root declaratives yields the following patterns:

(17) a. Dat boekje dat leg ik even neer
       That book that put I Adv down

b. dat leg ik even neer
       that put I Adv down

c. leg ik even neer
       put I Adv down

The left periphery may contain (at most one) overt DP topic and a D-pronoun, or an optional D-pronoun. If the D-pronoun is silent, which is only possible in V to C contexts, so-called Topic drop arises (17c).

The left periphery in (17) may combine with right-dislocated DPs as follows:

(18) a. dat leg ik even neer, dat boekje

---

3 The same DP cannot be both a left peripheral topic and a right-peripheral topic.

*dat boek dat leg ik even neer dat boek
    that book that lay I adv down that book
that put I adv down that book
I’ll put that down, that book’
b. leg ik wel even neer, dat boekje
put I yes adv down that book
lit. I’ll put down that book

(18b) yields a clear case of right-peripheral object in a declarative, through the interaction of right
dislocation and topic drop. I claim that this is also the source for right-peripheral objects in
imperatives (see also Barbiers, this volume).
In Dutch imperatives, the left and right peripheries pattern as follows:

(19) **Left periphery in imperatives:**
    a. * dat boekje dat leg neer
        that book that put down
    b. * dat leg even neer
        that put adv down
    c. leg even neer
        put adv down

(20) **Combining left and right periphery**
    a. * dat leg even neer dat boekje
        that put adv down that book
    b. leg even neer dat boekje
        put adv down that book

Imperative CPs differ from (root) declaratives as follows:

(21) a. Imperatives do not tolerate an overt Topic in the left periphery (19a).
    b. Imperatives do not tolerate an overt D-pronoun in the left periphery (19b).
    c. Imperatives allow Topic drop (19c).

(21b) and (21c) together yield the following descriptive generalization:

(22) A left peripheral D-pronoun must be obligatory dropped in imperatives

The imperatives discussed thus far are finite covert subject imperatives, with V-to-Fin movement.
Dutch also has overt subject imperatives (see Bennis, this volume), and, at first blush, these seem
to behave differently from covert subject imperatives. In Koopman (1997) I took the following
data to show that in overt-subject V-to-C imperatives, right-peripheral objects are excluded, and
initial D topics are allowed, as in German:

(23) a. * Leg jij neer dat boekje  (Koopman, 1997)
    Put you down that book

    b. Dat boekje leg jij neer
    That book put you down

This generalization does not seem to be correct. There are legitimate cases of right peripheral
objects in (23a), and there is evidence that (23b) should not analyzed as an imperative, but as a
declarative used with imperative force.
Adding an adverb or a string of adverbs to the ill-formed \((23a)\) renders it quite acceptable (cf the contrast between \((24a)\) and \((24b)\):

\[
(24) \begin{align*}
a. \text{Leg jij neer dat boekje } \quad (={23a}) \\
\text{Put you down that book} \\
b. \text{Leg jij /*je maart eens even neer dat boekje} \\
\text{Put you adv adv adv down that book.}
\end{align*}
\]

This contrast is quite mysterious, and raises the following question: should the grammaticality of \((24a)\) be related to a principled exclusion of right peripheral objects in overt subject imperatives, or should it be related to the expression of the pronominal subject. I will assume the latter (see Barbiers, this volume, for an interesting suggestion). In essence, there is not enough “space” in the derivation for the expression of the overt subject in \((24a)\), but that adding overt adverbs creates additional layers of structure, allowing the subject to move out of vP, and creating space (i.e. a Top position) for the subject.

\((24b)\) is a genuine imperative construction, and not a declarative disguised as an imperative. It is difficult to determine this from the verbal form, since the verbal form is identical to second person declaratives in the VS order. However, the second person pronoun in \((24b)\), as in overt-subject imperatives in general, is non-reducible (Bennis, this volume). Furthermore, the only unambiguously imperative verb form in Dutch can occur in this context (with backgrounded intonation on the PP).

\[
(25) \begin{align*}
a. \text{Leg jij /*je maar eens even neer dat boekje} \\
\text{Put you adv adv adv down that book.} \\
b. \text{Wees jij maar tevreden met dat leven van jou} \\
\text{Be-imp you adv content with that life of yours}
\end{align*}
\]

I conclude therefore that right-peripheral objects are in principle possible in overt subject imperatives.

Let us next turn to \((23b)\). If this was indeed an imperative, overt subject imperatives would differ from covert subject imperatives in allowing overt topics in the left periphery. This type of example should be analyzed as a declarative used with imperative force, not as a clause that contains an overt imperative verb form. First, the overt pronominal subject can be stressed or reduced, as in declaratives:

\[
(26) \text{Dat boekje leg jij/je nu neer!} \\
\text{That book put you now down}
\]

Other personal pronouns can be used in this context, with no appreciable difference in meaning:

\[
(27) \text{Dat boekje legt hij nu neer} \\
\text{That book puts he now down} \\
\text{‘He should put the book down now’}
\]

And finally, in the presence of an overt topic, an unambiguously imperative verb form is excluded, as shown in \((28a)\). This contrasts with the possibility of topic drop, which yields much better results, as \((28b)\) shows:

\[
(28) \begin{align*}
a. \text{Leg jij neer dat boekje} \\
\text{Put you down that book} \\
b. \text{Leg jij /*je maar eens even neer dat boekje} \\
\text{Put you adv adv down that book.}
\end{align*}
\]

\[\text{4 If reduced, focal stress is obligatory on } \textit{nu} \text{ (‘now’).}\]
I conclude therefore, that all clauses in Dutch that contain an imperative verb form disallow an overt topic, but allow topic drop, as stated in (22).

If right-peripheral objects are to be analyzed as right-dislocated DPs with a dropped associated D-pronoun, right dislocation should be independently possible in imperatives:

(29) leg dat / 't neer dat boekje
    put that/it down that book

These data can be replicated for the full range of accusative marked DPs, i.e. subject of intransitive small clauses, and direct objects (Den Dikken 1992).

(30) a.   (dat) laat ik zinken, dat bootje
        that let I sink that boat
 b.     laat maar zinken, dat bootje
        let adv sink that boat

(31) a.   (die) laat ik huilen, die hond
        that let I cry that dog
 b.     laat maar huilen, die hond
        let adv cry that dog

Long distance topicalization, in so far testable, yields the same results, though the examples below are better if the overt C (om) is absent:

(32) a.  ??(dat) probeer ik wel even [om [e] snel uit te lezen], dat boekje
        that try I yes adv [C quickly out to read] that book
 b.  ??     probeer maar even [om [e] snel uit te lezen], dat boekje
        try adv adv C quickly out to read that book

In sum, it can be maintained so far then that the right-peripheral object arises from right dislocation, in conjunction with obligatory dropping of fronted D-pronouns in imperatives. Other clause types should also allow for right-peripheral objects, as long as the general properties of right dislocation and topic drop are met. This seems correct, as the example in (18b) and the discussion about overt subject imperatives already shows. The ungrammaticality of the examples in (8), repeated here for convenience as (33), follows from failure of Topic drop, because the silent D pronoun cannot be analyzed as being in the left periphery.

(33) a. *Ik leg nu neer dat boekje
        I put now down that book
 b.   *nu leg ik neer dat boekje
        Now put I down that book
 c.  *wie legt neer dat boekje?
        who puts down that book

Restrictions on right-peripheral objects should be explainable in terms of general restrictions, either by general properties of right dislocation or by properties of topic drop. Differences
between clause types should be explainable in terms of restrictions on the particular projections involved in the clause types in question, in particular the Force projection.

2.1 Indirect objects

Den Dikken (1992) notes that the right-peripheral object in imperatives cannot be related to an indirect object DP, and relates this to a general restriction on empty (dative) operators:

(34) * stuur maar eens even een briefje op die jongen
    send Adv sometime adv a letter up that boy

The left and right periphery in declaratives do not show a perfect parallelism:

(35) a. die jongen die stuur ik even een briefje op
    that boy that send I adv a letter up
b. stuur ik even een briefje op
    send I adv a letter up

(36) a. die stuur ik even een briefje op, die jongen
    that send I adv a letter up that boy
b. *? stuur ik even een briefje op, die jongen
    send I adv a letter up that boy
(37) a. Ik stuur ‘m wel even een briefje op, die jongen
    I send him yes adv a letter up that boy

Indirect object DPs can occur in the left periphery, and most speakers I consulted accept D-pronoun drop in (35c). The contrast between (35c) with (36b) is quite mysterious, given that right dislocation and topic drop are independently available (section 2.4). A curious restriction then holds for right-peripheral DPs, but not for left dislocation:

(38) A right-peripheral DP cannot be related to a silent dative (cf. (36b))

Judgments on (35c) vary: I find this example quite unacceptable, but seem to be in the minority. One speaker informed me that (36a) was on a par with (36b), and differed in this respect from the contrast the other speakers seemed to.

To my ear, the parallelism exist, and maybe even more clear if the direct object is definite:

(i) (Die jongen? OK) *? stuur ik dat briefje wel even op
    That boy? OK send I that letter adv adv P
(ii) * Stuur ik dat briefje wel even op die jongen
    Send I that letter adv adv up that boy

I have encountered similar speaker variation with right dislocation in German imperatives, with some speakers accepting (iii), and others rejecting it, even though right dislocation and topic drop both seem to be available:

(i) das gib mal zurück, das Buch
    that give adv back that book
(ii) gib mal zurück
    give adv back
(iii) * gib mal zurück, das Buch
    give adv back that book
Whatever explains (38) should also capture (34).

### 2.2 P-stranding.

As is well-known, Dutch allows for limited instances of P-stranding (Van Riemsdijk 1978, Koopman 2000, among others). Right-peripheral objects in finite imperatives are excluded with stranded Ps.

\[(39) \quad *\text{Denk aan, die problemen} \\
\quad \quad \text{Think about, those problems}\]

In this context, we observe again a general left right asymmetry. Right-peripheral DPs are more restricted in what they can correspond to than left peripheral DPs.

**Left dislocation:**

\[(40)\]

\begin{align*}
\quad a. & \quad \text{Dat probleem daar denk ik wel eens over na} \\
\quad & \quad \text{That problem there think I yes Adv about P} \\
\quad & \quad \text{‘That problem, I do think about it from time to time’}
\end{align*}

\begin{align*}
\quad b. & \quad \text{daar denk ik wel eens over na} \\
\quad & \quad \text{there think I yes Adv about P}
\end{align*}

\begin{align*}
\quad c. & \quad \text{denk ik wel eens over na} \\
\quad & \quad \text{think I yes Adv about P}
\end{align*}

\[(41)\]

\begin{align*}
\quad a. & \quad \text{Dat mes daar snij ik wel eens brood mee} \\
\quad & \quad \text{That knife there cut I adv adv bread with}
\end{align*}

\begin{align*}
\quad b. & \quad \text{(daar) snij ik wel eens brood mee} \\
\quad & \quad \text{(there) cut I adv adv bread with}
\end{align*}

**Right dislocation:**

\[(42)\]

\begin{align*}
\quad a. & \quad *\text{daar denk ik wel eens over na, dat probleem} \\
\quad & \quad \text{there think I yes Adv about P that problem}
\end{align*}

\begin{align*}
\quad b. & \quad *\text{denk ik wel eens over na, dat probleem} \\
\quad & \quad \text{think I yes Adv about P that problem}
\end{align*}

\[(43)\]

\begin{align*}
\quad a. & \quad *\text{(Daar) snij ik wel eens brood mee, dat mes} \\
\quad & \quad \text{(there) cut I adv adv bread with, that knife}
\end{align*}

---

8 Den Dikken 1992 points out that right peripheral DPs are fine in infinitival imperatives (as opposed to finite imperatives) (i) is Den Dikken’s (21)):

\[(i) \quad \text{niet aan denken, die problemen!} \\
\quad \text{not of think.Inf, these problems}\]

This example contrast sharply with (ii)

\[(ii) \quad *\text{denk aan die problemen} \\
\quad \text{think not about these problems}\]

Den Dikken points out however that ‘infinitival RNPIs [right peripheral objects in imperatives] are acceptable, only if some adverb (not just niet ‘not’; other adverbs, like ‘meteen’ or goed ‘wel’) is included. (footnote 6, p. 57). While (i) and (ii) indeed contrast, I do not find a contrast between finite imperatives (iii) and infinitival imperatives (i):

\[(iii) \quad \text{denk maar niet aan, die problemen} \\
\quad \text{think adv not about these problems}\]

I conclude then that the possible occurrence of right peripheral objects with P-stranding is not to be related to finite or infinitival imperatives. Furthermore, I do find (i) and (iii) degraded in the same way as (42).

9 Speaker judgments on (40c) vary, from degraded for some speakers to fine (for yours truly).
The stars on (42) and (43) are not due to the left periphery: a fronted [+D,+R] pronoun may appear overtly, as in (40b), or may be dropped, as in (40c). The problem lies with the right-peripheral constituent. Indeed, a right-peripheral DP cannot be associated with a resumptive +R pronoun, whether this is a D-type R-pronoun pronoun (42), or a regular R-pronoun (Den Dikken 1992):

(44) a. ?*ik denk daar/er wel eens over na, dat probleem
   I think there/there yes Adv about P that problem
b.  * ik snij daar wel eens brood mee, dat mes
   I cut there adv adv bread with, that knife

These examples are fine with a full PP in the right periphery:

(45) a. ik denk daar/er wel eens over na, over dat probleem
   I think there/there yes Adv about P that problem
   I think about it sometimes, about that problem'

b. (daar) denk ik veel over na, over dat probleem
   there think I a lot about P, about that problem

c. daar snij ik wel eens brood mee, met dat mes
   there cut I adv adv bread with with that knife

It is quite revealing that these examples contain two instances of the same P. This suggests that what looks like a plain DP in (38) and (39), is in fact a PP with a silent preposition. A remnant PP is somehow allowed in left dislocation (46a), but excluded in right dislocation (46b). The structure can be salvaged by spelling out P (46c):

(46)  a.  [[P e] [DP]]  [(daar) V …….P ] …
b.    [(daar) V …….P ] *[[[P e] [DP]]]
c.    [(daar) V …….P ]  [[P [DP]]

Whatever the explanation for (46b), it is not surprising that in this context right-peripheral DPs are excluded in imperatives, as in (39): this is simply the general case.

Restrictions on right dislocation thus conspire to yield full DPs and PPs (and even VPs or CPs) as possible right dislocates. It is worth noting that this restriction holds more widely cross-linguistically, as illustrated for French or English below:

(47)  a. Ce livre, je l’ai lu hier
   This book, I read it yesterday

   b.   je l’ai lu hier, ce livre
   I read it yesterday, this book

(48)  a. Paris, j’y vais souvent
   Paris, I go there often
   
10 Full VPs are allowed as right-dislocated constituents:
   (i)  Doe maar even, dat boekje op tafel leggen
       Do adv adv, that book on table put
   As are full infinitivals:
   (ii) probeer maar even, om dat boekje op te pakken
        try adv adv C that book up to pick

11 Neither (46b) nor (46c) are acceptable in English. *I gave him this book, John. *I gave him this book, to John. How this ties in with the syntax of double objects remains to be determined.
b. *J’y vais souvent Paris
   *I go there often, Paris

c. J’y vais souvent à Paris
   I go there often to Paris

(49) a. Jean, je lui ai donné ce livre
    John, I gave him this book
b. *Je lui ai donné ce livre Jean
   *I gave him this book, John
c. Je lui ai donné ce livre à Jean
   *I gave him this book, to John

The distribution of the right-dislocated objects with Topic drop parallels that of Heavy NP shifted objects quite closely, with the following shared properties: Heavy NP shift shifts accusative DPs. This is the core case of rightperipheral objects; Dative objects cannot be shifted, rightperipheral DPs cannot be linked to a silent dative Ps; Heavy NP shift licenses parasitic gaps, and so do rightperipheral objects. The major differences concern the interpretation. Heavy NP shift involves Focus on the shifted DP, but right-peripheral objects in Dutch are interpreted as backgrounded topics; the possibility of a resumptive pronoun with rightperipheral objects in Dutch (this might be a general difference between focus constructions and topic constructions. Focus movement in Italian, for example, never involves resumptive pronouns (Cinque, 1990)). Finally, heavy NP shift cannot yield double P: *John talked to yesterday to his uncle from New York. This strongly suggests that the same general process might be responsible for the shared restrictions, and the left right asymmetries.

2.3 Some remarks on right-peripheral objects in imperatives cross linguistically

Den Dikken (1992) assumed that the empty operator (i.e. the silent D-pronoun) landed in a specific landing site which is available only in imperatives. In contrast, I have so far argued that right-peripheral objects are not special to imperatives. Their distribution reduces to the general properties of right dislocation and topic drop. These proposals predict different crosslinguistic correlations. Den Dikken’s proposal predicts right-peripheral objects should generally be possible in imperatives, all things being equal. My proposal predicts the availability of right-peripheral objects cross linguistically if a language allows for both right dislocation (or topics to the right) and topic (or clitic) drop. Although I am unaware of any systematic typological study on topics in imperatives, the languages I am familiar with impressionistically support the right dislocation/right topics and topic drop correlation, but not the correlation with imperatives. Thus, for example, neither English nor French allow Topic drop, and imperatives do not allow for backgrounded right-peripheral objects.13

(50) French: Met *(le) sur la table, ce livre
   English: Put *(it) on the table, that book

This in itself does not argue against Den Dikken’s proposal, since these might be excluded for independent reasons.

---

12 Note that P-doubling is more readily available in pseudoclefts: (what John talked about during his flight, was about his book).
13 Unless the verb itself allows for object drop independently. (i.e. donne, “give”, etc.).
There seems to be a cross-linguistic correlation between right dislocation/right topics and topic drop. German, for example, allows right dislocation and topic drop independently, and allows right-peripheral DPs as well.

(51) a. (das) gib mal her
    that give adv here
b. (das) gib mal her, das Buch
    that give adv here that book

Malagasy, an Austronesian language spoken in Madagascar, is a Topic-on-the-right and Topic-drop language (Pearson 2001). Voice morphology indicates which argument has escaped from the VP domain. Malagasy allows right-peripheral object Topics in imperatives, as well as topic drop, as long as the verbal morphology indicates that the object is the right peripheral topic, as in (52):

(52)  a. [vakiu [e] [TOP(ni buki),]
        read.IMP the book
    ‘Read the book, read (it))
b. [mamakia buki]
    maN.read.IMP a book
    ‘Read a book!
c. mamakia *(azi)
    maN.read.IMP this
    ‘Read it/this’

When the verb morphology indicates that the external argument is outside the VP, and the object is within the IP, as in (52b,c), object drop is impossible14.

This supports the correlation with right-peripheral topics and topic drop.

2.4 Reconstruction.

2.4.1 Movement versus base generation

We have seen that right-peripheral objects in Dutch are possible because of the interaction of right dislocation and topic drop. This fact is unexpected under den Dikken’s (1992) analysis. However, the other ingredients of Den Dikken’s analysis could be quite compatible with the results so far: base generation of the right-peripheral DP, and movement of an empty operator, a silent D-pronoun, targeting the left periphery. Nevertheless, I will present an argument against base generation of the right-peripheral DP, based on various reconstruction effects.

In order to determine if right dislocation should be analyzed in terms of rightward movement (i.e. low merger, followed by movement) or base generation (i.e. high merger), we need to consider how we can empirically distinguish between these options. Given the copy theory of movement, reconstruction constitutes a powerful diagnostic for movement. Sportiche (1997) argues that reconstruction is not only the defining property of movement, but in fact the only reliable diagnostic for movement.

2.4.2 Reconstruction effects

The following examples show that the right-peripheral DP reconstructs within the clause, and behaves in this respect like Cinque’s 1977 Clitic left dislocation construction15.

14 Unless a generic object is implied. (‘Read (something)’
(53) Anaphor binding:
   a. Geef de kinderen, eens gauw terug, die fotos van elkaar,
      Give the children Adv quickly back, these pictures of each other
   b. Laat de kinderen, maar vertellen, dat verhaal over hunzelf,
      Let the children Adv tell that story about themselves

(54) Condition C effects
   a. *Geef hem, maar terug, die fotos van Jan,
      Give him adv back these pictures of John
   b. *Laat hem, maar vertellen, dat verhaal over Jan,
      Let him adv tell that story about John

As might be expected, right dislocation with a fronted D-pronoun shows the same effect:

(55) Anaphor binding:
   a. Die geef ik de kinderen, eens gauw terug, die fotos van elkaar,
      these give I the children Adv quickly back, these pictures of each other
   b. Die laat ik de kinderen, maar zelf inplakken, die fotos van hunzelf,
      these let I the children adv self paste these pictures of themselves

(56) Condition C effects
   *Dat laat ik hem, maar zelf vertellen, dat verhaal over Jan,
      That let I him adv self tell that story about John

Right dislocation behaves in this respect like one type of left dislocation in Dutch and German which shows reconstruction effects (van Haaften, Smits and Vat 1978, Anagnostopoulou, van Riemsdijk and Zwarts 1977, Grohmann 2000). These examples show that the rightperipheral object is c-commanded by the dative object at some point in the derivation.

(57) Rightdislocated objects are c-commanded by the dative object at some point in the derivation

Reconstruction thus points to a movement derivation for right dislocation. However, the data so far would follow if the right dislocated object is simply always lower than the first object in double object constructions. Either because it is in-situ (merged low and unmoved), as in Kayne’s (1994) proposal for Heavy NP shift and Right dislocation (1994), or because its landing site is lower than the position where the first object is merged into the structure, as in Cecchetto (1999). Hallman 1997 argues that a clause consists of a series of clauses. If this is true, the landing site of the right-peripheral DP could be a Topic position in a lower leftperiphery, as proposed for rightdislocation in Italian by Cecchetto (1999).

(58) Top AgrS ……Top AgrIO….TOP AgrOP

In order to establish that movement is indeed involved in the derivation of rightdislocation16, it must therefore be shown that the rightperipheral object can be higher than the IO or the subject.

---

15 Marcel den Dikken (personal communication) informs me that reconstruction seems only possible with a comma intonation. A systematic exploration of this issue goes beyond the present paper.

16 Den Dikken 1992 argues against movement on the basis of the fact that the moved object does not alter pronominal binding relations: a quantified direct object in right-peripheral position cannot bind into an indirect object DP. However, quantified objects in Dutch can never bind into a DP indirect object, nor can a
2.4.3 Right peripheral DP: in-situ or moved?

Suppose with Kayne (1994) that the right-peripheral accusative DP was stranded low in the clause, with an associated DP (the D-pronoun) undergoing movement. This would immediately yield the reconstruction effects discussed so far. There are two arguments against an in-situ analysis. The first argument is phonological. Right-dislocated DPs carry their own characteristic intonation, and are preceded by an intonational contour associated with the right bracket of the “CP”. This suggests that the DP is outside CP (=FinP), in a designated projection that provides the configuration for the interpretation and intonation, as shown in (59) where FinP provides the right boundary tone:

(59) [FinPgeef de kinderen, [e] eens gauw terug] , [die fotos van elkaai]

The second argument is based on Condition C effects with adjuncts. As is well-known, names in adjuncts may fail to reconstruct. Consider now the contrast between (60) and (61).

(60) a. *Lees hem, [dat verhaal uit Jani’s dagboek] maar voor
   Read him that story in John’s diary adv for
   ‘Read him that story in John’s diary’

   b. *Laat hem, [dat verhaal uit Jani’s dagboek] maar voorlezen
   Let him that story out John’s diary adv for read
   ‘Let him read that story out of John’s diary’

(61) a. Lees hem, (dat) maar voor, [dat verhaal uit Jani’s dagboek]
   Read him (that) adv for, that story out of John’s diary

   b. Laat hem, (dat) maar voorlezen, [dat verhaal uit Jani’s dagboek]
   Let him that adv for.read that story out of John’s diary

The second argument is based on Condition C effects with adjuncts. As is well-known, names in adjuncts may fail to reconstruct. Consider now the contrast between (60) and (61).

(60) a. *Lees hem, [dat verhaal uit Jani’s dagboek] maar voor
   Read him that story in John’s diary adv for
   ‘Read him that story in John’s diary’

   b. *Laat hem, [dat verhaal uit Jani’s dagboek] maar voorlezen
   Let him that story out John’s diary adv for read
   ‘Let him read that story out of John’s diary’

(61) a. Lees hem, (dat) maar voor, [dat verhaal uit Jani’s dagboek]
   Read him (that) adv for, that story out of John’s diary

   b. Laat hem, (dat) maar voorlezen, [dat verhaal uit Jani’s dagboek]
   Let him that adv for.read that story out of John’s diary

If right-dislocated DPs were in a low position, they should behave like (60) for Condition C effects. However, coreference seems indeed possible, demonstrating that the DP that contains them is in a position higher than the dative object in (60), or the subject of the small clause in (61), with high merger of the adjunct. This strongly suggests the right-peripheral object is to be related to the high left periphery. In the next section, I will present evidence that this is indeed the case.

2.4.4 The landing site: Low left periphery or high left periphery?

quantifier be stranded before an indirect object. This suggests movement of the accusative DP never passes through an A position higher than an indirect object.

(i) a.* stuur al die fotos hun eigenaren op
   send all these pictures their owners up

   b.* al die fotos die stuur je hun eigenaren op
   all these pictures these send you their owners up

   c.* die fotos die stuur je (*?allemaal) hun eigenaren (allemaal) op
   these pictures these send you all their owners up

17 Quantifier float is possible with right dislocation.

(i) Geef Jan maar allemaal, terug, die fotos,
   Give John adv all back these pictures

This is compatible with high merger or low merger of the D-pronoun, as in Kayne’s treatment of relative pronouns (Kayne 1994), clitic doubling (Kayne 1999) and pronominal binding (Kayne 2001). Cf also Boeckx ’s (2001) treatment of resumptive pronoun constructions as containing stranded pronouns.
Cecchetto (1999) argues that the right dislocated object in Italian is in a lower TOP position, and is always in the c-command domain of the subject. Reconstruction of names contained in adjuncts allow us to establish whether or not the subject c-commands the landing site or not. In Dutch, right dislocated objects with D-pronouns behave like left dislocated objects. (The following example is tailored after Cecchetto’s (7)):

(62)

(a) Die aankondiging die Jani aan de krant gestuurd had,  
That announcement that John to the paper sent had  
  die ontkende hij al na een paar uur.  
  that denied he already after a couple of hours  
‘The announcement that John had sent to the paper, he denied (it) already after a couple of hours’

b. (die) ontkende hij al na een paar uur,  
that denied he already after a couple of hours  
  die aankondiging die Jani aan de krant gestuurd had  
  that announcement that John to the paper sent had

The availability of coreference in (62b) shows that the right dislocated object with a fronted D-pronoun behaves like a left dislocated object, and hence can be assumed to occupy a position in the high left periphery.

In conclusion, then, reconstruction of anaphors and names argues for a movement analysis, and high merger of names in adjuncts shows that right dislocated DPs may occupy a high position in the left periphery.

(63)

a. The right-peripheral DP is moved to its surface position, where  
its interpretation and its intonation are determined;  
b. The right-peripheral DP is preceded by a clausal (=FinP) boundary.  
c. The right peripheral DP may be outside the c-command the domain of an indirect object, or of the subject.

It was not established that all right peripheral objects must be in the high left periphery, but rather that they can be (63c). This raises the further issue if there is a unique landing site for right dislocation with D-pronouns, or if there are more potential landing sites. I will leave this

---

18 All speakers consulted expect for one agreed on the judgment in (62b). With the D-pronoun in the clause, judgments were more variable (ranging from OK to *):

(i) Hij ontkende die al na een paar uur,  
He denied that already after a couple of hours  
  die aankondiging die Jani aan de krant gestuurd had  
  that announcement that John to the paper sent had

In Italian, where the right dislocated DP is resumed by a clitic pronoun, this interpretation is completely unavailable. The following example is Cecchetto’s (8):

(iii) pro1 lo smentì dopo poche ore, l’annuncio che John1 diede alla stampa  
(He) denied it after a few hours the announcement that John gave to the press.
The parallel dislocation construction in Dutch, with a personal pronoun rather than a D-pronoun, seems to yield the Italian judgment:

(iv) Hij ontkende ‘t al na een paar uur,  
that denied he already after a couple of hours  
  de aankondiging die Jan, aan de krant gestuurd had  
  that announcement that John to the paper sent had
question for future research: for the purposes of this paper it is sufficient that rightperipheral objects can be in the high left periphery.

Assuming only leftward movement is available, with Kayne (1994), implies thus leftward movement of the DP to an A’ landing site in the left periphery, followed by leftward movement of a remnant constituent containing the imperative verb, FinP, to some projection in the left periphery, as in (64).

(64)         XP
             3
            FinP     YP
             3 3
            V…. [e]i  DPi

In order to make this analysis specific, it now becomes important to map out the left periphery in Dutch. This will allow gaining some understanding in the properties of right dislocation and the relation between left and right dislocation. The following questions must be answered:

(65) a. Given Rizzi’s (1997) left periphery consisting of Force (clause type), Topic*, Int, Focus, Topic*, Fin (finiteness of the IP), how can the cooccurrence restrictions on the left periphery be captured?
b. What is the landing site for FinP in (64)
c. How should topic drop be analyzed? Why is topic drop obligatory in Dutch imperatives?
d. What is the landing site of the right-peripheral DP?
e. What is the link between left and right dislocation?
f. How should right dislocation be analyzed?
g. How do the restrictions on right-dislocated PPs with a silent P follow?

3 Filters on Force

Imperatives and (root) declaratives are two different clause types, hence involve two different instantiations of Force: imperative force (Forceimp) and declarative force (Forcedcl). In both clause types the verb moves into the left periphery, at least as high as FinP. Suppose, in the spirit of Kayne 1998, that Force always attracts some designated constituent with overt material (following Koopman 1996, 2000, Koopman and Szabolcsi 2000). Let’s assume more specifically that imperative Force and declarative Force attract a clausal constituent containing the V, say at least FinP. If Force determines the intonational contour, clausal pied-piping will capture transparently that this intonation occurs clause finally. Can FinP pied-pipe some constituent that contains it? If so, overt material should be able to occur to the left of Fin. In Koopman & Szabolcsi (2000) and Koopman (2001), restrictions on pied-piping follow in large part from complexity filters that act on the representations generated by the derivations. Complexity filters specify the allowed depth of embedding of particular overt categories in designated Spec

---

19 Platzack and Rosengren (1998) argue that imperatives lack FinP. FinP in my proposal does not play any crucial role in imperatives. It could be absent if imperative verbs raise to Imp, a position like Rizzi’s Int. (as suggested in (79) of section 3.2).
positions. Complexity filters are formulated in structural terms. I will express the verb-first and verb-second constraints as complexity filters. In essence, these filters sum up the patterns that occur in the primary data. They presuppose a structural analysis (with very few choices) of each particular pattern, and generalize over these patterns. Complexity filters capture the restrictions and differences on the left periphery of imperatives and declaratives.

### 3.1 Imperative Force

$\text{Force}_{\text{imp}}$ attracts $\text{FinP}$ containing the imperative verb. This allows the following formulation of the filter on imperative Force:

\[(66) \quad \text{Filter on Spec, } \text{Force}^{\text{imperative}} \text{ (Dutch):}
\]

\[\text{V}_{\text{imp}} \text{ must occur in the following configuration:}
\]

\[
\begin{array}{c}
\text{ForceP}_{\text{imp}} \\
3
\end{array}
\]

\[
\begin{array}{c}
\text{XP} \\
3
\end{array}
\]

\[
\begin{array}{c}
\text{3} \\
\text{Force}_{\text{imp}} \\
3
\end{array}
\]

\[
[x \text{V}_{\text{imp}}]
\]

The imperative Force head must find the imperative verb within the highest projection attracted to its Spec, a canonical agreement configuration. This filter applies to a specific projection, and is sensitive to overt V. It collapses the two “good” surface configurations: regular imperatives with V-to-Fin movement, followed by FinP-to-ForceP movement \[67\], and imperatives with Topic drop, i.e. with V-to-Fin-to-Top movement, followed by TopP to $\text{Force}_{\text{imp}}$ \[68\]:

\[(67) \quad \text{V -to- Fin followed by FinP -to- Force}_{\text{imp}}
\]

\[
\begin{array}{c}
\text{ForceP}_{\text{imp}} \\
3
\end{array}
\]

\[
\begin{array}{c}
\text{FinP} \\
3
\end{array}
\]

\[
[x \text{V}_{\text{imp}}]
\]

\[(68) \quad \text{V-to-Fin-to-Top movement, followed by TopP to Force}_{\text{imp}}
\]

\[
\begin{array}{c}
\text{ForceP}_{\text{imp}} \\
3
\end{array}
\]
The representation in (68) presupposes an analysis of Topic drop that involves V movement to the Top projection. This is in accordance with the proposal in Koopman (1996, 2000) that each projection must be associated with overt material at some point in the derivation. However, overt material in both Spec and head at spell-out is impossible because of the inviolable doubly filled C filter. In a nutshell, I argued that this filter is derivable from a (modified) version of the LCA which applies to overt material only, and which does not restrict c-command to categories. If both Spec and head contain overt material, linearization cannot proceed because of the lack of asymmetric c-command. Contexts in whichSpecifier drop (pro-drop) or head drop occurs, then, are exactly those contexts in which the projection contains overt material, either in the head position or the Spec position (as shown in (69 a,b) overt material in boldface). In Koopman and Szabolcsi (2000), we discuss how head adjunction of an overt head to another overt head is excluded in the same way. The only allowable cases of head movement, if any, would be overt head adjunction to a silent head, or silent head movement to an overt head, as shown in (69 d-e).

(69)  
   a. pro-drop:  \[ x_{\text{pro}} [x \ Y] \\
   b. head drop  \[ x_{\text{WP}} [x \ Y] \\
   c. * \[ x_{\text{WP}} [x \ Y] \\
   d. Head adjunction  \[ y [x] \\
   e. * \[ y [x] \\
   f. * \[ y [x] \\

Topic drop, then, is an instance of either the configuration in (69a) or (69e). The Topic projection is activated by the overt verb: the Topic can be dropped, precisely because V is in the topic projection.

The generalized doubly filled C filter also captures the fact that imperatives cannot cooccur with an overt Topic. Indeed, if overt material spells out Spec, Top or the Top head position (as the d-word does perhaps), the verb cannot be in the highest projection. An overt topic in the left periphery therefore always result in a violation of the filter on Force (see (66)): the imperative verb will be too deeply embedded, and is not found in the ‘search space’ of the imperative Force.
The generalized doubly filled C filter captures the verb first property of imperatives: if V must be in the highest projection, the Spec of that projection can host no overt material. This is a nice result, since it makes the appeal to a silent operator for the verb first effect unnecessary. A silent imperative operator is standardly postulated in first position to make verb first imperatives obey the verb second constraint, not because the effects or locus of such an operator can be detected.

In sum, the verb first property of imperatives follows from a filter that demands the presence of the imperative verb in the highest projection that raises to Spec, Force. Projections in the left periphery may be present, as long as V can reach them, and satisfies the filter. These two factors conspire to yield obligatory topic drop and verb first. The “heavy” left peripheries below are ruled out:

The filter does not block derivations with the constituent attracted to Force moving around other left peripheral material. This could be XP movement of a complement, or XP movement of a Specifier or head movement. Suppose it was XP movement of a complement. This would yield right-peripheral objects, as in (72). This is the analysis of right-peripheral objects in imperatives that I pursued in Koopman (1997):

This analysis offered an interesting way to handle the Dutch/German contrast. Suppose German did not allow FinP to move around Topic. German then would have initial Topics in imperatives, not right-peripheral ones. This analysis cannot be made to work as is, and needs to be slightly
more complex. Besides initial Topics, German also allows backgrounded right-peripheral topics with topic drop. Thus, at the very least, German also allows FinP to Force movement. It is unclear in this analysis how to capture the differences and parallelism between left and right dislocation, or backgrounding more generally. Rightdislocation and backgrounding are widely available and not dependent on Fin to Force movement around Topic.

There is yet another type of derivation that the Spec, Force_imp filter does not exclude. The filter cares about finding the imperative verb in the highest projection, not about any particular location of FinP, V can move to Top, as we have seen. Consider now a heavy left periphery consisting of Force, Top, Focus, Top, and Fin. If the verb moves to the low Top, and V pied-pipes the series of projections to Force, the filter on Force will invariably be violated. But can V move to the higher Top? Subsequent movement of the constituent containing V to Force, would satisfy the filter, since Force finds the imperative verb in the highest projection.

\[(73)\]
\[\text{ForceP}_\text{imp} \]

\[\begin{array}{c}
\text{3} \\
\text{3} \\
\text{3} \\
\text{3} \\
\text{3} \\
\text{3} \\
\text{3} \\
\text{3} \\
\text{3} \\
\end{array} \]

\[\text{Force} \quad \text{Top} \quad \text{pro} \quad \text{V} \quad \text{FP} \quad \text{XP} \quad \text{Top} \quad \text{YP} \quad \text{FinP} \quad \text{V}_\text{imp} \]

This type of derivation predicts the grammaticality of following surface strings.

\[(74)\] Linear orders:
\[\begin{array}{ll}
a. & \text{V}_\text{imp} \quad \text{Focus} \quad \text{[IP]} \\
b. & \text{V}_\text{imp} \quad \text{Topic} \quad \text{[IP]} \\
c. & \text{V}_\text{imp} \quad \text{Topic} \quad \text{Focus} \quad \text{[IP]} \\
d. & \text{V}_\text{imp} \quad \text{Focus} \quad \text{Topic} \quad \text{[IP]} \\
& \text{etc.} \\
\end{array} \]

Judgments are difficult, and need to be established carefully. However, with the proper manipulation of intonation, some of these strings seem quite acceptable (For subjectless imperatives, weak pronouns mark the left boundary of the IP)

\[(75)\] a. (?) \quad \text{geef déze boeken } [‘m maar gauw kado] \\
b. \quad \text{geef } \text{NU} [‘m deze boeken maar gauw kado] \\
c. (*) \quad \text{geef déze boeken NU } [‘m maar gauw kado] \\
d. (??) \quad \text{geef } \text{NU deze boeken } [‘m maar gauw kado] \\

In order to gain an understanding of the distribution of the elements in the left periphery, the strings and interpretations of the elements separating V from the IP must also be taken into consideration. Pending a more careful and systematic examination, it might be the case that the imperative verb can indeed reach a high Topic position over intervening position higher than FinP.
3.2 Dutch versus German.

German, in contrast with Dutch, does allow for overt topics in the left periphery. This can be captured by a slightly less restrictive filter on imperative Force in German:

\[
\text{German: Spec of } \text{Force}_{\text{imp}} \text{ can maximally contain:}
\]

\[
\begin{array}{c}
\text{Force}_{\text{imp}} \\
3 \\
\text{TopP} \\
3 \\
\text{FinP} \\
3 \\
\text{Fin}
\end{array}
\]

This filter allows verb first imperatives, imperatives with Topic drop, and in addition, it allows a single overt Top preceding the imperative verb. The filter specifies that TopP may dominate FinP. Should it be replaced by XP? The latter would also allow foci in the left periphery of imperatives. Although more work needs to be done, it seems that the fronted constituent can be interpreted either as a contrastive topic or a Topic, but not as a focus. This is suggested by the fact that the fronted constituent does not seem to be compatible with focus accent (H*L): (Daniel Büring, personal communication).

(I don't want that record. You remember that book I gave you?)

?? a. DAS gib mal zurück!
That give av back
b. Gib mir DAS zurück!
give me THAT back

The left periphery of imperatives differs in this respect from the left periphery in declaratives. This raises the question why (surface) left peripheral focus would not be available in imperatives. This could follow if the imperative verb is in fact in the same position as Italian se ‘if’. Se follows che (Force), and can be preceded by a Topic, but not by a Focused constituent. This lead Rizzi (1999) to propose that se is located in Int, which occurs in the following location in the left periphery:

\[
\begin{array}{c}
\text{Force} \\
\text{Top}^* \\
\text{Int} \\
\text{FocP} \\
\text{TopP} \\
\text{FinP} \\
\end{array}
\]

Suppose that Imp occurs in the same structural position, with the imperative verb raising to Imp. This will allow imperatives to cooccur with a left peripheral Topic, or a Topic which has moved through Focus first (a contrastive topic). However, imperatives could never cooccur with a left peripheral focus. At the same time it will allow for some left peripheral material to surface on the right of the imperative verb.

(I don't want that record. You remember that book I gave you?)
These matters will have to be decided in the future. They will affect the actual formulation of the filter, but not the spirit of these filters.

3.3 Declarative Force

Root declaratives are verb second: they minimally require one silent topic or overt topic or focus preceding the finite verb, and maximally tolerate one overt topic and an overt resumptive D-pronoun. These configurations can be summed up in the following filter on Force\text{decl}, the projection that attracts at least a FinP constituent.

\[
\text{Filter on Force}_{\text{decl}}:
\begin{align*}
V_f & \text{ must appear in the following configuration:} \\
\text{ForceP}_{\text{decl}} & \text{XP} \\
3 & 3 \\
X & \text{FinP} \\
3 & 3 \\
\end{align*}
\]

As stated, FinP must be once embedded, and the finite verb needs to appear somewhere within this configuration, be it in Fin, or in X (thus allowing topic drop). Alternatively, FinP could be replaced with the category neutral YP. This would be closer to the traditional spirit of verb second. If this were the right formulation, the filter could simply require the verb’s presence in XP, or in YP, as the filter on imperative force does. It is unclear in this rendering of verb second how to ensure that V can only occur in X when XP is a Top, i.e. it is unclear why XP may not be FinP, with YP IP. I will tentatively assume the more restrictive (80).

As it stands, (80) allows one overt focus, one overt topic, and topic drop. However, the filter incorrectly rules out left dislocation with a fronted D-pronoun. Let us therefore assume that a Top projection may consist of two projections, a Topic projection and a resumptive Topic projection, which I will call Top and Top\text{R} respectively. The resumptive Topic node is equivalent to the projection where the D-pronoun surfaces, and is characterized by weak prosody. V may raise to Top\text{R} and thus yield Topic drop. Top and Top\text{R} count as a single XP for the purposes of the filter. Using a computer metaphor, clicking on Top, will make either Top or Top\text{R} pop-up. Thus, exactly one Top and Top\text{R} may precede the finite verb.

The filter allows the following left-peripheral configurations in declaratives:

\[
\begin{align*}
(81) & \text{a. Top Vf} \\
b. \text{Top Top}\text{R} Vf \\
c. \text{Foc Vf} \\
d. \text{Top}\text{R} Vf
\end{align*}
\]

\[\text{\textsuperscript{20}}\text{Weak subject pronouns can precede the finite verb, which Travis (1984) takes as evidence the verb is not in C, i.e. in Fin. Under my proposal, weak subject pronouns could be treated as occupying a Top}\text{R} with the finite verb in Fin. It needs to be explained why only weak pronominal subjects can reach this position.}\]
Top can be silent if $V_f$ raises to $Top_R$. The following left peripheries are filtered out, either because they are too light, or too heavy:

\[(82) \begin{align*}
    a. & \quad * FinP \text{ IP} \quad \text{(too light)} \\
    b. & \quad * Top1 \ Top2 \ V_f \quad \text{(too heavy)} \\
    c. & \quad * Top \ Foc \ V_f \quad \text{(too heavy)} \\
    d. & \quad * Top \ Foc \ Top \ V_f \quad \text{(too heavy)} \\
    e. & \quad * Foc \ Top_R \ V_f \quad \text{(too heavy)} \\
    \text{etc.}
\end{align*}\]

The reference to FinP in the filter restricts what material can intervene between the finite verb (in FinP) and IP. This looks by and large correct. Dutch allows very few items to intervene between the subject in IP, and the finite verb (or, for that matter, the complementizer).21

A complete study of the Dutch left periphery not only needs to take into account the surface patterns in the left and right-peripheries, but also the elements that may intervene between the finite verb and the IP boundary, and their interpretations. Indeed, if the verb second filter only cared about the verb being within the second projection, the following surface strings should be acceptable in verb second contexts, while they are not.

\[(83) \quad \text{Top} \ [\text{Top}_R \ V_f] \ (\text{Focus}) \ (\text{Top}) \ \text{Fin} \ \text{IP} \]

I will leave further exploration of these issues for future research. One can easily see that slight differences in the formulations of the filter, can yield important differences in coocurrence patterns. This is desirable, since it may offer a way to handle the substantial differences that exist in this respect within verb second languages.

In sum, language specific surface filters on $[\text{Spec, Force}]$ encode the verb second and verb first constraints, and restrict the coocurrence of left-peripheral material. A slight difference on $[\text{Spec, Force}_{imp}]$ between Dutch and German, allows for left-peripheral topics in German but not in Dutch. These filters are templates of the actually structural patterns that individual languages allow, i.e. they conveniently summarize the structural patterns that speakers have imposed on primary data.

4 Right dislocation

Right dislocation and left dislocation with a fronted D-pronoun are closely related, yet slightly different, constructions. They do not appear to receive exactly the same range of interpretations, nor do they carry the same intonational patterns. A left-dislocated constituent can get a wider range of interpretations (a Topic, a contrastive Topic and a hanging Topic interpretation) than a right-dislocated DP. A right-dislocated DP receives a backgrounded topic interpretation, and carries the characteristic intonation associated with backgrounding. Left-dislocated topics may be remnant PPs with a silent P, backgrounded topics may not.

What is needed, then, is an analysis that captures the similarities, but also accounts for the differences. The similarities follow if left dislocation and right dislocation share the same substructure, more precisely Top, $Top_R$ and Fin:

21 Dutch imposes strict adjacency between the finite verb and pronominal subjects, but allows some adverbs to intervene between verb and non-pronominal subject:

\[(i) \quad \begin{align*}
    a. & \quad \text{zonder aarzelen heeft (*gisteren) hij (gisteren) dat boek gekocht} \\
        & \quad \text{without hesitating has yesterday he yesterday that book bought} \\
    b. & \quad \text{zonder aarzelen heeft gisteren Jan (gisteren) dat boek gekocht} \\
        & \quad \text{without hesitating has yesterday John (gisteren) that book bought.}
\end{align*}\]
Right and Left dislocation:

…Top TopR Fin ….

Differences between right and left dislocation should be attributed to the properties of different additional structure. In the case of right dislocation, this additional structure should be responsible for the backgrounded interpretation and intonation, the right-peripheral surface position, and the accusative restriction on right-peripheral DPs. In a theory where properties are decomposed into elementary properties, and each property corresponds to a projection, the one-projection-per-feature theory, we are driven to at least the following structure and derivation, with two new mystery players whose identities we will try to unravel:

Right dislocation:

If Force is imp, V must move to TopR as discussed in \[3.1\] to satisfy the filter on imperative Force. If Force is declarative, a resumptive topic may precede the finite verb, in accordance with the filter on declarative Force \[80\]. Since Y is involved in “backgrounding” the Topic, I will call Y “Back”. What is the identity of the silent category X? Some sleuthing is called for. Let us study some clues as to X’s identity. X causes some type of “inversion” with a large constituent moving over an intervening DP. The resulting structure parallels the output of predicate inversion. Consider the (simplified output) of an inverse nominal copular construction (Moro 1997). In inverse copular constructions like the cause of the riot is the flag on the wall, the predicate moves past an intervening DP, and the DP that remains has subject properties.
Besides the inherent focus on the right-peripheral subject, and the absence of *be*, the resulting configuration is very similar to the configuration above. X triggers inversion, and is followed by a (backgrounded) DP topic. Let us therefore assume that X is an inversion inducing predicate, which I will call “Invert” for convenience. The proposal might be paraphrased as something like: *invert a backed topic with remainder*.

The stranded DP, i.e. the backgrounded Topic, shows other structural “subject” properties as well. Recall that remnant PPs, i.e. [[[e]] DP] with a silent P, are not acceptable in the right periphery, though these are fine in a leftperipheral Topic position. This strongly recalls the restriction on NP movement in many languages, where only DPs can move to Spec, IP (but dative DPs may not, nor remnant PPs). This suggest that right-peripheral backgrounded DP topics occupy some structural subject position like Spec, IP, i.e. there might be some structural subject position in this structure.

What about the restriction on PPs? Full PPs are sometimes analyzed as occupying Spec, IP (*in the room are three men*). Some type of predicate inversion takes place in these structures, and as a result, a PP ends up in a Spec, IP- like position. Only full PPs are acceptable in Spec, IP of an inversion triggering predicate, but remnant PPs are not (*the room are three men in, * dat [[[e], in]} er, drie mensen zaten ‘lit: that [in   ] there three people sat ‘that in ) vs dat in de kamer drie mensen zaten (that in the room three peoples were sitting ). We should therefore relate the fact that only full PPs are acceptable in rightdislocation to the fact that they end up in a Spec, IP like position. This position accepts accusative DPs, and full PPs, but not remnant PPs, without an overt P. A fuller structure is given below with the necessary properties decomposed:
How exactly this proposal captures the fact that a DP may not be related to a silent dative, or how this proposal extends to other cases of D-dislocation and right dislocation with personal pronouns remains to be determined in future research. Most promising here is a further exploration of recursive left peripheries, in conjunction with complexity filters on the left periphery. Right dislocation forms a natural class with Heavy NP shift, post-verbal subjects, pseudocleft, and predicate inversion constructions. It is interesting in this respect that Dutch by and large lacks heavy NP shift. From the perspective outlined above, this suggests that Dutch does not allow Invert to combine with high Focus. Indeed, if this were possible, Dutch would allow clause final focused constituents, contrary to the facts (Koopman and Szabolcsi 2000: 131).

(88)  *Invert FP FinP

5 Conclusion and further questions

In this paper, I have argued that the occurrence of right-peripheral objects does not follow from a specific property of imperatives, but arises through the interaction of D-right dislocation together with general properties of topic drop. Right-peripheral objects are not restricted to imperatives, but occur in other clause types as well, as long as the conditions on right dislocation and topic drop are met. Perhaps most surprising in this respect was the adverb effect on the judgments: we
saw repeatedly that clauses needed to contain enough overt structural pieces to allow for rightperipheral objects. I have argued for a movement account of rightdislocation on the basis of various reconstruction effects. This particular type of rightdislocation targets a high Topic position in the left periphery, followed by movement of the remainder of the clause to Force. Differences between left dislocation and right dislocation follow from the presence of Invert and Back in rightdislocated constructions. Back backgrounds a topic and that is responsible for the intonational contour. Invert is a predicate that causes some constituent to invert with the remainder. I suggested that there is some type of a subject-like position in rightdislocated responsible for the accusative restriction, and excluding remnant PPs. Topic drop arises when the finite verb moves from Fin to Top. There are restrictions on Topic drop: subjects and accusative objects can be dropped, but dropping of datives and d, +R-pronouns is subject to speaker variation in ways that will need to be determined. Differences between the left periphery of declaratives and imperatives are to be related to the verb second constraint and verb first constraints in imperatives, which I argue are particular complexity filters on Spec, Force. These filters conspire to yield the restricted distribution of elements in the left periphery. A slight difference in the formulation of the filter on Force in imperatives, yields the Dutch/German imperative contrast.

The modular account developed in this paper points to the fact that imperatives could indeed play an important role in the acquisition process, a desirable result given the accessibility of imperatives to children.

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