

Chapter X

Case Syncretism in German Feminines: Typological, Functional and Structural Aspects.

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Modern Standard German does not have distinct forms for nominatives and accusatives in the feminine gender. This is not only unique within Germanic languages, but also quite remarkable from a typological and functional viewpoint, under the plausible assumption that feminine NPs do not differ in animacy from masculine NPs. I will discuss the loss of the N/A distinction for feminines in detail and speculate about possible reasons – among others, that the referents of feminines are not typically animate, that the syncretism was modelled after a similar syncretism in the plural, and that a sexist bias of the speech community in which the syncretism originated influenced a core part of the grammar of their language.

¹ This paper had a long gestation period. After an initial popular treatment in the German daily *Frankfurter Rundschau* (on November 20, 1982, titled: ‘Der Vater liebt der Sohn. Grammatik und Gleichberechtigung’) I have presented talks on this subject at the Center for Advanced Study in the Behavioral Sciences, Stanford (1996), at the University of Texas at Austin (1998), at the University of Konstanz (1999) and at the Institut für deutsche Sprache, Mannheim (2003). Thanks to comments of the audience at these talks, and in particular to Thomas Becker, Manfred Bierwisch, Dagmar Bittner, Michael Cysouw, Nanna Fuhrhop, Gereon Müller, Barbara Stiebels, Dagmar Paulus, Frans Plank and Bernd Wiese. Unfortunately, I had only very little time to discuss these issues with Gustav Wurzel after we had come into closer professional contact in 2001 due to his untimely death, but it had been on our common agenda.

**1. Nominative/Accusative Syncretism in German:
Why it is Remarkable.**

Modern Standard German lacks any morphological distinction between nominative and accusative case for feminines. This does not only hold for nouns, but also for determiners and pronouns, i.e. for nominal categories that are more likely to exhibit case distinctions than nouns. Indeed, Modern Standard German and its dialects, including Pennsylvania Dutch, and closely related Yiddish, are special among the Germanic languages in this respect, as all other Germanic languages distinguish between these forms at least for pronouns (for data see König and van der Auwera (1994)). Lower Saxonian (“Plattdeutsch”), the non-standard language of Northern Germany, also has distinctive forms (cf. Stellmacher (1990)).

	English	Dutch	Afrikaans	Frisian	Icelandic
Nom	she	zij / ze	sy	hja / sy	hun
Acc	her	haar / ze	har	har	hana

	Faroese	Swedish	Norw. NyN.	Norw. BM	Danish
Nom	hon	hon	ho	hun (ho)	hun
Acc	hana	henne	ho, henne	henne (ho)	hende

	Lower Saxonian	Stand. German	Yiddish	Pennsylv. Dutch
Nom	se	sie	zi	si
Acc	e:r			

The Dutch clitic form *ze* doesn't show case distinction, but the full form does. The variation in Norwegian (Nynorsk and Bokmål) appears to be regional; Bokmål uses the feminine pronoun only for animates and also has a clitic form *-a* that does not distinguish case (Kjell-Johan Sæbø, pers. comm.).

In Middle High German, the immediate predecessor of German and Yiddish, we still find an N/A distinction, even though there is considerable variation – this is the time at which the case distinction got eliminated, see below. In Old High German the cases are clearly distinct. The

same holds, of course, for the other ancient Germanic languages for which we have direct evidence, Gothic, Old English and Old Norse.

	Middle High German	Old High German	Gothic
Nom	siu [sy:], sí [si:]	siu	si
Acc	sie [siə]	sia	ija

The case syncretism of nominatives and accusatives in feminines might be seen as just another example of morphological simplification by phonological attrition. After all, syncretism of nominatives and accusatives is nothing new for Germanic and, in fact, Indo-European languages in general: We observe it for all *neuter* nouns and pronouns, even in the earliest attested languages. However, this inherited case syncretism with neuter nouns has been explained by the fact that neuter is, originally, a class of *inanimates*, and that the N/A distinction does not bear much functional load for inanimates. In contrast, the N/A distinction is important for animates. And, *prima facie*, the feminine appears to be no less a gender for animates than the masculine. Under this perspective, the case syncretism of feminines looks rather odd and in need for an explanation.

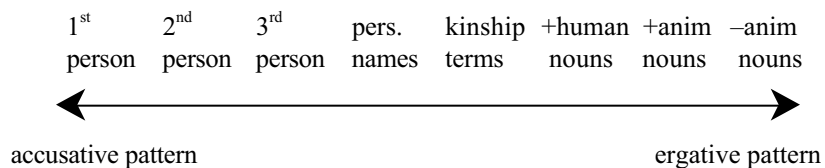
2. Case Distinction and Animacy: Typological Evidence and Functional Explanation

Why is it that the N/A distinction has a low functional load with inanimate nouns, and a high one with animates? The traditional explanation is that inanimates typically occur in a more restricted set of thematic roles than animates. If we concentrate on the two prototypical thematic roles of agent and patient, we find that animates can occur in either role, as in *the dog bit the cat*, whereas inanimates rarely occur as agents. We do find sentences with agent-like instruments as in *the key opened the door*, with agent-like moved objects as in *the avalanche hit the village*, and in cases like *the castle dominates the valley* that involve a metaphorical or metonymical understanding of inanimates as animates. But such cases are comparatively rare, and the assignment of thematic roles usually is obvious by other principles than animacy. Also, if we consider stimulus-experiencer pairs, we find that animates may occur in

either role, as in *the dog observed the cat* or *the cat frightened the dog*, whereas inanimates are restricted to the role of stimulus.

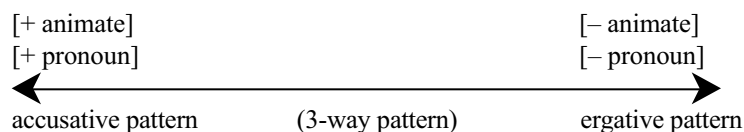
This means that it is not necessary to mark the thematic role of inanimates in transitive sentences to achieve effective, unambiguous communication in the large majority of cases. As agents and patients (and, to a lesser degree, experiencers and stimuli) are encoded by nominative and accusative case, we can expect case syncretism of nominative and accusative for inanimates. And this is exactly what we find with neuter nouns and pronouns in Indo-European.

This is the traditional explanation. It explains why cases should be *distinct* for agents and patients of animates (and can be left nondistinct for inanimates); it does not indicate which of the cases should be marked and which should be unmarked. It is worthwhile to look at a wider range of languages, as it turns out that the pattern of Indo-European languages is part of a more general pattern of case marking in human languages. In particular, in so-called *ergative* languages, the patient of transitive sentences is marked like the subject of intransitive sentences with an unmarked form, called the *absolutive*, and the agent of transitive sentences with a marked form, the *ergative*. Now, Silverstein (1976) has observed that ergative case marking is nearly always restricted, frequently with animacy and pronominality as determining factors. The phenomenon is called *split ergativity*. As a general rule, we find the (absolutive) / *ergative* pattern with inanimates and nouns, and the (nominative) / *accusative* pattern with animates and pronouns. Silverstein proposed an animacy hierarchy that combines pronominality and different degrees of animacy, where accusative patterns occur at the animate end, and ergative patterns at the inanimate end.

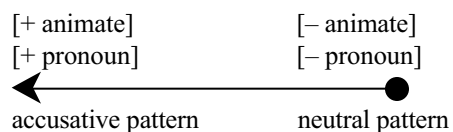


The conflation of the pronoun factor and the animacy factor is perhaps not very fortunate, as there are languages that treat names and certain animate nouns like personal pronouns (e.g., the Australian language Dyirbal, which has optionally accusative marking for proper names and certain human nouns, cf. Dixon (1994) p. 85. fn. 13).

In many split ergative languages we find that both patterns overlap in the middle of the extremes: There are *3-way-patterns* in which NPs show distinct markings for subjects of intransitives, agents, and patients of transitives. A case in point is the Australian language Yidinj, where we find an accusative pattern with first and second person pronouns, a 3-way-pattern with animate 3rd person pronouns, an optional 3-way pattern with inanimate 3rd person pronouns, names and kin terms, and an ergative/absolute pattern for the rest, which includes many animates and all inanimates (cf. Dixon (1994) p. 86f.).



The classical Indo-European languages fit into this general spectrum of case marking patterns. We find a *neutral* pattern with neuter nouns, which were in general inanimate, and an accusative pattern for masculines and feminines, which contained the animate nouns. The ergative system itself is not realized at all.



Various explanations have been proposed for the Silverstein hierarchy. The one by Du Bois (1987), which is endorsed and elaborated by Dixon (1994), works as follows.

1. *Topical* NPs are characteristically *agents*, *animate*, and *pronominal* or *definites*.
2. *Referent-introducing* NPs, that is NPs that introduce new discourse referents, are characteristically *non-agents*, *inanimate*, and *full NPs* or *indefinites*.

These are general preference rules for which there is evidence in natural discourses across speech communities and cultures. (1) reflects the fact that we prefer to talk about the agents of events, and about entities that either are present in the situation (which includes speaker and addressee) or have been introduced into the discourse before. Also, we prefer to talk about our fellow animate beings, or at least if we talk about them, they are most likely topics. (2) reflects the fact that new discourse ref-

erents are typically not introduced in the agent role (and hence, prototypically, as patients). They are also more often inanimates, which generally are less likely to be taken up later in discourse, and so are less likely to appear as topics. And pronouns can only rarely be used to introduce new discourse referents because they represent givenness. In particular, first and second person pronouns never introduce new discourse referents.

Du Bois cites a number of discourse studies to support these generalizations. In a more recent study, which made use of the *Samtal* corpus of spoken Swedish (cf. Dahl (2000)), Zeevat and Jäger (2002) make similar observations. Concentrating on NPs in subject and object position of intransitives and transitives, they observe that animate nouns and ego-referring nouns occur significantly more often in subject (= topic) position, and that indefinites, full NPs and inanimate NPs occur significantly more often in object position. Nothing definite could be said about definites and 3rd person pronouns.

Some further assumptions are:

3. Topical NPs and referent-introducing NPs have basic communicative functions. There are good reasons to express these functions in a morphologically unmarked way for NPs that tend to have these functions, and in a marked way for NPs that tend to lack these functions.
4. If we express topical NPs in an unmarked way, we get an accusative pattern: The agent is more likely a topic than the patient, hence the agent is unmarked and the patient is marked. Because agents are typically animate and pronominals, we find this pattern most likely with animates and pronominals.
5. If we express NPs that introduce new discourse referents in an unmarked way, we get an ergative pattern: The patient more likely introduces a new discourse referent, hence the patient is unmarked and the agent is marked. Because NPs that introduce new discourse referents are typically inanimate and full NPs, we find this pattern most likely with inanimates and full NPs.

The result is that we get an accusative pattern for animates and pronominals, and an ergative pattern for inanimates and full NPs. This reconstructs Silverstein's generalization.

The classical distribution of case marking in Indo-European (with neutral pattern for inanimates, but no ergative pattern) would result if we disregard (5), the unmarked expression of NPs that introduce new

discourse referents. Perhaps the tendency to zero-mark NPs that introduce new discourse referents is generally of a weaker nature: It appears that languages that exhibit the mirror-image of Indo-European, with a neutral pattern for animates and/or pronouns and an ergative pattern for inanimates and/or full NPs, appear to be very rare. Dixon (1994) cites Burushaski; however, this language has a vowel length distinction for pronouns that marks the ergative/absolute distinction (cf. Grune (1998)).

With languages that have an intermediary system in between the accusative system and the ergative system, we hardly ever find a neutral system, but rather a three-way system. This can be explained² by the fact that such languages have three coding devices (for ergative, accusative, and an unmarked nominative/absolute), and it would be uneconomical not to make use of them. Languages of the Indo-European type have just two devices, hence a neutral pattern appears at one end – more specifically, at the [–animate / –pronoun] end because the unmarked expression of topical NPs is more important than the unmarked expression of NPs that introduce discourse referents.

It has been proposed that Indo-European underwent a stage with an *active* case marking pattern, that is, a pattern which codes agents differently from patients, regardless whether they occur in transitive or intransitive sentences. (cf. Uhlenbeck (1901, 1902), and Schmidt (1979) for an overview). According to this theory, the zero marking of inanimate neuters represents an ‘inactive’ case, which stands in opposition to an –s marked ‘active’ case that naturally is restricted to animates. The –s marking is then generalized to intransitive subjects, resulting in an accusative system with a marked nominative. This situation has left remnants in Gothic and Old Nordic, in which we find a declension class with marked nominatives, e.g. *dags* / *dag* ‘day.NOM/ACC’ and *hestur* / *hest* ‘horse.NOM/ACC’.

There are a number of other derivations of preferred case marking patterns. Aissen (1999) works with hierarchies like AGENT > PATIENT and ANIMATE > INANIMATE that align and lead to the unmarked expression of animate agents (= nominatives in transitive sentences) and inanimate patients (= absolutes in transitive sentences). She shows how these rankings lead to certain constraints that are ranked, and that the case

² Thanks to Barbara Stiebels for discussing this point; cf. also Stiebels (2000).

marking patterns we find are the optimal solutions given those constraints. Stiebels (2000) also derives the split by harmonic alignment, using a hierarchy that ranks syntactically higher arguments above syntactically lower arguments. However, Aissen and Stiebels do not give extrinsic motivations for these hierarchies, as has been done by Du Bois.

3. Case Distinction and Animacy: Evidence within German

In the previous section we have discussed typological evidence that links animacy to case marking patterns. Here I would like to remind the reader that we find direct evidence for this correlation within German. The fact that neuter nouns and pronouns exhibit a neutral case marking system is not really sufficient to show this, as there are many neuter nouns that denote animates, and many masculine nouns that denote inanimates.

One piece of evidence can be found with the case marking pattern of interrogative pronouns (cf. e.g. Jespersen (1924)). As in many languages, there is a distinction between the animate (or rather, human) pronoun *wer* ‘who’ and the non-animate (or rather, non-human) pronoun *was* ‘what’. This cuts across gender distinctions, even though *wer* has masculine shape and *was* has neuter shape (cf. the articles *der* and *das*).

*Wer ist heruntergefallen, der Mann? / die Frau? / das Kind? /*der Apfel?*
Who fell down, the man / the woman / the child / the(MASC) apple

*Was ist heruntergefallen, der Apfel? /*das Kind?*
What fell down, the(MASC) apple? / the(NEUT) child?

With animates, nominatives and accusatives are distinct (*wer / wen*), whereas with inanimates we have case syncretism (*was*).

A second type of evidence comes from the weak declension of masculine nouns. Paul (1917), p. 38, observed that animate nouns show a N/A distinction (*-e* or \emptyset / *-en*), whereas inanimate nouns have the same ending in both cases (*-en*). Some examples:

Animates:	Inanimates:
<i>der Mensch / den Menschen</i> ‘human’	<i>der Regen / den Regen</i> ‘rain’
<i>der Fürst / den Fürsten</i> ‘duke’	<i>der Boden / den Boden</i> ‘soil’
<i>der Bote / den Boten</i> ‘messenger’	<i>der Kragen / den Kragen</i> ‘collar’
<i>der Sklave / den Sklaven</i> ‘slave’	<i>der Laden / den Laden</i> ‘shop’

der Hase / den Hasen ‘hare’ *der Wagen / den Wagen* ‘car’
der Löwe / den Löwen ‘lion’ *der Besen / den Besen* ‘broom’

There are a number of ambiguous nouns that have an animate and an inanimate reading. As predicted, the animate reading shows case distinction, and the inanimate reading, case syncretism. The following list gives the forms in the nominative; the accusative has, generally, *-en*.

der Drache ‘dragon’, *der Drachen* ‘kite’ (flying instrument)
der Rappe ‘black horse’, *der Rappen* (Swiss minor currency unit)
der Franke ‘inhabitant of Franconia’, *der Franken* (French currency unit)
der Lappe ‘inhabitant of Lappland’, *der Lappen* ‘rag’
der Lump ‘bad guy’, *der Lumpen* ‘rag’

Interestingly, fish appear to be inanimates (Gustav Wurzel, pers. communication), we have *der Karpfen* ‘the carp’ and *der Rochen* ‘the ray’. There are some inanimates which allow for both *-e* and *-en* nominatives, such as *der Friede(n)* ‘the peace’, *der Same(n)* ‘the seed’ and *der Wille(n)* ‘the will’, with subtle semantic differences. In general, language change is towards a generalization of the accusative form of inanimates to nominatives. Alternatively, inanimates change their gender to feminine, which is another way of loosing the N/A distinction, as in *Knospe* (cf. Becker (1994)). It should be added here that the weak declension of masculines is reminiscent of the case marking of masculines in the neighboring modern Slavic languages, which generally show a N/A distinction only for the animates, but not for the inanimates.

This shows that animacy is indeed a relevant force in German that has an impact on case distinction and case syncretism.

4. The Loss of Case Distinctions for Feminines

We now have a closer look at the history of the loss of the N/A distinction in German for feminines. As mentioned above, the predecessors of German did not show N/A syncretism for feminines. Personal pronouns, demonstratives, and articles all distinguished nominative and accusative forms, as well as the weak declension class of feminine nouns (the *n*-stems). The pronouns show a lot of variation but generally observe case distinction when the first records set in, around the 8th century. Be aware that the reconstructed phonetic realization of the graphemes in Middle

High German is as follows: ⟨i⟩: [ɪ], ⟨î⟩: [i:], ⟨iu⟩: [y:], and ⟨ie⟩: [iə]. In Modern German, ⟨ie⟩ is realized as [i:].

Old High German	Pronoun	Demonstrative	Article + Noun
Nominative	siu	disiu	diu zunga
Accusative	sia	disia	dea, dia zungûn

Middle High German	Pronoun	Demonstrative	Article + Noun
Nominative	si, sî, siu, sie	disiu	diu zunge
Accusative	sie, si, sî, siu	dise	die zungen

The case distinction with pronouns gradually got lost in Middle High German. Interestingly, it appears that it was the accusative form *sie* that was generalized (cf. Paul et al. (1982) §146 fn. 9). Walch and Häckel (1988) p. 130 find evidence for the distinction until the 14th century, at the end of Middle High German period.

Case syncretism also affected definite articles and demonstrative pronouns, though at a slower rate than with personal pronouns (cf. Paul (1917) § 148). According to Walch and Häckel (1988), p. 227, remnants of the old case distinction can be identified up to the end of the 14th century. In general, it was again the accusative form that became generalized, but generalization of the nominative is also reported.

The loss of case distinction within feminine *n*-stem nouns was investigated in detail by Wegera (1987), p. 110ff. There is evidence for both animate and inanimate feminine nouns that keep up the case distinction in Middle High German:

<i>frau / frau</i> ‘woman’	<i>erde / erden</i> ‘earth’
<i>wasse / wassen</i> ‘female cousin’	<i>hütte / hütten</i> ‘hut’
<i>taube / tauben</i> ‘pigeon’	<i>gasse / gassen</i> ‘street’

In dialects, evidence of this distinction can be found still in texts of the 18th century. Wegera cites the following forms:

<i>Frau / Frauen</i> ‘woman’	<i>Hölle / Höllen</i> ‘hell’
<i>Seele / Seelen</i> ‘soul’	<i>Kirche / Kirchen</i> ‘church’
	<i>Asche / Aschen</i> ‘ash’
	<i>Sonne / Sonnen</i> ‘sun’
	<i>Mitte / Mitten</i> ‘middle’
	<i>Seite / Seiten</i> ‘side’

The form *Seiten* still exists in the frozen expression *von Seiten* + Genitive, as in *von Seiten Pauls*, ‘by Paul’, literally ‘from the side of Paul’. Three things are remarkable here: First, the case distinction was present in the nominal declension long after it was lost within pronouns and articles. Secondly, contrary to what was the case with pronouns and articles, it was the nominative form that was generalized. And third, animacy didn’t seem to matter; inanimate feminines didn’t show case syncretism first.

Personal names have developed in an interesting way (cf. Paul (1917) §104ff.). In Middle High German, masculine names that end with a consonant patterned with adjectives insofar as they receive the case marking *-en*, cf. e.g. *Gêrnôt / Gêrnôten*. With feminine names that end in *-gunt*, *-hilt*, *-lint*, *-rîn* or *-trût* we find *-e* as an accusative marker, e.g. *Kriemhilt / Kriemhilde*. Short feminine names followed the weak inflection of nouns, cf. *Uote / Uoten*, and this is the form that was generalized for names later, assimilating feminines to masculines: *Kriemhilden*. We find evidence for this marking well into the 18th and even 19th century:

er [...] hat Lotte-n in meiner Gegenwart noch nicht ein einzigmal geküßt.
 ‘he hasn’t kissed Lotte-ACC a single time in my presence’
 (Goethe, *Die Leiden des jungen Werther*, 1774)

Notice that personal names are relatively high on the animacy hierarchy; there are split ergative languages like Dyirbal that treat them with an accusative case marking system.

There is another special development with nouns carrying the feminine suffix *-in* that always denote animates, and specifically humans. They belong to the *o/jo* stems for which we find case syncretism already in Old High German (the old nominative case marker *-u* was replaced by the accusative marker *-a*). However, nouns with the feminine suffix *-in* did not participate in this (cf. Braune (1987) §209). The reason, presumably, was that these nouns, a morphologically identifiable subgroup, always denoted humans. The case distinction got lost in Middle High German, again by generalization of the nominative form.

Feminine <i>-o</i> stems and nouns with feminine suffix <i>-in</i> in Old High German			
Nominative	gëba (> *gëbu)	kuningin	forasagin
Accusative	gëba	kuninginna	forasaginna
	‘gift’	‘queen’	‘female fortune teller’

Yet another special development occurred with the kinship term *Mutter* ‘mother’. In northern German usage we find (as with *Vater* ‘father’) the accusative ending *-(e)n*, which was generalized to the dative. This marking occurs only if the terms are used as names.

Wenn ich Mutter-n besuchte, kochte sie immer mein Lieblingsgericht.
‘Whenever I visited Mother-ACC, she always cooked my favorite dinner.’

This is the only feminine that still today, if only in a regional variant, shows a N/A distinction. It is most likely influenced by Lower Saxonian. Notice that the accusative marker only occurs when *Mutter* is used like a name, referring to the mother of the speaker or of a shifted origo, not with the common noun *Mutter*:

Wenn ich meine *Mutter-n / die *Mutter-n von Hans besuchte, ...
‘Whenever I visited my mother-ACC / the mother-ACC of Hans, ...’

It is interesting to have a look at Yiddish, which is historically closer related to High German than to Lower Saxonian. Yiddish has very few nouns, typically kinship terms and a few names, that show a case distinction, such as *tate* ‘father.NOM’ / *tate-n* ‘father-ACC/DAT’. There are three feminines among them: *mame* ‘mother’, *babe* ‘grandmother’ and *mume* ‘aunt’. But these feminines use the *-n* suffix only for the dative, not for the accusative, according to Birnbaum (1988 (1918)), p. 34.

Note that the accusative form *Mutter-n*, as well as accusative forms of feminine names like *Lotte-n*, constitute a counterexample to Silverstein’s animacy hierarchy: The corresponding pronoun to these NPs, *sie*, does not show any N/A distinction; it had lost this distinction several centuries earlier.

It is quite surprising that there is no case distinction for the few masculine nouns that are restricted to female referents. A particularly interesting case is *Hausdrache(n)*, a pejorative term for Xanthippean housewives. As we recall, we have *Drache* ‘dragon’ and *Drachen* ‘kite’ (the flying instrument, not the bird). Clearly, the term *Hausdrache(n)* is motivated by the ‘dragon’ interpretation, and is clearly animate. So we would expect a case distinction here. But typically we don’t, and *Hausdrachen* is even the form cited in the *Duden* dictionary.

Als ich heimkam, wartete der Hausdrachen schon hinter der Tür.
‘When I came home, the *house dragon* was waiting behind the door.’

A search on the internet provided 49 occurrences of *der Hausdrachen* and 68 occurrences of *der Hausdrache*, but a number of those actually

meant ‘pet dragon’. If it is at all possible to draw a conclusion from such limited data, it appears that German speakers avoid the N/A distinction even for masculine nouns that select for reference to females.

5. Reasons for N/A Case Syncretism

Case syncretism of nominatives and accusatives in feminines is unexpected if we assume that the N/A case distinction carries a high functional load for animates, and that masculines and feminines are not distinguished in terms of animacy. So, why did it happen?

5.1. Loss of a Phonological Feature?

The loss of case distinction could have happened in spite of a high functional load, for purely phonological reasons. The forms of the definite article, the personal pronoun and the demonstrative were phonologically quite similar in Middle High German: *diu* [dy:] / *die* [dɪə], *siu* / *sie* and *disiu* / *disie*, respectively. Indeed, Kern and Zutt (1977) have argued for a phonological change, triggered by a weakening of *siu* in unstressed clitic position and then affecting non-cliticized *siu*, the definite article *diu*, and the demonstrative *disiu*. A possible motivation of this change is that [y] has the marked feature [+rounded], which is eliminated by this change. True, [y] was not eliminated from the phoneme inventory in general, but the phoneme inventory of “functional” morphemes is often simpler than the inventory of lexical morphemes.

But then this change cannot be observed outside the very class of pronouns, so there is little, if any, independent evidence for it. Walch (1990) assumes, therefore, an analogical process that generalized the accusative form to the nominative. According to Walch, this was possible because nominative and accusative were not distinguished in the strong adjective declension anymore.

It remains a problem, for either explanation, why the animates, among the feminines, did not build up sufficient resistance against this development, if the case distinction had a high functional load for them. There is at least one instance in which case syncretism was averted by newly introduced differentiation: While Middle High German used *ir* and *ire* as feminine pronouns indiscriminately for both genitives and datives,

Modern German distinguishes *ihrer* and *ihr*. The *-er* genitives, which appear in the 16th century, originate in the plural forms of 1st and 2nd person (cf. Walch and Häckel (1988) p. 130ff). It is difficult to imagine that the need for genitive / dative distinction was more pressing than the need for N/A distinction for animates. We could have expected, for example, a similar generalization of the accusative marker *-n*, as the one we have found with *Muttern*. The result would have been N/A pairs like *sie* / **sien*, or *die* / **dien*. But this, of course, did not happen.

5.2. A Sexist Society?

The case syncretism of nominatives and accusatives in feminines could have been facilitated because, contrary to what we have assumed so far, the functional load of the distinction was not as high as for masculine nouns and pronouns. But what could have been a possible reason for this? After all, animate beings come in two sexes, male and female; typically there are roughly as many males as females; and in a sex-based gender language masculine and feminine forms are generally used to refer to males and females, respectively.

One possible reason why the functional load of case distinction might have been less prominent with feminines than with masculines is that female referents are lower on the (linguistic) animacy scale than male referents. This might be an effect of a sexist speech community, or a sexist perception within the speech community, in which females are less likely to resume the agent role, or are at least less likely to be reported as resuming the agent role. There is little doubt that sexism is behind the so-called generic use of the masculine gender, as in *Someone left his lipstick in the bathroom*, and the generic use of expressions like *chairman*. We also find sexist-based asymmetry in agreement rules, as in French, where reference to groups with mixed sex enforces masculine agreement, as in *Les américains sont arrivés* 'The Americans [male, or mixed male/female] have arrived' vs. *Les américaines sont arrivées* 'The Americans [females] have arrived'. Case syncretism in feminine nouns would then be nothing else than another case of built-in sexism of language.

However, a serious problem with this view is that neighbouring language communities, like the ones speaking Dutch or Lower Saxonian, do not show this case syncretism. So, was their society less sexist than the

German speaking communities? This is quite unlikely. Hence, if a sexist society played any role at all, then it is likely that there are additional linguistic factors at play.

5.3. Dative as the Savior?

One reason why most other Germanic languages show a N/A distinction in feminines is that the distinction between accusatives and datives was eliminated in favor of one common ‘objective’ or ‘oblique’ case. The dative is historically more differentiated from the nominative. We find that for animates it was generally the dative, and for inanimates, the accusative, that developed into the objective case. This is because datives, which prototypically mark the recipient or benefactive, most often denote animates. The development in English is quite characteristic:³

	Old English			Middle English		
	Masc.	Femin.	Neuter	Masc.	Femin.	Neuter
Nomin.	hê	hêo	hit	hê	she	it
Accus.	hine	hî(e)	hit			it
Dative	him	hire	him	him	her	

Notice that in the resulting system, nominatives and objectives are distinct for feminines. Thus, case syncretism of accusative and dative helped to keep alive a case distinction between nominatives and objectives. It is interesting that a general loss of morphological distinctions saved one particular distinction, the one between nominatives and accusatives (now: objectives) with feminines.

³ A similar development led to the removal of a strange quirk in Old Norse, which is still present in modern Icelandic and Faroese: The *masculine* pronoun shows case syncretism in the singular (not in the plural). In the other Scandinavian languages, which show syncretism of accusative and dative to an oblique case, the old dative form was generalized to the oblique form, thus introducing a N/A case distinction for the masculine pronoun.

5.4. Feminine Gender low in Animacy?

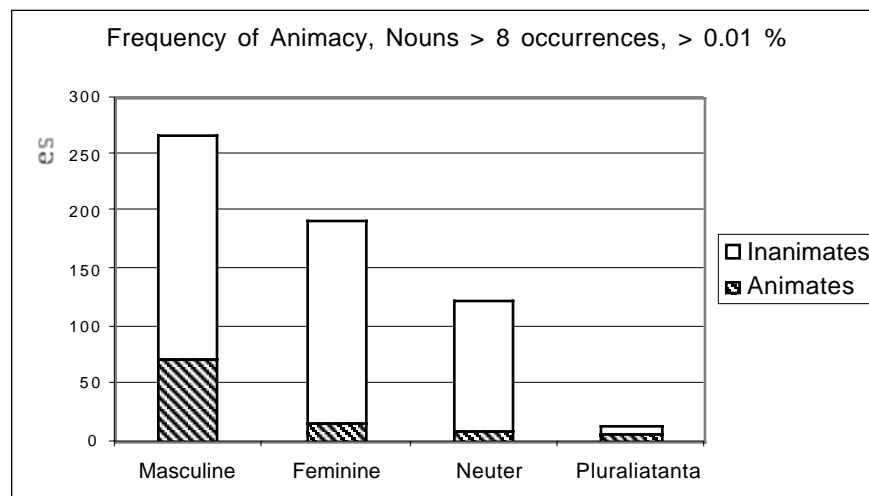
Perhaps feminine NPs in German simply did not refer often enough to animate beings to create sufficient functional pressure to keep up the N/A distinction. The gender systems of English and German do not only differ because English expressed gender only in pronouns and German expresses it also in full nouns and adjectives. They differ also because the gender system of English is nearly completely sex-based (*he* is used for male referents, *she* for female referents, and *it* for others). In German, the gender system is much less sex-based: many inanimate nouns have masculine or feminine gender (e.g. *der Apfel* ‘the apple’ (masc.), *die Birne* ‘the pear’ (fem.)), some animate nouns have neuter gender (e.g. *das Mädchen* ‘the girl’), and in general feminine nouns can refer to males and masculine nouns to females:

die männliche Person ‘the male person’
der weibliche Soldat ‘the female soldier’
das männliche Kind ‘the male child’

The reason why the N/A distinction got lost for feminines but was preserved for masculines could be that feminine forms were used more rarely to refer to animate beings than masculine nouns. This can be tested, but hasn’t been done so far for a larger corpus of texts, to the best of my knowledge, neither for older forms of German nor for Standard German.

A direct test would be to note for any occurrence of a pronominal or nominal NP its gender and whether it refers to an animate or inanimate entity, for a representative corpus of texts, preferably of spoken German. I did a simpler test, using available data from Ruoff (1981), which is based on a corpus of 500,000 words of interviews in rural Baden-Württemberg.⁴ This work lists the nouns occurring in the corpus, together with their frequency. Concentrating on the about 600 noun types with more than 8 tokens (that is, nouns with a frequency of >0,01% among the set of all nouns), I determined their gender and animacy. Animate noun types were distributed over the three genders and pluralia tantum nouns that do not belong to any particular gender as follows:

⁴ The interviewees were roughly balanced as to gender, the general topic of the interviews was the time after World War II. Thanks to Dagmar Paulus, who identified animate and inanimate nouns.



The diagram shows that the masculine nouns contains proportionally more animate nouns (namely, 26%) than the feminine nouns (namely, 8%) or the neuter nouns (7%). Only in the small class of pluralia tantum nouns like *Leute* ‘people’ there are proportionally more animate nouns (namely, 50%, or 6 out of 12).

Notice, also, that more noun types belong to masculines than to each of the other classes. Thus, by far most animate nouns are masculine. In the Ruoff corpus, restricting our attention again to nouns with more than 8 occurrences, 69% of the animate nouns are masculine, only 16% are feminine, 9% are neuter, and 6% belong to the class of pluralia tantum.

This pattern remains stable when we include less frequent nouns; it appears to become even more pronounced. For nouns that have more than 2 tokens, we find that 74% of the animates are masculine; and that 30% of the masculines are animate, 6% of the feminines are animate, and 9% (!) of the neuters are animate. That is, the incidence of animates is even slightly higher for neuters than for feminines. One reason for the higher incidence of animates within neuters might be the frequent use of the diminutive, which is neuter, in Alemannic dialects.

A study on the acquisition of morphology in German that counted tokens, not types, arrived at a less extreme but similar result. Bittner and Köpcke (2002) report language acquisition data with two subjects

from ages 1;11 to 4;0. About 50% of the masculine tokens were animate, about 34% of the feminine tokens, and about 15% of the neuters. In this study, the incidence of animates is generally higher, and feminines are about half-way between masculines and neuters. It is yet unclear whether this is generally so if one counts gender and animacy of NP tokens, or whether this is more characteristic for child language.

Another study (Gerhard Jäger, pers. comm.) looked at the gender of subjects and objects in transitive sentences in the NEGRA corpus, which consists of German newspaper texts. In the 812 sentences with transitive verbs, the ratio of subjects to subjects + direct objects for the three genders were as follows: masculines 369/519 \approx 0.71, feminines 245/491 \approx 0.50, neuters 198/343 \approx 0.58. As subjects of transitive sentences often are agents, or agent-like, this shows that masculine NPs in a primary grammatical role (subject or direct object) are more likely agents than feminine or neuter NPs. The detailed findings are as follows:

Sub\Ob	masc	fem	neut	Sum
masc	121	162	86	369
fem	86	100	59	245
neut	64	84	50	198
Sum	271	346	195	812

There is morphological evidence that the feminine gender is not systematically related to animacy. First, the animate, or rather human, interrogative *wer* has masculine shape; the interrogative with feminine shape *wie* means ‘how’.⁵ Secondly, derivational suffixes that create masculine nouns nearly always lead to animate nouns, whereas derivational suffixes that create feminine nouns nearly always create inanimates, and, in particular, abstract nouns (cf. Bittner (2003)).

Masculine derivations:
Lehr-er teach-SUFF ‘teacher’
Lehr-ling teach-SUFF ‘student’
Tisch-ler table-SUFF ‘carpenter’

Feminine derivations:
Frei-heit free-SUFF ‘freedom’
Freund-schaft friend-SUFF ‘friendship’
Kleid-ung dress-SUFF ‘clothing’

⁵ Gothic still had distinct feminine forms for interrogatives, *h^was* ‘who.MASC’, *h^wo*: ‘who.FEM’ and *h^wa* ‘what.NEUT’. Interestingly, only the masculine form showed N/A distinction, *h^was* ‘who.MASC.NOM’ and *h^wana* ‘who.MASC.ACC’.

Praktik-ant ‘practitioner’
Psycho-loge ‘psychologist’

Diskuss-ion ‘discussion’
Sing-erei sing-SUFF ‘singing’, pejorat.

The only exception among the feminine derivations is *-in*, as in *Lehr-er-in* ‘female teacher’, a suffix that takes masculine personal nouns and delivers feminines denoting the female counterpart. There are few neuter derivations (like the diminutives *-chen* and *-lein*, and the collective forming *-tum* as in *Christentum* ‘christendom’ and *Ge-* as in *Gewitter* ‘thunderstorm’), which can derive animates or inanimates. Interestingly, the suffix *-e* (schwa) [Schwa] can yield masculine or feminine nouns; the masculine ones are animate (e.g. *Frank-e* ‘Frankish person’), the feminine ones are inanimate (e.g. *Güt-e* ‘goodness’). Hence, as far as grammatical processes are concerned, masculines are animate, whereas feminines and neuters are inanimate.

One last piece of evidence that it is the masculine gender, in contrast to the feminine, that is related to [+human] comes from the observation of Köpcke and Zubin (1996) that nouns denoting animals that are considered more human-like, such as primates and mammals, are more likely masculine, whereas nouns that are considered less human-like, such as reptiles and insects, are more likely feminine. So we have *der Schimpanse* ‘the chimpanzee’, *der Elefant* ‘the elephant’, *der Igel* ‘the hedgehog’, but *die Eidechse* ‘the lizard’, *die Schlange* ‘the snake’, *die Hummel* ‘the bumble-bee’. There are exceptions, to be sure – *die Antilope* ‘the antelope’, *der Wurm* ‘the worm’ – but this appears to be the general tendency. However, this still has to be taken as a hypothesis, as Köpcke and Zubin did not present hard statistical evidence.

Taken together, this constitutes clear evidence that the functional need for case distinction between nominative and accusative was far less pressing for feminines than for masculines. It would be interesting to see similar data of Middle High German, the language stage in which most of the distinctions got lost.

5.5. Non-feminine reference to females?

We have seen evidence that the feminine gender in German is not particularly related to animacy. This raises the issue of how reference to females is accomplished in German at all.

We find, indeed, that this quite often happens with non-feminine NPs. There are high-frequency nouns like *Mädchen* ‘girl’ and the

(nowadays much rarer) *Fräulein* (a diminutive to *Frau*, used for unmarried women) that are neuter. Also, many expressions for women that are pejorative or condescending are neuter, such as *das Frauenzimmer*, *das Mensch*, *das Groupie*.

Perhaps it is most revealing to consider the situation in Middle High German, the stage of the language in which the N/A distinction got lost. It is impossible to construct a corpus that represents spoken Middle High German or Early New High German. But it is remarkable that there are a few very high-frequency words denoting females that are of neuter gender, that is, that do not differentiate between nominative and accusative forms. This is especially the noun *wîp* ‘married woman’, modern German *Weib* (a pejorative form for ‘woman’), which is cognate to English *wife* and has an unclear etymology (cf. Kluge and Seebold (1995)). In addition, we have *gemâhel* ‘spouse’, often used for female spouses, and *kint* ‘child’, which is often used for young unmarried females. In addition there are diminutives like *vröuwelîn* ‘unmarried female’ and, later, *Mädchen* ‘girl’ and *Bäsle* ‘female cousin’, which are first found in the 14th century. Diminutives are generally neuter, hence do not differentiate between nominative and accusative.

This observation led me to another approach that seemed feasible to perform: namely, to check the incidence of neuters among the NPs with nominal heads that refer to females. Ideally, one should do this by comparing things with NPs that refer to males, and one should take into account all NPs, including pronouns; I haven’t done this yet. In any case, I found that the nouns used to refer to females quite often belong to the neuter gender. The following table shows this for Middle High German texts by four different authors.

	Feminine nouns	Neuter nouns
Lucretia episode, <i>Kaiserchronik</i>	25 (<i>frouwe</i> 22, <i>kunigin</i> 2, <i>muoter</i> 1)	9 (<i>wîp</i>)
<i>Der arme Heinrich</i> Hartmann von der Aue	60 (<i>maget</i> 26, <i>muoter</i> 21, <i>tochter</i> 10, <i>künigin</i> 1, <i>vrouwe</i> 1, <i>meierin</i> 1)	28 (<i>wîp</i> 15, <i>ge- mahel</i> 11, <i>kint</i> 1, <i>vröuwelîn</i> 1)
<i>Das herzmaere</i> , Konrad von Würzburg	12 (<i>frouwe</i>)	13 (<i>wîp</i>)
<i>Die eingemauerte Frau</i> , <i>Der kluge Knecht</i> , Der Stricker	22 (<i>vrouwe</i> 20, <i>hûsvrouwe</i> 2)	25 (<i>wîp</i>)

As can be glanced from this, we indeed find quite often that neuter nouns were used to refer to females. However, this finding is less clear when we include pronouns. Pronouns that refer to females are nearly always feminine, even if their antecedent was neuter. The following passage from *Der kluge Knecht* is typical:

daz wîp, diu wart ouch geslagen /
 the.NEUT woman, this.FEM was also beaten
daz si den lîp mohte klagen
 that she(FEM) the body wanted complain

This differs from the situation in several modern German dialects, where quite generally neuter forms are used to refer to females, e.g. in the dialect of Cologne or in the dialect of Danube Swabians, which is illustrated in the following example:

Da Michl is mit'm Resi kumman, er hot's an dr Hand ghaltn.
 the Michl is with the.NEUT Theresa come, he has it.NEUT at the hand hold
 'Michael came with Theresa, he hold her by the hand.'

The studies reported in this section, though rather preliminary, point to a possible scenario for case syncretism: Case distinction between nominatives and accusatives in feminines had lost its functional load because feminines contained too few animates. This loss was caused by frequent neuter reference to females, with the use of diminutives as an important factor.

Does this exonerate medieval German society of the accusation of blatant linguistic sexism? Not quite: It remains astonishing that the functional need to distinguish agent and patient did not muster sufficient resistance against reference to females by forms with N/A case syncretism.

5.6. The Rise of Plural Marking?

While I feel that the hypothesis advanced in the previous paragraph is plausible, I would like to suggest another possible reason for case syncretism with feminines. In the weak declension class of feminines, the endings *-e* and *-en* fell out of use as markers of the N/A distinction. But they acquired a new function, namely to mark singulars and plurals in a

uniform way. This was proposed by Møller (1937). Compare the paradigm in Early New High German and Standard German:

	Early New High German		Standard German	
	Singular	Plural	Singular	Plural
Nominative	die zunge	die zungen	die Zunge	die Zungen
Accusative	die zungen	die zungen	die Zunge	die Zungen
Dative	der zungen	den zungen	der Zunge	den Zungen
Genitive	der zungen	der zungen	der Zunge	der Zungen

Quite generally, the morphological changes within the nouns have led to a perspicuous marking of number distinctions (cf. Wegera (1985)). One should keep in mind that systematic number marking was particularly important for feminines, as number is not distinguished by the article except in the dative case.

A point in favor of this reasoning is our observation above, that for nouns it was the nominative form that generalized to the accusative form, in contrast to the situation with pronouns and articles. This even holds for inanimate nouns, cf. Early New High German *die seite* ‘the side.NOM’ / *die seiten* ‘the side.ACC’ to Standard German *die Seite* ‘the side.NOM/ACC’. We see now that this does not mean that the nominative won out over the accusative; rather, the nominative form was the only one that was distinctive in its number marking and hence spread to the other cases within the same number.

The drift towards perspicuous number marking may have been an important reason for case syncretism in the declination of nouns. But it is difficult to imagine that it was the driving force for the general case syncretism in feminines. Recall that N/A syncretism happened considerably later with nouns than with pronouns.

5.7. Rule of Referral to Plural Pronouns?

Number might have played a similar role in case syncretism of pronominal elements. In the transition from Old High German to Middle

High German, plural forms syncretized for all the genders, and feminine singular forms ended up very similar to plural forms.

		MascSg	NeutSg.	Fem.Sg.	MascPl	Neut.Pl	Fem.Pl
Old H.G.	Nom.	ēr	iz	siu, si	sie	siu	sio
	Acc.	inan, in	iz	sia (sie)	sie	siu	sio
	Gen.	(sîn)	ēs	ira	iro	iro	iro
	Dat.	imo	imo	iru	im	im	im
Mid.H.G.	Nom.	ēr, her	ēz (it)	siu	sî sî sie	sie sî si	sie sî si
	Acc.	in, inen	ēz (it)	sie sî si	sie sî si	sie sî si	sie sî si
	Gen.	ēs (sîn)	ēs (sîn)	ire ir	ire ir	ire ir	ire ir
	Dat.	ime, im	ime, in	ire, ir	in	in	in
Mod. G.	Nom	er	es	sie	sie	sie	sie
	Acc.	ihn	es	sie	sie	sie	sie
	Gen.	sein(er)	sein(es)	ihr(er)	ihr(er)	ihr(er)	ihr(er)
	Dat.	ihm	ihm	ihr	ihnen	ihnen	ihnen

We observe, first, that even in Old High German nominative and accusative were not distinguished in the plural. This is not remarkable, given that plural is the marked category, and syncretism is more likely in marked categories. The N/A forms were distinct for the three genders, but there was already syncretism for genitive and dative forms. Hence, there was pressure towards nondistinction of all gender forms, and in Middle High German, the forms merged. For the N/A case this might have happened by generalization of the OHG masculine form, *sie*.

Note that after this merger, the plural forms of nominative and accusative pronouns became very similar to the feminine singular. There remained only one distinct form, *siu*. Eliminating this one form, and replacing it with the already established allomorph *sie*, led to a situation in which the same forms were used for the feminine singular and the common plural, for nominative and accusative case. This was even generalized by assimilating the feminine genitive form *ira* to the common plural form *iro*, which became [irə] by general reduction of unstressed vowels.

This suggests another potential reason for the merger of nominative and accusative in feminines: The singular feminine forms might have become tied to the emerging common plural forms by a rule of referral (cf. Zwicky (1985), Stump (1993)) by which language learners identified the nominative and accusative form of feminine singular pronouns (and demonstratives) with the corresponding forms of the plural. As the plural did not distinguish between nominative and accusative, the feminine singular lost this distinction as well. This explains, incidentally, why we find *sie* as the generalized form for nominative and accusative: It is not the feminine accusative that generalized; rather, it is the homophonous N/A form of the plural *sie* that goes back to the masculine plural form *sie* of Old High German. This rule of referral included also the genitive forms. Only the dative forms remained distinct, and they are distinct today (feminine singular *ihr*, plural: *ihnen*).

The view of rules of referral that is suggested by this picture is that one way in which they arise when one part of a paradigm becomes sufficiently similar to another one. If there is no strong functional reason to keep them apart, their forms may become the same, thus reducing the information present in a paradigm.

5.8. Reorganisation of the Pronominal Paradigm?

Rules of referral have sometimes been considered of questionable value for a morphological theory that tries to capture the morphological knowledge of speakers because they are theoretically unconstrained (cf. e.g. Wunderlich (2003)). We might be able to explain the effect of the plural declension on feminines in a more systematic way if we assume a special paradigmatic relationship between feminines and plurals.

For example, Bittner (2003) has proposed – rather speculative – semantic reasons for a closer relationship between feminines and plurals, pointing out that grammatically derived feminines typically denote abstract entities, and that the semantic side of plural formation is, in a sense, comparable to the formation of abstracts.

Another view that assumes a closer systematic relationship between feminines and plurals emerges from work like Wiese (1999) and Müller (2001). In Modern Standard German, all gender distinctions are collapsed in the plural, which allows to treat plural as one of the genders, on a par with masculine, feminine and neuter.

Viewing plural as a gender is by no means unusual from a typological viewpoint. Research on noun class systems (cf. Corbett (1991) for an overview) has found that plural classes can be considered noun classes that stand in systematic relationship to other noun classes. This view also has several welcome consequences for the description of German. First, pluralia tantum like *Kosten* ‘costs’ which traditionally lack a gender can be assigned a gender, just like other nouns. Second, pluralization now can be seen as a derivational, and not an inflectional, process that changes non-plural nouns to plural with an accompanying semantic effect. It is similar to the collectivizing derivation with the prefix *ge-*, which changes nouns into neuters (cf. *Wolk-e* ‘cloud’ (feminine), *Gewölk* ‘cluster of clouds’ (neuter), in addition to *Wolk-en* ‘clouds’ (plural)). This explains why it is restricted: Mass nouns, like *Gold*, don’t have a plural form. Furthermore, we can also explain why plural nouns can be the source of further derivational processes, as in *Kind-er-chen* ‘child-PLURAL-DIMINUTIVE’⁶.

There are problems with the unorthodox view that plural is one of the genders. Perhaps the most severe one, pointed out to me by Manfred Bierwisch, is that there appears to be covert gender in plurals, witness forms like *die Äpfel, von denen einer verfault war* ‘the apples, of which one.MASC was rotten’ vs. *die Birnen, von denen eine verfault war* ‘the pears, of which one.FEM was rotten’. This even holds for certain pluralia tantum nouns: *die Leute, von denen einer / *eine blind war* ‘the people, of which one.MASC / *one.FEM was blind’. But it may be possible to account for these phenomena as cases of ‘semantic’ agreement. For example, pointing to an apple, one can say *Der ist verfault* ‘this.MASC is rotten’, whereas pointing to a pear, one has to say *Die ist verfault* ‘this.FEM is rotten’. In the case of *Leute* we might have default masculine agreement for single persons; there is no clear singular gender for non-animate pluralia tantum such as *Kosten*.

⁶ To be sure, this process is restricted to *-er* plurals (and hence to masculines and neuters), cf. *Häus-er-chen* ‘little houses’, *Männ-er-chen* ‘little men’. Nevertheless, this is an open class, and treatment of plural as an inflectional category couldn’t possibly deal with it. Note, also, that simple diminutives are plurals by zero derivation, e.g. *das Kind-chen* ‘the.SING child-DIMINUTIVE’, *die Kind-chen* ‘the.PLUR child-DIMINUTIVE’. Also, in substandard German the plural suffix *-s* can follow the derivational suffix, as in *Fräu-lein-s*, possibly by English influence.

For the purpose of this article it is most important that viewing plural as a fourth gender allows for a more succinct description of patterns of case syncretism. Compare the following alternative description of syncretism in the pronominal paradigm of Modern German that could be the basis for morphological impoverishment rules in the style of Noyer (1998).

- (a) i. Nom=Acc for all items that are [*not masculine*] or *plural*.
ii. Gen=Dat for all items that are *feminine and singular*.
- (b) i. Nom=Acc for all items that are *not masculine*
(i.e. for neuters, feminines, and plurals).
ii. Gen=Dat for all items that are *feminine*.
(i.e. not for masculines, neuters, or plurals).

(a) assumes that number is orthogonal to gender, (b) assumes that plural is one of the genders. Notice that (b) allows for a more concise description of case syncretisms. See Wiese (1999) and Müller (2001) for further ways to capture syncretisms, using the featural analysis of the German case system of Bierwisch (1967). This view allows us to see the merger of nominative and accusative forms of feminines as a result of the integration of plurals into the gender system, which consequently allowed for morphological impoverishment rules like (b) above. Yet, even if this scenario is correct, it is remarkable that animacy did not prevent the merger of nominatives and accusatives for feminines.

It is perhaps interesting to note that in the resulting system, feminine and plural forms are not distinguished for pronouns, even though full NPs do distinguish these forms due to plural marking of the noun, as in *die Zunge / die Zungen*, or *die Frau / die Frauen*. With pronominal forms, number can only be distinguished indirectly, by verb agreement, if the pronominal forms occur in subject position:

Sie komm-t heute.	Sie komm-en heute.
she come-3SG today	they come-3PL today

If we recall the general tendency that pronouns occur more likely in subject position, and full NPs more likely in object position, then the functional need for distinguishing number with pronouns might have been less pressing than with full NPs.

6. Conclusion

We started out with the observation that feminines in German lack a N/A case distinction throughout all morphological classes that exhibit case and gender. We pointed out that this is quite remarkable from a typological viewpoint and also from the perspective of other Indo-European and Germanic languages, under the assumption that feminines denote animates to a similar degree as masculines. The reason is that there is a strong functional motivation for case distinction differentiating between agents and patients for animates and pronominal elements (and more specifically, for a case distinction following the nominative-accusative pattern).

This finding can be interpreted straightforwardly as evidence of a sexist society in which the denotation objects of feminine NPs occur less frequently in the agent role than the denotation objects of masculines; the need to distinguish agent and patient would then be less pressing for feminines. I have argued that this may be an important factor, but added more details to this general picture.

First, I showed that reference to females quite often was not accomplished by feminine forms. Various types of evidence was adduced for this, like the low incidence of animate nouns in feminines compared to masculines, the high incidence of reference to females in texts by neuter nouns in Middle High German, and the lack of grammatically enforced animacy features for feminines in the morphological system of the language. It remains to be investigated whether the predecessors of Standard German differed from other Germanic languages by showing more reference to females by non-feminine, and in particular neuter NPs. There is evidence that gender systems that are sex-based to a greater degree, like English, managed to keep up a N/A distinction for feminines for pronouns (if only via case syncretism of accusatives and datives).

Second, a review of the changes in noun declension showed that the overall drift from a clear distinction of case to a perspicuous and uniform distinction of number might have led to the obliteration of case distinction for feminines. This is because feminines became similar with plural forms, and the N/A distinction was not expressed in the plural, the marked category of number, even in Old High German.

Third, a review of the pronominal declension also showed that feminine forms might have been modelled after plural forms, thus losing the N/A distinction. The process that has led to this might have been trig-

gered by the establishment of rules of referral or morphological impoverishment rules that linked feminine forms to the nearly identical plural forms.

In any case, it is quite possible that an element of sexism in the language community played a role in these developments. If one endorses a view that such asymmetries create a sexist bias in the cognitive attitude of speakers and therefore should be removed, one faces a nearly impossible task. While we try our best to circumvent the generic use of masculines with forms like *Studentinnen und Studenten*, or the unpronounceable *StudentInnen* (which originated from the slash indicating alternatives, *Student/innen*), language reformers that intend to design remedies for the gender asymmetries in the case system are faced with two options: (a) Give up the N/A distinction for masculines, allowing for sentences like *der Vater liebt der Sohn*. (b) Reintroduce a N/A distinction for feminines, allowing for sentences like *die Mutter liebt dien Tochter*. Needless to say, neither one of these options seems particularly attractive (cf. Krifka (1982)).

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