Verb second

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Introduction[*]

A language is called a verb-second (V2) language when the finite verb is obligatorily the second constituent, either specifically in main clauses or in all finite clauses.

(1) a.   Jag **har** ärligt   talat   aldrig sett huggormar i den här skogen.   [Swedish]
         I   have honestly speaking never seen adders   in this here forest
         'To be honest I've never seen adders in this forest.'
   b.   Huggormar **har** jag ärligt   talat   aldrig sett i den här skogen.
         adders   have I   honestly speaking never seen in this here forest
   c.   I den här skogen **har** jag ärligt   talat   aldrig sett huggormar.
         in this here forest have I   honestly speaking never seen adders
   d.   Ärligt   talat   **har** jag aldrig sett huggormar i den här skogen.
         honestly speaking have I   never seen adders   in this here forest

The examples illustrate the fact that the finite verb (in this case an auxiliary verb) is the second constituent in main clauses in Swedish, regardless what the first constituent is. V2 is characteristic of the Germanic languages, with Modern English as the only exception. Among the modern Romance languages, only some of the Rhaetoromance languages/dialects have the V2 property (Poletto 2002, Anderson 2006) but, according to Beninca (1983/1984, 2006) it was characteristic of many, or even all Medieval Romance languages (see Roberts (1993) on Old French, Fontana (1993, 1997) on Old Spanish). Among the modern Celtic languages, Breton has V2, but it was earlier more wide-spread at least among the Brythonic Celtic languages (Willis 1998). Among the Finno-Ugric languages, Estonian has V2. Among the Slavic languages, Sorbian is reported to have V2 (Raritätenkabinett 2003). Outside Europe, Kashmiri, an Indo-Aryan language, is a V2 language (Bhatt 1999), as are two dialects of Himachali (also Indo-Aryan and adjacent to Kashmiri), according to Hendriksen (1986, 1990). Karitiana, a Tupi language of Brazil, has also been characterised, by Storto (1999, 2003) as a V2 language (although this characterisation can be questioned, as will be discussed

below). This is still a very small percentage of the languages of the world. In fact, one interesting question regarding V2 is why it appears to be so rare, globally.

In the history of generative linguistics V2 has played a particularly important part, in that it was the first well-studied and widely known case of head-movement, and also one of the first well-studied cases where a functional category, namely C (or COMP), was successfully analysed as a head in X-bar-based phrase structure theory.

The V2-languages are traditionally divided into two types, those that have V2 in main clauses only, and those that have V2 in all finite clauses. The former, which include the Mainland Scandinavian languages and all the Continental Germanic languages except Yiddish, will be referred to as C-V2 languages, for reasons to be made clear below in section 2.3. The latter, which include Icelandic, Yiddish, and (with some provisos) Breton are I-V2 languages. Some of the V2 languages have OV order (Continental Germanic, Kashmiri), others VO order (Breton, Rhaetoromance, the Scandinavian languages).

In the following I will first characterise and delineate V2, distinguishing it from some partly similar syntactic rule systems; not a trivial issue, as we shall see. I will then describe the basic facts, the generalisations and exceptions, in the various languages where V2 occurs. Thereafter I will present and discuss the theories that have been proposed in the literature, within generative grammar. Finally I will discuss what the fundamental nature is of V2, including whether it is a matter of Narrow Syntax or a postsyntactic 'PF' matter.

For reasons of space I leave some important aspects of the V2 phenomenon aside in this overview paper, such as the history of V2 and L1 acquisition of V2.[1]

1. Real and apparent V2

1.1. Residual V2

So called residual V2 is when the finite verb is in second position in wh-questions and perhaps certain other constructions, but not across the board. The term is due to Rizzi (1990b), and the implication is that this is a residue of a more general V2 system. English is an example:

(2) a. Which battery type (**would)** you (***would**) recommend?

b. This battery type (***would**) I (**would)** not recommend.

c. None of them (**would)** I (***would**) recommend.

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[1] For a recent paper on the history of V2 in Germanic, with controversial conclusions, see Hinterhölzl and Petrova (to appear). On the acquisition of V2, see Westergaard (2008, 2009). For a useful summary of the typology of V2 languages, see Jouitteau (to appear). The publication where these two papers are found appeared too late to be fully taken into account in the present overview.

        d.   So good (**was**) his performance (***was**), that he got a standing ovation.

        e.   In the sink (***found**) John (**found**) a spider.

As shown, English has 'V2' when the initial constituent is a wh-phrase or a negated phrase, and in a few other cases where an operator-like constituents is fronted, but not when it is a topicalised non-negative object or adverbial; see Vikner (1995: 48ff.), Haegeman (2002). Even in the cases where English has inversion, only auxiliaries ever undergo it, which is another, presumably independent, difference between (Modern) English and the other Germanic languages.

        Spanish is another language with residual V2:

(3)   Con quien (**vendrá**)   Juan (***vendrá**)   hoy?

        with who (will.come) Juan (will.come) today

        'With who will Juan come today?'

In the case of English and Spanish this system may be rightly characterised as a historical residue of an earlier general V2 system, since Old English and Old Spanish were both V2 languages.[2] This may not be the case for residual V2 effects in general, though, as will be discussed below.

1.2.   Other apparent and borderline cases of V2

Some languages derive word orders that are descriptively speaking verb-second, yet are arguably different from 'real V2'. If a language has movement of the finite verb to T/INFL, as very many languages do, and allows the subject to remain in a low position, and place a non-subject constituent in initial position, then the word order will be verb-second. Some languages generally classified as VSO have this property, for example Standard Arabic (N = Nominative, A = Accusative).

(4)   a.   **Kataba** Zaydun r-risaalata.

                wrote Zayd-N the-letter-A

                'Zaid wrote the letter.'

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[2] English was a V2 language until, roughly, the 15th century (see Fischer et al., 129ff.). On Old Spanish, see Fontana (1993, 1997). There are two constructions in Modern English which superficially look like 'real' V2: Locative Inversion and Quotative Inversion.
(i)   Into the bar strolled three drunken sailors.
(ii)   "I've had enough", said John.
Most scholars agree that Locative Inversion is only apparent V2, in that the subject is postverbal not by virtue of the verb moving to a high position, as in V2 languages (see section 3.1), but by virtue of the subject staying in an unusually low position; Bresnan 1994, den Dikken 2006. According to Branigan and Collins (1997), the same is true of Quotative Inversion. See, however, Westergaard (2007) for a theory where modern English is characterised as a V2 language, only with V2 restricted to certain clause types.

b.   Zaydun **kataba** r-risaalata.

c.   R-risaalata **kataba** Zaydun

d.   Maadaa **kataba** Zaydun?

         what   wrote   Zayd-N

         'What did Zayd write?'

e.   *Maadaa Zaydun **kataba**?

(4d,e), in particular, looks like a V2 effect, or at least, like a residual V2 effect (indicating that this is not necessarily always a historical residue of general V2). However, what makes Standard Arabic clearly different from V2 languages is the fact that V-initial order is unmarked, in declarative sentences. Any order with a category preceding the finite verb is marked, including the one with a preposed subject (the subject being either a contrastive topic or focus); see Fassi Fehri (1993: 27ff.).[3]

     Another non-V2-like property of Arabic is that in wh-questions the fronted whP may be, and often is, preceded by a topicalised phrase, giving verb-third order.

(5)   Zaydun maadaa kataba?

       Zayd-N what   wrote

       'What did Zayd write?/As for Zayd, what did he write?'

On the other hand, this is also characteristic of Kashmiri (Bhatt: 107ff.) a language which in other respects is a well-behaved V2 language (see below section 2.1), and also of Rhaetoromance (Poletto 2002). This, too, indicates that the V2 property involves more than one parameter, maybe more than two.

     Estonian exhibits, in a sense, the opposite situation to remnant V2: In the case of fronted arguments or adverbials it is robustly V2 (Ehala 1998, 2004).

(6)   a.   Lapsed **söövad** täna suppi.   [Estonian: Ehala 2004]

             children eat   today soup

     b.   Täna **söövad** lapsed suppi.

             today eat   children soup

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[3] The 'V2 effect' is strongest with wh-movement, but focus fronting across a fronted subject is quite marginal, too.

(i)   ?R-risaalata   Zaydun kataba.

       the-letter-A Zayd-N wrote

       'It was the letter Zayd wrote.'

According to A. Fassi Fehri (p.c.) (i) is most natural as a reply to an echo question: *Zaydun kataba maadaa?* 'Zayd wrote what?'

      c.   Suppi **söövad** lapsed täna.

               soup eat   children today

               'Today the children will eat soup.'

But V2 is not obligatory in wh-questions.[4]

(7)   Miks (**on**)   külalised   (**on**)   saabunud?   [Estonian]

             why (be3PL.PST) guest-NOM.PL (be3PL.PST) arrive-ACT.PTC

             ' Why have the guests arrived?'

Karitiana, as reported in Storto (1999, 2003), exhibits V2 order quite generally, as exemplified in (8):

(8)   a.   Taso Ø-naka-'y-j   ohy   [Karitiana: Storto 2003]

               man 3-DCL-eat-IRR potatoe

               'The man will eat potatoe.'

      b.   Ohy   a-taka-'y-j   taso

               potatoe PASS-DCL-eat-IRR man

               'Potatoe, the man will eat.'

However, (8c) shows that there is no prohibition as such against more than one XP preceding the verb.

      c.   Mynda taso na-m-potpora-j   ese   [Karitiana: Storto 2003]

               slowly man DCL-CAUS-boil-IRR water

               'The man boiled the water slowly.'

Storto also acknowledges that V-initial order is an option in declarative clauses. So why do we even consider calling it a V2 language, then? As we shall see below, *all* the V2 languages allow certain deviations from the strict V2 model, raising the question whether 'V2 language' is actually a well-defined notion. For example, various dialects of Norwegian, otherwise a strict V2 language, allow non-V2 order in certain subtypes of wh-questions, not unlike Estonian (see Westergaard 2007, 2008, 2009):

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[4] Thanks to Anne Tamm for discussing the issue and providing the example.

(9)   Kem du   like best?   [Norwegian, Tromsø dialect: Westergaard 2009: 43]

        who you like best

        'Who do you like best?'

Thus one of the aims of this paper is to investigate whether V2 language is a well-defined notion or not.

        Almost all the examples of V2 order in the following will be from a set of 'core V2 languages', comprising a subset of the Germanic V2 languages, Kashmiri, and Breton. The data and analyses of Kashmiri are all based on Bhatt (1999).

2.   V2 facts

2.1   Categories that can be 'the first constituent'

All the V2 languages allow preposing/fronting of a very wide variety of categories: NPs (subjects, objects), PPs, embedded clauses, adverbs, predicative APs, etc., with some variation across the languages regarding which categories are frontable, and what information-structural or other effects the fronting has. The rough generalisation is, however, that whatever category is moved to the left periphery (the C-domain) will count as the first constituent for V2, while categories which are externally merged (first-merged, base-generated) in the left periphery, including conjunctions and question particles, do not count as first constituents for V2 (but see below section 2.1.7 on Breton). Likewise, clearly left-dislocated phrases, which are also plausibly analysed as externally merged in the left-periphery of the clause, do not count for V2. The structural position of the subject in V2 clauses (whether it is in the C-domain or not) is a controversial issue which I will return to below in sections 2.3 and 3.2. The following is an overview of the categories that are fronted.

2.1.1. The subject

In all the V2 languages the subject can precede the finite verb, counting as the first constituent of V2 order. In all the V2 languages this is the order typically found in sentences with wide focus (or sentence focus), that is information-structurally unmarked sentences (possible answers to the question "What happened?"). Breton is a special case, though: SVO in Breton can be unmarked, but is only one of many unmarked V2 orders; see Timm (1989, 1991), Schafer (1995), and especially Jouitteau (2005: 168, 2008).[5]

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[5] The situation in Kashmiri is not entirely clear. Most of the subject-first examples in Bhatt (1999) are translated into English as clefts, hence have a focused subject. Yet there are some examples, including (10b), where the subject is apparently unmarked in information-structural terms.

(10)   a.   André het gister die storie geskryf.   [Afrikaans]

            André has yesterday the story written

            'André wrote the story yesterday.'

        b.   Rameshas cha   azkal shiilaa khosh karaan   [Kashmiri: Bhatt 1999: 88]

            Ramesh   these days Sheila happy do-NPRF

            'Ramesh likes Sheila these days.'

        c.   Azenor a   redas d 'ar gêr.[6]   [Breton: Jouitteau 2005: 35, 436]

            Azenor PRT ran   to the home

            'Azenor ran home.'

2.1.2. Objects

All of the V2 languages allow preposing of an object as a marked option.

(11)   a.   Tidningar   läser barnen   inte.   [Swedish]

            newspapers read the-children not

            'Newspapers, the children don't read.'

        b.   Darvaaz mutsroov Ramesh-an.   [Kashmiri: Bhatt 1999: 85]

            door opened Ramesh-ERG

            'It was the door that Ramesh opened.'

        c.   Ur marc'h a   brenas an den.   [Breton: Jouitteau 2005: 36]

            a horse   PRT bought the man

            'It was a horse that the man bought.'

There is variation across the languages regarding the information-structural import of a preposed object. In the Swedish example, the preposed object can be (contrastive) topic, but not focus (hence is not translatable into English as a cleft), while this is a possible reading of the Breton example, and, according to Bhatt (1999), the only reading of the Kashmiri example. See below section 4.2.

2.1.3 Adverbials

All of the V2 languages allow preposing of adverbs and any kind of adverbial phrases and clauses.

(12)   a.   Vandag het 'n nuwe blogger by ons aangesluit.   [Afrikaans]

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[6] The PRT in the Breton examples is the particle called *rannig* in traditional Breton grammar, analysed by Jouitteau (2005) as a realisation of Fin(iteness), seen as the lowest head in the CP-domain. According to Jouitteau, the verb moves and adjoins to the right of PRT.

today   has a new   blogger with us joined

'Today a new blogger has joined us.'

b.   Heldigvis er den politiske kunst på vej tilbage.   [Danish]

luckily   is the political art   on way back

'Luckily, political art is making a come-back.'

c.   [Wenn man keine Träume mehr   hat] ist man leer.   [German]

 if   one no   dreams anymore has   is one empty

'If you have no dreams anymore, you're empty.'

d.   [E brezhoneg] e   vez   lakaet ar verb d'an eil   plas. [Breton: Jouitteau
2005)

in Breton   PRT is-habitual put   the verb to the second position

'IN BRETON, the verb is in second position.'

In all the V2 languages preposing of adverbs is common and, at least for many types of adverbs
(including scene-setting ones, as in (12a) and epistemic adverbs, as in (12b)), not necessarily
associated with a marked pragmatic value.

2.1.4. Wh-phrases
All the V2 languages have wh-movement, not wh-in-situ, so a wh-phrase can be the first constituent
in V2 clauses.

(13)   a.   Wat hebben jullie besteld?   [Dutch]

what have   you   ordered

b.   Varför blir   löv   gula   på hösten?   [Swedish]

why   become leaves yellow in autumn

'Why do leaves become yellow in the autumn?'

b.   Hvers vegna hefur kreditkortinu mínu verið hafnað? [Icelandic]

why   has credit card   my   been rejected

'Why has my credit card been rejected?'

Kashmiri differs from the other V2 languages in that wh-initial order is marked. The unmarked order
has a topic preceding the wh-phrase (Bhatt 1999: 107ff.). That is to say, wh-questions are generally
V3 (D = dative, E = ergative).

(14)   a.   rameshan kyaa dyutnay tse   [Kashmiri]

                    Ramesh-E what gave   you-D

                    'As for Ramesh , what is it that he gave you?'

        b.   tse kyaa dyutnay rameshan

                    you-D what gave ramesh-E

                    'As for you, what was it that Ramesh gave you?'

2.1.5. Predicates

Predicates such as predicative adjectives or nouns can be preposed in all the V2 languages. Some, but not all, of the V2 languages allow preposing of VP (Yiddish and Icelandic do not; see Källgren and Prince 1989, Holmberg and Platzack 1995: 223).

(15)   a.   Sint   er jeg ikke, bare veldig skuffet.   [Norwegian]

                    angry am I   not only very disappointed

                    'I'm not angry, just very disappointed.'

        b.   [Gelesen het boek] heeft hij niet.   [Dutch]

                     read   the book has he not

2.1.6 Heads, the negation

With regard to preposing of heads, there is variation across the V2 languages. In Breton a non-finite verb can be preposed. This is also possible in Icelandic and Yiddish.[7]

(16)   a.   Skrivet em   eus ar frasenn a-benn.   [Jouitteau 2005: 439]

                    read   PRT.1SG have the sentence entirely

                    'I've written the entire sentence.'

        b.   Komið hafa margir stúdentar.   [Icelandic]

                    come have many students

                    'Many students have come.'

        c.   Leyenen leyent er dos bukh yetst.   [Yiddish: Källgren and Prince 1989]

                    read-INF reads he the book now

                    'As for reading, he's reading the book now.'

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[7] A construction such as (i), characteristic of the continental Germanic languages, has the surface appearance of V-fronting. However, according to den Besten & Webelhuth (1987, 1990) these are derived by moving the object out of the VP, before fronting the VP.
(i)   Gelesen heeft hij het boek niet.   [Dutch]
          read   has he the book not

In Icelandic this movement falls under the fronting operation called Stylistic Fronting, characterised by absence of any semantic or pragmatic effect (see Holmberg 2000, 2005). It has the character of a last resort operation to satisfy V2.[8] See Jouitteau (2005: 450ff., passim, 2008) for arguments that V-fronting in Breton has this character as well. More precisely, in Breton a constituent may be fronted for pragmatic effect, such as a subject, object, or adverbial, but in the absence of this, some other constituent, which may even be a head, is fronted as a last resort. In Yiddish, on the other hand, verb copying and fronting, as in (16c), is a topicalisation device.

Some of the V2 languages allow preposing of the negation. Breton does, as does Icelandic, Swedish, and Norwegian. In the case of Breton, Jouitteau (2005: 418ff.) argues that the negation can satisfy V2 as a C-element (see section 2.1.7; Schafer 1995, Borsley and Kathol 1995). In Icelandic, Norwegian, and Swedish the negation is a sentence adverb, frontable on a par with other sentence adverbs; see Holmberg and Platzack (1995).

(17)   a.   N'em   eus   ket   kousket un dakenn gant Pouchka. [Jouitteau 2005: 98]
              NEG PRT have NEG slept   a   drop   with Pouchka
              'I haven't slept at all because of Pouchka.'

        b.   Ekki veit ég hvað ætlar úr þér að verða.   [Icelandic]
              not know I   what will   of you to become
              'I don't know what will become of you.'

2.1.7 Particles

As for various polarity-related or modal particles such as German *doch*, *eben*, *ja*, *schon,* which are typically found in the IP-domain (the *Mittelfeld*) in the Germanic V2 languages, insofar as they can be initial, they will typically count as first constituent for V2. Particles that have a conjunctive function, such as 'yet', 'even so', 'however', etc. are particularly natural in clause-initial position, counting as first constituents (although they can also occur in the IP-domain).

(18)a.   **Emellertid** kan du inte använda en DVD-RAM skiva som startskiva.   [Swedish]
          however   can you not use   a   DVD-RAM disc as   start-up disc
          'However, you cannot use a DVD-RAM disc as start-up disc.'

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[8] In Icelandic, an expletive pronoun is an alternative to Stylistic Fronting in main clauses. Thus, (i) is synonymous and pragmatically identical with (16b):
(i)   það   hafa komið margir stúdentar.
           EXPL have come many   students

b.   Es war kein optimales Spiel, **trotzdem** haben wir gewonnen.   [German]

 it was no optimal   game yet   have we won

 'It wasn't an optimal game, yet we won.'

'True conjunctions', i.e. counterparts of *and*, *but* and *or* generally do not count as first constituent for V2, although some exceptions exist (thus Swedish *eller* 'or' can function as first constituent; see also Jouitteau 2005: 68)). The question particle counts as first constituent in Breton, but the question particle *mon* in Danish does not, nor does the desiderative particle *bara* in Swedish (another example of a 'force-particle'; see below section 4.1).

(19)   ...og (***tok**) de   **tok** bussen til sentrum.   [Norwegian]

 and (took) they (took) the-bus to centre

 '...and they took the bus to the town centre.'

(20)   a.   Hag **eo** gwir an dra-se   [Breton: Jouitteau 2005: 61]

 Q   is   true the thing-here

 'Is that true?'

 b.   Mon (***er**) han (**er**) syg?   [Danish]

  Q   he   is ill

 'I wonder if he's ill?'

 c.   Bara (***kommer**) han (**kommer**) snart!   [Swedish]

 only (comes)   he (comes)   soon

 'If only he'd be here soon.'

As for complementisers, including adverbial clausal subordinators like 'because', 'although', etc., they are irrelevant for V2 in C-V2 languages (as they have V2 in main clauses only). Among the I-V2 languages they do count for V2 in Breton, at least in the case of some complementisers, including the main clause C-element *e-* exemplified in (21a), but not in the Germanic I-V2 languages Icelandic and Yiddish.

(21)   a.   **E**mañ Maijo el   levraoueg.   [Breton: Jouitteau 2008]

 C-is   Maijo in-the library

 b.   Ég veit [**að** (***kemur**) hann (**kemur**) ekki].   [Icelandic]

 I know that (comes)   he   (comes) not

'I know that he's not coming.'

See Jouitteau (1995: 240ff., 407ff., 2008) for arguments that (21a) is an instance of V2 with a complementiser as first element (see below section 2.4).

For the latter languages the following generalisation seems to hold: If a particle *can* occur anywhere but in initial position, then it will count as first constituent when it does occur initially. This suggests that V2 is an accompaniment to *movement* to the C-domain, in the languages in question (see section 4.2).

2.2.   Only one category can precede the verb
One of the defining characteristics of V2 languages is that only one category can ever be fronted, to preverbal position.

(22)   a.   *Vandag die koerant   lees hy./*Die koerant   vandag lees hy. [Afrikaans]
                today   the newspaper read he /the newspaper today read he
        b.   *Varför ensam vill   du   inte vara?/*Ensam varför vill   du   inte vara?   [Swedish]
                why   alone   want you not be /   alone   why   want you not be

This distinguishes V2 languages from many other languages, where the left periphery preceding the finite verb may contain a string of sentential constituents, including, in addition to the subject, a fronted focus, or topic, and scene-setting adverbials. The following example is from Italian (Rizzi 2002):

(23)   Il mio libro, perchè, a Gianni, non glielo   avete   anchora dato.
        the my book why   to Gianni not to.him-it have.2PL still   given
        'Why have you still not given my book to Gianni?'

This generalisation has exceptions, though, discussed in the next section.

2.3. Exceptions
2.3.1.   V1 order
There is a variety of (apparent) exceptions to the V2 rule in V2 languages. To begin with, V1 is the unmarked order in yes/no-questions; see (24a). It is also the order in imperatives, which is apparent when the subject is overt; see (24b). In some of the V2 languages it occurs in declaratives as well, as

a marked alternative, for example in Icelandic (so called Narrative Inversion); see (24c), Sigurdsson (1990). Finally, it is also not uncommon as a result of ellipsis of a topicalised subject or object pronoun.

(24)   a.   Lees hy vandaag die koerant?   [Afrikaans]
                read he today   the newspaper
                'Did he read the newspaper today?'

         b.   Var du tyst!   [Swedish]
                be you quiet
                'You be quiet!'

         c.   Kom Ólafur seint heim. [Icelandic: Sigurðsson 1990]
                came Ólafur late home
                'Olafur came home late.'

         d.   Weiss ich nicht.   [German]
                know I   not
                'I don't know.'

(24d) is plausibly 'covertly V2', in that the initial position contains a fronted pronoun (here *dass* 'that'), which is optionally deleted in spoken German by topic drop (or 'pronoun zap'); see Cardinaletti (1990), Mörnsjö (2001)). The interrogative case has been analysed as also being covertly V2, the initial position occupied by an abstract question operator (as originally proposed by Katz and Postal 1964). The imperative may likewise be analysed as having an imperative operator in initial position (again following Katz and Postal 1964). In the case of Narrative Inversion, it is not inconceivable that the initial position is filled by a covert temporal adverbial particle 'then'.

2.3.2. Stacked adverbials

In the Germanic languages, and possibly generally in V2 languages, circumstantial adverbials can be stacked in initial position.

(25)   I går,   vid femtiden,   utanför stationen,   när   jag kom från jobbet, mötte jag en gammal skolkamrat.   [Swedish]
         yesterday at about.five   outside the.station, when I   came from work, met   I   an old schoolmate

Typically it is a cluster of time or place adverbials which specify the time and/or place with increasing specificity. If these adverbials form a complex constituent, each adverbial adjoined to the next one, these constructions do conform to the V2 rule. I am not familiar with any other evidence that this is the right analysis, though. The stacked adverbials do not make up a single prosodic phrase, but instead, typically, each adverbial makes up an independent prosodic phrase (reflected in spelling by the commas).

Not any adverbial can be part of an initial cluster. For instance, sentence adverbs or aspectual adverbs ('often', 'rarely', 'never', etc.) apparently cannot.

(26)   Nede vid ån,   under bron,   (*tydligen) (*aldrig) har det   bott en bisamråtta.
        down by the-river, under the-bridge, (apparently)(never) has there lived a muskrat
        [Swedish]

2.3.3   Left dislocation

In the Germanic V2 languages there are two left-dislocation constructions, both of which violate the V2 rule, on a descriptive level (see Anagnostopoulou & al. 1997, Frey 2004). The first one is the Hanging Topic Left Dislocation (HTLD) construction in (27): An argument or adverbial is merged with a subject-initial main clause containing a resumptive pronoun.

(27)   Peter, ich werde ihn Morgen   sehen.   [German]
        Peter I   will   him tomorrow see

In the other dislocation construction the dislocated constituent is, in a sense, more closely integrated with the clause.

(28)   a.   Die man, **die** ken   ik niet.   [Dutch]
                    that man him know I not
        b.   För två veckor sen, **då** köpte Johan sin första bil. [Swedish]
                    for two weeks ago then bought Johan his first car
                    'Two weeks ago Johan bought his new car.'

In this construction, a left-dislocated phrase is merged with a sentence in which a pronoun or other adequate proform cross-referenced with the dislocated phrase is fronted, functioning as first constituent for V2. This is, for some reason, traditionally called Contrastive Left Dislocation (CLD),

even though it need not actually be contrastive. That CLD is different, and 'more integrated' than HTLD, is shown, for example, by the fact that it may occur in 'embedded root clauses' (see section 2.4), which HTLD cannot do.

(29) a. Jag har hört [att för två veckor sen, **då** köpte Johan sin första bil]. [Swedish]

    I have heard that for two weeks ago then bought Johan his first car

    'I've heard that Johan bought his first car two weeks ago.'

  b. *Jag har hört [att för två veckor sen, Johan köpte sin första bil **då]**.

    I have heard that for two weeks ago Johan bought his first car then

The derivation of CLD remains controversial. The question is whether the left-dislocated phrase is derived by movement (specifically a two step-movement which leaves a proform in the first landing site), or by external merge of the dislocated phrase with the clause, and movement of only the resumptive pronoun; see Vat (1981), Grohmann (2000), Anagnostopoulou & al. (1997), Frey (2004). There is also a time-honoured analysis according to which topicalisation of NPs, clauses, PPs, VPs, etc. in the Germanic V2 languages is derived by CLD followed by deletion of the moved pronoun (see Koster 1978).[9] See, however, Frey (2004) for arguments that at least the German variety of CLD is not information-structurally identical to topicalisation.[10]

2.3.4 Exceptional adverbs

There is a set of focus adverbs in Scandinavian, including (in Swedish) *bara* 'only', *nästan* 'nearly', *till och med* 'even', *helt enkelt* 'simply', which systematically cause violation of V2 order (see Egerland 1998, Nilsen 2003).

(30) a. Han bara hló   að mér.   [Icelandic: Sigurðsson 1990: 63]

    he just laughed at me

  b. Han nesten brølte hurra.   [Norwegian: Nilsen 2002: 79]

    he almost roared hooray

---

[9] A form of 'dislocation' which, as far as I know, is specific to Mainland Scandinavian, is constructing *all* preposing of adjuncts optionally with a fronted proform *så* 'so' (see Holmberg 1986: 113ff., Nordström 2010).
(i) Tydligen **så** får man inte vara här. [Swedish]
    apparently so may one not be here
    'Apparently you can't stay here.'
[10] Müller (2005) discusses a wide variety of V3 (and V-more) sentences extracted from German corpora, some of which seem not to fall under the stacked adverbials type or the left-dislocation type or the exceptional adverb type.

Nilsen (2003) takes these adverbs to provide evidence that V2 is not derived by V-movement, but VP movement (see below section 3.3), where this class of adverbs move along with the VP to the C-domain.

Another exceptional adverb discussed in the literature is the Swedish adverb *kanske* 'maybe', which optionally does not trigger V2 (see Platzack 1986).

(31) Kanske (**kommer**) han inte (**kommer**).

maybe (comes)   he   not (comes)

'Maybe he's not coming.'

Plausibly this has to do with the historical origin of *kanske* as a predicate meaning 'may happen', taking a clausal complement. In fact, a complementiser *att* 'that' may be inserted after *kanske*: *Kanske **att** han inte kommer.*

2.4.   I-V2 and C-V2-languages

Of the modern Germanic V2 languages Icelandic, some dialects of Faroese, and Yiddish have V2 in all finite clauses, main and embedded (but see reservations below). Modern spoken Afrikaans is, apparently, in the process of developing into such a language (see Biberauer 2002). The rest of the languages have V2 in main clauses only; see Thráinsson et al. (2004) (on Faroese), Diesing 1990, Santorini 1989, Vikner 1995. There are exceptions both ways, though, as will be discussed below. I have used *I-V2* and *C-V2* for the two types*,* reflecting the hypothesis according to which the former languages are V2 by virtue of V-to-I movement (at least in embedded clauses), the latter by virtue of V-to-C movement.[11] In (32) and (33) a Scandinavian I-V2 language and C-V2 language are contrasted. Since these languages are SVO languages, the difference only appears in the presence of a negation or sentence adverb or other category placed between the subject and the VP. The finite verb will then precede the negation/adverb in embedded clauses in Icelandic, an I-V2 language, but follow it in Norwegian, a C-V2 language (data from Wiklund et al. 2007).

(32) Hann efast   um   [að   hun (**hafi**) ekki (*****hafi**) hitt þennan mann]. [Icelandic]

he   doubts about that she (has)   not (has)   met this   man

'He doubts that she has not met this man.'

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[11] The names do not imply a commitment to a particular analysis, in the present context. Another pair of terms in use is 'asymmetrical' and 'symmetrical' V2 languages. Yet another one is 'restricted' and 'general' V2 languages. As discussed in the text below, the supposedly symmetrical or general V2 languages are not so symmetrical or general after all (at least not Icelandic). I therefore prefer the shorter terms C-V2 and I-V2.

(33)   Han tvilte   på [at   hun (***hadde**) ikke (**hadde**) møtt denne mannen]. [Norwegian]

        he   doubted on that she (had)   not (had)   met   this   man

In (34) and (35) a Continental I-V2 language (Yiddish) is contrasted with a Continental C-V2 language (German); data from Diesing (1990).

(34)   Avrom gloybt   az   Max **shikt** avek dos bukh. [Yiddish]

        Avrom believes that Max sends away the book

(35)   Sigrid glaubt dass Waltraud wahrscheinlich das Buch gekauft **hat**. [German]

        Sigrid thinks that   Waltraud probably   the book bought has

Of the non-Germanic V2 languages, Kashmiri has V2 in main clauses and complement clauses, but not in relative clauses and adverbial clauses.

(36)   a.   me buuz [ki   rameshan **vuch** raath shiila]   [Bhatt 2002: 98]

               I   heard that ramesh-E saw yesterday Sheila

        b.   me buuz [ki   raath   **vuch** rameshan shiila]

               I   heard that yesterday saw Ramesh-E Sheila

               'I heard that Ramesh saw Sheila yesterday.'

(37)   a.   su LaRk [yus raath   yath kamras manz batI khyvaan oos] [Bhatt 2002: 122]

               that boy who yesterday this room   in   food eat   **was**

               'the boy who was eating food in this room yesterday'

        b.   yodivay su   Daak-as khat **traav-yi**   [Bhatt 2002: 123]

               if   he-N mail-D   letter put-FUT

               'if he will put the letter in the mail'

Interestingly, this is not that different from the situation in Icelandic. Although V2 is found in all embedded finite clauses in Icelandic, and even some non-finite ones (control infinitivals), it is in fact obligatory only in complement clauses, being optional in relatives and adverbial clauses, as pointed out in Sigurðsson (1992), and more recently discussed by Angantýsson (2001) and Wiklund et al. (2007) (who also add indirect questions to the list of possible non-V2 clauses in Icelandic).

(38)   Ég veit um ena bók sem Jón **(hefur)** ekki **(hefur)** lesið. [Icelandic: Wiklund et al. 2007]

        I   know of one book that Jon (has)   not (has)   read

17

(39)   ...fyrst einhverjir stúdentar (**skiluðu**)   ekki (**skiluðu**) verkefnum

       as   some   students (handed.in) not (handed.in) assignments

       '...as some students didn't hand in assignments.'

The difference between the I-V2 language Icelandic and the C-V2 languages is, therefore, smaller than it is made out to be in much of the literature (e.g. Vikner 1995). As will be discussed in the next section, the C-V2 languages all allow V2 order in some embedded clauses, and, correspondingly, the I-V2 languages allow non-V2 order in some embedded clauses. As a rough generalisation, V2 in embedded clauses in Icelandic is *obligatory* in clauses/contexts that allow *optional* embedded V2 in Mainland Scandinavian, and is *optional* in embedded clauses/contexts that do not allow embedded V2 in Mainland Scandinavian.[12]

      As for Breton, it is VSO in embedded clauses, which, according to Jouitteau (1995), is because C satisfies the requirement that the finite verb be preceded by a syntactically specified category. Arguably, whether or not the order C-VSO is permitted is a more fundamental typological distinction among the V2 languages than the C-V2/I-V2 distinction (see Jouitteau, to appear).

2.5   V2 in embedded clauses in C-V2 languages

All the Germanic C-V2 languages have V2 order in some embedded clauses, as an alternative to the usual V-final (Continental Germanic) or 'V3' order (Mainland Scandinavian). Embedded V2 word order is associated with specific semantic-pragmatic and syntactic effects.

(40)   a.   Maria glaubt [Peter **geht** nach Hause].   [German]

              Maria thinks Peter goes to   home

      a'.   Maria glaubt [dass Peter nach Hause **geht**].

      b.   Eva säger [att   hon (**ser**)   aldrig (**ser**)   på TV]. [Swedish]

              Eva says that she (watches) never (watches) at TV

              'Eva says that she never watches TV.'

      c.   Watson påstod att disse penge **havde** Moriarty stjålet. [Danish: Vikner 1995: 71]

              Watson claimed that this money had Moriarty stolen

              'Watson claimed that Moriarty had stolen this money.'

(40a,b) exemplify subject-initial embedded V2 clauses. (40c) shows that topicalisation of, for example, an object with concomitant V2 is also possible in embedded clauses, in C-V2 languages.

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[12] I am not familiar with any study which would confirm whether this is, in fact, the case for Yiddish, too.

In all the Germanic C-V2 languages[13] embedded V2 is particularly common in complements of verbs of saying and thinking, as in (40), but actually occurs in a wider range of embedded clauses, including complements of 'predicates of certainty' (41) and semi-factive predicates (42).[14]

(41)   Det är uppenbart [att   Eva (**ser**)   aldrig (**ser**)   på TV].   [Swedish]

        it is   obvious   that Eva (watches) never (watches) at TV

(42)   Jeg oppdaget [at jeg (**hadde**) ikke (**hadde**) lest den]. [Norwegian: Wiklund & al. 2007]

        I discovered   that I (had)   not (had)   read it

It also occurs in the complement of certain nouns.

(43)   a.   der Glaube, die Erde **sei**   flach   [German: Heycock 2005]

        the belief   the earth is.SBJ flat

        b.   Pyt hie my in boadskip stjoerd, dat hy (**koe**)   moarn   net komme (**koe**).

        Pyt had me a message sent   that he (could) tomorrow not come (could)

        [Frisian: de Haan 2001]

Some of the Germanic V2 languages allow V2 in 'extent clauses'.

(44)   a.   Hy is sa siik [dat hy (**kin**) dy hjoed net helpe (**kin**)].   [Frisian: de Haan 2001]

        he is so sick that he (can) you today not help (can)

        b.   Han er så sjuk [så/att   han (**kan**) inte (**kan**) hjälpa dej].   [Swedish][15]

        he is so sick   so/that he (can) not (can) help   you

Embedded V2 is also found in adjunct clauses denoting cause, in German, Frisian, and at least some varieties of Scandinavian (see de Haan 2001, Andersson 1975), and, in German only, in relative clauses; see Reis (1997), Gärtner (2001, 2002).

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[13] For some reason embedded V2 is rare in Dutch (but see Hoekstra 1993: 168-169 on Northern Dutch). Frisian has embedded V2 with, as well as without, a complementiser; see text below.

[14] See also Truckenbrodt (2006: 297) on German. Semi-factive predicates include *know*, *understand*, *discover*, *realise*, to be distinguished from true factives like *regret, be sad, be surprised*, etc. , which never allow embedded V2. What they have in common is that they presuppose the truth of their complement (i.e. they report a fact), but for semi-factives this presupposition may be cancelled in questions and conditionals. V2 clauses cannot, however, be embedded under semi-factives or predicates of certainty if the predicates are negated, in Mainland Scandinavian.

(i)   Det är inte uppenbart [att Eva (*ser) aldrig (ser) på TV].   [Swedish]

        it is not obvious that Eva (watches) never (watches) at TV

[15]V2 order is not allowed in the Danish counterpart to (44b) (Iatridou and Kroch 1992: fn. 4).

(45) He koe net kommer omdat hy (**moast**) Teake helpe (**moast**).   (Frisian: de Haan 2001)

he could not come because he (must) Teake help (must)

'He couldn't come because he had to help Teake.'

(46) Das Blatt hat eine Seite, die (**ist**) ganz   schwartz (**ist**). [Gärtner 2001]

the sheet has one side   that (is) entirely black   (is)

'The sheet has one side that is entirely black.'

 As for the meaning of embedded V2 the received view, which goes back to Hooper and Thompson's (1973) study of embedded root phenomena in English, is that they have, in some sense, the force of assertions, albeit of a weaker kind than in main clauses. This will be further discussed in section 4.

Considering V2 in complement clauses, there are two types, one without an overt complementiser, the other with an obligatory complementiser. The first type is characteristic of Continental Germanic, the other of Scandinavian, with Frisian straddling the boundary, having embedded V2 with or without a complementiser (see de Haan and Weermann 1986, de Haan 2001). Note that Mainland Scandinavian allows a null or deleted complementiser heading complement clauses with V3 order in clauses which are complements of 'bridge verbs', but does not allow a null or deleted complementiser in the corresponding V2 clauses embedded under the very same matrix verbs (see Iatridou & Kroch 1993, Vikner 1995, Heycock 2005).

(47) a.   Maria glaubt (*dass) Peter geht nach Hause.   [German]

'Maria thinks that Peter is going home.'

b.   Eva säger *(att) hon **ser** aldrig på TV.   [Swedish]

b',   Eva säger (att) hon aldrig **ser** på TV.

'Evan says that she never watches TV.'

As regards syntactic as well as semantic-pragmatic properties, embedded V2 clauses are very similar across the two types, and across different languages. Very broadly, embedded V2 clauses exhibit a lesser degree of syntactic dependence on the matrix predicate than embedded non-V2 clauses, corresponding to their lesser degree of semantic dependence (consider the notion that they have their own illocutionary force). One consequence of this is that extraction out of embedded V2

clauses is prohibited, or much more restricted than in the case of embedded non-V2 clauses (Holmberg 1986: 109ff., Vikner 1995: 108ff.).[16]

(48)   Vilken fest$_i$ sa   hon [att vi (**behöver**) inte (**behöver**) köpa roliga hattar till t$_i$]? [Swedish: Holmberg 1986: 111]

         which party said she that we (need)   not   (need)   buy funny hats   for

         'Which party did she say that we don't need to buy funny hats for?'

This is, in fact, controversial in the case of German, in view of sentences such as (49):

(49)   Welchen Film hat sie gesagt haben die Kinder gesehen? [German: Vikner 1995: 114]

         which   film   has she said   have the children seen

         'Which film did she say that the children have seen?'

However, if Reis (1997, 2002) is right, (49) does not exemplify extraction in a biclausal construction, but interpolation of a parenthetical, here *hat sie gesagt* 'did she say', in a monoclausal wh-question.

         Other effects of the relative independence of the embedded V2 clauses include the fact that they cannot be topicalised (see Reis 1997, Heycock 2005).[17]

(50)   a.   Dass er$_i$ unheimlich beliebt sei, möchte jeder$_i$ gern glauben.   [German]

                that he extremely popular is would everyone gladly believe

                ' Everyone would gladly believe that he is popular.'

         b.   *Er sei unheimlich beliebt, möchte jeder$_i$ gern glauben.

         c.   [Att fett (**är**) inte (är) bra   för hjärtat]   vet   jag.   [Swedish]

                 that fat   (is) not (is)   good for the.heart know I

                'I know that fat is not good for the heart.'

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[16] According to Wiklund et al. (2009), there is some variation regarding extraction among varieties of Scandinavian: While all the Mainland Scandinavian varieties appear to disallow extraction from non-subject-initial embedded V2 clauses, Norwegian allows extraction from subject-initial embedded V2 clauses. Icelandic, as an I-V2 language, is predicted to allow extraction from embedded V2 clauses (or it would not have any extraction at all). However, as noted by Wiklund et al. (2009) (see also Iatridou and Kroch 1993, Vikner 1995) it only allows extraction from subject-initial embedded V2 clauses.

[17] The quantifier and the pronoun are included in the example to control for the possibility that the string in (45b) is parsed as a main clause followed by a parenthetical.

This can be understood if the V2 clause is not a proper complement of the verb, but is rather in a relation which Reis (1997) refers to as 'relatively unintegrated', characterized in some work as ´paratactic´ rather than 'hypotactic' (see Gärtner 2001, de Haan 2001, Truckenbrodt 2006).

Yet another effect of the independence of V2 clauses, pertaining to cause clauses, is that a negation in the matrix clause cannot scope over a cause clause with V2 order.

(51)   Er kommt nicht, weil   er (ist) faul (ist).   [German]
        he comes not   because he (is) lazy (is)

While the V-final alternative is ambiguous, the V2 alternative lacks the reading where the reason why is coming is not that he is lazy (predicted if the relation between the clauses is paratactic, i.e. coordination, rather than hypotactic/subordination). See de Haan (2001), Heycock (2005).

As far as the structure of embedded V2 clauses is concerned, the analysis of the continental, complementiserless type seems relatively straightforward: V2 order is derived in the same way as in main clauses; I return to the details in the next section. As for the Scandinavian/Frisian type, where a complementiser combines with V2 order, the majority view is that it is a case of CP-recursion: The complementiser corresponding *to* 'that', which normally takes an IP complement, can alternatively take a full CP complement, which makes possible the syntax of a main clause, including V2, and at least to some extent the semantics of a main clause, including illocutionary force, in the embedded clause (see Holmberg 1986, Holmberg and Platzack 1995, de Haan & Weermann 1989, Iatridou and Kroch 1993, Vikner 1995, Heycock 2005, Wiklund & al. 2007).[18] The prohibition against extraction could then be essentially a Subjacency effect: There is one more CP-boundary to cross for an extracted element. This explanation does not carry over to Continental Germanic, though. Instead, whatever special properties the embedded V2 clauses have in these languages would be the effect of the special attachment, the lack of 'integration' of these clauses in the main clause. (50) suggests that the attachment/integration of embedded V2 clauses in Mainland Scandinavian may be more or less the same as in Continental Germanic. See de Haan (2001) for arguments that the embedded main clauses in Frisian are essentially coordinated rather than subordinated to the matrix clauses

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[18] Much more controversial is the question whether the I-V2 languages Icelandic and Yiddish also have general CP-recursion, deriving general V2; see Vikner (1995: 80ff.) for discussion and references, and for a more recent discussion and reappraisal of the issue Wiklund & al. (2007) and Hrafnbjargarson & Wiklund (forthcoming), who argue that embedded V2 in Icelandic is not derived by V-to-I, but by V-to-C, same as in main clauses. The whole issue is put in a different light in the framework of a theory with an articulated left periphery; see section 4.2.

3.   Theories of V2

3.1.   Den Besten 1983/89

Den Besten's paper was first circulated in 1977, was eventually published in 1983, with an added appendix updating the theory, and was later made part of den Besten's PhD thesis, with an added commentary further updating the theory. Den Besten takes as his starting point the observation that V2 is a root phenomenon, in German, Dutch, and Swedish. But importantly, he notes that this is part of a broader generalisation, which is that complementisers and V-fronting have complementary distribution in these languages, a fact which was noted for French in Dubuisson and Goldsmith (1976) and further discussed in Goldsmith (1981). Thus we find, for example the alternations in (52) and (53) (SBJ = subjunctive).

(52)   a.   Er sagte, **dass** er morgen   **komme**.   [German: after den Besten (1989: 82)]

he said   that he tomorrow comes-SBJ

b.   Er sagte, er **komme** morgen.

he said   he comes-SBJ tomorrow

c.   *Er sagte, **dass** er **komme** morgen.

(53)   a.   --, als **ob** er es nicht gesehen **hätte**.   [German: after den Besten (1989: 91)]

as if   he it not   seen   had-SBJ

b.   --, als **hätte**   er es nicht gesehen.

as had-SBJ he it not   seen

c.   *--, als **ob hätte** er es nicht gesehen.

Den Besten's great contribution was to propose an explanation of this generalisation, which was that the complementiser and the verb compete for the same position, namely C. The generalisation is that C must be lexicalised in these languages, which is accomplished by V-movement (later re-defined as I-to-C movement, with I containing V), in the absence of a complementiser.

This idea was further developed in a host of works during the eighties and early nineties, including the papers in Haider and Prinzhorn (1986), Platzack (1986), Holmberg (1986), Diesing (1990), Sigurðsson (1990), Rögnvaldsson and Thráinsson (1990), Vikner (1995), Platzack & Holmberg (1995). This was, arguably, the first time head movement was proposed as a transformation in generative grammar, with the properties which have since become familiar, in particular the idea that head movement is movement to a head-position (first formalised by den Besten (1983) as head-substitution, and later reanalysed as head-adjunction). It also became an important link in the

argument for the analysis, which soon became near-universally accepted, that C is a clausal head (Stowell 1983, Holmberg 1986, Chomsky 1986).

In relation to V2, it provided a starting point for the analysis where V2 is a consequence of two independent operations: V-to-C, or more correctly, V-to-I-to-C, and A'-movement to spec,CP. V2 languages, or at least the Germanic C-V2 languages, would be languages that have generalised V-(to-I)-to-C in complementiserless clauses, and generalised XP-movement to spec,CP, with, crucially, only one spec,CP available (in the languages in question, or perhaps universally, as a consequence of X'-theory).

3.2.   Travis (1984, 1994): asymmetrical V2

Den Besten's theory, and a number of its successors, including Platzack (1986), Holmberg (1986), Holmberg and Platzack (1995), Vikner (1995), adopted den Besten's 'symmetrical analysis' (Vikner 1995: 81) of V2, according to which subject-initial main clauses have the finite verb in C and the subject in spec,CP. Only embedded clauses with non-V2 order would have the subject in spec,IP. Travis (1984) articulates an alternative analysis, according to which the subject is in Spec,IP in main and embedded clauses, and the verb moves to C only in connection with movement of a non-subject phrase to spec,CP, or else when a verb-first structure is called for. This theory is further developed in Travis (1994), and notably in Zwart (1993, 1996) within a Chomskyan minimalist theory (Chomsky (1993, 1995)). It is also supported by Rögnvaldsson and Thráinsson (1990) for Icelandic and Diesing (1990) for Yiddish. The matter is partly different in these two I-V2 languages, though.

In the case of the Continental Germanic OV- languages, Travis (1984, 1994) argued, controversially at the time, that they have I-VP order. Hence V-to-I and subject placement in spec,IP derives SVO order, in main clauses. In the Scandinavian languages, too, V moves to I in main clauses, according to Travis (1994). In this perspective, the symmetrical theory of V2 has the disadvantage that it must assume that finite I and the subject both undergo a movement (I-to-C and A'-movement to spec,CP, respectively) which has the effect that they end up in the same spec-head configuration and order that they had before movement. In GB theory, where movement is in principle always optional and not subject to any cost-calculus, this is not necessarily a problem from the point of view of the architecture of the grammar. However, it makes it harder to detect the effects of the movement in the Phonetic Form (PF), and is therefore predicted to pose an acquisition problem. In the I-V2 languages it poses what would seem to be an insurmountable problem: There would be no surface (PF) difference ever between a structure before and after the putative movements to C and spec,CP.[19] In a minimalist framework, where the form and functioning of grammar is assumed to be

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[19] We are now ignoring the observation that V-to-I is optional in some embedded clauses in Icelandic.

subject to economy of derivation (following Chomsky 1993 and much subsequent work), the superfluous movement from I to C and spec,IP to spec,CP is obviously anathema. Travis's theory is further developed by Zwart (1993, 1998) and Koster (1994), among others. They provide a new range of arguments that I is 'on the left' in Dutch (and OV languages in general), based on Kayne's (1994) Linear Correspondence Axiom, with the consequence that head-final order is always derived by movement of complements leftwards.

The symmetrical analysis thus relies on what is arguably a violation of a straightforward economy condition, and may even be unlearnable, at least in the case of I-V2 languages. The asymmetrical analysis of Travis (1984, 1994) and Zwart (1993, 1996), on the other hand, has the empirical disadvantage of predicting similarity between subject-first main clauses and embedded clauses, and not predicting similarity between subject-first main clauses and non-subject-first main clauses. Consider, for example, the extraction facts illustrated in (47): Movement out of embedded V2 clause is prohibited in the C-V2 languages, even when the subject is the first constituent. According to the symmetrical theory, this is explained since spec,CP, the escape-hatch for extraction out of clauses, is always occupied in embedded V2 clauses (by the subject or a non-subject). Under the asymmetrical theory spec,CP is filled in non-subject-first but not in subject-first embedded V2 clauses, predicting that extraction should be possible out of the latter, contrary to fact (note, however, that Norwegian behaves rather as predicted by the asymmetrical theory, according to Wiklund & al. (2007), as mentioned in section 2.5).

Branigan (1996) has articulated a theory which aims to combine the advantages of each theory, while avoiding their drawbacks. The theory is based on the idea that the subject in V2 clauses is neither in spec,IP nor in spec,CP, but in an A-bar position in between. This analysis is, in fact, commonplace today, within cartography-oriented theory, following Rizzi (1997); see below section 4.2. See Craenenbroeck and Haegeman (2007) for some (very convincing) evidence that a symmetrical analysis of V2 is correct at least for some Flemish dialects.

3.3. V2 as remnant vP fronting

An idea that has been developed in recent years, starting with Kayne (1998), is that what has traditionally been analysed as head-movement is, in fact, movement of a phrase, out of which the complement and the specifier(s) have been moved, leaving only the head behind. When this remnant phrase moves, it has the effect of head movement. An obvious advantage, if all head movement can be reduced to remnant XP movement, is that movement theory is simplified: Only maximal categories ever move. V2 as derived by remnant VP movement is pioneered in Mahajan

(2001). A version of this idea, applied to German, is proposed by Müller (2004), whose theory is summarised here (see also Nilsen (2002), Wiklund et al. (2007, 2009)).

The gist of Müller's theory is that V2 in German is the effect of movement of a remnant vP to spec,CP, where the moving vP consists of just the finite verb and the edge of vP, which crucially contains only one phrase. This vP has V2 order, so when it is moved to specCP, the result is a clause with V2 order. In the unmarked case of a transitive sentence the edge of vP contains the subject and nothing else, as the subject is the one category which is externally merged in that position. As noted in section 2.1.1 above, subject-initial root clauses are the unmarked case in German (and the other Germanic V2 languages), which fact is thus explained in Müller's theory. The derivation of (54) is shown in (55), where (55a) represents the complete vP.

(54)   Die Maria hat den Fritz geküsst.
         the Maria$_{NOM}$ has the Fritz$_{ACC}$ kissed
         'Maria kissed Fritz.'

(55)   a.   [$_{vP}$ die Maria [$_{v'}$ [$_{vP}$ den Fritz geküsst] hat]]] → Merge T, Move VP to spec,TP
         b.   [$_{TP}$ [$_{vP}$ den Fritz geküsst]$_i$ T [$_{vP}$ die Maria [$_{v'}$ t$_i$ hat]]] → Move vP to spec,CP
         c.   [$_{CP}$ [$_{vP}$ die Maria [$_{v'}$ t$_i$ hat]]$_k$ C [$_{TP}$ [$_{vP}$ den Fritz geküsst]$_i$ T t$_k$]]]

A V2 clause with a non-subject constituent such as an object or an adverbial in initial position is derived by movement of the constituent in question to the edge of vP; such movement is standardly assumed anyway within theories assuming that derivation proceeds in phases, in the sense of Chomsky (2000, 2001). In this case, to leave only one constituent in the edge of vP, the subject has to move to spec,TP (an outer spec,TP, with VP occupying the inner spec,TP).

The theory needs to be constructed so that a root clause vP will, in every case, be evacuated, leaving only one constituent in the edge of vP. Movement of VP to specTP is one important component of this theory; see also Hinterhölzl (2006), Biberauer and Roberts (2006) for other theories which assume VP movement to spec,TP as part of the derivation of V-final order.

This theory (or family of theories) predicts that the same constraints that are found at the edge of vP will recur at the edge of CP in V2 clauses. Thus Müller points out that the theory can explain why two categories that do not undergo scrambling in German also do not occur in initial position in V2 clauses: weak object pronouns and finite clauses. Assuming that scrambling is movement to the edge of vP, and assuming that, for whatever reason (presumably different reasons) weak pronouns and finite clauses cannot be accommodated in the edge of vP, it follows

under Müller's theory, that they will also not occur initially in V2 clauses. (56) exemplifies the weak pronoun restriction; (56a) shows that the unstressed object pronoun *sie* must move to spec,TP, and cannot occur scrambled in midfield. (56b) exemplifies the observation that the weak object pronoun cannot be clause-initial in a V2 clause.

(56) a. dass gestern (sie$_{ACC}$) der Fritz (*sie$_{ACC}$) der Maria (*sie$_{ACC}$) empfohlen hat.
          that yesterday (her)   the Fritz (her)   the Maria (her)   recommended has
          'that yesterday Fritz recommended her to Maria'
      b. *Es hat Maria$_{NOM}$ gelesen.
           it has Maria read
          Intended reading: 'Maria has read it.'

However, the prediction goes wrong in the case of the German IPP phenomenon (as pointed out by one of the referees of this paper). In a sequence of verbs, a modal cannot be followed by an auxiliary that requires a participial form on the preceding verb. The finite verb must be fronted instead, as in (57c,d) (PRC = past participle).

(57) a. *dass er es *lesen   gemusst   hätte*
              that he it read-INF must-PRC had
      b. *dass er es *lesen müssen hätte*[20]
      c.   dass er es *lesen hätte müssen*
      d.   dass er es *hätte lesen müssen*

However, (57b) contrasts with (58): the CP-edge can accommodate the word order ruled out in the vP-edge, unremarkable under the standard V-movement analysis of V2, but unexpected under the remnant movement theory of V2.

(58) *Lesen   müssen hätte* er es.
      read-INF must-INF had   he it
      'Read it, he had to.'

A problem of a conceptual nature is that the remnant vP-movement theory requires two 'V2 stipulations': First, the edge of the vP undergoing movement to spec,CP in main clauses (the

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[20] This is well formed only in East Austrian vernacular, according to the referee.

movement itself is triggered by a feature of C, which is the crucial parametrised property of V2 languages) must only contain one constituent. Second, the CP-edge must also be restricted to containing only one constituent. The theory is constructed so that the first condition is derived (for the cases Müller discusses), but, needless to say, the required theoretical assumptions can be questioned. The second condition is not even discussed, although it is explicitly mentioned in connection with the islandhood of embedded V2 clauses (p. 213).

3.4. V2 in Optimality Theory

The main idea in Anderson's (2000) theory of V2, couched within Optimality Theory (OT), is that second-position placement in general, including V2, is the effect of the interplay of two constraints: One is a member of a family of EDGEMOST(e,E,D) constraints. These constraints say that an element e should appear as close to the edge E (Left or Right) of the domain D as possible. Thus there is a constraint (universal, as are all OT constraints) EDGEMOST(V_{fin}, L, S). The constraint says that the finite verb should be as close to the left edge of the sentence as possible. This constraint is highly ranked in the V2 languages, less highly ranked in other languages (meaning that it will not necessarily have any visible effects). The constraint is, however, in competition with a member of another family of constraints NON-INITIAL(e,D), saying that an element e should not be initial in a given domain. In V2 languages a member of this family, NON-INITIAL(V_{fin},S) is ranked higher than EDGEMOST(Vfin,L,S). The effect of this ranking is that the finite verb will be as close to the left edge of the sentence (that is CP) as possible without being initial. That is to say, it will be the second constituent of CP. Anderson's theory is assumed, and developed further, in Legendre (2001).

Anderson (2000) assumes, following the tradition of den Besten (1993), that the finite verb ends up in second position by movement of V-to-I-to-C (while stressing that this is not crucial to the theory), and that the first position is then filled by movement of some category to spec,CP. A consequence of the OT perspective is, however, that the movement of I to C is not triggered (necessarily) by any feature of C, but rather

"/t/he verb moves from I to C (or whatever positions are involved) because (a) this movement is syntactically possible, and violates no constraints of the syntactic computational system; and (b) the structures that result have fewer violations of the constraints /EDGEMOST(V_{fin},L,S) and NON-INITIAL(V_{fin},S)/ than structures in which the movement has not taken place, and in which the verb is thus farther from the left edge of the sentence." (Anderson 2000: 325f.)

Anderson points out that proposals made in the literature for features driving I to C in V2 sentences, typically in terms of feature-checking "amount to camouflaged language-particular stipulations of the requirement 'Move I to C'." (Anderson 2000: 325). It is, for example, a well-known fact that there is no particular morphology associated with I-to-C, and arguably there is no semantic effect either, given (a) that it is a requirement in *all* main clauses, and (b) synonymous sentences in other languages do not have I-to-C (although this view can be, and has been, challenged; see next section). The OT view implies that V2 is a fact purely about linearization, forced by the accidental ranking of two constraints. A prediction which the theory makes is that there might be structures where V2 holds but not as a result of I-to-C and XP-movement to spec,CP. The case Anderson brings up is Stylistic Fronting in Icelandic (Maling 1980, Holmberg 2000, 2005). In this construction a category is moved to pre-finite-verb position in embedded clauses where the subject is not available for filling this position, for example subject relatives.

(59)   sá sem fyrstur er að skora mark   [Icelandic]
       he that first   is to score goal
       'he who is first to score a goal'

The finite verb, in this construction, is not in C, and the category preceding it is not in spec,CP. Furthermore, that category can be a head (as would seem to be the case in (53)); see Holmberg (2000, 2005). Yet, in the OT framework of Anderson (2000), Stylistic Fronting would be the result of exactly the same constraint ranking as 'standard V2' – as is also consistent with the observation that the movement has no semantic effect.[21] Another pertinent example is V2 in Breton, as discussed in Legendre (2001), if V2 in Breton is not a matter of the C-domain; see also Borsley & Kathol (2000), Jouitteau (1995, 1998).[22]

An interesting property of the theory of Anderson (2000) and Legendre (2001) is that V2 can be united with other second position phenomena. The case they both discuss in great detail is clitic-second position effects, as found in many languages. Clitic second position placement would be the effect of versions of the same constraints, specified to apply to (some subcategory of) clitics instead of the finite verb. This connection is not made in work on V2 in the tradition emanating from den Besten and Travis.

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[21] This claim is challenged in Hrafnbjargarson (2006).
[22] According to Jouitteau (2005, 2008), V2 in Breton *is* a matter of the C-domain, insofar as the finite verb always moves to Fin, the lowest head in the C-domain (lower than clause-typing complementisers). She does, however, stress the similarity of Breton V2 and Icelandic Stylistic Fronting, ascribing the movement of a category to spec,FinP (in the unmarked case) to a 'phonological EPP' feature (following Holmberg 2000).

4. The nature of V2: PF or Narrow Syntax?

The title question has already been broached in the previous section. The question is whether V2 order is an effect of a language-particular linearization requirement, or whether it is an effect of movements that are triggered by features operative in the Narrow Syntax, with effects at the LF-interface, as well as, accidentally as it were, at PF.

There is no question that the movement of various constituents to spec,CP has semantic, particularly information-structural, effects. Thus, for instance, a fronted object is typically interpreted as topic in the Germanic V2 languages, but typically as focus in Kashmiri. This is not an effect of V2 as such, however, but an effect of movement to the CP-domain; non-V2 languages, too, employ movement to the left periphery for information-structural effects. What makes the V2 languages special in this connection is that they only want exactly *one* constituent to be moved to the CP-domain (in the general case, or even strictly, if the V3 orders discussed in section 2.3 are not derived by movement). The question is rather (a) whether fronting the *verb* to the second position, in connection with fronting some other category to initial position, has a semantic effect, and (b) whether fronting/placing a category in sentence-first position *always* has some particular semantic/pragmatic effect?

Consider first question (a).

4.1   The meaning of V-to-C

The most detailed study of the semantic effect of V-to-C in a V2 language is Truckenbrodt's (2006) study of German, building on Wechsler (1990) and Lohnstein (2000), among others. Truckenbrodt elucidates the effect of V-to-I by comparing (a) the semantics of main clauses with and without V-to-C and (b) the semantics of embedded clauses with and without V-to-C.

Some main clauses without V-to-C, all German, are exemplified in (60), to be compared with a main clause with V-to-C in (61).

(60)   a.   Dass du (ja) das Fenster öffnest!

                 that you PRT the window open

                 'Don't forget to open the window.'

         b.   Dass ich noch einmal Venedig sehen könnte!

                 that I   still once Venice see could

                 'I would like to see Venice once more.'

c.   Das Fenster öffnen!

        the window open.INF

        'Open the window.'

d.   Dass die   immer nur Turnschuhe anzieht! (Rosengren 1992

        that she.DEM always only trainers   wears

        'Why does she always wear trainers!'

(61)   Du öffnest   das Fenster.

       you open-PRS.2SG the window

       'You're opening the window.'

As Truckenbrodt points out, (60a) has the same morphological properties as its V2 counterpart (61), and denotes a proposition, like (60), but the non-V2 sentence cannot be used as an assertion. Instead, the non-V2 root clauses can be used as directives, desideratives, or as exclamatives. The basis of Truckenbrodt's account is the claim that

> "all sentential speech acts (with the exception of some pure exclamations) are volitional on the part of the speaker ('deontic' in the following): S wants something, wishes for something, invites A [the addressee: AH] to do something etc. I paraphrase this as '*S wants (from A)...*'. /.../ Also as a starting point I assume that the interpretation that is inherent to declaratives and interrogatives always has the common ground as the epistemic desideratum." (Truckenbrodt 2006: 259-260)

The meaning of the declarative (62a) and the interrogative (62b) can therefore be paraphrased as shown:

(62)   a.   Der Peter hat das gemacht.

         the Peter has this done

         'S wants from A that it is common ground that Peter has done this.'

     b.   Hat der Peter das gemacht?

         has the Peter this done

         'S wants from A that it is common ground whether Peter has done this.'

More formally, T proposes that C has a set of features making up what is called a 'context index', as follows:

(63)   In a context index <Deont$_S$ (,x) (,<Epist>)> in C

      a.   Epist is present iff

            (i)   C contains a finite verb with indicative or subjunctive II, or

            (ii)   C/CP is marked [+WH];

      b.   x = A iff C contains a finite verb with person inflection.

The feature Deont$_S$ yields the meaning component 'S wants...', Deont$_S$ (A) is then 'S wants from A that...', while Epist is 'it is common ground that/whether...'. The feature values A and Epist are the result of V-to-C, as only V-to-C provides the indicative/subjunctive and person features required. Thus x and Epist in the context index of C can be seen as unvalued features triggering V-to-C. (ibid.: 262). There are sentence types which have [Deont$_S$] without A or Epist, among them the directive and desiderative type exemplified in (58) above, and one type which has neither Deont$_S$, A, nor Epist, that is exclamatives. These sentence types do not (necessarily) have V-to-C.

      A complication, which Truckenbrodt deals with in some detail (see also Truckenbrodt 2004), is that non-V2 root interrogatives do have the epistemic interpretation.

(64)   Ob   er immer noch kubanische Zigarren mag?
        whether he always still   Cuban   cigars   likes
        'I wonder whether he still likes Cuban cigars.'
        'S wants it to be common ground whether he still likes Cuban cigars.'

This is why (aii) is included in (63): [+WH] can value Epist even in the absence of V-to-T. As indicated by the paraphrase in (64), this question lacks the component 'from A', though (compare (62b)). The non-V2 question form is typically used when the speaker does *not* expect the addressee to know the answer. The context Truckenbrodt gives for (64) is that interlocutor 1 says (in German) 'I haven't heard from Peter in years'. Interlocutor 2 replies 'Me neither', whereupon interlocutor 1 utters (64), obviously with no hope of an answer from interlocutor 2 (call them *speculative questions*). The conclusion Truckenbrodt draws is that [+WH] cannot provide the value A for x in the context index of C; only V-to-C can do that.

      Truckenbrodt then goes on to discuss embedded V2. There is a long tradition of work on the meaning of embedded V2, alluded to in section 2.5 (Hooper and Thompson 1973, Andersson 1975,

Wechsler 1990, Iatridou and Kroch 1992, Heycock 2005). The consensus is that embedded V2 has assertive force, in some sense: Thus, while the standard, non-V2 embedded clause in (65a) merely reports what Eva says, (65b) in some sense also asserts it (although, as Heycock (2005) notes, unlike main clauses, it does not actually convey an assertion on the part of the *speaker*).

(65)   a.   Eva säger [att   hon aldrig ser   på TV].   [Swedish]

                  Eva says   that she never watches at TV

      b.   Eva säger [att   hon ser   aldrig på TV].

                  Eva says   that she watches never at TV

                  'Eva says that she never watches TV.'

In terms of the theory Truckenbrodt develops, C in embedded clauses lack [Deont$_S$ (A)], but may have, in the context of predicates of the right type, [Epist], triggering V-to-C.

It seems clear enough that V-to-C in German has semantic effects of the sort Truckenbrodt discusses. Similar word order phenomena can be observed in other Germanic V2 languages.[23] This would seem to entail that V-(to-I)-to-C movement takes place in Narrow Syntax, with effects at both interfaces, LF and PF – contradicting Anderson (2000) (see section 3.4).

The question is, why don't all languages have V-to-C of the German type, then? Apparently there are other ways to check [Deont$_S$ (A)] and [Epist], not made use of in German or the other Germanic V2 languages (in fact, Reis (2006) argues that there are other ways, even in German, in certain constructions). On the assumption that these features are universally located in C, it would seem to be the case, then, in languages which do not have V-to-C, nor any other visible C-element in declarative main clauses, that a *null* C is how the relevant features are checked. The 'exceptional sentence types' (speculative questions, desideratives, etc.) would then, presumably, be marked by overt C-elements, such as particles of some kind.

Thus, on a very 'narrow interpretation of Narrow Syntax' one might still claim that the checking of Truckenbrodt's (2006) features in C is a postsyntactic matter, dependent on vocabulary insertion (in a Distributive Morphology framework), which provides a form of particle, one that has null realisation and checks the relevant C-features, in some languages, where the V2 languages instead rely on V-to-C.

Truckenbrodt's theory of German appears to generalise to Germanic V2 languages. It does not generalise to Breton, though. Verb fronting is quite simply compulsory in finite clauses in Breton, so verb fronting cannot have the sort of distinctive semantic function it has in Germanic. The minor

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[23] Note that the question headed by a question particle in (20b) is a speculative question, as predicted by Truckenbrodt (2006), applied to Danish. (20c) is a desiderative without V-to-C.

sentence types are, therefore, not distinguished by absence of verb fronting, the way they are in Germanic.[24]

4.2.   The meaning of XP-fronting and the articulated left periphery

V-movement is only half of the V2 phenomenon. The other half is the restriction to one constituent preceding the fronted finite verb. The question whether V-to-C has a semantic effect, and thus belongs in Narrow Syntax was answered in the affirmative (although possible objections were noted). The complementary question is whether fronting/placing a category in sentence-first position *always* has some particular semantic/pragmatic effect? The answer would seem to be no. The fronted category can have a variety of information-structural functions, with some variation across the different V2 languages. For example in Swedish, a fronted object can be aboutness topic (Frey 2004, Frascarelli and Hinterhölzl 2007), as in (66), seen as a continuation of the statement "Slumdog Millionaire is wonderful".

(66)   Den filmen får   du   bara inte missa.   [Swedish]
        that film   must you just not miss
        'You simply mustn't miss that film.'

Or it can be contrastive topic, as in (67), uttered as a reply to the question "Do you see a lot of film and theatre?"

(67)   Film går jag mycket på, men inte teater. [Swedish]
        film go I   much on, but not theatre
        'I go to a lot of films, but not theatre.'

It is definitely less natural with contrastive focus, as in (68a), uttered as a correction of the claim "I hear you like theatre a lot", and it cannot be new information focus, as in (68b) taken as a reply to the question "What book are you reading?"

(68)   a.   #Film gillar jag, inte teater.   [Swedish]
                 film like   I   not theatre
                Intended reading: 'It's film I like, not theatre.'
        b.   #Harry Potter läser jag.

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[24] Thanks to Mélanie Jouitteau for discussion of this question.

Harry Potter read I

Intended reading: 'I'm reading Harry Potter.'

Thus, there are definite restrictions on the interpretation of an object fronted to specCP. On the other hand the subject can be the first constituent apparently regardless of its semantic import: Anything from an expletive pronoun to a contrastively focused, complex, quantified DP can be subject, preceding the finite verb. Thus if V2 involves fronting of the subject to some position higher than spec,IP/TP (not an uncontroversial assumption; see sections 3.2, 3.3), then this movement cannot always be triggered by a semantically interpretable feature. Sentences with an initial sentence adverb may also be virtually identical in terms of semantics and pragmatics to the counterpart where the adverb is in post-V2 position.

(69)   a.   Antagligen är han mycket rik.   [Swedish]
               probably   is he   very rich
       b.   Han är antagligen mycket rik.
               he   is probably very rich

The syntax of the Icelandic expletive pronoun also indicates that filling the pre-C position is a purely formal requirement, similar to the classical EPP. The pronoun must be sentence–initial:

(70)   a.   Það rignir.   [Icelandic]
               'It's raining.'
       b.   *Rignir (*það)?
               'Is it raining.'
       c.   Nú   rignir (*það).
               'It's raining now.'

(70b,c) show that the expletive cannot occupy specIP. If so, it must be in specCP in (70a). If so, then V2 must be a purely formal requirement.

       The effects of fronting are different across the V2 languages, though. Thus, a fronted object in Kashmiri can only be a focus (according to Bhatt 1999).

(71)   darvaaz mutsroov rameshan   [Kashmiri: Bhatt 1999: 85]
         door   opened   Ramesh

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'Ramesh opened the door/It was the door that Ramesh opened'

An observation (among several) which Bhatt (1999) mentions in support of the generalisation that a fronted object in Kashmiri is focus, not topic, is that universal quantifiers, notoriously not good topics, can be fronted as objects in Kashmiri. This is not an option in Swedish, where a fronted object can only be a topic.

(72)   a.   sooruyikeNh khyav rameshan   [Kashmiri]

                everything   ate   Ramesh

                'Ramesh ate everything.'

        b.   *?Allt   åt   Johan. [Swedish]

                  everything ate Johan

An interesting and topical question is how to account for V2 within a theory postulating an articulated left periphery, along the lines of Rizzi (1997, 2001, 2004) and related work. According to this theory the left periphery of sentences is made up of a hierarchy of heads and/or corresponding 'positions' which encode sentential and information-structural functions such as Force, Focus, Topic, and Finiteness, and which is at least in part determined by Universal Grammar. The following hierarchy is based on Poletto (2002).

(73)   [HT [Scene-setting [Force [Topic [Focus [WH [Fin]]]]]]]

The hierarchy should be seen as a hierarchy of 'fields' or sub-hierarchies, which each consists of a fixed number of defined projections (Beninca and Poletto 2004).[25] HT is the head/projection of the Hanging Topic, followed by a sub-hierarchy of projections for scene-setting adverbials, followed by a clause-typing functional head Force, followed by a sub-hierarchy of Topic projections, followed by projections of Focus, WH (interrogative force), and Fin(iteness) (Fin is discussed but not explicitly included in Poletto's (2000) representation of the hierarchy).

        The empirical support for this theory comes primarily from the possibility of stacking constituents with definable sentential/information-structural functions in the left periphery in some languages (see (23) above for an example from Italian). In V2 languages this possibility is, obviously, highly restricted: typically only one XP can occur in the left periphery. Poletto (2002) discusses two alternative ways to account for V2 within this type of framework. One is that languages may differ

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[25] Rizzi (1997) proposed recursive Topic projections. More recent work has shown that there is a hierarchy of different types of Topics and Foci (Beninca and Poletto 2004, Frascarelli and Hinterhölzl 2007).

with respect to whether the relevant left-peripheral functional features are distributed over a hierarchy of distinct heads, each with their own spec-position (for example Standard Italian), or whether they are encoded in one head, with one spec-position (V2 languages). In the latter case, the constituent in the spec of that head can have a variety of functions. The alternative, advocated by Poletto (2002) and Beninca and Poletto (2004), is that all languages have the full hierarchy of left-peripheral heads/projections. The V2 constraint would then be an effect of a requirement to "check a low CP", i.e. lexically fill the spec of a head low in the hierarchy, where this filled spec will then block movement of any other category to a higher position.

Another theory of V2 in the framework of an articulated CP is developed by Westergaard (2007, 2008, 2009). She shows that V2 languages exhibit considerable variation with regard to which sentence types require V2. A favourite example of hers is the variety of Norwegian where certain subtypes of wh-interrogatives do not have V2 (see (9)). She argues that this is due to micro-parametric variation regarding which heads in the articulated C-domain trigger verb-movement and XP-movement to their specifier position.

An interesting prediction that Poletto's (2002) and Beninca and Poletto's (2004) hypothesis makes is that V3 orders should be possible in V2 languages provided that the first constituent is not *moved* to that position, but externally merged (base-generated) there. We have seen some evidence of this in the course of this paper: The Hanging Topic in (27) is a clear example. The CLD constructions in (28) are also potentially examples, although more controversially, as CLD has also been analysed as derived by movement. In Kashmiri V3 order appears to be particularly common, with a left-dislocated topic phrase, followed by a focused phrase, followed by the finite verb.

(74)   su   laRk$_i$,   rameshan vuch temis$_i$ tsuur karaan   [Kashmiri: Bhatt 1999: 102]

        that boy-N   Ramesh-E saw he-D   theft doNPerf

        'As for that boy, it is Ramesh who saw him stealing.'

Bhatt analyses the initial phrase as base-generated in initial position (note that the case of the initial NP is different from that of the resumptive pronoun, ruling out a movement analysis). Poletto's (2002) theory is, indeed, based on the observation that Rhaetoromance languages exhibit V3 order as an alternative to V2, but the V3 order is constrained in a way which is predicted if (a) the hierarchy in (73) is assumed, and (b) there is a division in this hierarchy between a lower domain (from Focus down) where spec-positions are filled by movement/internal merge, and a higher

domain (the Topic domain), where they are filled by external merge, and (c) only one spec-position higher than the head hosting the finite verb is ever filled by movement.[26] [27]

The conceptual reason for the movement-blocking effect in V2 languages which Poletto (2002) draws on is articulated in Roberts (2004).[28] The idea is that it is fundamentally due to Relativised Minimality (Rizzi 1990a), according to which 'like repels like', so that A'-movement is blocked across a filled A'-position, A-movement across a filled A-position, and head-movement across a filled head. Roberts adopts the formalisation proposed by Chomsky (2000, 2001), according to which (phrasal) movement is triggered by an 'EPP-feature', an essentially arbitrary property of certain heads, subject to cross-linguistic variation. Characteristic of V2 languages, according to Roberts, is that they have a generalised EPP feature in Fin[29] which requires filling specFinP with 'something', any phrase or particle, regardless of its feature composition and syntactic function (if no other category is available, it can be an expletive). This position filled with 'anything' will then have the effect of blocking movement of 'anything', by Relativised Minimality.[30]

We have seen evidence above that 'anything' can satisfy the V2 requirement as long as it is *moved* to initial position. This explained the contrast between, for example, (75a = 18b) and (75b):

(75)   a.   ...trozdem haben wir gewonnen.   [German]

                 yet   have   we won

[26] Wh-questions in Kashmiri, shown in (14) above are a possible counterexample: The constituent preceding the fronted whP does not look like it is externally merged in this position: It has a case assigned sentence-internally, and is, apparently, associated with a gap, not a resumptive pronoun.

[27] Some of the German V3 constructions discussed by Müller (2005) (see footnote 10) do not seem to fall under Poletto's generalisation. Müller develops an analysis of these constructions in terms of a null verbal head that takes the elements before the finite verb as arguments or adjuncts.

[28] Poletto also credits unpublished work by Liliane Haegeman.

[29] Incidentally, this is not entirely consistent with Truckenbrodt's (2006) theory, where V-movement at least in German, is crucial for illocutionary force – suggesting that the movement is to Force, in the Rizzian left periphery.

[30] The Chomskian EPP feature is an arbitrary feature because movement, hence linear order, *is* to a certain extent an arbitrary language-particular (or 'parametrised') property. According to Chomsky (2000, 2001) the relation between, say, C and a wh-marked object in an object wh-question is established by Agree, a universally available operation linking a WH-feature on C with a matching feature on the wh-phrase. Whether Agree is accompanied by movement is subject to cross-linguistic variation: some languages have wh-movement, other languages have wh-in-situ. This is formally a matter of the WH-feature being accompanied by an EPP-feature, or not. This would be a specialised EPP-feature, as opposed to a generalised one, as it only attracts wh-phrases. Another specialised EPP-feature is what T has in English and many other languages: It attracts specifically the subject NP. Another specialised EPP-feature is found in Finnish, where according to Holmberg & Nikanne (2002) the EPP-feature in Fin attracts a non-contrastive topic (NP or PP) to spec,FinP. This allows movement of a *contrastive* topic or focus to a higher position in the C-domain. The result is that exactly two moved constituents may precede the finite verb, the first one contrastive, the second one non-contrastive (see also Vilkuna 1995).
(i)   Kukkia   Annalle antoi Mikko.
           flowers to-Anna gave Mikko
           'It was Mikko that gave FLOWERS to Anna (someone else gave chocolates).'

b.   *...und haben wir gewonnen.

and have   we won

The particle *trotzdem* has an alternative position in the IP-domain, which the conjunction *und* does not. Thus *trotzdem* is, not implausibly, moved to initial position in (75a), while *und* is externally merged there.

(76)   Wir haben trotzdem/*und gewonnen.

We also saw examples that pure force particles, presumably merged in initial position, do not satisfy V2 (hence do not violate V2), in Danish and Swedish. Whether or not we accept the explanation based on Relativised Minimality, this is support for the hypothesis that prohibition against more than one constituent preceding the finite verb in V2 languages is, indeed, a prohibition against movement.

On the other hand we also saw that the generalisation that only moved constituents can satisfy V2 does not apply to Breton, where, if Jouitteau (2005,2008) is right, even an externally merged category, such as (certain types of) C can satisfy V2. Another potential counterexample is noted in footnote 26. No doubt there are other potential counterexamples, when a wider range of data is considered. Even so, a theory of V2 along the lines of Poletto (2002) seems promising enough to be worth exploring in more detail, applied to a wider range of languages.

5.   Conclusions

The V2 property is made up of the two components (77a,b).

(77)   (a)   A functional head in the left periphery attracts the finite verb.

(b)   This functional head wants a constituent moved to its specifier position.

Property (b) may be formalised as a 'generalised EPP-feature', along the lines of Roberts (2004), that is a feature which triggers movement and re-merge of a constituent virtually of any kind (NP, PP, AP, adverbs, particles, etc.) with the projection of the head (if verb movement is actually movement of a remnant phrase headed by the finite verb, the two properties will have to be reformulated accordingly).

The two properties/parameters are, arguably, independent. It may thus be the case that, for example, certain VSO languages have property (77a) without having property (77b). Or a language may have, say, a finiteness particle or a null C with the generalised EPP property without any need for verb movement.

The generalised EPP feature has the effect of blocking movement of any other category, across the constituent which satisfies the EPP feature, as an effect of Relativised Minimality (following Roberts 2004). This yields V2 order.

If Truckenbrodt (2006) is right, in the C-V2 languages (or at least a subset of them) the verb movement has the effect of checking/valueing features in C which determine the illocutionary force of the sentence, and would as such be part of Narrow Syntax. This is not the case in C-VSO languages like Breton, though. For these languages, the movement could, on that account, be a postsyntactic linearization rule (which would be consistent with Anderson 2000, Legendre 2002, Kathol and Borsley 2000; but see Jouitteau 2008).

The constituent which satisfies the EPP feature may have a variety of syntactic and information-structural functions, with variation across the V2 languages, some allowing topics and disallowing focused phrases, others vice versa. But crucially, the constituent may be information-structurally neutral, most clearly in the case of expletives, but also in the case of an initial subject in wide focus sentences, or an initial epistemic adverb, or a conjunctive particle. This is the effect of the generalised EPP feature. Regardless of its interpretation, the moved constituent blocks movement of any other constituent to a higher position.

The question was posed in section 2.2 whether 'V2 language' is a meaningful, well-defined notion. The answer is: yes it is. It is a language which has the two properties (77a,b). Property (a) accounts for the fronted verb, property (b), the generalised EPP feature, for the requirement that the verb be preceded by one and only one constituent. However, the EPP feature can only prevent V3 (V4, V5, etc.) order derived by *movement*. It does not prevent V3 order derived by external merge.

There is variation among the V2 languages regarding the interpretation of the constituent preceding the fronted verb; in some languages a moved non-subject argument can only be a topic, in other languages it can only be focus. There is also variation among the V2 languages regarding the V3 orders they 'exceptionally' allow. In terms of a theory assuming a Rizzian articulated left periphery, this can be described as variation concerning which head in the left periphery has the properties (77a,b), hence how high in the left periphery a constituent may move. If it cannot move higher than spec,Focus, then a moved constituent could never be a topic (given the hierarchy (73)), meaning that a sentence-initial topic would have to be externally merged. On the other hand, in such a grammar, there is a wider variety of functions that can precede the moved constituent: it can be a topic (of any kind), or a scene-setting adverbial, or a HT (or conceivably a combination of these). If a moved constituent can be (or must be) a topic, thus move higher up the hierarchy, the functions that may precede it are correspondingly reduced.

The theory makes the prediction that V2 languages in which a moved constituent can be focus but not topic (as is the case in Kashmiri), should allow a wider variety of constituents in the 'V3 position', which appears to be the case, as Kashmiri exhibits not only what appears to be quite general left-dislocation, but also certain adverbs in V3 position (Bhatt 1999: 104), and even (marginally) more than one topic preceding a fronted focus (ibid.: 110).

The question was posed in the introduction why the V2 property appears to be so rare, among the languages of the world. The idea that V2 is the result of properties (77a,b), has consequences for this question. To begin with, if the properties are independent of each other, V2 will only be found where the properties happen to co-occur. Second, V2 may not be quite as rare as we have been wont to think. In a V2 language where the generalised EPP feature is low, the finite verb may be quite regularly preceded by more than one constituent, even though only the innermost one is moved there, which will make it less obvious to an unsuspecting observer that it has the properties (77a,b) (see Beninca's (2004) description of the Medieval Romance languages). For instance, topic-prominent languages of the Chinese type, which quite regularly have one or more topics externally merged with CP, may have the properties (77a,b), yet the finite verb will much of the time be preceded by more than one constituent. And in languages of the head-marking type, as analysed in Jelinek (1984) and Baker (1996), where all lexical (non-pronominal) arguments are externally merged as adjuncts to CP, linked to null proforms in argument positions within IP, any effects of (77a,b), insofar as these properties could ever (co-) occur in such languages, would be very hard, indeed, to detect.

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