# Relative agreement in Dutch

Jacqueline van Kampen Uil OTS Utrecht University

#### The selection problem

The form of a Dutch relative pronoun is sometimes selected from the set of *d*-pronouns {*die*, *dat*} ('that') and sometimes from the set of *w*-pronouns {*wie*, *wat*, *waar*} ('who, what, where'). The selection of either *d*-forms or *w*-forms is full of options, especially if one considers the additional possibilities of informal spoken Dutch. Take for instance an example like (1).

(1) het meisje {a. *dat* b. *wat* c. *die*} ik heb gezien (the girl that I have seen)

The relative in (1a) *dat* is written standard, whereas (1b) *wat* and (1c) *die* are more informal options (ANS 1997: par. 5.8.3.2, 5.8.5.5). Bennis (2001) who pays some attention to the variation in selection, ventures the prediction that the more informal relative *w*-pronouns will in the long run block the relative *d*-pronouns. The present paper develops an acquisitional analysis and arrives at a different point of view.

The observational set to be covered by the analysis proposed below, will be the set of the relative forms mentioned in the ANS (1997); the relative systems of other lects are beyond the scope of this paper.

An important claim will be that language acquisition proceeds in a series of steps such that the earlier steps are a condition for the later ones. The acquisition of relatives in child Dutch follows the earlier acquisition of topic *d*-pronouns and question *w*-pronouns in root sentences. That system in turn is not well-established before the acquisition of the V2nd rule. Once the *d*- and *w*-pronouns are available, the main rule for relative pronouns seems to be as in (2).

(2) *Main rule for relative pronoun selection*If it is possible to express gender agreement between the antecedent and the relative, select the *d*-pronoun. Select the *w*-pronoun if such gender agreement cannot be expressed.

This implies that the d-pronouns are unlikely to get marginalized as long as their gender agreement is easily perceived. The same rule further implies that the selection of wat in (1b) and die in (1c) is anomalous and needs an explanation.

The next three sections will present a new analysis of the selection problem. The last two sections will deal with an explanatory acquisition story.

## 2. A-bar pronouns

Following Postal (1966), I will label all pronouns as referential indicators <+D>. They allow in addition a discourse anaphoric binding <+pro>. The set <+D, +pro> can be further divided in A-pronouns and A-bar pronouns (Van Kampen 1997: Chapter 4). The A-bar pronouns (question w-pronouns, topic d-pronouns, and relative pronouns) are obligatorily positioned in Spec,C and related to an argument position. Let the A-bar pronouns be marked by the feature <+C>.\frac{1}{2}

The best example of inherently A-bar pronouns <+D, +pro, +C> are the w-pronouns in root questions. The V2nd languages have in addition a Spec,C topic A-bar pronoun, the d-pronoun. The d-pronoun in root Spec,C has a discourse function, namely topic-shift (Van Kampen 1997, Comrie 2000). It indicates that the focus of the preceding sentence is the topic of the new sentence, see (3).

- (3) De advocaat heeft met uw broer gesproken (the lawyer has spoken with your brother)
  - a. die/\*h(e)m (uw broer) achtte hij (de advocaat) betrouwbaar (that/\*him (your brother) judged he reliable)
  - b. *hij*/\*die (de advocaat) achtte *hem*/#die (uw broer) betrouwbaar (he/\*that (the lawyer) judged him/#that (your brother) reliable)

Relative pronouns are A-bar pronouns. They have the characteristics in (4).

- (4) a. Their position is the sentence-initial Spec, C.
  - b. Their form is partly taken from the root w(h)-pronouns, and partly from the root d-pronouns in languages that have them.

My conjecture in (4b) that the *d*-option for relative pronouns is present in V2nd languages only, happens to be confirmed by a typological survey in De Vries (2002: appendix II, Table 8), but De Vries makes no reference to the V2nd relation.

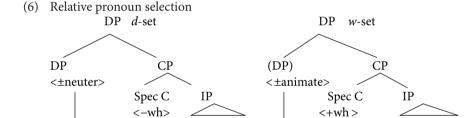
## 3. A-bar pronouns and relative agreement in Dutch

Dutch distinguishes six main A-bar pronouns in root sentences, three from the *w*-set and three from the *d*-set, see (5).

#### (5) Root A-bar pronouns in Dutch

The *d*-system is sensitive to the grammatical  $<\pm$ neuter> gender of the antecedent, and the *w*-system is sensitive to semantic  $<\pm$ animate>. Topic *d*-pronouns  $\{die, dat\}$  refer to a discourse antecedent. They have an identified referentiality and may express the grammatical gender of the antecedent DP. Question *w*-pronouns, as opposed to topic *d*-pronouns and relative pronouns, carry a reference that has not yet been identified. They nevertheless presuppose a  $<\pm$ animate $>\{wie, wat\}$  for their referent. The oblique form of the *d*-system *daar* is not sensitive to the gender distinction. This determines the selection of *waar* as the oblique relative pronoun in (5) according to the rule in (2). Relative oblique pronouns that are <+animate>allow the variant [P + wie] next to  $[waar] \dots [P t]$ . See (13) below.

The rule for relative pronoun selection in (2), diagrammed in (6), expresses a blocking relation. The selection of *d*-forms blocks the selection of *w*-forms.



As usual, blocking prefers the more language-specific form, grammatical gender in this case, over the more universal distinction, semantic animacy in this case.

 $t_{<\pm wh>}$ 

< α animate>

 $t_{<\pm wh>}$ 

Examples of relative pronouns for the d-set in standard Dutch are in (7).

(7) a. het huis<+neuter> dat<+neuter> ik leuk vind (the house that I like)

<a neuter>

b. de man<-neuter> die<-neuter> ik leuk vind (the man that I like)

A w-relative is selected if there is no separate antecedent as in (8) and (9). In both cases antecedent and relative are 'fused'. The relative construction in (9) is a pseudo-cleft.

- (8) a. wat<-animate> overblijft, is niet noemenswaardig ((that) what remains, is not appreciable)
  - b. wie<+animate> zoet is, krijgt lekkers ((he) who is sweet, gets sweets)
- (9) a. wat<-animate> ik leuk vind, is die bank (what I like. is that couch)
  - b. wie<+animate> ik leuk vind, is het hoofd van de school (who I like, is the head of the school)

Gender is a DP feature due to the N-complement. For that reason, if the D-head lacks an N-complement, the DP will lack gender, which is why we find *alles wat* ('everything what') and *dat wat* ('that what'), *iets wat* ('something what'), *veel wat* ('much what') (ANS 1997: par. 5.8.5.4-5). However, a further provision is needed, since the same rule incorrectly predicts *w*-relatives for the genderless proper names, personal pronouns and non-attributive quantifiers in (10a), which use the *d*-pronouns, see (10b).

```
(10) a. *Jan wie, *hij wie, *iedereen wie, *iemand wie
b. Jan die, hij die, iedereen die, iemand die
(John who, he who, everybody who, somebody who)
```

The examples in (10b) show that the selection of a d-relative is not based on gender agreement only. The diagrams in (6) above somewhat simplified the state of affairs. The d-system is also sensitive to semantic animacy.

Let me therefore reanalyze the antecedent properties of the root topic *d*-pronouns {*die*, *dat*}. I propose that <+neuter> equals 'unspecified for gender' as in Rooryck (2003). If we take <+animate> and <+gender> to be univalent features, the topic pronoun *die* can be argued to be selected by antecedents that are grammatically specified for gender and/or animacy, whereas *dat* holds for antecedents that are grammatically unspecified for gender.<sup>2</sup> Examples of the latter are (11c) *iets* ('something'), *heel veel* ('much'), and the neuter noun *het overschot*.

```
(11) a. daar heeft {Jan, iemand, een meisje } staan kijken there has {Jan, somebody, a girl} been watching en die moeten we ondervragen (antecedent <+animate>: (and that must we interrogate) die/*dat)
b. daar heeft de schat gelegen. (there has the treasure been lying) en die moeten we terugkrijgen (antecedent <+gender>: (and that have we to get back) die/*dat)
```

c. daar heeft {iets, heel veel, het overschot} gelegen
(there has {something, much, the remaining} been lying )
en dat moeten we terugkrijgen (non-animate/non-gender:
(and that have we to get back) \*die/dat)

The new analysis of the topic *d*-pronouns explains why the *d*-system is sufficiently sensitive for all antecedents <+animate> and/or <+gender> and need not fall back on the *w*-system. There is no longer a problem with the facts in (10). It seems however that the earlier success of predicting {*iets wat, veel wat, alles wat*} has been lost. More seriously, the domain for rule (2) seems to disappear. If there is an antecedent, the *d*-system will be able to handle it. The sunny side of things is that all antecedents that allow a *wat* relative pronoun (including *alles, iets, veel*) allow in principle a *dat* relative as well (ANS 1997: par. 5.8.5.5). Although the new analysis of the *d*-pronouns cannot account for all relative data, at least it does not make any wrong predictions. I will return to rule (2) and the *wat* relatives in the acquisitional part of the paper.

The selection of oblique relative pronouns constitutes another interesting complication, cf. (5). The oblique case in Dutch is expressed by a preposition. When that preposition is followed by a pronoun (a personal, w-, or d-pronoun), the pronoun must have an inherent marking for <+animate>, formulated in (12).

(12) Pronouns that lack an inherent <+animate>, lack the potential to realize an oblique [P pronoun]<sub>PP</sub>

For the (somewhat mysterious) reason (12), all *d*-pronouns, the non-animate personal pronoun *het* ('it'), and the non-animate *w*-pronoun *wat* are ungrammatical as complements of a preposition P, see (13a). The personal pronouns *hem/haar/'m/d'r* (full and reduced 'him, her') and the *w*-pronoun *wie* in (13c) are grammatical in this configuration, since they are inherently <+animate>. Note that the pronoun *die* is not inherently <+animate>, cf. (11b). The oblique case of pronouns not marked for <+animate> is expressed by a pronominal adverb *daar/er* that binds a trace governed by the preposition, see (13b).

#### (13) Oblique case for pronouns

a.	op *het	op *dat *die	op *wat	
b.	er <sub>i</sub> op t <sub>i</sub>	daar <sub>i</sub> op t <sub>i</sub>	waar <sub>i</sub> op t <sub>i</sub>	
c.	op h'm/d'r	op hem/haar	op wie	<+animate>

Because the *d*-pronouns {*die*, *dat*} lack the inherent <+animate>, oblique topic pronouns must be expressed by the pronominal adverb or by the (stressed) personal pronoun, following (12). These forms (pronominal adverb or personal pronoun)

cannot express grammatical gender in Dutch, and hence the oblique relatives switch to the w-system, following rule (2). See the examples (14) for oblique topic pronouns and the examples (15) for oblique relative pronouns.

```
is zij verliefd [op t<sub>i</sub>]
             [op *dat], is zij verliefd t,
            (with that she is in love)
            zie je die jongen/dat jongetje? (do you see that (little) boy?)
                            is zij verliefd [op t<sub>:</sub>]
             [op hem], is zij verliefd t,
                            is zij verliefd t<sub>i</sub>
             [op *die];
            (with him she is in love)
                                      zij verliefd [op t<sub>i</sub>] is
(15) a. het huis waar.
                       [op *wat]; zij verliefd is t;
            (the house with what she is in love)
            de jongen
                                            zij verliefd [op t<sub>i</sub>]<sub>pp</sub> is
                            waar:
            jongen
                            [op wie];
                                           zij verliefd is t,
            (the boy with whom she is in love)
```

zie je dat huis? (do you see that house?)

(14) a.

In short, rule (2) that controls the d/w-switch in Dutch appears to hold within the more complex context of oblique case.

## 4. Two factors that maintain relative d-pronouns in Germanic languages

The explanation for the selection of relative pronouns from either the *d*-set or the *w*-set in Dutch may be extended to the relative pronoun selection in other Germanic languages. Relative pronouns in High German are mostly selected from the *d*-set, whereas relatives in English and Afrikaans are selected from the *w*-system. The reason for this lies in the role of 1) the V2nd rule, and 2) gender agreement.

When English lost the V2nd rule, it also lost the A-bar topic d-pronoun in root clauses.<sup>3</sup> Compare the English example (16a) to the Dutch example (16b).

- (16) a. Do you see the man across the street? He/\*that wears a nice coat.
  - b. Zie je de man aan de overkant? Die heeft een mooie jas aan.

The English residual V2nd allows only question words in Spec,C (*who, what, where*). When the only A-bar pronouns available for relative acquisition are *w*-words, all English relatives are expected to turn up as *w*-elements and they do. I follow here Bresnan (1970) and assume that the English element *that* in *the man that she looked at* is a (relative) constant C<sup>0</sup> rather than a (relative) pronoun.

Afrikaans seems to fit the picture too. Afrikaans maintains the Dutch V2nd, but, like English, it has lost (Indo-)Germanic grammatical gender: articles and demonstratives are the same for all nouns. All relative pronouns in Afrikaans are w-elements, as expected. It is not clear, though, why the <±animate> feature of the w-system did not survive. All relatives in Afrikaans are wat ('what'). Den Besten (1996) suggests that this may have been the effect of an unknown creolization process. Note in this respect that the Dutch child overuses wat in the period that she is still uncertain about the gender status of antecedent het-words (non gender), see Section 6. It is possible that the creolization period caused a prolonged uncertainty about gender in general, whether de-words or het-words.

German, by contrast, prefers the A-bar *d*-pronouns for its relatives. German root clauses are V2nd and their Spec,C welcomes the topic *d*-pronouns in all the four grammatical cases. Since German root topic *d*-pronouns have strong grammatical gender agreement with the antecedent, relative pronouns are now from the *d*-set (Duden 1997:330f), as expected. There are relative *w*-elements in High German for locatives and fused relatives, but their selection is more restricted than in (deflected) Dutch.

The discussion so far can be summarized by the questions in (17), which in turn can be answered by the proposal in (18):

## (17) Why are

a. all Dutch relatives without explicit antecedent: *w*-set elements?

b. all Dutch oblique relatives: w-set elements?
c. all Afrikaans relative pronouns: w-set elements?
d. all English relative pronouns: w-set elements?

#### (18) Proposal for the lack of relatives from the *d*-set

- a. Fused relatives have no agreement configuration; hence, such relatives are selected from the *w*-set.
- b. Oblique pronouns in Dutch cannot express grammatical gender; hence, as relatives they switch to the *w*-set
- c. Afrikaans has no gender distinction; hence, all relative pronouns come from the *w*-set. Why only *wat* survived as an invariant form, remains unexplained.
- d. English has lost the V2nd rule; hence, it has no topic *d*-pronouns.

## 5. The relative pronoun selection in child Dutch

Language acquisition often explains the diachrony of a grammatical construction and the acquisitional analysis of Dutch relative pronouns is a case in point.

I will exemplify the acquisition steps that lead to the relative pronoun selection for Dutch in the case of Sarah (corpus in CHILDES).<sup>4</sup>

The Sarah files show that root A-bar pronouns are acquired before relative A-bar pronouns. This in itself is not very surprising, because relative sentences are subordinates and root sentences are acquired before subordinates. However, the point of the present paper lies elsewhere. The claim here is that the earlier acquisition steps can be reconstructed as an entrance condition for the later steps. If this is correct, the order of acquisition steps constitutes an acquisition hierarchy. The selection of relative pronouns from the *w*-set or the *d*-set is learnable because the two types of A-bar pronouns have been acquired earlier in simplex root clauses.

Before the age of three, Sarah's speech abounds in root topic *d*-pronouns (20) and root question *w*-pronouns (19). All six A-bar pronouns are attested.

(19)	a.	waar hoort ie? (where do	oes it belong?)	(S. 2;7.16)
	b.	wat heb ik (g)edaan? (what have	(S. 2;8.19)	
	c.	wie doet dat? (who doe	es that?)	(S. 2;11.3)
(20)	a.	die kan lopen		
	(but the little baby. Sarah: yes, that can walk)			(S. 2;10.18)
	b.	niet lekker		
		(a bone. Sarah: that we don't fin	nd tasty)	(S. 2;11.3)
	c.	andere boekje. Die lees ik nooi	t.	(S. 3.5.30)
		(other book. that read I never)		
	d. andere kermis. Daar zaten ook tijgers in			(S. 3;2.13)
		(other fair. there were also tige:		

Sarah uses the *d*-pronoun *die* as a topic pronoun for all <+animate> antecedents. The antecedent in (21a) is *iemand* ('somebody'), in (21b) *(he)t Beest* ('the Beast') and in (21c) *dat meisje* ('that girl').

- (21) Root *d*-pronoun *die* for <+animate> antecedents
  - a. daar woont iemand en *die* houdt niet van .... (S. 4;11.15) there lives somebody and that doesn't like ....)
  - b. 't Beest is er niet bij. *Die* woont in het kasteel (S. 4;0.11) (the Beast is not there, that lives in the castle)
  - c. dat meisje, *die* geeft de baby water (S. 4;9.13) (that girl that gives the baby water)

The files yielded 34 cases of overt non-cliticized root *w*-pronouns (*wat*, *waar*, *wie*) in Sarah's speech as recorded between the age of two-and-a-half and three. Copula constructions and stereotypes were excluded from the count. In the same period, Sarah produced 33 root *d*-pronouns (mainly *dat* and *die*) with a clear discourse antecedent. As the recordings took place only once a fortnight, the number of

relevant examples can be estimated to be around 10,000 for each set of A-bar pronouns. The conclusion seems warranted that the use of the A-bar root pronouns {wie, wat, waar} and {die, dat, daar} is established in the speech of Sarah well before she reaches the age of three.

Relative clauses do not appear until after the age of three, when the A-bar pronouns for root questions and root topics are solidly in place. Examples with the relative *d*-pronoun *die* are given in (22). These include examples like (22c,d) with a <+animate> antecedent.

## (22) Relative *d*-pronoun *die*

- a. welke kussens?; Sarah: *die* van Nienke is (S. 3;2.13) (which pillows?; Sarah: that to Nienke belongs)
- b. we doen grote cracker *die* net omgevallen heb (S. 4;1.11) (we do (the) big cracker that just down fallen has)
- c. toen heb ik gevonden *die* dood was, (het) muisje (S. 3;1.10) (then I have found that was dead, (the) little mouse)
- d. en toen kwam ik iemand tegen *die* ik kende (S. 4;11.15) (and then I met somebody that I knew)

Examples of relatives with a *w*-pronoun *wat* and *waar* are given in (23). Sarah uses the oblique relative pronoun *waar* in (23a) as in the adult input. She also has the correct *w*-selection for fused relatives (23b) and relatives with a quantifier (23c). It appears, though, that she has a unique preference for the relative *wat* (*w*-system) over the relative *dat* (*d*-system) for non-gender antecedents, as in (23d).

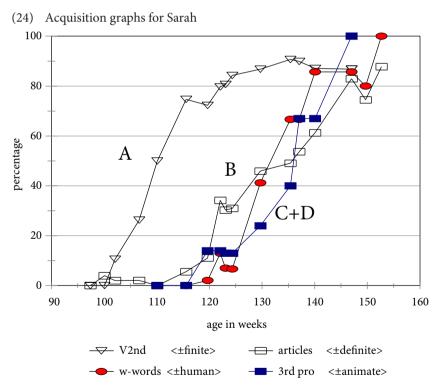
#### (23) Relative w-pronouns

- a. ze mogen soms naar *waar* de andere dieren zitten (S. 3;10.7) (they may sometimes to where the other animals are)
- b. ik heb gedaan *wat* ze allemaal aan 't doen zijn (S. 4;11.15) (I have done what they all on doing are)
- c. ik doe *alles* dr uit *wat* er niet in hoort (S. 4;5.29) (I take everything there out what there not in belongs)
- d. ik wil dat toastje *wat* wij gekocht hebben (S. 4;8.21) (I want that cracker which we have bought)

Although Sarah's mother uses (mostly) *dat* for *het*-antecedents, Sarah disregards the attested maternal input and holds on to a *die/wat* opposition. Hence, the position of *die* in the relative system seems very strong. On the other hand, there were no *dat* relatives at all for Sarah in the files, although *dat* did appear as a topic *d*-pronoun (20b) earlier. This brings us to the main problem, as announced in (1). How can a preference for *wat* over *dat* in child Dutch be accounted for, and why is it maintained in informal Dutch?

## 6. The hierarchy of acquisition steps

Longitudinal acquisition graphs of (i) finite verbs, (ii) determiners, (iii) question *w*-pronouns and (iv) discourse-related pronouns constructed in Van Kampen (1997, 2004) show the acquisition steps A, B, C, D in (24). Finite verbs in the V2nd C<sup>0</sup>-position (graph A, the illocution/predication system of grammar) are acquired first. Determiners (graph B, the referential system of grammar) appear half a year later. Graph B keeps track of the rising use of <±definite> determiners before nouns. The situation just after week 120 in diagram (24) seems an illustration of Pinker's (1995) 'all hell breaks loose', when a host of grammatical markings seem to be acquired almost simultaneously. Notice though that there are speed-differences. The <±definite> marking first takes the lead, but is overtaken by the pronominal graphs C+D at week 130. By week 145 all <+D>-markers (determiners, *w*-pronouns and personal pronouns) have leveled out.



It is a crucial point that the acquisition of the noun category 'unspecified gender' (nouns with the article *het*) is lagging behind for all <+D>-markers (both articles and pronouns). The acquisition data for the *het*-nouns remain riddled with gender mistakes during the period of article acquisition (graph B), see

(25) below, whereas if an article was used with *de*-nouns, it was always used correctly.

The acquisition of the gender unspecified article *het*, then, is a slow process of lexical acquisition. Relative acquisition, by contrast, represents the acquisition of a feature of grammar, which races ahead of full-blown lexical gender acquisition. It is a mismatch that greatly favors a switch to the default *w*-system. The argument from the graphs now runs as follows. The graphs C+D for pronouns cross graph B for articles at week 130. At that point, the non-gender *het* has not yet been acquired. Child language remains hesitant and full of mistakes in the direction of the dominant article *de* for many years, see (25). Hence, there will for some time be no fixed acquisitional basis for *dat* in relative selection at the moment that relative clauses enter the child's grammar.

#### (25) Sarah's acquisition of het-nouns

Age	het-nouns	het realized	de realized	(of which de +
		correctly	incorrectly	N-diminutive)
2;4-3;6	91	38 42%	53 58%	22 (out of 53)
3;6-5	131	101 77%	30 23%	10 (out of 30)

The first opposition for relatives with an explicit antecedent *die/wat* is established around the age of three-and-a-half. At that period most non-gender nouns (*het*-words) used more than once appear with both *de* and *het* more or less at random. There is, however, an easy way out for the child in her selection of a relative pronoun: if you feel uncertain about the gender (as you still do), switch to the default *w*-system that is gender-free.

#### 7. Conclusion

By the time the gender information is well established, the default *wat* is already firmly in place in the relative system, and once acquired it remains a first option. Informal Dutch still reflects the initial learnability landscape set out in the schema in (26).

The features of relative agreement in Dutch that are best learnable are those where the antecedent is <+gender> or manifest <+animate>. From the beginning, Sarah made no mistakes as to the <+gender> nature of *de*-nouns, which explains why

relative pronouns with a de-antecedent never switch to the w-system (\*de vaas wat), but they all result in die (de vaas die 'the vase that'). Die-relatives represent by far the strongest part of the relative paradigm. The option wat appears as a provisional default for all antecedents that are not yet clearly gender unspecified within the acquisition period. This explains why Sarah starts with die/wat relatives, whereas the maternal input is almost unexceptionally die/dat as controlled by the gender/animacy marking of the antecedent. Sarah could not yet process with sufficient speed and certainty the gender property of antecedents and get the rule for the relative dat. This acquisition account explains why, historically, the more 'sophisticated' dat appears fairly late. It became a socially 'better' option for all cases of relative wat with an antecedent, but a secondary option nevertheless (ANS 1997: par. 5.8.5.5.; cf. Section 3). Formal standard Dutch dat is established only later, probably at primary school. The reason for this delay is its weaker learnability in the crucial period just after the age of 3.

#### **Notes**

- 1. If one allows the category feature <+C> to appear in the lexicon as an option for certain pronouns, one gets for example: wat <+D, ±C>. A w-pronoun like wat may then appear as indefinite pronoun in <-C> argument positions. As an indefinite argument wat cannot rise into the subject position, and remains in situ as in (i). Cf. the observations in Cheng (2001).
  - (i) a. als (er) hem wat/iets lukt/bevalt/hindert/tegenzit (if (there) him something succeeds/pleases/bothers/goes against)
    - b. er is wel wat/iets in de keuken (there is presumably something in the kitchen)
- 2. One might use the same descriptive method for Dutch adjective agreement as pointed out in Rooryck (2003). Dutch adjective agreement is reduced to [Adj+-e]. Predicate adjectives are not subject to agreement and hence they appear without -e. Yet, attributive adjectives must appear without -e if their DP is unmarked for definite, gender and number een zwart paard ('a black horse'). Hence, adjective -e agreement appears in a positive context only.
- 3. See Allen (1980) for relative d-pronouns in old English. The English demonstrative that in sentence-initial position refers to a preceding state of affairs, rather than to a preceding antecedent taken up as a topic, see (i). In the latter case, English may use a stressed personal pronoun, as in (ii)
  - (i) I like to wear a red coat. That ('wearing a red coat') gives me the idea of being a star
  - (ii) I only like hèr. Shè is a star
- 4. The claims made in the paper about the delayed acquisition of the article *het* and the relative dat are supported by data from three children in CHILDES (Sarah, and Laura Van Kampen corpus, Josse Groningen corpus). The other Dutch corpora in CHILDES do not contain sufficient relevant data. All examples in Sections 5 and 6 are from the Sarah files (50 recordings of 45 minutes between 1;6.16 and 5;2.13). Sarah eventually got her relatives right. She is at present

a verbally well-gifted high-school student. It is my contention that the order of acquisition steps is a causal effect of massive daily input. The acquisition speed of children may differ, but it seems unlikely that there can be variation in the order of the steps themselves. For that reason, I propose that arguments based on order of acquisition steps, — even if derived from a few children —, constitute strong evidence indeed.

#### References

Allen, Cynthia. 1980. Topics in Diachronic English Syntax. New York: Garland.

ANS. 1997. ed. by G. Geerts et al. Groningen: Wolters-Noordhoff. Second revised edition.

Bennis, Hans. 2001. Tegengestelde Krachten in Taal. Inaugural address, U. of Amsterdam.

Besten, Hans den. 1998. "Afrikaans relatief *wat* en de West-Germaanse relativisatie systemen". *Taal en Tongval* 9. *Afrikaans en Variëteiten van het Nederlands* ed. by H. den Besten, J. Goossens, F. Ponelis & P. van Reenen, 12-34. Meertens Instituut.

Bresnan, Joan. 1970. "On complementizers: Toward a syntactic theory of complement types". *Foundations of Language* 6. 297-321.

Cheng, Lisa. 2001. Het is Allemaal 'wat'. Inaugural address, Leiden University.

Comrie, Bernard. 2000. "Pragmatic binding: 'Demonstratives as anaphors in Dutch". *Proceedings of the Twenty-Third Annual Meeting of the Berkeley Linguistics Society* ed. by M.L. Juge & J.L. Moxley, 50–61. Berkeley Linguistics Society.

Duden. 1997. ed. by G. Drosdowski et al. Mannheim: Bibliographisches Institut.

Kampen, Jacqueline van. 1997. First Steps in Wh-movement. Delft: Eburon.

Kampen, Jacqueline van. 2004. "Learnability order in the French pronominal system". *Going Romance* 2002 ed. by R. Bok-Bennema, 163-183. Amsterdam: Benjamins.

Pinker, Steven. 1995. The Language Instinct. New York: Penguin.

Postal, Paul. 1966. "On So-called Pronouns in English". *Monograph Series on Language and Linguistics 19* ed. by F. Dinneen, 177-206. Georgetown University Press.

Rooryck, Johan. 2003. "The morphosyntactic structure of articles and pronouns in Dutch". *Germania et alia*. A linguistic webschrift for Hans den Besten ed. by J. Koster & H. van Riemsdijk. http://odur.let.rug.nl/~koster/DenBesten/contents.htm

Vries, Mark de. 2002. The Syntax of Relativization. PhD. diss., University of Amsterdam.