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Editorial

DP-internal information structure: Some introductory remarks[☆]

1. Symmetry in (information) structure?

An important characteristic of generative grammar is the quest for *symmetry*. A classical example illustrating this search for parallelism is Chomsky's (1970) *Remarks on Nominalization*, in which he proposes that phrases of different categorial types (i.e., NP, VP, AP, PP) have the same internal phrase-structural make-up. In line with this presumed symmetry in phrasal organization, grammatical functions are identified with specific structural positions in the syntactic representation. Chomsky points out that the distribution of grammatical functions such as subject and object is essentially the same in a sentence like *the enemy destroyed the city* and a nominal expression like *the enemy's destruction of the city*. The noun phrase *the enemy* occupies the so-called specifier position and functions as a subject of V and N. *The city*, on the contrary, functions as a direct object and occupies the complement position of the head (i.e., V, N).

Besides symmetry in phrasal structural organization, Chomsky (1970) points out cross-categorial symmetry in phrase internal displacement phenomena. The phenomenon of passivization, for example, is not restricted to the sentential domain (*The city was destroyed by the enemy*) but is also attested in the nominal domain (*the city's destruction by the enemy*). From this cross-categorial symmetry Chomsky concludes that the phenomenon of passivization should not be analyzed in terms of a construction specific rule of sentential passivization, but rather in terms of a general rule of *Move NP* that moves the direct object NP to the subject position (i.e., a specifier position) and applies across phrasal domains, *in casu* across sentences and nominal expressions.

This search for symmetry in phrasal organization and phrase internal rule application has always been a major guideline of generative syntactic research. Especially during the last fifteen years or so, generative syntactic studies have emphasized the parallelism between the clausal domain and the nominal domain. This research led to the identification of DP as the nominal counterpart of CP (cf. Abney, 1987) and to the idea that D, just like C, functions as a subordinator and, as such, typically introduces an argumental phrase (cf. Szabolcsi, 1987, 1994; Stowell, 1991). Another dimension of parallelism comes from agreement: as noted in Szabolcsi (1983) for Hungarian, the agreement relationship between a noun phrase-internal possessor and the possessed noun is formally identical to the agreement relationship between a subject noun phrase and a finite verb. This parallelism in agreement has been interpreted as evidence that the same structural configuration—more specifically, spec-head agreement—is involved in establishing an agreement dependency. Also in the realm of displacement, similar types of movement operations have been identified for the clausal and the nominal domain. In Cinque (1994) and Longobardi (1994), for example, it is argued that, parallel to V^o-movement operations in the clausal domain, there are N^o-movement operations in the nominal domain. A further parallel displacement phenomenon is suggested in Kayne (1994), Den Dikken (2006), and Bennis et al. (1998), who argue that the nominal domain, similarly to the clausal domain, features instances of predicate movement, as in the well-known *N of N* construction (e.g., *that jerk of a policeman*). Another parallel that has been reported in the literature concerns the distinction between A versus A'-movement. In terms of Den Dikken (1998:181),

[☆] The authors of this introduction are listed alphabetically.

for instance, predicate inversion is an instance of A-movement inside the DP. According to this author, predicate inversion is “a case of A-movement of a predicate around the position of its subject [...] which is also an A-position”. Given this characterization, an immediate point that arises is that the movement potentially violates the Minimal Link Condition as defined in Chomsky (1995), and the theory must provide an explanation as to whether this is so. In the context of the discussion on predication and predicate movement, Bennis et al. (1998) further indicate that the distinction between A versus A'-movement is also relevant for movement inside the DP. What these different studies show is that there appears to be strict symmetry between the CP and the DP not just with regard to the structural make-up of these two domains, but also with regard to the syntactic operations that they allow.

With this search for cross-categorical symmetry as a heuristic strategy for the analysis of sentences and noun phrases, the question may be raised as to whether this parallelism between the clausal system and the nominal system extends to what is called information structure. The information structure of a sentence can be characterized as the formal (i.e., lexical, (morpho)syntactic and prosodic) expression of the pragmatic structuring of a proposition in discourse (cf. Lambrecht, 1994:5; see also Halliday, 1967; Chafe, 1976; Vallduví, 1992; Erteschik-Shir, 2007).¹ The idea is that in a communicative situation a speaker tailors the form of his utterance in order to reach an optimal understanding of the utterance by the addressee. Thus, information structure reflects the speaker's hypotheses about the hearer's state of mind (i.e., his assumptions, beliefs and knowledge) at the time of an utterance (cf. Prince, 1981:224).

In Lambrecht (1994:49) two types of information are essentially distinguished: First of all, the *pragmatic states* of the denotata of individual sentence constituents in the minds of the speech participants. Secondly, the *pragmatic relations* established between these referents and the propositions in which they play the role of predicates or arguments.

1.1. Expressions of pragmatic state

The former type of cognitive information involves the mental representations of entities or propositions in discourse. More specifically, it regards the speaker's assumptions as to whether the addressee is able to identify a referent or proposition—that is, does the hearer have knowledge of an entity or a state of affairs?—and as to whether the addressee is consciously aware of an entity or proposition at the time of the utterance—that is, is the referent or state of affairs discourse-active, i.e., familiar to the hearer? The assumptions of the speaker about the hearer's knowledge about, or familiarity with, the entity is reflected, for example, in the choice of determiners and case-markers. Thus, the use of an indefinite article or a definite article typically marks whether the speaker assumes the referent of the noun phrase to be identifiable to the addressee (see (1)). As exemplified in (2), Turkish linguistically encodes the distinction between identifiability versus non-identifiability of an object noun phrase via the presence versus absence of accusative case; see also Enç (1991).² In the Frisian variant called Fering, the distinction between a familiar (i.e., D-linked) entity and a non-familiar (but identifiable) entity is lexically encoded (cf. Ebert, 1970) via the availability of two types of definite articles, viz. *a* ([+identifiable], [–familiar]) and *det/di* ([+identifiable], [+familiar]). The use of each article is exemplified in (3).

- | | | | |
|-----|----|--|---|
| (1) | a. | John invited [<i>a</i> linguist from China] | (indefinite; non-identifiable) |
| | b. | John invited [<i>the</i> linguist from China] | (definite; identifiable) |
| (2) | a. | Ahmet <i>öküz-ü</i> aldi.
Ahmet ox-ACC bought
'Ahmet bought the ox.' | (accusative case, identifiable) |
| | b. | Ahmet <i>öküz</i> aldi.
Ahmet ox bought
'Ahmet bought an ox.' | (no accusative marking; non-identifiable) |

¹ The study of information structure goes back to Prague School linguistics, which labeled this study of the formal structure of sentences ‘the functional sentence perspective’ (cf. Mathesius, 1929).

² The examples in (2) and (3) are taken from Lambrecht (1994) and Ebert (1970), respectively.

- (3) a. *A hünj hee tuswark.*
The dog (i.e. the speaker's dog) has toothache
'The dog has a toothache.'
- b. *Peetje hee jister an kü slachtet. Jo saai, det kü wiar äi sünj.*
Peetje has yesterday a cow slaughtered. One says the cow was not healthy.
'Peetje has slaughtered a cow yesterday. One says that the cow was not healthy.'

Similarly, [Ionin \(2006:176\)](#) argues that the so-called *this*-indefinite as illustrated in (4) is a specificity marker in English.

- (4) There is *this man* who lives upstairs from me who is driving me mad because he jumps rope at 2 a.m. every night.

While it is well-known that specificity is sensitive to the notion of familiarity ([Prince, 1981](#)), [Ionin \(2006:181\)](#) shows that the DPs marked by specificity *this* exhibit the following properties:

- They are indefinite,
- They do not take narrow scope with respect to intensional/modal operators or negation,
- Their felicity is affected by *noteworthiness*.

Where *noteworthiness* is understood in the literal sense (i.e., worthy of note, [Ionin, 2006:188](#)). What is worth mentioning here is that *noteworthiness* is a context dependent notion that is not expected to have any strong syntactic effect. Yet, both the distribution and the semantics of this marker indicates that it is syntactically different from the (in)definite determiners of English (i.e., *the/a*). Under this description therefore, a pragmatic notion appears to have syntactic manifestations that need to be accounted for.

Other ways of linguistically encoding the pragmatic states of entities are the use of pronominal forms and word order. Pronouns typically encode discourse-familiar entities, where familiarity may result from situational presence of the entity (cf. (5a)) or from earlier availability in the discourse (cf. (5b)).

- (5) a. Isn't *she* lovely? (person A pointing at a baby)
b. Peter saw that there was *a baby* in the cradle. *She* was lovely.

The role of word order in the grammatical encoding of the pragmatic states of referents is well-known from the phenomenon of scrambling in Germanic languages such as Dutch and German (see among others, [Diesing, 1992](#); [De Hoop, 1992](#); [Delfitto and Corver, 1998](#)). While a noun phrase representing a non-familiar identifiable referent typically occurs in a structural position close to the final verb (see (6)), a noun phrase representing a familiar (and whence identifiable) referent typically occurs in a scrambled position, i.e., a position more distant from the final verb (see (7)):

- (6) A: Wat heb je gisteren gedaan?
what have you yesterday done
'What did you do yesterday?'
- B: Ik heb [_{AdvP} gisteren] [de regisseur van Lethal Weapon II] geïnterviewd
I have yesterday the director of Lethal Weapon II interviewed
'Yesterday I interviewed the director of Lethal Weapon II.'
- (7) A: Ken jij Richard Donner, de regisseur van Lethal Weapon II?
Know you Richard Donner, the director of Lethal Weapon II
'Do you know Richard Donner, the director of Lethal Weapon II?'
- B: Jazeker, ik heb [de regisseur] [_{AdvP} gisteren nog] geïnterviewd
Sure, I have the director yesterday PRT interviewed
'Sure, I interviewed this director yesterday.'

1.2. Expression of pragmatic relations

Let us now turn to the second type of information-structure category, i.e., pragmatically construed relations between denotata and propositions. Two types of relations are generally distinguished: the topic relation and the focus relation. The former is the relation of aboutness between a proposition and a discourse entity. The topic of a sentence has been defined as the entity which the proposition expressed by the sentence is about (Lambrecht, 1994:118). It is ‘the matter of concern’ about which new information is conveyed in an utterance. Topic expressions typically refer to entities that have a certain degree of activeness in the discourse, and as such typically have the form of unstressed (or phonologically empty) pronominals. This latter property is exemplified in (8):

- (8) A: What will John do?
B: [_{Topic} He] will warn the police.

Another linguistic way of formally encoding topichood is the use of specific constructions in which the topic expression occupies a specific structural position in the sentence. Three such constructions are given in (9)–(11):

- (9) A: You want to see *Lethal Weapon II*?
B: [_{topic} *Lethal Weapon II*] I saw yesterday. (Topicalization)
- (10) A: Ken jij de film *Lethal Weapon II*? (Dutch)
know you the movie *Lethal Weapon II*
‘Do you know the movie *Lethal Weapon II*?’
B: Nee, [_{Topic} *Lethal Weapon II*]_i, die_i heb ik nog nooit gezien. (Left Disl.)
No, *Lethal Weapon II*, that have I still never seen
‘No, *Lethal Weapon II* is a movie that I have still not seen.’
- (11) Ik heb ’m_i nog nooit gezien, [_{Topic} *Lethal Weapon II*]_i. (Right Disl.)
I have him still never seen, *Lethal Weapon II*
‘I have still not seen it, *Lethal Weapon II*.’

In (9), the topichood of the noun phrase *Lethal Weapon II* is grammatically encoded by displacement of the topical noun phrase to the sentence-initial position. In the Dutch example (10), the topic expression also occupies a left peripheral position but is now followed by a coreferential (demonstrative) pronoun. In the Dutch example (11), finally, the topic expression is in a right peripheral position and is related to the sentence via the coindexed pronoun ’m.³

Let us now turn to the second pragmatic relation, the so-called focus relation. The notion of focus refers to the most informative part of the utterance, i.e., the information that the speaker takes to be new and non-recoverable for the hearer. The focus is generally taken to be part of an assertion, i.e., a proposition which the addressee is expected to know or believe as a result of hearing the utterance. Besides the focus, the assertion contains information which the speaker assumes the hearer already knows or believes at the time of speech. This part is called the (pragmatic) presupposition of the proposition. In (12B), for example, ‘John saw x’ constitutes the presupposed information and *Lethal Weapon II* the focus (i.e., new, non-presupposed) information of the proposition.

- (12) A: What did John see?
B: John saw [_{Focus} *Lethal Weapon II*].

In the literature on focus, two types of foci are generally distinguished: (i) information focus (also called: presentational focus) and (ii) contrastive focus (also called: identificational focus); see Kiss (1998), Drubig (2003), Winkler (2005). The former can pragmatically be defined as new, non-presupposed information (Kiss, 1998:246), the latter can informally be characterized as evoking a suitable “subset of the set of contextually or situationally given

³ We will abstract away here from the exact pragmatic meaning of each of the three ‘topical’ constructions in (9)–(11).

elements for which the predicate phrase can potentially hold” (Kiss, 1998:245); The two types of foci are illustrated by the Dutch examples (13B) and (14), respectively:

- (13) A: Wat is er aan de hand? ('What's going on?')
 A': Wat heeft Jan gedaan? ('What did Jan do?')
 A'': Wat heeft Jan ingeslikt? ('What did Jan swallow?')
- B: Jan heeft een WORM ingeslikt.
 Jan has a worm swallowed
 'Jan swallowed a worm.'
- (14) Jan heeft een WORM ingeslikt, niet een VLIEG.
 Jan has a worm swallowed, not a fly
 'Jan swallowed a worm not a fly.'

Sentence (13B) exemplifies information focus: In reply to question A, the entire sentence represents the new information (i.e., all focus). The lexical item *worm* on which the strongest pitch accent is realized is assigned the focus feature, say [F] (cf. Kiss, 1998). From that position, the focus feature is said to project outside the maximal projection of the accented word, in this case up to the dominating projection CP (i.e., the entire main clause). In reply to question A', it is the VP that provides the new information (so-called wide focus). The focus feature [F] associated with *worm* projects up to VP. In reply to question A'', finally, the direct object noun phrase provides the new information; the focus feature [F] projects from N up to the object noun phrase (i.e., DP).

Turning next to (14), which also has the pitch accent on the lexical item *worm*, we observe that the informational role of the direct object noun phrase *een WORM* is different from its role in (13). In (14), 'a worm', rather than the alternative entity 'a fly', is identified as the entity to which the predicate applies. In (14), a contrastive in situ focus is realized on *een worm*, placing it in opposition to the DP *een vlieg*. As shown in (15), the contrastive focus DP can also be fronted to the left periphery of the sentence:

- (15) [Een WORM]_i heeft Jan t_j ingeslikt, niet een VLIEG. (Focus fronting)
 a worm has Jan – swallowed, not a fly
 'John has swallowed a WORM, not a FLY.'

2. DP-internal information structure: some illustrations

Having provided the reader with some background knowledge on information structure, we may return to the general question as to whether information structure is also attested at the non-clausal level, i.e., in phrasal domains such as DPs, APs and PPs. A priori there does not seem to be any reason for not assuming the relevance of information packaging in those domains. Lambrecht (1994:35) makes the following remarks about this issue: “[...] information structure contrasts may in principle be expressed within any syntactic domain which expresses a predicate-argument relation, for example within the noun phrase (see the information-structure contrast between *my CAR* and *MY car* or French *ma VOITURE* and *ma voiture à moi*).”

In various studies on noun phrases, it has been observed that word order alternations within the noun phrase often have a pragmatic effect, e.g., focalization or emphasis of a particular constituent within the noun phrase. Cardinaletti (1998), for example, observes that the pragmatic status of *sua* in (16a) and (16b) is different. In postnominal position, the possessive pronoun necessarily has a contrastive focus reading. In prenominal position, on the contrary, the pronoun typically has a neutral (i.e., non-contrastive) interpretation:

- (16) a. la casa SUA, non tua (Italian)
 the house his/her, not yours
- b. la sua casa (*la SUA casa, non tua)
 the his/her house (the his/her house, not yours)

Another example suggesting the role of information structure within the noun phrase comes from adjective-noun ordering in Polish (and also other West and East Slavic languages). *Siewierska and Uhlirová (1998:134)* argue that adjective-noun inversion has a clear pragmatic effect: the prenominal placement of a qualitative adjective (i.e., AN) has a neutral reading, but postnominal placement (i.e., NA) has the pragmatic effect of (contrastive) focus or emphasis:

- (17) a. piękna kobieta (Polish)
beautiful woman
'a beautiful woman'
b. kobieta piękna
woman beautiful
'a BEAUTIFUL woman'

In *Rijkhoff (1998)*, it is noted that in a language like Turkish, an emphatic/contrastive focus reading of an attributive adjective is obtained by having the adjective in a position preceding the indefinite article/cardinal *bir*. When the adjective has a neutral (i.e., non-focalized) reading, the adjective typically occurs in a position between the cardinal/indefinite article and the noun. In short, from a surface perspective, contrastive focus within the nominal domain is associated with a left peripheral position, rather than a right peripheral position.

- (18) a. bir büyük ev (Turkish)
a/one big house
'a/one big house'
b. büyük bir ev
big a house
'a BIG house'

Another illustration that contrastive focus may be associated with a left peripheral position within the noun phrase comes from Greek. As noted in *Ntelitheos (2004)*, possessors marked with Genitive case appear after the possessed noun in Greek (see (19a)) (but see *Szendrői*, this volume for an alternative). When the same possessor is contrastively focused, it can appear in a pre-determiner position, as in (19b))

- (19) a. Mu ipes pos dhiavases *to vivlio tu Gianni*. (Greek)
me-GEN said-2sg that read-2sg the book-NOM the-Gianni-GEN
'You told me you read Gianni's book.'
b. Mu ipes pos dhiavases *tu GIANNI to vivlio* (ki ohi tu KOSTA).
me-GEN said-2sg that read-2sg the-Gianni-GEN the book-NOM (and not the Kosta-GEN)
'You told me you read Gianni's book (and not Kosta's).'

Besides word order, there are also other means available in language to mark emphasis or focus of a DP-internal constituent. For example, *Simpson and Wu (2002:300)*, citing *Hundius and Kölver (1983)*, note that in Thai the optional use of a classifier (CL) on the attributive adjective brings with it a clear emphatic/focalized reading of the adjective:

- (20) a. phuuying suay khon-nii
woman pretty CL-this
'this pretty woman'
b. phuuying khon-suay khon-nii
woman CL-pretty CL-this
'this PRETTY woman'

In the above examples, the emphatic/focalized constituent is part of a larger noun phrase. In those examples, the focalized constituent typically receives a contrastive interpretation. The question arises as to whether the notion of information focus (also called: presentational focus) ever applies at the level of the noun phrase. In *Corver and Van*

Koppen (2008), this question is answered positively. They argue that the nominal constructions to be considered are what may be called ‘root nominal constructions’. Two potential instances of root nominal constructions are the following: (a) nominal constructions that function as titles of books (21a,b) and paintings (21c–e) *et cetera*; vocative noun phrases (22).⁴

- (21) a. Aspects of the theory of SYNTAX (books by Noam Chomsky)
 b. The logical structure of linguistic THEORY
 c. Bust of an old MAN (paintings by Rembrandt)
 d. Portrait of an old MAN
 e. The return of the prodigal SON
- (22) a. Dear friends of HOLLAND!
 b. Hi, little friend of WILL’S!

The normal way to pronounce these titles and vocatives is with pitch accent on the rightmost, i.e., the most deeply embedded, constituent (on the recursive side). Since titles are typically assigned to books, poems, paintings *et cetera* in isolation, i.e., not in (a contextual) relation of opposition to some other object, these titles typically have an informational focus reading; i.e., the title represents new information in its entirety. Informally, therefore, the title of the book could be understood as an answer to the implicit question “What is this book about?”

One could imagine, though, that an artist has painted two paintings (e.g., a diptych) that are somehow related to each other and in which some property of the individuals/objects represented are contrasted with each other. Imagine, for example, a diptych consisting of two portraits of men having different ages. This diptych could have the following title, in which *old* and *young* are contrastively focused.

- (23) Portrait of an OLD man and portrait of a YOUNG man

In view of the discussion above, the conclusion may be drawn that both information focus and contrastive focus are attested within the nominal domain. Thus, the noun phrase, just like the sentence, may be interpreted as a syntactic domain in which information structure is active (see also Drubig, 2003:24).

Let us now briefly turn to the question as to whether such information structural notions such as familiarity (i.e., discourse-activated entities) and topicality might be taken to be active within the nominal domain. Some support for the role of these notions again comes from vocative noun phrases (i.e., root nominal constructions). As noted in Corver and Van Koppen (2008), it is possible to have noun phrase ellipsis within a vocative noun phrase, i.e., elision of that part of the noun phrase which the speaker considers to be familiar to the addressee (i.e., activated in the addressee’s mental representation). Consider, for example, the pair of Dutch vocative expressions in (24). In (24a), we have a ‘full’ vocative noun phrase, and in (24b) an elided one.⁵

⁴ Interestingly, the indefinite article *a* is absent in the titles (21a,b), which suggests that these titles have their own syntactic peculiarities. The absence of the indefinite article also suggests that titles like (21c,d) should not be derived from underlying copular constructions of the type: ‘This is *(a) bust of an old man’. As indicated, the indefinite article must be present in those copular constructions.

⁵ In Corver (2008), more examples of ‘incomplete’ vocative expressions are given. Consider, for instance, the following examples from Aarschot Dutch (spoken in Belgium); examples are drawn from Pauwels (1940).

- (i) a. A doe se verken! (Aarschot Dutch)
 oh you *se* pig
 ‘Oh, You pig!’
 b. A se verken!
 oh *sen* pig
 ‘Oh, you pig!’
 c. O dóe se!
 o you *se*
 Oh you! (pejorative meaning)

(ia) represents the full vocative noun phrase, which is introduced by the interjection *A*. The vocative noun phrase consists of a second person pronoun which is linked to the evaluative/pejorative noun by the grammatical marker *se*. As shown in (ib), the second person, which obviously is discourse-active given its situational presence, can be absent. Focus is then assigned to the evaluative noun. In (ic), we have the opposite situation: the evaluative noun is left implicit and it is the second person which receives emphasis/focus.

- (24) a. Hé, [stoere JONGEN], ga eens gauw weg!
 Hey, sturdy guy, go PRT quickly away
 ‘Hey, you sturdy guy, go away!’
 b. Hé, [STOERE --], ga eens gauw weg!

The referent of the elided noun in (24b) is situationally accessible, i.e., active in the addressee’s mind due to his/her salient presence in the discourse-external world (cf. Lambrecht, 1994:100). More specifically, upon hearing the utterance in (24b), the hearer knows that she is the one who is addressed by the speaker. As such, the referent of the (elided) noun can be taken to be presupposed. The new information is provided by the attributive adjective, which carries pitch accent.

As for the presence of topic expressions within the nominal domain, we would like to point out here that in certain Dutch dialects we find nominal constructions which are formally quite similar to clausal left dislocation constructions (cf. (10B)).⁶

- (25) Teuns baaier is kold, mor [Teun dei zien eten] nait. (Uithuizen Dutch)
 Teun’s beer is cold, but Teun that his food not
 ‘Teun’s beer is cold but Teun’s food is not.’

Just like in the clausal left dislocation construction in (10B), a discourse active noun (i.e., *Teun*) is followed by a coreferential demonstrative pronoun (i.e., *dei*). The latter element arguably occupies the spec-position of a DP, whose head position is occupied by the weak possessive pronominal *z’n*. The topical expression proper name *Teun* may then be analyzed as a constituent adjoined to DP (or, possibly, in the spec-position of a Top(ic)P(hrase) which is located on top of the DP). The structure can schematically be represented as follows:

- (26) [_{DP} Teun_i [_{DP} dei_i [_{D'} zien [_{NP} eten]]]]

3. Information structure and phrasal architecture

Generative-syntactic research on the phrasal architecture of the clause and on the nature of various clause-internal displacement phenomena has led to the identification of various phrase structural layers within the clausal projection. A general characterization that emerged from this research is that the clause is organized syntactically in the following way (cf. Chomsky, 1995, 2002): First, there is a core predicate layer, where s(ematic) selection is relevant (i.e., the lexical domain involving predicate-argument relations). Secondly, on top of the lexical layer, there is an inflectional domain, responsible for agreement and/or inflectional features (e.g., tense, mood, aspect). Thirdly, the highest layer, often referred to as the left periphery (or the “edge”) of the clause encodes discourse-linked properties. Schematically, we then have the following representation of the clause:

- (27) [[Discourse-linked features] ···[[inflectional/agreement features] ···[[core predicate and its arguments]]]]

According to this schema, two types of meaning properties are encoded in the phrase-structural organization of the sentence: thematic relations (i.e., argument structure)—also referred to as “deep (semantic) properties”—are encoded in the lower structural zone (i.e., VP and vP), whereas information-structural relations such as topic and focus—also referred to by the name of “surface (meaning) properties”—are associated with the left-peripheral edge of the sentence (cf. Chomsky, 1995, 2002; see also Rizzi, 1997). According to Chomsky (2002:165), this ‘duality of semantics’ is an interface condition imposed on the language faculty by language-external conceptual-intentional systems. Chomsky further argues that the syntactic encoding of these two types of meaning properties is related to two types of operations of the computational system of human language: application of external merge yields argument structure, whereas internal merge (i.e., displacement) yields representations encoding discourse-related meaning. Importantly, displacement does not seem to be the only way of syntactically encoding information structural properties (Chomsky, 2004:165). External merge, for example, may also play a role in the encoding of information-structural

⁶ The example in (25) is drawn from the data which are collected as part of the DiDDD-project (Diversity in Dutch DP Design), which is executed at the University of Utrecht (see Corver et al., 2007). See also Jansen (1974, 1977) for reference to this construction type in Dutch dialects.

information, as seems to be the case for discourse-particles that attach to a (nominal) constituent in order to encode topicality (28) or focalization (29):

- (28) John-wa sono hono yonda. (Japanese)
 John-Topic the book read
 ‘John read the book.’
- (29) A: Jáan chidíísh yiyíílcho? (Navajo)
 John car.Q 3.sg.past-wreck
 ‘Did John wreck the car?’
 B: Nda, Jáán chidítísoh ga’ yiyíílcho.
 No, John truck FOC 3.sg.past-wreck
 ‘No, John wrecked the TRUCK’

The cross-categorical parallelism between the clausal domain and the nominal domain raises the question to what extent parallels can be found as regards the ways in which information is packaged formally in these structural domains. In this regard, two school of thought are found within Minimalism: (i) notions of information structure being context variants do not directly interact with syntax, (ii) information structure relates to syntactic features (e.g., topic, focus) which project in syntax and may trigger displacement rules (i.e., internal merge).

3.1. Information structure within DP as an expression of prosody

In the context of the first school, Fanselow (2006, 2007) argues that no insight is gained into the interaction between syntax and information structure by the simple addition of information-structure-sensitive features, such as topic and focus, to the list of formal features manipulated by syntax. Instead, it is suggested that syntax and information structure only interact indirectly, via PF (and maybe LF). Accordingly, one must exclude strong functionalist views “according to which some syntactic operations are triggered by aspects of information structure such as a focus feature” (Fanselow, 2007:208). Part of Fanselow’s argumentation is based on the fact that, in Germanic and Romance, structures which are commonly treated as derived from Movement to the left periphery due to the discourse features [topic] and [focus] are ambiguous with regard to these functions. In the following instance of split DP (30), the fronted part *bücher* can be both contrastive topic or corrective focus depending on the context questions given in (31).

- (30) **Bücher** hab ich mir ein paar – gekauft.
 books have I me a couple bought
 ‘I’ve bought some books’
- (31) a. What have you bought? [Focus on the object DP]
 b. What have you done? [Focus on the VP]
 c. What happened? [Focus on TP]

Since example (30) can be a felicitous answer for any of the questions under (31), there seems to be no sense in which one can say that movement of the constituent *bücher* ‘books’ to the left periphery satisfies the requirement to check a topic or focus feature. Following this line of argumentation, Fanselow further suggests that word order variation and focus assignment in German can be better understood by looking at the prosodic correlates, namely the requirement in this language that the accented element occurs to the far right.

A similar view that treats information-sensitive re-orderings as resulting from prosodic constraints is found in Zubizarreta (1998) who distinguishes between formal features (i.e., f-features) and prosodic features (i.e., p-features), which may have discourse-effects. F-features are assumed to be lexical properties and enter checking mechanisms. On the other hand, p-features are determined by prosodic needs and are relevant for p-movement. Accordingly, operations related to f-features and p-features happen at different points in the derivation. F-driven operations happen early in the derivation and involve checking of formal features, while p-driven operations happen just before the derivation branches off. In terms of this view therefore, though focus/topic assignment affects meaning (because it is visible at LF),

the focus/topic feature per se is not a lexical property and the movement operations that lead to the assignment of focus cannot be understood as triggered by lexical properties of the elements to which it attaches. Under these views therefore, the symmetry between the clausal domain and the nominal domain is maintained by denying both domains structural properties related to information structure. Put differently, if information structure only interacts indirectly with syntax, via the interfaces, this must be true for both the clausal domain and the nominal domain.

3.2. Information structure within DP as an expression of syntactic structure

The second school of thought includes studies which are often referred to as the *Cartographic Approach*. Under the view that the clausal projection CP constitutes the structural “zone” where discourse-related properties such as topic and focus are encoded, the question arises to what extent D, generally considered to be the left periphery of the nominal domain, also constitutes the structural “zone” in which discourse related properties are encoded. In recent studies, among which Giusti (1996), Bernstein (1997, 2001), Bennis et al. (1998), Haegeman (2004), Aboh (2004a), Ntelitheos (2004), it has been argued that the nominal left edge D-domain is similar to the clausal C-domain in encoding discourse-related properties such as topic, focus and illocutionary force.

Giusti (1996:111), for instance, reports that, in Albanian, postnominal adjectives occur in a fixed order both in definite and indefinite contexts, (32). See also section 1.2. for similar data.

- (32) a. një grua tjetër e bukur
 Indef woman other Art nice
 ‘another nice woman’
 b. gruaja tjetër e bukur
 woman-Def other Art nice
 ‘the other nice woman’

The ungrammatical sequences in (33) show that the fixed order in (32) cannot be altered.

- (33) a. *një grua e bukur tjetër
 b. *gruja e bukur tjetër

On this basis, one could conclude that these adjectives are restricted in postnominal position where they occur in a fixed order. Yet, as it has been observed for Romance languages (e.g., Cinque, 1994; Brugè, 1996; Bernstein, 1997, 2001), these Albanian postnominal adjectives can occur prenominally if emphasized, hence the grammatical examples in (34).

- (34) a. një e bukur grua
 Indef Art nice woman
 ‘a NICE woman’
 b. e bukura grua
 Art nice-Def woman
 ‘the NICE woman’

The examples in (35) indicate that any postnominal adjective can front, though movement does not affect the whole sequence of adjectives.

- (35) a. tjetra gura e bukur
 other-Def woman Art nice
 ‘the OTHER nice woman’
 b. e bukura grua tjetër
 Art nice-Def woman other
 ‘the other NICE woman’

Because fronting of the postnominal adjective is exceptional and correlates with emphasis, Giusti (1996) proposes that the construction involves phrasal movement of the adjectival phrase to the specifier of a focus phrase within the DP. In the context of definite DPs, the definite marker is generated in Foc, while the element glossed as Art merges within D, as in (36).

(36) [DP [D e [FocP bukur [Foc a [NP grua tjetër bukur]]]]]

Under this view therefore, the Albanian DP includes a focus projection headed by an article-like element. This discussion is compatible with Bernstein's (1997, 2001) work on Romance and Germanic languages in general.

With regard to the topic phrase, Giusti (1996) discusses data from Italian, arguing that certain prenominal adjectives refer to shared knowledge (i.e., topic) and therefore qualify as topics within the DP. The argumentation is based on the following facts. While Italian has both prenominal and postnominal adjectives, these have different readings.

- (37)
- | | | | | |
|----|----------------------|---------|---------|---------|
| a. | i | suoi | capelli | bianchi |
| | the | his/her | hair | white |
| | 'his white hair' | | | |
| b. | i | suoi | bianchi | capelli |
| | the | his/her | white | hair |
| | 'his/her white hair' | | | |
| c. | i | bianchi | suoi | capelli |
| | the | white | his/her | hair |
| | 'his/her white hair' | | | |

While the English translation of these sequences is invariable, the Italian sequences actually have different meaning depending on the context. According to Giusti (1996:119), citing Zamparelli (1993), the prenominal adjectives are most felicitous "if they express a prototypical property of the noun and if the noun itself is maximally specified." Giusti illustrates this with the following examples. The relevant context here is one whereby there has been a Martian invasion of the planet. If the context is that of new information, one can have the sequence in (38), where the adjective *ultima* 'last' precedes *brutale* 'brutal'.

- (38)
- | | | | | | | | | |
|--|-------|--------|------|-------------|---------|--------|---------|-------|
| la | loro | ultima | vera | aggressione | brutale | al | planeta | |
| the | their | last | very | aggression | brutal | of.the | planet | |
| 'their possible last real brutal aggression of the planet....' | | | | | | | | |

However, in a context where the participants in the discourse all know that the aggression of the Martians was brutal, one may also utter sequence (39a) where the adjective *brutale* now precedes *ultima*, but also the pronoun *loro*. Crucially, the ungrammatical sequences in (39b–d) indicate that *brutale* never follows any modifier in this context.

- (39)
- | | | | | | | | | | |
|----|--|---------|---------|-------------|----------|-------------|--------|------|-------------|
| a. | Sappiamo | tutti | che | la | brutale | loro | ultima | vera | aggressione |
| | know.1pl | all | that | the | brutal | their | last | real | aggression |
| | 'We all know that the brutal last real aggression....' | | | | | | | | |
| b. | *la | loro | brutale | ultima | vera | aggressione | | | |
| | the | their | brutal | last | real | aggression | | | |
| c. | *la | loro | ultima | brutale | vera | aggressione | | | |
| | the | their | last | brutal | real | aggression | | | |
| d. | *l'ultima | brutale | vera | aggressione | Marziana | | | | |
| | the.last | brutale | real | aggression | Martian | | | | |

These facts not only suggest that the topicalized adjective must front, but they also indicate that it must front to the highest position within the DP such that nothing can precede it, except for the determiner. In accounting for these facts,

Giusti (1996) suggests that these pronominal adjectives front to a topic position that is lower than D, as schematized in (40), where the adjective first merges in the specifier of an agreement phrase but must raise to [specTopP].

(40) [DP Art [TopP AP [Top [AgrP... AP.....[NP]]]]

While the empirical facts presented thus far may be compatible with the view that inversion of the adjectival phrase in many languages involves displacement to a DP-internal Topic or Focus projections, the same facts may be accommodated by alternatives in terms of base generation, or else P-driven movement. The main point here being that the assumed displacement targets a maximal projection and it is not always clear what the probe is, given that the assumed Topic and Focus heads do not have clear morphological manifestations in most languages discussed in the literature.

However, one language that may be of interest is Gungbe, for which Aboh (2004a) argues that it exhibits DP-internal markers that encode topic and focus features. This conclusion derives from the following facts in Gungbe and the Gbe languages in general.

Aboh (2004b, 2007) reports that, in addition to having tense, aspect and mood markers that occur within the IP, the Gbe languages include various discourse markers (i.e., interrogative, topic, focus) that occur within the left periphery. The following example shows that IP-related markers occur between the subject and the verb, while left peripheral markers occur in a space between the complementizer and the subject. Also observe that topicalized and focused elements occur in the fixed order Topic > Focus.

(41) a. Ûn sè ɖɔ̀ àzón éhè yà Sésínú wè ògán ná nò zé-é ná din.
 1sg hear that work this Top Sesinu Foc chief Fut Hab give-3sg to now
 ‘I heard that *concerning this job*, the chief will now be giving it to SESINU.’
 b. *Ûn sè ɖɔ̀ Sésínú wè àzón éhè yà ògán ná...
 1sg hear that Sesinu Foc work this Top chief Fut

In addition, Gungbe includes certain markers, which can only occur to the right edge. A case in point is the yes-no question marker which in this language occurs as a sentence-final low tone glossed as Inter.

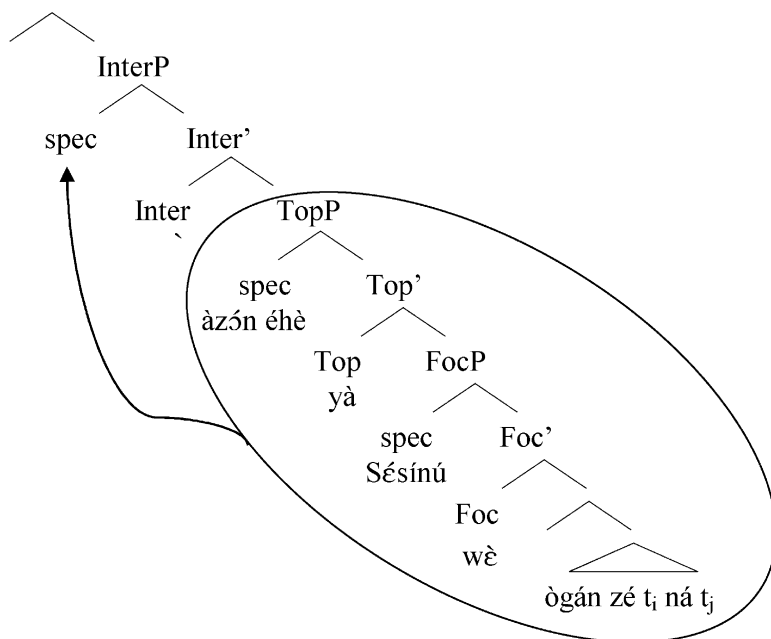
(42) Sésínú kò yì ?
 Sesinu already go Inter
 ‘Did Sesinu leave already?’

Given that Gungbe has discourse markers that occur to the left and the right of the clause, one may wonder whether these two types of determiners ever co-occur, and when they do, whether they can cluster on one edge (i.e., left or right). The example in (43) shows that there is no co-occurrence restriction on the markers to the left and the one to the right.

(43) àzón éhè yà Sésínú wè ògán zé-é ná `?
 work this Top Sesinu Foc chief give-3sg to Inter
 ‘*Concerning this job*, did the chief give it to SESINU?’

The generalization that emerges here is that the topic and focus marker may probe over an individual constituent, while the question marker probes over the proposition. A unifying factor across these markers is that the element that is being probed over must be left adjacent to the marker. Aboh (2004b) accounts for these facts by proposing that the discourse markers head distinct functional projections (i.e., InterP, FocP, TopP) within the left periphery and attract their goals into their specifier positions. This means that a sentence like (43) is generated by first moving the topic and focus constituents to [specTopP] and [specFocP], respectively, followed by generalized pied-piping of the constituent containing TopP into the specifier position of the interrogative phrase, as depicted in (44).

(44)



Setting aside the details of this analysis, a remarkable point here is that Gungbe (and the Gbe languages) involve markers within the left periphery that trigger fronting of the proposition into their specifier. This view is further supported by the fact that the focus and topic markers can also probe over the sentence. When this happens, they also occur to the right edge (45a and b) and when they so co-occur, they display the reverse order Foc > Top (45c), which appeared ungrammatical in (41b).

- (45)
- | | | | | | | |
|----|--|---------|----|-----|-------|-------|
| a. | Sésínú | kò | yì | yà | `? | |
| | Sesinu | already | go | Top | Inter | |
| | 'Did Sesinu leave already (as planned)?' | | | | | |
| b. | Sésínú | kò | yì | wè | `? | |
| | Sesinu | already | go | Foc | Inter | |
| | 'DID SESINU LEAVE ALREADY?' | | | | | |
| c. | Sésínú | kò | yì | wè | yà | `? |
| | Sesinu | already | go | Foc | Top | Inter |
| | 'DID SESINU LEAVE ALREADY (as planned)?' | | | | | |

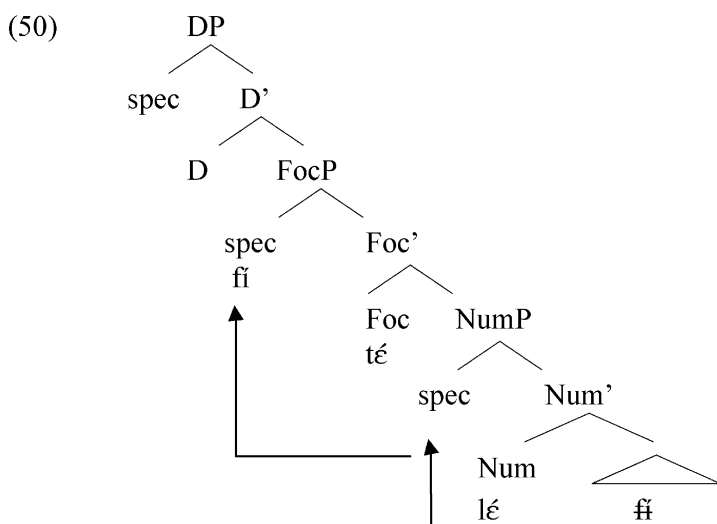
In accounting for these facts, Aboh (2004b) argues that the reverse order obtained in (45c) derives from snowballing movement (i.e., roll-up structures) where the proposition first moves to [specFocP], followed by movement of FocP to [specTopP], followed by movement of TopP into [specInterP]. Here again, the relevant fact for our discussion is that the Gungbe left peripheral markers may probe over the proposition, which then raises into their specifier position. This movement may then apply recursively, leading to snowballing movement.

In the context of a search of symmetry between C and D, a question that arises with regard to Gungbe is whether this language involves D-related markers that are comparable to those found within the clausal left periphery (i.e., topic, focus/interrogative) and whether these markers require the same type of movement observed within the Gungbe clausal domain. In discussing these facts, Aboh reports the following facts. Gungbe, like many Gbe languages, involves determinerless noun phrases that may occur in all argument positions. As shown by example (46a) all the nouns lack a determiner that would correspond to English *the*, even though the sentence relates to a specific context where all referents (i.e., *the door, the room, the dog*) are pre-determined and therefore definite. On the other hand, such bare nouns can be interpreted as indefinite or generic depending on the context. Accordingly, Gungbe, and most Gbe languages, do not need a determiner to encode definiteness. Gbe 'bare' noun phrases can embed different modifiers. The relative order of these modifiers with regard to the noun is the mirror image of English (46b). Finally, the sequence in (46c) indicates that the noun together with the modifiers can be followed by the specificity marker and a number marker.

In the context of the discussion of the DP-internal discourse markers, it further appears that the Gbe languages do not involve simplex *wh*-phrases of the English type. Instead, these languages form *wh*-phrases by a combination of a place, a person, or a time phrase that attaches to a question morpheme inside the DP (49a and b). These Q-morphemes can attach to various phrases to form more specific content questions as in (49c). Note from these examples that, when the *wh*-expression is plural, it includes the number marker that we assumed heads NumP inside DP.

- (49) a. nú-té-/ lé b. fí-té/ lé c. ví-té/ lé
 thing-Q/Num place-Q/Num child-Q/Num
 ‘what/what-PL’ ‘where/what-PL’ ‘which child/which children’
 b. [fí-dé- té-lé] wè Kòfí nò yì ?
 place-Ind-Q-Num Foc Kofi Hab go
 ‘Where does Kofi go so often [i.e., what places does he go to]?’

Building on the previous discussion on the syntax of clausal and nominal discourse markers in Gungbe, it is proposed that the Q-morpheme corresponds to a focus head within the DP that attracts the NP into its specifier, as schematized in (50).



Given the tight relation between question and focus, it is important to observe that Gungbe *wh*-questions require the presence of the focus marker *wè*. But, as example (49b) further suggests, the Gungbe *wh*-expressions must embed a Q-morpheme that appears necessary to check the focus/interrogative features under the focus head of the clausal left periphery. This explains why a sequence like (51a) is ungrammatical unless one adds the Q-morpheme as in (51b).

- (51) a. *fí wè Kòfí nò yì ?
 place Foc Kofi Hab go
 ‘Where does Kofi go so often?’
 b. [fí -té]*(wè) Kòfí nò yì ?
 place-Q Foc Kofi Hab go
 ‘Where does Kofi go so often?’

Therefore, the Q-morpheme that heads the nominal focus projection is similar to the nominal topic marker in that both are the active goals for the clausal topic and focus heads. These Gungbe facts point to an almost perfect symmetry between C and D: both systems involve the same classes of discourse markers, and these discourse markers appear to have similar syntax, which may lead to fronting of their complement. This confirms a point already made in the literature (e.g., Bennis et al., 1998) that the symmetry between C and D relates not only to their

structural make-up, but also to the various movement operations that their distinct functional heads trigger. What is new about the Gungbe facts though, is that the topic and focus heads within the DP actually represent active goals for the functional heads within the C domain. This would mean that A'-movement is not a relation between a probe within C and a goal that happens to be a maximal projection (as one may think) but instead between two heads: a probe within C (e.g., topic, focus, Q) and a matching head within D. That this type of probe-goal relation typically leads to generalized pied-piping of the whole DP embedding the goal obviously represents the next research question.

Given these findings, the overall aim of the present volume is to further our insight into the general question as to whether and how information structure is encoded in the nominal domain (i.e., DP) and to what extent the linguistic encoding of information structural properties in the nominal domain is similar to that of the clausal domain. In the next section, we will summarize the four contributions to this volume and see how they envisage the encoding of information structure within the DP.

4. Overview of the contributions to this volume

This volume includes four papers, which offer opposite, but interesting views on the relevance of information structuring in regard to the search for symmetry between the noun phrase and the clause.

Samek Lodovici's discussion of final and non-final focus within DPs builds on Bernstein's (2001) original observation about Germanic and Romance that nominal modifiers (heads and phrases alike) which normally precede the noun phrase, may occur DP-finally when focused or emphasized. This is shown by example (52) where the focused elements carry main stress. We mark focus with a subscript (F) and main stress with small caps.

- (52) a. senza beneficio ALCUNO_F (non senza qualche beneficio)
without benefit any not without some benefit
'without any benefit (not some benefit).'
- b. questo libro vecchio QUI (non quello lì)
this book old here (not that there)
'THIS old book (not that one).'

It therefore appears that focus alignment within the DP is similar to focus expression within the clause. But as argued by Samek Lodovici, the evidence offered by Bernstein (2001) and much related work is not conclusive. In the following sentences, where the sequence in bracket is being focused, the adjective *alcuno* and the demonstrative *qui* still remain DP-final.

- (53) a. senza [beneficio ALCUNO]_F (non senza **soddisfazione**)
without benefit any (not without satisfaction)
'Without any benefit (not without satisfaction).'
- b. [questo libro vecchio QUI]_F (non la Divina Commedia)
this book old here (not the Divine Comedy)
'this old book (not the Divine Comedy).'

These examples indicate that the modifiers under discussion here occur DP-finally regardless of whether they express focus or belong to a sequence that is being focused. Accordingly, it is not clear from such data whether the occurrence of these elements in DP-final position is primarily a consequence of focusing or some other grammatical property that would force them to occur to the right edge of the DP. As a consequence, Samek Lodovici suggests that two other independent factors that influence the relative ordering of modifiers and nouns must be taken into account to reach a finer characterization: (i) the obligatory raising of nouns past certain lower adjectives (e.g., nationality, color) and (ii) the fact that the noun may raise past even higher adjectives (e.g., expressing quality), but does so in pied-piping lower adjectives obligatorily. Applying this second condition shows that, while six logical orders are possible in the sequencing of the noun (N), a lower adjective (A_L), and a higher adjective (A_H), only the two (i.e., A_H > N > A_L versus N > A_L > A_H) in (54) are found in Italian, as illustrated in (54).

- (54) a. una splendida macchina FRANCESE
 a splendid car French
 'a splendid French car'
- b. una macchina Francese SPLENDIDA
 a car French splendid
 'a splendid French car'

Therefore, the so-called low adjectives can follow or precede the high adjectives. However, when it comes to focusing the low adjectives, only the order $A_H > N > A_L$, where the low adjective is last, is allowed. Based on this evidence, Samek Lodovici argues that DP-final alignment of focus in Italian is parallel to sentence-final alignment of focus within the clausal domain. In both situations, the focus occurs last as a consequence of left dislocation of the non-focused part into a higher functional projection within the left periphery (C in the clause and D in the noun phrase). It is worth noting that Samek Lodovici does not assume a specific focus projection within D or C. Instead, the effect on focus stems from the fact that the focused element must bear the most prominent stress, which in Germanic and Romance falls on the rightmost element. The conjunction of these two factors forces p(rosody)-driven movement that results in DP-final or CP-final focus.

In their contribution 'Predicate Focus Fronting in the Spanish Determiner Phrase', Xavier Villalba and Anna Bartra-Kaufmann provide further evidence in support of the hypothesis that the architecture of the nominal domain (DP) mirrors that of the sentence. More specifically, they claim that the topic-focus articulation as attested in the clausal system is also found in the nominal domain. They arrive at this conclusion from the analysis of the Spanish nominal *lo-de* construction, which is exemplified in (55):

- (55) Me sorprendió *lo caro de la casa*.
 to.me surprised LO expensive.MASC of the house.FEM
 'It surprised me how expensive the house was.'

Villalba and Bartra-Kaufmann claim that a nominal construction like *lo caro de la casa* involves an 'underlying' DP-internal subject-predicate relationship (i.e., $[[_{subj} \textit{la casa}] [_{pred} \textit{lo caro}]]$), with *casa* being the subject and the Deg(ree)P(hrase) *lo caro* as the predicate. The surface order results from raising of the DegP-predicate (i.e., focus fronting) to a DP-internal Focus Phrase. As a consequence of this DP-internal displacement operation, the DP is split into two information-structural areas: one representing new information (i.e., the focalized DegP), the other representing background information (i.e., the backgrounded topic-expression *la casa*, which must be specific). It is further argued in the article that the 'exclamatory flavor' of the *lo-de* construction results from the combination of two semantic factors: the presence of a null operator over degrees, and the inherent definiteness of the neuter article *lo*.

Liliane Haegeman in her article "The syntax of *wek* (which) and *zok* (such) in West Flemish" explores the left periphery of the DP from a microcomparative angle by looking at DP-internal interrogative and demonstrative pronouns. It is shown that interrogative *wek* (which) and demonstrative *zok* (such) are part of the same paradigm, just like, for instance, Italian *quale* (which) and *tale* (such) and English *which* and *such*. An example is provided in (56) below.

- (56) a. Wekken unden ee-j doa gezien?
 which –en dogs have-you there seen
 'Which dogs did you see there?' (West-Flemish)
- b. Zukken unden een ze ier ook.
 such –en dogs have they here also
 'Such dogs, they also have here.'

Haegeman argues that the DP-internal interrogative pronoun *wek* (which) and the DP-internal demonstrative pronoun *zok* (such) are not base generated in the left periphery of the DP, but that they are moved there in the course of the derivation. This can be seen as yet another parallel between DP and CP: wh-words in the CP-domain are usually also assumed to move to the left periphery of the clause from a lower position.

Haegeman argues that *wek* and *zuk* are base generated as the predicate in a DP-internal small-clause. The DP-internal pronouns undergo predicate inversion when they move to the left periphery of the clause. They either move via XP-movement, in which case the spurious indefinite article appears, or they move via head-movement, in which case the spurious indefinite article is obligatorily absent. Evidence in favor of this analysis comes from another interesting empirical domain, which connects the CP-domain with the DP-domain, namely DP-internal negative concord.

The papers discussed thus far admit the relevance of information structure within the DP, though they disagree as to whether this notion has repercussions on the structural make-up of the DP. In her “Flexible approach to discourse-related word order variations in the DP” Szendrői adopts a radically opposite view suggesting that the symmetry between the clausal domain and the nominal domain breaks down on the issue of information structure. Two main points are at the heart of Szendrői’s argumentation. The first assumes that discourse-related displacement rules (e.g., left dislocation) do not arise as an immediate consequence of a probe within the C (e.g., Foc) that attracts a relevant phrase (e.g., a focused constituent). Instead, word order rearrangement often observed in connection to topic and focus constructions arise as the need to “create a continuous comment and background constituent.” Thus, movement of the topic or the focus element to the left allows a “transparent mapping between syntax and discourse structure at the interface.” Given this view, we are led to the second central point that Szendrői makes: discourse-related rearrangement is essentially a propositional property that generates the topic-comment or focus-background articulation. Put together, these two points naturally lead to the conclusion that the notion of information structure is not and cannot be relevant at the DP-level. The DP is not a proposition and therefore it cannot allow the topic-comment or focus-background partition. On the basis of this conclusion, the next question then is how to account for cases of DP-internal displacement that are often argued to be related to DP-internal topicalization or focusing. In order to demonstrate this, Szendrői discusses adjective reordering in Germanic, and Greek polydefinite constructions.

With regard to adjective reordering, for instance, Szendrői considers sentences such as the ones in (57) where speakers agree that the reversed order in (57a) correlates with a focus interpretation on the fronted adjective.

- (57) a. My friends all drive big cars, but only I drive a BLACK big car.
 b. My friends all drive big black cars, and so do I.

In a way quite similar to Samek Lodovici, Szendrői shows that these data are not conclusive because the reordering is not a necessary condition for encoding focus. Thus, example (58), where the adjective is stressed in-situ has the same interpretation as (57a), where it appears fronted.

- (58) My friends all drive big cars, but only I drive a big BLACK car.

Given the interpretational similarity between (57a) and (58), the next question to answer is whether (57a) does involve movement of the intersective adjective past the subsective one, and if so, what motivates such apparently vacuous movement. Szendrői answers both questions by showing that (57a) does not involve movement. She builds on Neeleman and Van der Koot’s (2008) distinction between A- and A’-scrambling, where the latter only relates to focus and topic. Applied to the DP, it turns out that adjective reordering exhibits properties similar to those of A-scrambling, which in turn is accounted for in terms of distinct positions of first merge. Put differently, the observed reordering is not triggered by a focus operation that applies DP-internally, but by the possibility of the adjective to first merge in two distinct positions.

The author further proposes a reanalysis of Greek polydefinite constructions suggesting that the focus effect that may affect certain adjectives in these contexts is a consequence of the fact that “the construction involves NP-ellipsis rather than DP-internal focus fronting.”

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