## ON THE DISTRIBUTION OF PRE-DETERMINER UNIVERSAL QUANTIFIERS IN GERMANIC

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1. Introduction: I propose that the Dutch DP has a split low functional domain, whereas English has an unsplit one (cf. Iatridou 1990, Thrainsson 1996, Bobaljik & Thraínsson 1998, Giorgi & Pianesi 1997 on the IP-domain). I show that this distinction is reflected in a different distribution of universal quantifiers that appear in front of the determiner (henceforth 'predeterminer UQ'). 2. Problem: Zwarts (1992) observes that the Dutch pre-determiner UQ comes in two types: *al* 'all' and *heel* 'whole'. They appear to be in complementary distribution: the first one, *al* 'all', occurs with definite mass readings (1) and def. plural NPs (2). The second one, *heel* 'whole', selects def. singulars (3). English does not make this distinction: def. mass readings (4), def. pl. NPs (5) and def. sg. NPs (6) all take *all* as a pre-determiner UQ.

**3. Proposal:** At first sight, it seems that English just lacks a pre-determiner UQ specifically marked for the feature [sg]. I propose, however, that this variation between Dutch and English is a reflection of a more fundamental divergence, i.e. a difference in the number of functional heads in the NP's countability domain. More specifically, Dutch *heel* is licensed by a functional head responsible for unit readings. English lacks this head and therefore also this fine-grained distinction between *heel* and *al.* **4. Background:** In what follows, I present Dutch countability facts. Following Borer (2005), I assume that the default reading for all nouns is mass and that functional projections can be added to the NP to add semantic features to the noun.

**5. Data:** Dutch has a mass reading and two different types of count readings: kind readings and unit readings. (i) mass readings: Mass readings (7) do not allow for any low functional structure in Dutch: they do not allow for number marking (8) or diminutives (9). As pointed out above, they do not allow for the pre-determiner UQ *heel*, but they do take *all* (1). (ii) kind readings: A kind reading can be paraphrased a 'a kind of'. Semantically, it is odd to ask about the size of a kind (10). Further, as a count reading, it allows for singular and plural marking (11-12). It does not, however, allow for a diminutive (13-14), neither does it allow for *heel* (15). Plural kind readings allow for *all*, though (16). (iii) unit readings: A unit reading can be paraphrased as a 'piece/specimen/portion of'. Semantically, it is normal to ask about the size of a unit (17). It allows for singular and plural marking (18-19). It also allows for a diminutive (18-19) (cf. Wiltschko 2007) and sg. unit readings allow for *heel* (20). Pl. unit readings allow for *all* (21).

6. Analysis 6.1 Dutch heel: (i) For Dutch kind readings, I assume the presence of the functional projection DivP that is realized as number marking and that hosts the feature [Div] (Borer 2005). This feature serves to divide the mass stuff into countable items. (ii) For Dutch unit readings, I propose an additional piece of structure, that can be realized as the diminutive. This projection assigns size to the noun. The pre-determiner UQ heel then is marked for this feature [Size]. It therefore merges in Spec, SizeP where it checks its [Size] feature. From (1-3) it follows further that it is marked for the features [sg] and [def]. It therefore raises via Spec,DivP (in order to check [sg]) to Spec, DP (in order to check [Def]) (22). 6.2 Dutch al: Apparently, the UQ al can take any non-singular definite DP as its complement without any further structural requirements. For the mass readings it therefore merges directly into Spec, DP to check its [def] feature. For the count readings, it merges into Spec, DivP to check its [non-sg] feature and then it raises to Spec, DP. 6.3 English: Like Dutch, English distinguishes between mass and count readings by means of number marking. However, it has no functional syntactic means to set unit readings apart from kind readings. Indeed, all English count readings are completely homonymous between kinds and units (23). I therefore propose that there is no reason to assume a functional SizeP for English. It follows that a UQ specifically marked for [size] is redundant and even impossible in this system: it could never check its feature. As a result, English *all* can appear in all circumstances. It is void of any features but definiteness. It therefore merges in Spec,DP.

7. Extension: I will discuss other Germanic languages that behave like Dutch, like Norwegian. Norwegian makes use of a closed class of morphemes to distinguish between kinds and units, such as *-bit* 'piece' and *-slurk* 'sip' and equally has the *al-heel* distinction.

**8.** Conclusion: In this talk, I relate interlinguistic variation in pre-determiner universal quantifiers to variation in the low functional domain of the DP. I conclude that languages can have the specific *heel* quantifier if they also have a SizeP, as *heel* is marked for the feature [Size].

- (1) al/<\*heel> het water all/whole the water 'all the water'
- (3) <heel>/<\*al> mijn leven whole/all my life 'all my life'
- (5) <all>/<\*whole> those dogs
- (7) de chocolade (8) # de chocolade-s
  the chocolate the chocolate-PL
  'the chocolate' (illicit under a mass reading)
- (10) # How big is that kind of chocolate?
- (12) Ze bestudeerde die chocolade-s she studied those chocolate-PL 'She studied those kinds of chocolate'
- (14) # Zij bestudeerde dat auto-tje. She studied that car-DIM (illicit under a kind reading)

- (2) al/<\*heel> die honden all/whole those dogs 'all those dogs'
- (4) <all>/<\*whole> the water
- (6)  $\langle all \rangle / \langle whole \rangle$  my life
  - (9) # het chocola-tjethe chocolate- DIM(illicit under a mass reading)
- (11) Ze bestudeerde die chocolade. She studied that chocolate 'She studied that kind of chocolate
- (13) # Zij bestudeerde dat chocola-tje.She studied that chocolate-DIM (illicit under a kind reading)
- (15) In deze speciale sessie over de poedel verwelkomen we dr. Janssens this specal session on the poodle welcome in we dr. Janssens die (\*heel) die hond bestudeerd. heeft that whole that dog has studied Intended: 'In this special session on the poodle we welcome dr. Janssens who studied this kind of dog from a to z.'
- (16) Niet al de hond-en zijn geschikt voor de jacht. not all the dog-PL are suitable for the hunting 'Not all kinds of dogs are suitable for the hunting.'
- (17) How big is that piece of chocolate?
- (19) Zij speelde met de auto-tje-s. she played with the car- DIM-PL 'She played with the little (toy) cars.'
- (21) al de auto-tje-s al the car- DIM-PL 'all the little (toy) cars'

- (18) Zij at de chocola-tje-s op. she ate the chocolate-DIM-PL PRT 'She ate the pieces of chocolate.'
- (20) Het hele auto-tje is verroest. the whole car- DIM is rusted 'the whole little (toy) car is rusted.'
- (23) a. a beers 'a glass/a kind of beer'b. chocolates 'pieces/kinds of beer'c. dogs 'dogs/kinds of dogs'
- (22)  $\begin{bmatrix} DP & heel \\ DIVP & heel \end{bmatrix} DIV° & boek-je-Ø_{sg} \begin{bmatrix} SIZEP & heel \end{bmatrix} SIZE° & boek-je_{dim} \begin{bmatrix} NP \\ N° & boek \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \\ whole & the & book-DIM-SG \\ `the whole small book'em \end{bmatrix}$

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