

## SYNTACTIC DOUBLING AND THE STRUCTURE OF CHAINS

A recent survey of 267 dialects of Dutch (SAND) provides five cases of pronoun doubling. One is a case of identical doubling (1), the others involve distinct doubling: neuter WH-word + non-neuter WH-word (2); non-neuter WH-word + non-neuter relative pronoun (3); neuter WH-word + non-neuter relative pronoun (4) (the meaning of (1)-(4) is identical); weak subject pronoun + strong subject pronoun (5). For all distinct doubling cases, the reverse order of elements is ungrammatical (cf. 6-9). The doubling in (7) [*die ... wie*] and (8) [*die ... wat*] is also impossible in long relatives, even though many varieties of Dutch allow WH-words as relative pronouns.

Under the assumption that (1)-(4) involve a direct dependency (cf. McDaniel 1989), i.e. an A'-chain, and (5) involves an A-chain, the generalization is that a higher link in a distinct doubling chain cannot be more specified than a lower link. (We show that apparent counterexamples involve dislocation structures in which the more specified element can precede the less specified one because it was externally merged.) This generalization supports analyses such as Cheng (2000) according to which only the WH-feature moves. However, this does not yet account for (3) and (5), which would involve movement of more than one feature, begging the question which features can move together and which not. An alternative is the so-called big XP analysis, according to which the two elements in a doubling chain originate in the same XP (Belletti (2005), Poletto (2006)). A problem for such analyses is that the putative big XPs never occur overtly, e.g. we do not find [<sub>XP</sub> *wat wie*], [<sub>XP</sub> *wie die*] [<sub>XP</sub> *ze zij*]. This is unexpected if subextraction of WH from big XPs is basically parallel to *what-for* split (cf. Sabel 2000), since in many varieties of Dutch the *for*-NP can be optionally pied piped. In addition, the big XP analysis requires additional stipulations to block extraction of the more specified element. An account involving partial spell-out at PF and in particular scattered deletion (Nunes 2005) also wrongly predicts partial underspecification of the lower copy to be possible.

Our explanation has three ingredients: (i) pronouns have phrasal structure (cf. Déchaine & Wiltschko (2002), Harley & Ritter (2002), van Koppen (2005)); (ii) copying is optionally partial (iii) partial copying targets a proper subconstituent of a phrasal pronoun. If the less specified element of a chain is externally merged first, (partial) copying of this element will never lead to a more specified higher chain link, as addition of features during copying is impossible, violating the Inclusiveness Condition (Chomsky 1995). Variation and optionality in the spellout of chains thus reduces to optional pied piping (cf. van Riemsdijk (1978), Koopman & Szabolcsi (2000)). Since WH-words in Dutch can also be used as relative pronouns and *wat* 'what' can also be used as an exclamative operator, WH-words are not endowed with a WH-feature but with an [operator] feature. In addition, *wie* is specified for [non-neuter], whereas *wat* is underspecified for gender (as an elsewhere form). Thus, the features of *wat* are a subset of the features of *wie*. Structurally, *wie* is [<sub>PhiP</sub> Operator [Phi<sub>non-neuter</sub> [<sub>NP</sub>]]]. Full copying of PhiP results in [*wie ... wie*], cf. (1). Partial copying then involves copying of the operator in SpecPhiP. PhiP spells out as *wie*, the subextracted operator as *wat*, resulting in [*wat ... wie*], cf. (2). Following Bennis (2001), the relative pronouns *die* and *dat* are the definite counterparts of *wie* and *wat* and have a [definite] feature. Thus, the feature bundles of *wie* and *wat* are proper subsets of the feature bundle of *die*. Structurally, *die* is [<sub>DP</sub> [D<sub>definite</sub> [<sub>PhiP</sub> Operator [Phi<sub>non-neuter</sub> [<sub>NP</sub>]]]. Partial copying then either involves copying PhiP, which spells out as *wie* yielding [*wie ... die*], cf. (3), or copying the operator in SpecPhiP, which spells out as *wat* yielding [*wat ... wie*], cf. (4). Finally, the strong pronoun *zij* has the features [3,sing,focus], and the weak pronoun *ze* [3, sing]. *Ze* is the spell out of PhiP, which is a partial copy of [<sub>FocP</sub> F [<sub>PhiP</sub> [NP]]]. Excluded now are [<sub>XP</sub>*wie ... wat*], [<sub>XP</sub>*die ... wie*] and [<sub>XP</sub>*zij ... ze*], because spell out of the top node necessarily subsumes spell out of categories dominated by the top node.

- (1) **Wie** denk je **wie** ik gezien heb? (e.g. Drenthe)  
 who think you who I seen have  
 ‘Who do you think I have seen?’
- (2) **Wat** denk je **wie** ik gezien heb? (e.g. Overijssel)  
 what think you who I seen have
- (3) **Wie** denk je **die** ik gezien heb? (e.g. North-Holland)  
 who think you rel.pron I seen have
- (4) **Wat** denk je **die** ik gezien heb? (e.g. Overijssel)  
 what think you rel.pron I seen have
- (5) **Ze** heeft **zij** daar niks mee te maken. (e.g. Flemish)  
 she.weak has she.strong there nothing with to do  
 ‘She’s got nothing to do with it.’
- (6) \***Wie** denk je **wat** ik gezien heb?  
 who think you what I seen have
- (7) \***Die** denk je **wie** ik gezien heb?  
 rel.pron think you who I seen have
- (8) \* **Die** denk je **wat** ik gezien heb?  
 rel.pron think you what I seen have
- (9) \* **Zij** heeft **ze** daar niks mee te maken.  
 she.strong has she.weak there nothing with to do

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