# The meaning of structure: the wat voor construction revisited

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#### 0. Introduction

The internal structure of the Dutch wat voor-construction has been the subject of much debate in the past fifteen years (cf. Reuland 1983, Bennis 1983, Den Besten 1985 and Corver 1990). In all these analyses wat voor (een) was taken to be some kind of idiomatic specifier, comparable to the normal wh-specifier welke ('which'). In this paper I argue that the structure of the wat voor-construction is not idiomatic at all. In order to show this, I have to discuss the apparently irregular use of the three constituent elements: wat, voor, and een. Wat ('what') does not behave as a question pronoun, voor ('for') is not a preposition, and een ('a') is not an indefinite determiner. One of the important assets of this discussion is that it provides us with a straightforward explanation of the fact that wat can be extracted from NP.

#### 1. WAT as a constituent

In Postma (1994, 1995) it is argued that the interpretation of *wat* is configurationally determined. *Wat* is interpreted as a question pronoun if it is moved to [SPEC,CP], and as an indefinite pronoun if it remains within VP. Examples are given in (1).

(1) a Wat heb jij gezegd?
What did you say?
\*Something did you say
b Ik heb wat gezegd
I have something said
\*I have what said?

Postma shows quite convincingly that the difference in interpretation is not due to a lexical difference involving two different lexical items wat. There is only one lexical element wat, the interpretation of which depends on the syntactic position in the configuration. If it is moved to the wh-operator position in [SPEC,CP] wat

<sup>&</sup>lt;sup>1</sup> I would like to thank Frits Beukema and Marcel den Dikken for useful comments.

is interpreted as an interrogative word; if wat is in the scope of the existential operator, which is located at the left edge of VP (cf. Diesing 1988), it receives a strictly indefinite, non-specific interpretation.<sup>2</sup> There is a third quantificational interpretation of wat. Wat can also be used as an exclamative marker, as in (2).

- Wat is hij mij tegengevallen! What is he me disappointed
  - b Wat ging hij tekeer! What went he crazy

In the sentences in (2) wat can only be interpreted as an element that marks the exclamative function of the sentence. Although interrogative wat occupies the same position as exclamative wat, no ambiguity arises. Interrogative wat has to bind a variable in an argument position, whereas exclamative wat can only be related to non-argument positions. This is shown in (3). In (4) it is demonstrated that indefinite wat may appear either as an argument or as an adjunct.

- \*Wat is hij jou tegengevallen? (3) a
  - What is he you disappointed? b \*Wat heeft hij gezegd! What has he said!
- (4) a Hij heeft wat gekocht He has something bought
  - b Hij is mij wat tegengevallen He is me somewhat disappointed 'He has disappointed me slightly'

Extending Postma's hypothesis, we may formulate the following generalization:

- (5) The interpretation of wat is not determined by lexical properties, but is derived structurally:
  - If the Q-domain is CP: WH or EXCL If wat binds an A-position: WH If wat binds an A'-position: EXCL
    • If the Q-domain is VP (A or A'): INDEF

The next question is what properties of wat cause this lexical element to behave like this. The only property that the three interpretations of wat have in common

<sup>&</sup>lt;sup>2</sup> Other indefinite NPs, such as iets ('something') or een man ('a man') may have an indefinite or a specific interpretation. Only the latter interpretation is allowed after scrambling (Bennis 1986). Wat has no specific interpretation since it has to be in the scope of the existential operator in order to be interpreted. It is thus correctly predicted that indefinite wat cannot scramble:

<sup>(</sup>i) a Hii heeft gisteren wat/twee boeken gekocht

Hij heeft \*wat/twee boeken gisteren gekocht He has yesterday something/two books bought

is that wat is a quantificational element. I will take this to be the only lexical property of wat, as is formulated in the hypothesis in (6).

(6) Hypothesis: Wat is a quantifier without meaning

If (6) is correct, it follows that *wat* has no inherent  $\phi$ -features. Traditionally *wat* is taken to be a third person, neuter pronoun. If we compare *wat* with its non-neuter counterpart *wie* ('who'), we observe that *wie*, apart from having no exclamative or indefinite interpretation, differs from *wat* in that *wie* may show singular or plural agreement, depending on the context, whereas *wat* only has singular agreement, as is shown in (7).

(7) a Wat staat / \*staan daar op de tafel?
What stands / stand there on the table
b Wie staat / staan daar op de tafel?
Who stands / stand there on the table

If wie is interpreted as plural, it triggers plural agreement. Although wat may also be interpreted as plural, it must nevertheless have singular agreement. The fact that singular agreement shows up in (7a) is not an accident. Singular is the unmarked value, as is evident from finite subjectless sentences, as in (8).

(8) a In het stadion wordt / \*worden gevoetbald
 In the stadium is / are played football
 b Telkens blijkt / \*blijken dat hij gelijk heeft
 Everytime appears / appear that he right has

If we take the unmarked value of a feature to be the absence of a feature we are able to explain the facts in (7). Given (6), wat has no feature for number; it thus cannot trigger plural agreement. Since a Spec-Head relation requires feature-identity of the Specifier and the Head, the absence of features on the specifier (the subject) leads to the absence of features on the head (the finite verb), thus causing the verb to show up as 'singular'. In a similar fashion I will take 'third person' to be the absence of a person feature. That non-pronominal NPs do not show agreement for first and second person (although they may refer to first or second person, eg. in epithets) might be taken as a consequence of the absence of person features on non-pronominal NPs.

The  $\phi$ -feature gender can also be shown to have neuter as the unmarked value, or rather, neuter is the absence of the gender feature. This is clear from adjectival agreement. In indefinite NPs only the combination of singular and neuter leads to the absence of the adjectival agreement suffix -e. This is demonstrated in (9).

(9)	a	een goed boek	[+sing, +neuter]	; [—]	'a good book'
` ′	b	goede boeken	[-sing, +neuter]	; [plural]	'good books'
	c	een goede krant	[+sing, -neuter]	; [masc]	'a good paper'
	d	goed <u>e</u> kranten	[-sing, -neuter]	; [plural,masc]	'good papers'

In this analysis the absence of morphological agreement in (9a) indicates the absence of agreement, and thus the absence of features, as is indicated after the semicolon in (9).3 This view is corroborated by the fact that wat appears as a relative pronoun only if the antecedent has no features (i.e. neuter, singular):

- (10) a alles/elk boek [—] wat ik heb gelezen everything/each book what I have read
  - b \*elke krant [masc] wat ik heb gelezen each newspaper what I have read
  - c \*alle boeken [plural] wat ik heb gelezen
  - d \*alle kranten [masc, plural] wat ik heb gelezen

I cannot but conclude that wat is a quantifier without meaning. Its interpretation is completely determined by the configuration.

## 2. WAT as part of an NP

Interestingly, wat within NP may also trigger three different interpretations: indefinite, exclamative and interrogative. This is shown in (11).

[Wat voor een boeken] leest hij? What for a books read hij (11) a Interpretation: WH Interpretation: EXCL

[Wat een boeken] leest hij! What a books reads he

c Hij leest [wat boeken] Interpretation: INDEF He reads what books

As is shown in (12)-(14), the internal structure of the whole noun phrase determines the interpretation of wat. The position of the NP or the A vs A'relatedness is does not appear to change the interpretation.

One obvious question is why the unmarked realization of attributive adjectives is the uninflected adjectival form, whereas the unmarked form of the verb is the third person singular, clearly a marked form from a morphological point of view. Note however that it is not the most unmarked verbal form that we are looking for, but rather, the most unmarked finite form. Whereas in languages such as Dutch and English the third person singular verbal form is unequivocally recognizable as a finite verb, the interpretation of other finite forms is dependent on the structure in which the form is found (e.g. the plural verbal form (-en) is also found in infinitives and nominalizations; the difference is determined configurationally). I thus consider a form unmarked if it represents the minimal form that can be interpreted without context.

(12) a	*[Wat voor een boeken] leest hij!	Interpretation: EXCL
b	*Hij leest [wat voor een boeken]	Interpretation: INDEF
(13) a	*[Wat een boeken] leest hij?	Interpretation: WH
b	*Hij leest [wat een boeken]	Interpretation: INDEF
	*[Wat boeken] leest hij?	Interpretation: WH
b	*[Wat boeken] leest hij!	Interpretation: EXCL

Externally the NP behaves just like a regular interrogative, exclamative or indefinite NP. The difference between *wat*-constituents and [*wat* ...]-constituents is illustrated below.

- (15) a \*Wat koopt hij!
  - b [Wat een boeken] koopt hij! What (a books) buys he
- (16) a \*Wat werkt hij?
  - b [Wat voor uren] werkt hij? What (for hours) works he
- (17) a \*Wat ligt er op de grond (indefinite interpretation)
  - b [Wat zand] ligt er op de grond (indefinite interpretation) What (sand) lies there on the ground
- (18) a \*Ik heb wat gisteren aan Jan verkocht
  - b Ik heb [wat boeken] gisteren aan Jan verkocht I have what (books) yesterday to John sold
- (15) shows that exclamative [wat ...] may bind a variable in an A-position, but exclamative wat may not. (16) shows that interrogative what cannot be an adjunct, but interrogative [wat ...] can. From (17)-(18) it follows that the condition that indefinite wat must remain within VP and cannot be moved by Wh-movement or Scrambling does not hold for indefinite [wat ...].

I conclude that the interpretation of wat in NP is determined NP-internally. The [wat ...]-NP behaves like an ordinary quantified NP. The following three types of [wat ...] can be found:

- (19) [wat ...]-NP-types:
  a) wat boeken = Indef
  b) wat een boeken = Excl
  c) wat voor (een) boeken = WH
- <sup>4</sup> A third construction in which wat is found is the [wat ...]-AP construction. There is no interrogative [wat ...]-AP construction, but both exclamative and indefinite [wat ...]-AP are found. These [wat ...]-APs are like [wat ...]-NPs with respect to the fact that the interpretation of the [wat ...]-AP is not configurationally determined. They differ from [wat ...]-NPs in that there is no AP-internal lexical difference between exclamative and indefinite [wat ...]-APs. A detailed discussion of sentences such as in (i) lies outside the scope of this paper.
  - (i) a Die opgave is wat moeilijk (excl/indef/\*wh)

    That task is very/somewhat difficult

    b Wat moeilijk is die opgave (excl/indef/\*wh)

    Very/Somewhat difficult is that task

## 3. VOOR as a wh-complementizer in NP

Although it might be claimed that the interpretation of the NPs in (19) is determined by the interpretation of the specifiers wat, wat een and wat voor (een), it would seriously undermine our hypothesis that wat is just a bare quantifier. Moreover, it would not provide us with any perspective on an explanation of the similarities between the NPs in (19). One of these similarities is the fact that there is no agreement between the specifier and the noun. Although wat is generally taken to be singular and neuter (see above), the floun in the constructions in (19) can be singular or plural, neuter or non-neuter, as is shown in (20).

- (20) a wat vrijheid/jongens/zand what freedom/boys/zand
  - b wat een jongen/jongens/boek! what a boy/boys/book
  - c wat voor jongen [masc,sing] / jongens [masc,plu] / boek [neuter, sing]? what for boy/boys/book

Finally, it would be a virtual coincidence that *wat* is used in these three constructions, and that the same three different interpretations can be observed if *wat* appears as a single constituent. The remarkable similarities between the NPs in (20) and between *wat* and [*wat* ...] constitute sufficient ground to leave the rather stipulative standard analysis, and to look for an alternative. One major ingredient of this analysis should be the fact that *wat* appears as a quantifier without meaning, as formulated in the hypothesis in (6). If that hypothesis is correct, the wh-interpretation of (19c) cannot be due to the presence of *wat*. Given the paradigm in (19) the only available candidate for determining the wh-interpretation of (19c) is the prepositional element *voor*. Although I have not been able to find direct, independent evidence for the claim that *voor* determines the interrogative interpretation of the [*wat voor* ...]-NP, there are several indirect arguments that provide circumstantial evidence.

First of all, it is quite clear that *voor* does not have the properties that we would expect it to have if *voor* is used as a preposition. With respect to Case, categorial status, and interpretation there is hardly any resemblance with the preposition *voor* ('before'/'for'). As is shown in Corver (1991), *für* does not assign Case to the following noun in the German counterpart of the *wat voor*-construction. This is shown in (21).

(21) a Mit [+dat] was für [+acc] einem Mann [+dat] haben Sie gesprochen?
b \*Mit [+dat] was für [+acc] einen Mann [+acc] haben Sie gesprochen?
With what for a man have you spoken
'With what kind of man did you speak?'

The Case of the phrase following *voor/für* is determined by the position of the whole [wat voor ...] phrase. In (21) it is the preposition mit that determines the case of the phrase einem Mann.

Similarly, the embedded noun determines agreement in subject-verb agreement context, as is evident from (22).

- (22) a Wat voor (een) jongen loopt / \*lopen daar?
  What for (a) boy walks / walk there
  b Wat voor (een) jongens \*loopt / lopen daar?
- If voor was a preposition, we would expect the phrase following P to be the object of P. In that case the construction in (22) would be similar to the construc-
  - (23) Welke van de jongens loopt / lopen daar? Which of the boys walks / walk there

tion in (23).

In (23) van de jongens is a partitive PP. Agreement is determined by welke, which can be either singular or plural, depending on the interpretation. We have seen above that wat triggers no agreement, thereby forcing the finite verb to appear as singular. The only way to account for the agreement facts in (22) is to assume that the noun following voor is the head of the whole wat voor-NP. This implies that voor (een) jongen(s) in (22) is not a PP.

Another argument to show that interrogative *wat* is not the head of this construction comes from the contrast between interrogative *wat* and [*wat voor* ...] with respect to the possibility to appear as a relative pronoun:

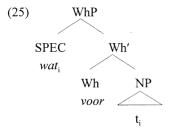
- (24) a alles wat<sub>i</sub> ik t<sub>i</sub> heb gelezen everything what I have read
  - b \*alles wat, ik [t, voor boeken] heb gelezen everything what I for a books have read
  - c \*alles [wat voor boeken], ik t, heb gelezen everything what for books I have read

Apparently the interpretation of the *wat voor*-construction is restricted to interrogative contexts. This cannot be due to *wat*, as is shown in (24a). Something else has to mark this construction as an interrogative phrase.<sup>5</sup>

The discussion so far leads us to the conclusion that neither wat nor voor are the head of the wat voor phrase. Moreover, we have established that wat behaves

Note that a construction which is apparently quite similar to the wat voor-construction, the wat aan-construction (cf. Corver 1990) appears to allow relativization, as in alles wat ik aan boeken heb ... 'everything what I to books have' (all the books that I have). This appears to favour Corver's conclusion that wat aan boeken is not a constituent; wat is the single wat discussed in the preceding paragraph.

like a bare quantifier, and that *voor* does not behave like a preposition. If we add these things up, we are led to the following structure:



In (25) *voor* determines the interrogative status of the whole phrase, and *wat* behaves like a quantifier that is moved to the operator position in [SPEC,WhP]. In this structure *voor* is a functional head in the nominal domain. *Voor* is structurally similar to lexical complementizers in several respects. Interestingly, *voor* may also appear as a complementizer introducing finite or infinitival clauses. This is shown in (26).

(26) a Dit is een boek om/%voor/\*e op tafel te leggen
This is a book for on table to put
b Jan ging weg voor (voordat)/\*na (nadat)/\*om (omdat) ik binnenkwam
John left before/after/because I entered

Although it gives rise to a somewhat marked and substandard result, the standard complementizer *om* can be replaced by *voor* in infinitival relatives (26a) (cf. Cornips 1994). Of the complementizers consisting of a preposition followed by the finite complementizer *dat* ('that') — *voordat*, *doordat*, *nadat*, *omdat*, *opdat* — only *voor* allows deletion of *dat*. Given the fact that the complementizer position cannot be empty in finite clauses, (26b) indicates that *voor* may appear as a complementizer as well (cf. Bennis & Hoekstra 1984).

One of the major advantages of the structure in (25) is that it allows us to explain *wat*-extraction from NP in precisely the same way as Wh-extraction from CP. The well-known ECP-type effects of *wat*-extraction from subjects or adjuncts (cf. Den Besten 1985) are parallel to ECP-effects in extraction from subject- or adjunct CPs. Some examples are given below.

- (27) a Wat heeft Jan [t voor boeken] gelezen? What has John for books read
  - b Wat voor boeken heeft Jan gelezen?
- (28) a ???Wat hebben [t voor jongens] dit boek gelezen? What have for boys this book read
  - b Wat voor jongen hebben dit book gelezen?

- (29) a ??Wat heeft Jan [t voor tijd] aan dat boek gewerkt? What has John for years on that book worked
  - b Wat voor tijd heeft Jan aan dat boek gewerkt?

From the discussion in this paragraph we may conclude that *voor* appears as a functional head with an interrogative interpretation in the [wat voor ...] construction. Wat is a bare quantifier occupying an operator/A'-position entirely similar to the position of Wh in [SPEC,CP]. Wh-extraction from NP is thus structurally similar to Wh-extraction from CP.

#### 4. Exclamative EEN

The third 'idiomatic' element in the [wat voor (een) ... ] construction is een ('a'). This lexical element normally appears as the indefinite, singular determiner of noun phrases. However, in this construction it must have a different function. It shows up in front of plural and non-count nouns, in which cases the determiner een is not allowed.

- (30) a wat voor een jongen/boek what for a boy/book
  - b wat voor een jongens/boeken what for a boys/books
  - c wat voor een zand/vrijheid what for a sand/freedom
- a' een jongen/boek
- a boy/book b' \*een jongens/boeken
- a boys/books
  c' \*een zand/vrijheid
  a sand/freedom

The questions that needs to be asked with respect to *een* in the *wat voor (een)* construction are: why is *een* allowed in this construction, and why does it appear? In order to answer the first question we have to look at the exclamative [wat een ...] construction, discussed in paragraph 2. Just as in (30), *een* in the exclamative construction doesn't have  $\phi$ -features; if we leave out *voor* the NPs in (30) turn into acceptable exclamative NPs. In the exclamative [wat een ...] construction the presence of *een* is obligatory, just as the presence of *voor* is obligatory in the [wat voor (een) ...] construction.

- (31) a [Wat \*(een) boeken] heeft Jan! What a books has John b Wat, heeft Jan [t, \*(een) boeken]!
  - b Wat, heeft Jan [t, \*(een) boeken]! What has John a books

It is quite reasonable to assume that the exclamative interpretation derives from the presence of *een*. Aside from the fact that the hypothesis in (6) forces us to adopt the view that exclamation does not depend on *wat* and that the facts in (15) show that the exclamative interpretation is not syntagmatically determined, the facts in (32) show that exclamative *een* appears without *wat*. This indicates that *een* is a functional head with an exclamative interpretation.

- Deze jongen koopt me toch een boeken! This boy buys me still a books
  - b Een boeken dat deze jongen koopt! A books that this boy buys

The fact that *een* appears to have no  $\phi$ -features is in line with the idea that *een* is an exclamative head in this construction, and not an element that is used for referential purposes. The fact that wat, and only wat, may appear in the specifier of exclamative een can now be seen to be the result of the fact that both elements have no φ-features.

This analysis of een answers the question why een may appear in the [wat voor (een) ...] construction. Given the fact that both wat and een are featureless, wat may occupy the Spec-position of eenP, on its way to Spec-voorP. However, we would like to know what een is doing in this interrogative construction. Although the facts are rather subtle, there is a slight difference between the [wat voor ...] construction with or without een. This is shown in the question in (33), with a set of potential answers in (34).

- (33) a Wat voor een jongens heb jij gesproken?
  - Wat voor jongens heb jij gesproken?
  - Welke jongens heb jij gesproken?
    What for a boys/What for boys/Which boys have you spoken
- (34) a Teun, Johan en Harry : (33a) \*, (33b) ?, (33c) ok b Aardige jongens (nice boys) : (33a) ok, (33b) ok, (33c) \*

According to most informants the difference between (33a) and (33b) is that the answer in (34a) is impossible for (33a), and questionable for (33b). Apparently the presence of een provides the [wat voor ...] phrase with a non-specific interpretation. We thus assume that the functional Q-head een may receive different interpretations within the set of the quantificational interpretations that we have distinguished for wat.

# 5. Indefinite ∅

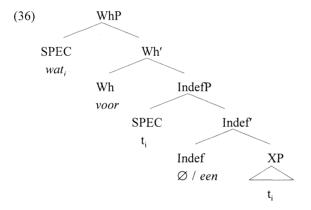
A final question with respect to the structure of the [wat voor ...] construction is whether the construction has an empty functional projection when een is absent. This question is closely related to the question about the internal structure of the indefinite [wat ...] construction. As argued in section 2, the indefinite [wat ...] construction is internally marked as indefinite. Just as with the constructions discussed in the sections 3. and 4. the indefinite [wat ...] construction shows no syntactic agreement between wat and the noun, although this construction is restricted to nouns that are semantically plural. This is illustrated in (35).

- (35) a Ik heb wat book \*(-en) op tafel gelegd I have what book(s) on table put
  - b Ik heb wat bier op de tafel gemorst I have what beer on the table spilled

Apparently wat shows up in this construction only if the construction without wat is also acceptable, i.e. with plural or non-count nouns. Given that hypothesis (6) implies that wat cannot be the indefinite marker of the NPs in (35), we have to assume that a null-head is present in order to determine the indefiniteness of the [wat ...] NP. The fact that the null-determiner is required anyway in plural or non-count indefinite NPs corroborates this analysis for the [wat ...] construction. Just like voor and een we have to assume that the  $\emptyset$ -head has no  $\varphi$ -features, in order to allow featureless wat to appear in its specifier position.

#### 6. Conclusion

This leads us to the following structure of the [wat voor (een) ...] construction:



As will be clear many questions remain to be answered. To raise just a few: what is the D-structure position of *wat*, what is the status of the clause containing the NP and *wat*, why is *een* optional in (36), but obligatorily present/absent in indefinite NPs? Furthermore, I have had no opportunity to discuss another related construction: the construction with a genitive -s morpheme on adjectives: *wat aardigs* (something nice), which shows an interesting interaction with the con-

<sup>6</sup> In order to account for the difference between wat voor and wat voor een (see (33), (34)) we have to assume that Ø and een differ with respect to a non-φ-feature, e.g. [-specific] (cf. the difference between L-related and non-L-related features of Chomsky 1993).

structions discussed here (wat voor (\*een) iets aardigs 'what for (a) something nice-s'). Finally I have to refrain from a discussion of the theoretical implications of the proposed analysis. It is clear that this analysis has several aspects in common with existing analyses for related phenomena, such as Wh-in-situ (Pesetsky 1989), Clitic Left Dislocation (Cinque 1990), and French constructions with the element de (Hulk & Verheugd 1994, Kayne 1994). These subjects will be dealt with in future research.

What should be clear, however, is that the structure of a sentence is not only a way to organise lexical elements in such a way that it gives rise to a grammatical sentence. The structure itself makes a substantial contribution to the interpretation of lexical elements. The hypothesis that *wat* is without meaning has led us to reconsider the structure of the constructions in which *wat* appears, including constructions with apparent idiomatic specifiers.

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