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### Semantic versus lexical gender

*Synchronic and diachronic variation in Germanic gender agreement*

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#### Publication date

2017

#### Document Version

Other version

#### License

Other

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#### Citation for published version (APA):

Kraaikamp, M. (2017). *Semantic versus lexical gender: Synchronic and diachronic variation in Germanic gender agreement*. [Thesis, fully internal, Universiteit van Amsterdam]. LOT.

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# Chapter VI

## Conclusion

This dissertation departed from the observation that pronominal gender agreement in Dutch varies between agreement that is based on the lexical gender of the antecedent noun and semantic agreement that is based on the degree of individuation of the referent. The aim of this thesis was to investigate the origin of semantic gender agreement based on individuation, when it has developed in Dutch and what factors could be involved in its surfacing. The previous four chapters each focused on a research question that contributes to this aim. These questions were formulated in Chapter I and are repeated here:

- (i) How deeply rooted is the association of common and masculine gender with the meaning of high individuation and neuter gender with the meaning of low individuation in Dutch? Is this semantic association restricted to pronominal gender or can it be found in nominal gender as well? Could the association go back to a semantic origin of the gender system?
- (ii) Does semantic agreement based on individuation also exist in Germanic varieties that still distinguish the original three nominal genders?
- (iii) Did semantic agreement based on individuation develop in Dutch after the change from a three-gender system to a two-gender system or did it exist already before this change?
- (iv) Is there a relation between the extent to which lexical gender is marked in the noun phrase and the ratio of semantic gender agreement in pronouns?

Section 1 of this concluding chapter summarizes how these research questions have been answered by the studies presented in the previous chapters. Sections 2 and 3 of this chapter address remaining issues that have not been discussed in detail in the previous chapters: Section 2 discusses the relation between gender agreement based

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on individuation and gender agreement based on sex, and Section 3 discusses the divergent development of semantic agreement in Dutch compared to semantic agreement in English. Section 4 concludes this dissertation with suggestions for future research.

### 1. Answers to the research questions

The research questions that formed the basis of this dissertation each addressed an issue that relates to the question of the origin and rise of pronominal gender agreement based on individuation. Below, each research question is answered on the basis of the findings from the studies presented in the previous chapters.

The first research question, or set of questions, explored to what extent the semantic association of the genders in Dutch is restricted to pronouns or forms a more integral part of the Dutch gender system:

- (i) How deeply rooted is the association of common and masculine gender with the meaning of high individuation and neuter gender with the meaning of low individuation in Dutch? Is this semantic association restricted to pronominal gender or can it be found in nominal gender as well? Could the association go back to a semantic origin of the gender system?

It was shown in Chapter II that the semantic interpretation of the genders along the lines of individuation can be found in nominal gender assignment as well, despite the fact that the gender of most Dutch nouns is not semantically motivated. It can be found particularly in cases where the gender of the noun is variable and the noun does not have one lexically stored gender, such as double gender nouns (e.g. *de/het steen* ‘the stone’) and productive nominalizations from adjectives (e.g. *de/het leuke* ‘the fun one/thing’). The association between neuter gender and low individuation is also visible in pronominal reference to non-nominal antecedents, such as predicates and clauses. It seems therefore that the association of the genders with different degrees of individuation is not an innovation in Dutch pronouns, but has always been part of the gender system. There are in fact indications that the semantic interpretation of the genders goes back to Proto-Indo-European and originates from an originally semantic gender assignment system. In line with this, semantic

agreement based on individuation has been found not only in Dutch, but also in other Germanic varieties and in Romance dialects. It is possible that the semantic basis of the gender system has become disrupted in the nominal domain, ever since nominal gender became an invariable, lexically stored feature of nouns.

The second research question related to the hypothesis that agreement based on individuation developed in Dutch pronouns in response to the loss of the three-way nominal gender system. This kind of agreement has indeed so far only been attested in Germanic varieties that changed to a two-gender system, or are currently moving towards a two-gender system, or that lost lexical gender altogether, viz. Helgoland Frisian, City Frisian (Wahrig-Burfeind 1989), Flemish (De Vos & De Vogelaer 2011, De Vogelaer & De Sutter 2011, De Vos 2014), West Jutland Danish (Ringgaard 1973, Braunnüller 2000) and West Somerset English (Siemund 2002, 2008). Therefore, the second research question aimed to investigate whether the loss of the three-gender system is in fact a necessary condition for agreement based on individuation to occur:

- (ii) Does semantic agreement based on individuation also exist in Germanic varieties that still distinguish the original three nominal genders?

Chapter III showed that semantic agreement based on individuation exists not only in Dutch, but also in German, a Germanic variety that still distinguishes three nominal genders. Pronoun elicitation experiments were conducted with speakers of Dutch and speakers of German, eliciting pronominal references to referents with varying degrees of individuation, viz. animals, objects, abstracts and masses. The experiment included two kinds of reference tests: an anaphoric reference test, with an explicit nominal antecedent, and a deictic reference test, where the referent was presented on a picture. The results showed semantic neuter agreement with masses and abstract referents, and semantic masculine agreement with animals, both in Dutch and in German. Semantic agreement was more likely in deictic reference than in anaphoric reference in both languages. A notable difference between the two languages was that speakers of German did not show semantic agreement with object referents, while speakers of Dutch did, and that overall the frequency of semantic agreement was much lower in German than in Dutch. It was proposed that

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this difference is due to the higher visibility of lexical gender in adnominal marking in German than in Dutch. The findings of the experiment suggest that semantic agreement based on individuation is a shared Germanic feature and that the difference between Dutch and German with respect to this kind of agreement is mainly one of degree.

The third research question focused on the diachrony of semantic agreement in Dutch and the issue of whether or not agreement based on individuation already existed before the distinction between masculine and feminine nominal gender was lost:

- (iii) Did semantic agreement based on individuation develop in Dutch after the change from a three-gender system to a two-gender system or did it exist already before this change?

Semantic agreement based on individuation already existed beside lexical gender agreement when Dutch still distinguished three nominal genders. Chapter IV presented a corpus study of pronominal agreement in Middle Dutch recipe books from the early 16<sup>th</sup> century. The results showed that there is semantic neuter agreement with referents of low individuation, viz. masses, in Middle Dutch. Semantic agreement with inanimate referents of high individuation, viz. objects, was not found. It appears that semantic agreement occurred with referents on the far ends of the Individuation Hierarchy at this time: animate referents on the left end and lowly individuated referents on the right end. A comparison of the frequency of semantic agreement in Middle Dutch to that in present-day Dutch suggests that semantic agreement has increased over time.

The fourth research question concerned the causes behind changes in the ratio of lexical to semantic agreement over time. Certain factors are known to have an effect on the variation between the two kinds of agreement, such as the distance between the pronoun and its antecedent (Corbett 1991, Audring 2009) or the kind of referent involved (Audring 2009), but these factors are unchanging and hence cannot explain diachronic change. The conflation of masculine and feminine nominal gender may have played a role in the increase of semantic agreement, as this change may have led to a period of uncertainty about lexical agreement with former

masculine and feminine nouns. However, a factor that has been more or less concomitant with the change from three to two genders and that also could have played a role is the reduced visibility of the remaining lexical genders. While some adnominal elements still clearly mark lexical gender in Dutch, such as the definite article, other elements have lost their gender marking properties over time, leading to a reduced visibility of lexical gender in the Dutch noun phrase. The fourth research question asked whether lexical gender marking in the noun phrase has an effect on pronominal agreement:

- (iv) Is there a relation between the extent to which lexical gender is marked in the noun phrase and the ratio of semantic gender agreement in pronouns?

There is a relation between gender marking in the noun phrase and the likelihood of semantic gender agreement in the pronoun. Chapter V presented a pronoun elicitation experiment with speakers of Dutch testing pronominal agreement with object referents. The test sentences contained well-known neuter nouns as antecedents to the pronouns and varied in one crucial aspect: the noun was accompanied by either a determiner carrying explicit neuter gender marking or a determiner without gender marking. The results showed that the likelihood of semantic agreement is higher when there is no gender marking on the antecedent. This finding reveals that the direct visibility of a noun's lexical gender supports lexical gender agreement in the pronoun, or the other way around, the absence of lexical gender marking makes semantic agreement surface more easily in the pronoun. This effect not only explains synchronic variation between lexical and semantic agreement, but it can also explain diachronic change towards more semantic agreement in a language that still has lexical gender.

The answers to research questions (i), (ii) and (iii) indicate that semantic gender agreement based on individuation is not an innovation in Dutch pronouns, but is an older Germanic feature that surfaces in varying degrees in different varieties. Particularly semantic neuter agreement with referents of low individuation was found to exist not only in present-day Dutch but also in Middle Dutch and in German. The extent to which semantic gender agreement surfaces, that is, its ratio compared to lexical gender agreement and the kind of referents with which it occurs,

appears to depend on the strength of the lexical gender system in question. The answer to research question (iv) indicates that this involves the visibility of lexical gender in adnominal marking.

## 2. Agreement based on sex and agreement based on individuation

The results of this thesis indicate that semantic masculine agreement with inanimate referents of high individuation has developed later in Dutch than semantic neuter agreement with referents of low individuation. The former kind of agreement also appears to be shared less widely in present-day Germanic varieties than the latter. Semantic masculine agreement with objects was not found in German in the present study and previous studies did not find this type of agreement in Flemish either (De Vos & De Vogelaer 2011, De Vos 2014). This discrepancy between the two kinds of semantic agreement can be explained by the relative positions of the referents involved on the Individuation Hierarchy, shown in (1).

### (1) The Individuation Hierarchy<sup>1</sup>

human > animal > object > abstract > mass

While inanimate referents with a low degree of individuation, viz. masses, are positioned at the right end of the hierarchy, inanimate referents with a high degree of individuation, viz. objects, take a middle position on the hierarchy, following

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<sup>1</sup> This version of the Individuation Hierarchy is an adaptation of the hierarchies in Sasse 1993: 659 and Audring 2006: 102, 2009: 127. Audring (2006, 2009) distinguishes between bounded abstracts and unbounded abstracts, and between specific and unspecific masses, whereby bounded abstracts are grouped with objects, and unbounded abstracts are grouped with unspecific masses. Sasse (1993), on the other hand, presents abstracts as one separate category. The results of the experiment presented in Chapter III showed that bounded abstracts are not treated the same as objects in Dutch nor in German. Rather, bounded abstracts receive similar semantic agreement as unbounded abstracts, that is, neuter agreement in Dutch and neuter or feminine agreement in German. Nevertheless, bounded and unbounded abstracts are conceptually distinct entities that have different degrees of individuation and therefore it makes sense to separate them on a detailed hierarchy of individuation. The same applies to specific and unspecific masses. However, as the present data do not indicate what the relative positions of these subcategories should be, in particular the position of specific masses in relation to abstracts, the hierarchy presented here abstracts away from these details.

animate referents. As noted by Audring (2009: 167-168), semantic agreement is more likely with referents at the extreme ends of the hierarchy than with those towards the middle. The potential conflict between the lexical gender of the antecedent noun and the referent is more prominent with referents that have an extremely high or low degree of individuation than with referents with a more moderate degree of individuation.

The varieties that do not show semantic masculine agreement with inanimate referents do show semantic masculine agreement with animate referents, viz. humans and animals. Semantic masculine agreement with animals was found in German in the experiment presented in Chapter III and it has also been found in Flemish by De Vos (2014: 59-62). Semantic agreement with animate referents is usually analysed as agreement that is based on the sex of the referent (e.g. Audring 2009: 117, De Vos 2014: 62). Sex-based agreement relates to agreement based on individuation in the sense it makes a further distinction between referents on the far left end of the Individuation Hierarchy: masculine pronouns are used for male referents of high individuation and feminine pronouns are used for female referents of high individuation. In Dutch, where semantic masculine agreement occurs also with inanimate referents of high individuation, masculine pronouns serve a double semantic role: they are pronouns of high individuation as well as pronouns with the more specific meaning of male sex, which applies only to a subset of referents with a high degree individuation.

A question that arises is when masculine pronouns agree on the basis of male sex and when they agree on the basis of high individuation, in other words, at what point on the Individuation Hierarchy agreement based on sex ends and agreement based on high individuation begins. This is not immediately clear, as masculine agreement with animate referents is not necessarily always based on sex, but could be based on high individuation as well. This question is relevant for the analysis of semantic masculine agreement in varieties where this agreement occurs only with animate referents, viz. German and Flemish, as it explores the issue of whether there is masculine agreement on the basis of high individuation in these varieties at all. The question also relates to the issue of whether the development of semantic masculine agreement with inanimate referents of high individuation in Dutch can be considered an extension of semantic agreement that was already taking place on the

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left end of the Individuation Hierarchy or a more innovative kind of pronominal agreement that involves the adoption of a broader semantic interpretation of the masculine pronoun.

The answer to this question lies in the analysis of semantic masculine agreement with animate referents and on exactly what property of the referent the masculine agreement is based. There could be a difference between semantic masculine agreement with humans and semantic masculine agreement with animals in this respect, which makes it useful to tease these two apart. Focusing on agreement with humans first, it is relevant to note that it is possible to use masculine pronouns in Dutch when the sex of a human referent is unknown and irrelevant. Examples of this are shown below, where in (2) a masculine pronoun is used to refer to an unspecified student in a university document and in (3) a masculine pronoun is used to refer to an unspecified doctor on a website for patients.<sup>2</sup>

- (2) Elke student dient zich voor elk vak dat hij wil  
every student(C) should 3SG.REFL for each course that 3SG.M wants  
  
volgen aan te melden  
follow on to report

‘Every student has to register for each course he wants to take.’

(Example from Onderwijs- en examenregeling voor de bacheloropleidingen

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<sup>2</sup> The examples in (2) and (3) involve common gender nouns, as most nouns referring to humans are common gender in Dutch. This means that the agreement with masculine pronouns is not necessarily based on semantics but can be motivated by the lexical gender of the noun as well. However, the pronominal agreement found with neuter nouns referring to humans, such as *meisje* ‘girl’, shows that with human referents pronominal agreement is commonly based on semantics: the neuter noun *meisje* ‘girl’ is usually pronominalized by feminine personal pronouns and rarely by the neuter personal pronoun *het* ‘it’, despite the fact that neuter agrees with the lexical gender of the noun. This indicates that semantic agreement is the norm in pronominal reference to humans. Note also that it is the same noun, *student* ‘student’, that is referred to by a masculine pronoun in (2) and by a feminine pronoun in (4), which makes it more likely that the agreement is based on the referent, rather than the gender of the noun.

van de Faculteit der Geesteswetenschappen ‘Teaching and exam regulations for the bachelor programs of the Humanities Faculty’, University of Amsterdam, 2013–2014, p. 5)

- (3) Als u de oorzaak van uw klachten wilt weten is het nodig  
if you the cause of your symptoms want know is it necessary

dat u naar uw huis-arts gaat. Uw arts probeert  
that you to your family-doctor(C) go your doctor(C) tries

samen met u de diagnose te stellen. Dit betekent dat hij  
together with you the diagnosis to determine this means that 3SG.M

uitzoekt wat er precies aan de hand is.  
investigates what PART exactly at the hand is

‘If you want to know the cause of your symptoms it is necessary that you go to your family doctor. Your doctor tries to make the diagnosis together with you. This means that he investigates what exactly is the matter.’

(Example from <http://www.reumafonds.nl/informatie-voor-doelgroepen/patienten/heb-ik-reuma/aanvullend-onderzoek/diagnose>)

This kind of masculine agreement could be analysed as agreement based on the high degree of individuation of the human referent. On the other hand, the agreement could still be based on sex, with the referent conceptualized as a default male. The latter analysis is in fact more likely, because the high-individuation analysis contrasts with another observation regarding agreement with humans: if a human referent is known to be female, agreement with masculine pronouns is impossible. When a similarly unspecific student as in example (2) above is unmistakably female, as in (4), feminine agreement occurs, and agreement with masculine pronouns, as in (4’), is suddenly excluded:

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- (4) Als een student zwanger is, kijkt ze met haar  
if a student(C) pregnant is looks 3SG.F with 3SG.F.POSS

studie-begeleider wat ze kan doen.  
study-adviser what 3SG.F can do

‘If a student is pregnant, she and her student adviser evaluate what she can do.’

(Example from Dutch newspaper *NRC*, 12-10-2002. Accessed via <http://nrc.nl//krant/article1552190.ece>)

- (4’) Als een student zwanger is, kijkt \*hij met \*zijn  
if a student(C) pregnant is looks 3SG.M with 3SG.M.POSS

studie-begeleider wat \*hij kan doen.  
study-adviser what 3SG.M can do

‘If a student is pregnant, he and his student adviser evaluate what he can do.’

The impossibility of using masculine pronouns with human referents that are female indicates that masculine pronouns are necessarily connected to the meaning of male sex when they refer to humans and are not used with the broader meaning of high individuation.

Agreement with animal referents is different. It seems that semantic masculine agreement with animals is not always based on sex. When an animal is known to be female, for example in the case of a female family pet or a cow, agreement with masculine pronouns is possible in Dutch, as illustrated in (5) and (6) below (Haeseryn et al. 1997: §3.3.3):<sup>3</sup>

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<sup>3</sup> The examples (5) and (6) involve common gender nouns, but note that masculine agreement occurs with neuter nouns referring to animals as well, such as the neuter noun *paard* ‘horse’ or *schaap* ‘sheep’. (See the results of the pronoun elicitation experiment presented in Chapter III.)

- (5) Daar ligt de kat. Hij heeft gisteren gejongd.  
 there lies DET.C cat(C) 3SG.M has yesterday birthed

‘The cat is lying over there. He gave birth yesterday.’

(Example from Haeseryn et al. 1997: §3.3.3)

- (6) Zie je die koe? Hij staat net met zijn kop naar  
 see you DEM.C cow(C) 3SG.M stands just with 3SG.M.POSS head to

deze kant.

this side

‘Do you see that cow? He is just now standing with his head facing this side.’

(Example from <http://taaladvies.net/taal/advies/vraag/1631/>)

This use of masculine pronouns in reference to female animals can already be observed in early 17<sup>th</sup> century Dutch, for instance in Bredero’s *Klucht van de koe* (Geerts 1966: 198-199):

- (7) O seker ‘t is een moye gladde koe, hij is al wel  
 oh certainly it is a nice smooth cow(C) 3SG.M is already well

gemiest, hij het vrij wat op zijn schilde  
 fattened 3SG.M has quite some on 3SG.M.POSS shoulders

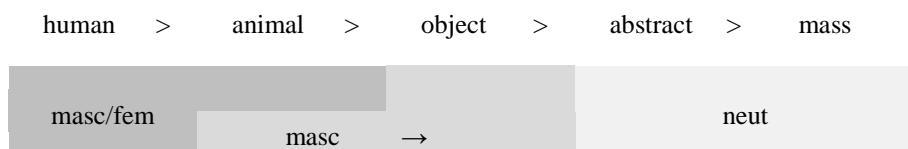
‘Oh certainly, it is a nice, smooth cow, he is well fattened, he has quite a lot on his shoulders’

(G. A. Bredero, *Klucht van de koe*, 1619. Accessed via [dbnl.nl](http://dbnl.nl).)

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This indicates that masculine pronouns can carry the broader meaning of high individuation instead of the more specific meaning of male sex in reference to animals. In those cases where no sex agreement is intended, masculine agreement with animals is the same kind of agreement as masculine agreement with inanimate referents of high individuation. This means that the development of semantic masculine agreement with inanimate referents in Dutch can be analysed as an extension of the semantic use of masculine that already exists on the left side of the Individuation Hierarchy, as illustrated in (8).

### (8) The Individuation Hierarchy and semantic gender agreement in Dutch



The analysis above applies to Dutch, but agreement with animals is a little different in Flemish. The standard reference grammar by Haeseryn et al. (1997) notes that the use of masculine pronouns with female animals is not as common there as it is in Dutch (Haeseryn et al. 1997: §3.3.3). This does not mean that semantic agreement with animals does not exist at all in Flemish: corpus data by De Vos (2014: 59-63) show that semantic masculine agreement with animal referents that are not distinctively female certainly exists also in Flemish. However, as De Vos's (2014) data do not include references to distinctively female animals, it is not certain to what extent masculine agreement with female referents may occur in Flemish. The observation that masculine agreement with female animals is less common in Flemish is likely not because the semantic agreement pattern with animals is different in Flemish than in Dutch, but because nouns that typically refer to female animals, such as *koe* 'cow', are feminine nouns in Flemish. Therefore, using feminine pronouns with nouns such as *koe* 'cow' constitutes agreement with the lexical gender of the noun as well as semantic agreement with the sex of the referent. It seems likely that under this circumstance deviation from lexical gender is not strongly motivated. The same situation exists in German, where animal nouns that typically have female referents, such as *Kuh* 'cow', are feminine nouns. What is

important for the present analysis of semantic masculine agreement with animals is that De Vos (2014: 60-61) not only found semantic masculine agreement with animal referents whose gender can be assumed to be known to the speaker, but with animal referents whose gender appears to be unknown to the speaker as well. This indicates that in Flemish, as in Dutch, semantic masculine agreement with animals is not always based on sex but can instead be based on the referent's high degree of individuation. The exact nature of semantic masculine agreement with animals in Flemish and in German, specifically to what extent semantic masculine agreement could also occur with distinctively female animals in these varieties, deserves further investigation.

### 3. Spread of semantic agreement in different directions

It is noteworthy that semantic agreement in Dutch has not developed in the same direction as semantic agreement in English. Whereas masculine agreement has spread to include inanimate referents of high individuation in Dutch, all inanimate referents receive neuter agreement in English. Apparently, semantic agreement can spread in different ways when the lexical gender system weakens or is completely lost: either masculine agreement spreads towards the right on the Individuation Hierarchy or neuter agreement spreads towards the left.

It is not immediately clear why Dutch and English have developed in different directions, but something that could have played a role is how their nominal gender systems changed. While Dutch has always preserved a distinction between common and neuter nouns in adnominal marking, English has lost all gender distinctions in the noun phrase. Interesting in this respect are the Southwestern dialects of English, such as West Somerset English, which show a pronominal agreement pattern similar to Dutch, viz. masculine pronouns for inanimate referents of high individuation and neuter for those of low individuation (Siemund 2002, 2008). As Standard English, these dialects no longer have lexical gender, but the demonstrative determiners show gender agreement inside the noun phrase, based on the same semantic distinction shown in the pronouns, for example *this water*, with a mass noun, but *theäse tree* 'this tree', with a count noun (Siemund 2008: 24). Other Germanic varieties that are known to show semantic masculine agreement with inanimate referents, Helgoland Frisian (Wahrig-Burfeind 1989) and West Jutland Danish (Ringgaard 1973), also

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show gender agreement in the noun phrase, on the basis of lexical gender in the case of Helgoland Frisian or on the basis of semantics in the case of West Jutish. Possibly, the preservation of gender distinctions in the noun phrase makes semantic agreement move in a different direction than when all gender agreement in the noun phrase is lost. The existence of common or masculine nouns referring to inanimate entities perhaps supports the association between masculine gender and inanimate referents in pronominal agreement.

Afrikaans may be another case in point. It inherited its gender system from Dutch, but is like Standard English in having lost all gender agreement in the noun phrase. In accordance with the proposed hypothesis, pronominal agreement is largely similar to the English system, with masculine and feminine pronouns being used for humans and animals, and the neuter pronoun being used for all inanimate referents. However, particularly in spoken language, masculine pronouns can be used with inanimate referents as well in Afrikaans (Ponelis 1979, Donaldson 1993). According to Ponelis (1979: 68-69, 585-590), this use of masculine is increasing, and it is influenced by both semantic and stylistic factors. Masculine agreement with inanimate referents is more likely in affective, lively speech and it mostly occurs with countable referents. Although the latter suggests that Afrikaans exhibits a semantic agreement pattern that is very similar to Dutch, which is also noted by Siemund (2008) and Audring (2009), an important difference is that masculine agreement in Afrikaans is not restricted to countable referents, but occurs with mass referents as well. It seems that, instead of being directly motivated by the semantic properties of the referent, masculine agreement in Afrikaans is primarily an expression of affectivity, which may be more likely with countable referents than with mass referents (T. Biberauer, personal communication). The possible intertwining of these factors and their diachronic development in Afrikaans deserve further investigation.

It is yet unclear whether Flemish corroborates the hypothesis or not. Flemish, like Dutch, still has gender agreement in the noun phrase and would therefore be expected to show a semantic agreement pattern that is similar to Dutch. Although Flemish primarily shows semantic neuter agreement with referents of low individuation (De Vos & De Vogelaer 2011, De Vos 2014), De Vos (2014) observes non-lexical neuter agreement with referents of high individuation in Flemish as well,

that is, neuter pronouns used with masculine and feminine nouns referring to objects. This indicates that Flemish could be developing in a different direction than Dutch, towards semantic neuter agreement with all inanimate referents. However, as Flemish is in the middle of losing the distinction between masculine and feminine nouns, which is evidenced by the many deviations to masculine and feminine gender found in Flemish as well, it is not certain that all deviations to neuter gender are semantically motivated (De Vos 2014: 66-77). Part of the neuter agreement could be a temporary side-effect of the current gender confusion in Flemish and could be motivated by the avoidance of masculine and feminine pronouns altogether, because of uncertainty about the masculine or feminine gender of the antecedent noun. If this is the case, semantically motivated agreement in Flemish could still be moving in the same direction as in Dutch.

#### **4. Future research**

The previous sections raised several issues that are worth investigating further: questions regarding the basis of semantic agreement with animals and the ways in which semantic agreement can spread along the Individuation Hierarchy. Another question that is still open for future research is when semantic masculine agreement started occurring with object referents in Dutch. The absence of this type of agreement in the Middle Dutch corpus studied in Chapter IV suggests that it developed after the mid sixteenth century. A first step towards answering this question would be a corpus study of pronominal agreement in Early Modern Dutch. Geerts 1966 is a study of gender agreement in this period, including texts from ca. 1550 to 1700, and focuses on the conflation of masculine and feminine nominal gender. Unfortunately, however, the data in Geerts 1966 do not give insight into the ratio and kind of semantic agreement that may have taken place at this time, as it is not a systematic frequency study of pronominal agreement. A complicating factor in researching pronominal agreement in Early Modern Dutch is that this period marks the beginning of language standardization in Dutch, which means that written language started to be shaped according to prescriptive language norms. It is therefore possible that the semantic agreement that may have existed in the spoken language does not surface in the writings of that time.

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A final issue relates to the central theme of this dissertation, which is the occurrence of semantic gender agreement in a lexical gender system that is no longer based on semantics. Gender agreement in such a system can be focused either on the lexical gender of nouns or on the semantic gender associated with the real-world entities that are referred to. The lexical gender system has its most important exponents in adnominal agreement targets and it appears that if the lexical gender system loses some of these exponents, semantic agreement can gain ground. Pronouns tend to be the starting point of such a development and for this reason, pronouns tend to be seen as innovators in gender systems. However, while change towards more semantic agreement may start with pronouns, they are more likely conservative elements that preserve and reflect the semantic basis of a gender system. Pronouns are particularly apt at this conservative role, because of all the agreement targets, they are the least bound to lexical gender: they are not always in an agreement relation with a noun (non-nominal antecedents) or they have only an indirect agreement relation with a noun (deictic reference), and when pronouns do stand in a direct agreement relation with a noun (anaphoric reference), they still have a connection with the real-world referent at the same time. These properties make pronouns exceptional agreement targets, which makes it possible for them to preserve the seeds of a semantic system and make it grow again when the lexical gender system fades.

It deserves further investigation to what extent pronouns show the same behaviour in lexical gender systems outside the Indo-European language family. The Agreement Hierarchy (Corbett 1979) already indicates that pronouns are cross-linguistically always the first and most likely agreement targets to show semantic gender agreement within a lexical gender system. The expectation would be that the semantic agreement observed in pronouns has always existed beside lexical gender agreement and can be attested in the oldest sources. The Agreement Hierarchy further indicates that semantic agreement can gradually spread from pronouns to other agreement targets, including, as a final step, adnominal elements. However, if the semantic agreement in pronouns relates to an older semantic interpretation of the genders, it may, on close inspection, also be found with adnominal elements, particularly in the exceptional cases where nominal gender is variable within the lexical gender system.