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AGREEMENT FROM A DIACHRONIC PERSPECTIVE

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Hybrid nouns and their complexity

Abstract: Hybrid nouns, nouns which induce different agreements according to the target, have been described in various languages. The new question is why they exist at all. There is clear evidence that hybrids vary considerably in the agreement they control, even within a single language. It therefore seems logical to align this variability with lexical semantics, and this is convincing for some hybrids. But this motivation is hard to reconcile with the fact that some hybrids are hybrids only for part of their paradigm. These latter instances suggest that the underlying motivation for some hybrids is a form-meaning mismatch.

Introduction

Hybrid nouns are those whose agreement specification varies according to the agreement target; examples are German *Mädchen* ‘girl’, English *committee* and Serbo-Croat *gazde* ‘bosses, landlords’. They are important for the insight they give into agreement systems more generally, and for their varying role in linguistic change. There has been a good deal of research into them, often in terms of the constraints on their agreements imposed by the Agreement Hierarchy. However, a key question has received comparatively little attention, namely, why there are hybrids at all. I first outline the problem (Section 1) and give the essential background (Section 2). I then identify three pointers towards a solution (Section 3). A major problem concerns featural restrictions (Section 4) and the issue of full and split hybrids. From there we move to the role of hybrids in diachrony (Section 5) before concluding (Section 6).

1 The problem: assignment

In the normal situation, semantic factors override formal characteristics in the assignment of morphosyntactic feature values. Thus Latin *nauta* ‘sailor’ is masculine, since its meaning takes precedence over its inflectional morphology. Similarly all the agreements of Russian *djadja* ‘uncle’ are masculine, following its meaning, even though it inflects in a manner typical of a feminine noun. Hybrids are more complex: assignment is not uniquely determined in favour of one particular value. Thus German *Mädchen* ‘girl’ is not fully neuter nor fully feminine,

since it does not take the consistent agreement pattern of either gender: hence it is a hybrid. One way hybrids have been thought about is to suggest that the semantic factor does not fully override the formal. These conflicting factors play out differently for the different target positions on the Agreement Hierarchy (presented in Section 2.2 below). The target positions which are more distant in syntactic terms have less ready access to the formal information, it was suggested, while the semantic information is still available. This makes a good deal of sense, but the question remains why German *Mädchen* ‘girl’ is a hybrid while Russian *djadja* ‘uncle’ is not. More generally, since we know that semantic factors win out over formal ones in assignment, why does this not happen with hybrids like *Mädchen* ‘girl’?

Other issues have been identified, which bear on possible solutions to our problem. They concern variability of agreement within classes of hybrids, and even with individual hybrids. At first sight, they compound our problem, but they can also be seen as useful pointers to a solution.

2 Essentials

2.1 Hybrids and constructional mismatches

In the canonical situation, a given item always controls the same agreements; if a noun is feminine singular, any agreement target which it controls will be feminine singular. There are various situations where this does not hold. Lexical hybrids are particularly interesting because they take different agreements, and specifically agreements which differ according to the target. They do not simply have alternative agreements, rather agreement is determined in part by the target. Thus English *committee* allows both singular and plural agreement, particularly in British English. Hence we find both *the committee has decided* and *the committee have decided*. However, this is not a free choice of singular and plural agreement: **these committee* is excluded. Hence the distribution of singular and plural agreement is constrained by the agreement target. In this paper the focus is on lexical hybrids, some of which have two possible gender values and some have two number values; however, it is worth recalling that the issue is not restricted to individual nouns. Whole constructions, such as conjoined noun phrases, exhibit similar properties (Corbett 2006: 220–224).

2.2 The Agreement Hierarchy

We noted that while hybrids allow more than one possible agreement specification, the variants are constrained by the target. There are four key types of target, specified in the Agreement Hierarchy (Figure 1):

attributive > predicate > relative pronoun > personal pronoun

Figure 1: The Agreement Hierarchy (Corbett 2012: 95)

The relevant constraint is as follows: “For any controller that permits alternative agreements, as we move rightwards along the Agreement Hierarchy, the likelihood of agreement with greater semantic justification will increase monotonically.” (Corbett 2012: 95)

We shall see various examples in the paper. As a first one, recall that while **these committee* is not accepted, we find many instances of both *the committee has decided* and *the committee have decided*. That is, semantically justified agreement, the plural, is found in the predicate but not in attributive position. This fits with the constraint. For compilations of examples of hybrids see Corbett (2006: 213–227) and Croft (2013: 99–103).

2.3 Features

The features normally involved with hybrids are gender and number; even the extension in applicability of the Agreement Hierarchy to possessive adjectives in Slavonic (Corbett 1987) involves these features. There are other features which may be conditions on agreement, in addition to the Agreement Hierarchy constraint (something we return to in Section 4). It is perhaps worth pointing out that the Agreement Hierarchy makes no claim about which items will be agreement targets: thus the Hierarchy applies to German hybrids like *Mädchen* ‘girl’ to the extent that is possible – the fact that predicates in Modern German do not inflect for gender means that there is no prediction for that target. Some recent suggested counter-examples concern the targets which show or do not show agreement. That is a different issue: the Agreement Hierarchy constrains the distribution of syntactic and semantic agreement, not the inventory of agreement targets (a point made clear in Siemund & Dolberg 2011: 528–529).

3 Pointers

While there are numerous hybrids, in various languages, which follow the Agreement Hierarchy, we still need to understand why it is that they are hybrids. As we noted, we would expect the semantic rules of assignment to take precedence. To help us come to grips with how hybrids work, there are three pointers, which we look at in turn.

3.1 German *Mädchen* ‘girl’

Consider this example:

German (Siemund & Dolberg 2011: 492)

- (1) *Das Mädchen dachte an die Blume-n,*
 ART.SG.N girl think.PST.3SG of ART.PL flower-PL
die sie/es vergessen hatte.
 REL.PL 3SG.F/3SG.N forgotten AUX.PST.3SG
 ‘The girl thought of the flowers that she had forgotten.’

The noun *Mädchen* ‘girl’ takes the neuter form of the article, but it is not consistently neuter. We see this by looking at the personal pronoun, which is often feminine, though neuter is also found. This shows that the noun is a hybrid, since the gender value it takes depends on the target. Its agreements are constrained by the Agreement Hierarchy.

Manfred Krifka suggested (personal communication, reported in Corbett 1991: 228) that the older the girl referred to the more likely the use of *sie*, and the younger, the more likely *es* becomes. This interesting suggestion has been confirmed in a paper by Braun & Haig (2010). In a study of 302 native speakers of German, it is shown that when the age of the *Mädchen* is specified, speakers are more likely to use *sie* for a *Mädchen* who is 18 than for one that is 12 or younger. The form of *Mädchen* is not changing, rather the semantics. We might have assumed that German has a simple rule of gender assignment (nouns denoting females are feminine), but evidently things are more complicated; for the purposes of the rule of gender assignment *Mädchen* does not straightforwardly denote a female.

3.2 English *family* versus *committee*

Committee has been one of the central examples from the beginnings of the discussion of hybrids. We talk readily of *committee* nouns, as though they were all the same, but they vary dramatically. Levin (2001) undertook a substantial corpus study of *committee* and similar nouns. His data provide overwhelming evidence that such hybrids are indeed subject to the Agreement Hierarchy. Moreover, he shows that there are differences between items: they are not all just like *committee*.¹ Consider these data from Hundt (1998) and Levin (2001):

Table 1: Predicate agreement with various *committee* nouns across some varieties of English

country	United States		New Zealand		Great Britain		Great Britain	
newspaper	<i>Miami Herald</i>		<i>Dominion and Evening Post</i>		<i>The Guardian</i>		<i>Independent</i>	
source	Hundt (1998: 82)		Hundt (1998: 82)		Hundt (1998: 82)		Levin (2001: 65)	
	<i>N</i>	% PL	<i>N</i>	% PL	<i>N</i>	% PL	<i>N</i>	% PL
<i>government</i>	100	0	100	0	100	0	365	5
<i>committee</i>	100	0	100	1	100	3	137	9
<i>team</i>	100	2	100	7	100	38	145	37
<i>family</i>	100	3	100	41	100	28	173	37

Hundt (1998) collected her data by counting until she had found 100 examples, hence the unusual totals; Levin (2001) used a straightforward corpus count. We see variation between the varieties of English (with American English having the lowest rates of semantic agreement, and British English the highest). We could find substantial variation too by comparing agreement of the pronoun (the counts for the plural are higher for the pronouns, in accord with the Agreement Hierarchy). The key issue, however, is that the figures vary dramatically between the lexical items: agreements with *family* are not the same as those for *government*, for instance; more evidence is presented in Depraetere (2003: 110–111), Bock et al. (2006: 98), Levin (2006), and for Singaporean English and Philippine English in

¹ This was suggested earlier by Gil (1996: 64): “Different lexical items may also be associated with different degrees of plurality and singularity.” Levin (2006: 334) points to Poutsma (1914: 283) for a similar claim, and Poutsma indeed gives examples for several different hybrids in his discussion (1914: 284–294).

Hundt (2006). The mixed behaviour of *team* probably results from the fact that this noun appears frequently on the sports pages of newspapers and on general pages too, and with rather different results; there are more plurals on the sports pages (see Hundt 1998: 86–87). The central point for our current discussion is that hybrids vary substantially in the agreements they take: *committee* nouns are not identical in their behaviour.

3.3 Dutch ‘committee nouns’

We have established that there is more to hybrids than a meaning-form mismatch. We saw how the use of *Mädchen* with different referents can lead to different agreements (Section 3.1). And we have just seen that apparently similar nouns can have very different proportions of semantic agreement (Section 3.2). Now we turn to a study where the different agreement possibilities are correlated with meaning differences. The relevant study concerns Dutch.

Joosten et al. (2007) analyse Dutch nouns comparable to English *committee*. They show that these nouns have different “conceptual profiling”: for instance, in *an old club* the “collection” is old, while the members can be young, while in contrast *an old audience* is one where it is the members who are old.² According to Joosten et al. (2007: 86–87) this suggests that the member level of *club* is profiled to a lesser extent than the member level of *audience*. They consider various means to distinguish between the collection level and the member level and propose a three-way division of nouns. Type 1 nouns generally trigger collection level interpretations (for instance, *vereniging* ‘association’); Type 2 nouns, readily allow both interpretations (like *familie* ‘family’); Type 3 nouns generally trigger member level interpretations (as with *bemannings* ‘crew’); the list of 18 such nouns which they investigated will be given in Table 3 below.

Turning to agreement, Joosten et al. took two large corpora, first the CONDIV corpus (47 million words), with additions for less frequent nouns from the INL corpus (38 million words); the data on the 18 *committee* nouns are summarized in Table 2).³

² For earlier discussion of English see Copestake (1995) and Wechsler & Zlatić (2003: 76–81).

³ The CONDIV corpus is described in Grondelaers, Deygers, Van Aken, Van den Heede & Speelman (2000); the INL Corpus (the Corpus of the Instituut voor Nederlandse Lexicologie) is specified in Kruyt & Dutilh (1997).

Table 2: Agreement with Dutch noun phrases headed by *committee* nouns (derived from Joosten et al. 2007: 98)

verb		relative pronoun		possessive pronoun		personal pronoun	
<i>N</i>	% PL	<i>N</i>	% PL	<i>N</i>	% PL	<i>N</i>	% PL
6804	0.6	1242	2.0	787	21.2	876	50.0

These data demonstrate the constraint of the Agreement Hierarchy. We see quite clearly a monotonic increase in semantic agreement. Furthermore, the Dutch possessive pronoun can be distinguished from ordinary personal pronouns.

Let us now look at the 18 particular nouns, and relate the judgements concerning collection level and member level to the agreements found. The data presented in Table 3 are entirely derived from Joosten et al. (2007), but they are treated somewhat differently.⁴ We take their data just from the CONDIV corpus, and we consider only the personal pronoun. As we see from Table 2, this target readily takes both singular and plural forms with *committee* nouns in Dutch, and so it gives every chance to see the effect of other factors.

A first observation is that there is a dramatic spread in the agreement, according to the particular noun, from over 90% plural to under 5% plural. This reinforces the earlier point about hybrids varying considerably in the agreements they control. In Table 3 the semantic type for each noun is also given, from the three types described above. Thus *duo* ‘duo, pair’ has the highest proportion of plural (semantic) agreement of the personal pronoun, namely 91.9%; moreover, it is of Type 3, that is, one of those nouns which generally trigger member level interpretations. If we compare the two columns – that for agreement and that for semantic type – we see that they correlate well, particularly at the extremes. A high proportion of plural agreement is found with high member level accessibility. The correlation is good (though not as impressive as that in Joosten et al. 2007). Items which stand out are *publiek* ‘public’, also meaning ‘audience’, and *koor* ‘choir’. There are various factors which could be investigated further. But the key point is that the research of Joosten et al. (2007) demonstrates a link between the lexical semantics of particular nouns and the differing proportions of syntactic and semantic agreement found with them (see also Bock et al. 2006: 84). Impro-

⁴ Joosten et al. have a procedure which involves taking the mean of the percentage plural agreements with two different targets, the possessive pronoun and the personal pronoun, which appears somewhat ad hoc. The procedure for deriving the data in Table 3 is more straightforward, and the resulting picture is less neat as a result.

tantly for us, it gives a separate measure, apart from agreement, for ranking the different nouns.

Table 3: Dutch nouns: percentage plural agreement of personal pronoun and semantic type (derived from Joosten et al. 2007: 97, 116–122)

lexical item	N	% plural	semantic type
<i>duo</i> ‘duo, pair’	62	91.9%	3
<i>echtpaar</i> ‘married couple’	33	81.8%	3
<i>bende</i> ‘gang’	24	70.8%	2
<i>gezin</i> ‘family, household’	23	69.6%	3
<i>bemannig</i> ‘crew’	42	64.3%	3
<i>familie</i> ‘family’	77	55.8%	2
<i>koor</i> ‘choir’	34	52.9%	1
<i>publiek</i> ‘public’	53	52.8%	3
<i>delegatie</i> ‘delegation’	38	52.6%	2
<i>firma</i> ‘firm’	27	48.1%	1
<i>team</i> ‘team’	23	43.5%	2
<i>club</i> ‘club’	31	35.5%	1
<i>bond</i> ‘union’	24	29.2%	1
<i>vereniging</i> ‘association’	39	15.4%	1
<i>leger</i> ‘army’	17	11.8%	1
<i>comité</i> ‘committee’	45	6.7%	1
<i>maatschappij</i> ‘company’	35	5.7%	1
<i>regering</i> ‘government’	118	4.2%	1

3.4 Progress so far

We saw in Section 3.1 that a noun can be treated as “more feminine” or “less feminine”, while Section 3.2 showed that within a set of nouns with similar semantics some items are nevertheless “more plural” and some “less plural”. In section Section 3.3 we saw that the vague notion “more plural” is in fact independently

testable. Hence our problem is not just one of meaning versus form, but also concerns subtler variations of meaning.

When it is stated that, as we move rightwards on the Agreement Hierarchy, we shall find more instances of semantically justified agreement, it is the more general or abstract semantic distinction which wins out. For instance, an individual may be considered in terms of a specific role (doctor, landlord and so on), but as the syntactic distance increases, so the more general semantic distinction male/female assumes a larger role. Similarly a group of individuals may be conceptualized differently (as a gang, choir or club, for instance), it is the general semantics of number (one versus more than one in the languages we have been considering) which comes to the fore at the rightmost end of the Agreement Hierarchy. The particular balance can vary between varieties, styles and individuals, but we expect some broad similarity in the ranking of different items (that is, we would expect *family* to be more likely to take plural agreement, whatever the actual percentage, than *government*).

So far, then, it seems that the solution to our problem of why there are hybrids might lie in the area of lexical semantics. And this certainly takes us forward considerably. However, there is a complication which suggests there is more to be uncovered before we can arrive at a full account of which nouns are hybrids and which are not: this complication is the problem of featural restrictions.

4 Featural restrictions

A potential problem for the analysis we are working towards is the existence of lexemes that are hybrids only for a part of their paradigm. The issue is this: we might assume that a lexeme's lexical semantics is the same through the paradigm, yet some lexemes have different agreement possibilities in different segments of their paradigm.

We should first put to one side items which have different agreements but are not hybrids. For instance, Serbo-Croat⁵ *oko* 'eye' has the irregular plural *oči* 'eyes'. This morphological irregularity (a remnant of the former dual) brings with it a syntactic irregularity: the noun takes neuter agreement in the singular but feminine in the plural. Here the noun's paradigm is split, and the two different parts of the morphological paradigm bring with them two different agreements (see Corbett forthcoming for a typology of such split lexemes). But while this

⁵ I use "Serbo-Croat" here to cover Bosnian, Croatian, Montenegrin and Serbian (Corbett & Browne 2009). For recent discussion see Bugarski (2012).

noun has different agreements, they are consistent; that is, they are the same for every agreement target. Whatever the target, the noun is neuter when singular and feminine when plural. It is not therefore a hybrid: the point about hybrids is that their agreements are not consistent across targets.

Then, strictly speaking, some familiar hybrid nouns are hybrids only in a part of their paradigm. Thus *Mädchen* ‘girl’ and *committee* have agreements which are inconsistent (varying according to target) in the singular only. However, this is determined by the feature system of German and English. *Mädchen* ‘girl’ is a hybrid in respect of gender, and Modern German distinguishes gender in the singular only, hence there is no scope for this noun to be hybrid in the plural. And *committee* takes singular or plural agreements when it is singular; when plural this possibility is removed. There are other hybrids which are comparable, including Russian *para* ‘couple’ (a hybrid only when singular, as for English *committee*), and Polish devirilized nouns (which are hybrids in the plural only, as determined by the feature system of Polish). In all of these, the split in the hybrid is a by-product of the feature system. But this need not be the case. If we had an example comparable to *Mädchen* ‘girl’ in a language which distinguished gender in the plural, we could potentially have a hybrid which was not split, but was a hybrid in the plural as well as in the singular. Then these questions arise for our analysis: (i) do we actually find hybrids that are not split?; (ii) if not, how would our account deal with this?; and (iii) if we do find hybrids that are split which need not be (according to the feature system), how is the split to be accounted for?

Though they are rare, we arguably find both types: namely hybrids which are not split (“full hybrids”), discussed in Section 4.1 and Section 4.2, and hybrids which are split although they need not be (“split hybrids”), to be considered in Section 4.3 and Section 4.4. Examples of both types are of considerable interest.

4.1 Full hybrid in Old High German

There is a “full hybrid” in Old High German, namely *wīb* ‘woman, wife’. Agreements can in principle be neuter or feminine, and examples of both are found (documented in Fleischer 2012). There are two complicating factors here. First, the gender distinctions in the plural were in the process of being lost: in the personal pronoun, the masculine and feminine fell together as *sie* (versus *siu* neuter), and later *sie* was used irrespective of gender (see Fleischer 2012: 170, and references there). Second, there are relatively few unambiguous uses of plural agreement. However, in the writing of Otfrid we find the right set of circumstances. Otfrid distinguishes the neuter in the plural. (Specifically, in the personal pronoun, he has neuter versus a combined masculine/feminine (“common”) form, though there

are also three instances of the old feminine form *sio*, while in the demonstrative/relative pronoun, which is also used anaphorically as a demonstrative, he retains a feminine distinct from masculine and from neuter.) Moreover he provides a reasonable number of examples of plural pronouns. Otfrid von Weißenburg was a priest and poet. The Marburg project corpus includes his only extant Old High German work, the *Liber evangeliorum*, written between 863 and 871; the version used is that of the Codex Vindobonensis 2687 (see Goldberg 2006: 184–185 for some historical and political background to the writing, and Young & Gloning 2004: 67–76 for a linguistic introduction).

Let us consider some examples of agreements with *wīb* ‘woman, wife’, all from Otfrid. In attributive position, we find neuter singular agreement:

Old High German

- (2) *th-az uuīb*⁶
 DEF-SG.NOM.N woman[SG.NOM]
 ‘the woman’ (Otfrid III, 10, 19)

There is considerable syncretism in Old High German; the forms in (2) could also be accusative singular. Our next example is accusative singular in context, though the forms could equally be nominative:

- (3) *ein arm-az uuīb*
 INDF[SG.ACC.N] poor-SG.ACC.N woman[SG.ACC]
 ‘a poor woman’ (Otfrid II, 14, 84)

Again we find neuter singular agreement (*armaz* ‘poor’ is the strong form of the adjective). What we have seen so far could be replicated in Modern German. The difference is that there are gender distinctions in the plural too. We stay with attributive position:

- (4) *Th-iu uuīb gifuaro stuánt-un*
 DEF-PL.NOM.N woman[PL.NOM] decently stand.PST-3PL
 ‘The women stood decently.’ (Otfrid IV, 35, 23)

Note that *wīb* ‘woman, wife’ is the form for the nominative and accusative in both the singular and the plural. There are distinct forms of modifiers. Moreover,

⁶ The normalized form *wīb* ‘woman, wife’ has *w* for *uu* in the Otfrid text, and a macron to indicate vowel length. In the Otfrid manuscript, there is no indication of length, but there are accents to show the most accentuated syllables (it is a verse text).

the singular and plural are distinguished in other cases: *wībes* (SG.GEN), *wībe* (SG.DAT) versus *wībo* (PL.GEN) and *wībon* (PL.DAT). There is a substantial literature on nominal morphology in Old High German; for a recent review see Luiten (2011). In (4) the modifier demonstrates that *wīb* ‘woman, wife’ is plural, and the modifier is in the neuter.

To prove that we have a hybrid, we need to find an agreement target whose agreements differ from those of the attributive modifier. We find this in the personal pronoun:

- (5) *th-az uuib thaz si*
 DEF-SG.NOM.N woman[SG.NOM] that 3SG.NOM.F
 ‘the woman, that she ...’ (Otfrid III, 10, 19)

In (5) we see another neuter singular modifier, and more importantly a feminine singular pronoun. Clearly, then, agreement with *wīb* ‘woman, wife’ depends on the particular target, hence it is indeed a hybrid. However, this too could be found in Modern German. It is examples like the following which show its special interest as a “full hybrid”.

- (6) *Th-iu uuib th-ero lant-liut-o*
 DEF-PL.NOM.N woman[PL.NOM] DEF-PL.GEN provincial-people-PL.GEN
th-iu ir-uuéino-t-un tho luto
 DEM-PL.NOM.N INCH-cry-PST-3PL then loud
uuán-u sie oh thaz rúz-in
 think-1SG 3PL.NOM.M/F also that mourn-PST.3PL
uuaz síe imo leuues uuízz-in
 what 3PL.NOM.M/F 3SG.DAT.M alas accuse-PST.3PL
 ‘The women from the province, they started to cry out loud; I think they also mourned about what they, alas, had accused him of.’ (Otfrid IV, 26, 5–6)

Here the neuter plural modifier shows that *uuib* ‘woman, wife’ is plural. In line 2, *th-iu* is a demonstrative pronoun, functioning as a resumptive for the topicalized phrase. The key item is *sie* ‘they’, which is syncretic between masculine and feminine, but is distinct from *siu* (neuter plural). (It is worth pointing out that the second *síe* is not relevant here; it refers not to the women but indicates those who accused him (Jesus).) Thus *sie* shows semantic agreement in the plural: this means that we have an item which is a hybrid in both singular and plural.

Let us now look at a count of all the relevant examples from Otfrid’s *Liber evangeliorum*, kindly extracted by Magnus Breder Birkenes:

Table 4: Agreement with *wīb* ‘woman, wife’ in Otfrid’s *Liber evangeliorum* (Magnus Breder Birkenes, p.c.)

	attributive			relative pronoun			person pronoun*		
	NEUT	FEM	%sem	NEUT	FEM	%sem	NEUT	FEM	%sem
SINGULAR	29	0	0	5	1	17	0	115	100
	NEUT	FEM	%sem	NEUT	FEM	%sem	NEUT	MASC/FEM	%sem
PLURAL	8	0	0	1	0	(0)	4**	18	82

Notes:

* ambiguous examples have been excluded (notably in the personal pronouns)

** there are also two instances of demonstrative pronouns, functioning as resumptives, both neuter. One of these was in example (6).

Consider first the singular. We see that Otfrid uses syntactic (neuter) and semantic (feminine) agreement, with a dramatic difference according to the Agreement Hierarchy position. Semantic agreement (“sem” in Table 4) increases monotonically from left to right. This is sufficient to demonstrate that *wīb* ‘woman; wife’ is a hybrid in Otfrid’s usage. Now turn to the plural; again Otfrid uses syntactic (neuter) and semantic (feminine or masculine/feminine) agreement. In the plural too, though the figures are small, we again see a monotonic increase in semantic agreement. Thus we have a “full hybrid”, since this item takes inconsistent agreement throughout its paradigm (singular and plural).

We must be careful in the interpretation of these relatively small numbers. It may appear that the gender agreements differ between singular and plural (compare Fleischer 2012: 184 fn. 13 and 196). There are more instances of semantic agreement in the singular than in the plural (and this would fit with the examples like Serbo-Croat *gazda* ‘landlord’, as in Section 4.3 below, where there is a complete split). However, the figures are small; we should also note that the choice is not quite the same in the singular and the plural; in the plural personal pronoun the choice is between neuter and masculine/feminine; this means that the “semantic” choice is not as clearly semantic as in the singular, which might be a factor in any difference that there is.

4.2 Full hybrid: Icelandic

Most modern Germanic languages have lost gender distinctions in the plural, and so it is not possible to find examples like those found in Otfrid. It is natural, however, to check Icelandic. For all the research into Icelandic, it is hard to find

research on the issue of hybrids (though see Graf 2007 and Þórhallsdóttir 2009). For these examples I am grateful to Joan Maling, Sigríður Sigurjónsdóttir, Halldór Ármann Sigurðsson, Thomas Graf and Guðrún Þórhallsdóttir. The judgements given here are those of Guðrún Þórhallsdóttir and they are more liberal in terms of semantic agreement than the judgements of some other speakers. In examples (7) and (8) the intended referent of the subject is male (though in general the noun *lögga* can refer to police officers of either sex):

Icelandic

- (7) *Þess-i lögg-a er fræg. Hún / Hann*
 DEM-SG.NOM⁷ cop-SG.NOM be.PRS[3SG] famous[F.SG]. 3SG.F / 3SG.M
bjarg-að-i lítill-i stelp-u.
 rescue-SG.PST-3SG little-F.SG.DAT girl-SG.DAT
 'This (male) cop is famous. He rescued a little girl.'

- (8) *Þess-ar lögg-ur er-u fræg-ar. Þær / Þeir*
 DEM-F.PL.NOM cop.PL.NOM be.PRS-3PL famous-F.PL.NOM. 3PL.F / 3PL.M
björg-uð-u lítill-i stelp-u.
 rescue-PL.PST-3PL little-F.SG.DAT girl-SG.DAT
 'These (male) cops are famous. They rescued a little girl.'

Lögg-a 'cop' (like *hetj-a* 'hero' and similar nouns) takes feminine agreement for most targets, even when reference is to a male. For the personal pronoun, however, some speakers would use the masculine pronoun, and this is possible for both singular and plural. Thus Icelandic *lögg-a* 'cop' is a full hybrid.⁸

If we found only full hybrids, we could hope to account for hybrids in terms of their lexical semantics; it would remain a challenging task, but it would appear realistic to attempt it. However, there are more complex instances, namely split hybrids, to be considered.

⁷ The demonstrative *Þess-i* is the form for both masculine and feminine singular.

⁸ As Guðrún Þórhallsdóttir points out (p.c.) there is also interesting work to be done on the numerous nouns like *nemandi* 'student'; such nouns may refer to females and males and in the plural this gives the possibility of using the neuter plural for groups including both sexes; see, for instance, Þráinsson (2005: 517–518). For further discussion of syntactic and semantic agreement in Icelandic see Guðrún Þórhallsdóttir (this volume).

4.3 Split hybrid: Serbo-Croat

Serbo-Croat nouns like *gazda* ‘boss, landlord’ are hybrids, as we shall see. These nouns frequently denote males in terms of their trade or profession. They inflect according to an inflectional class whose members are typically feminine in gender. Since Serbo-Croat distinguishes three genders in the singular and in the plural, these nouns could in principle be full hybrids. In fact they are more curious than that. In the modern language, these nouns take masculine agreement in the singular. In the plural, however, they are hybrids taking masculine and feminine agreement. The agreement choices for nouns like *gazda* ‘landlord’ when plural are illustrated by Leko (2010):

Serbo-Croat (Leko 2010: 99)

- (9) *Propal-e / propal-i gazd-e koj-e / koj-i još živ-e*
 ruined-PL.F ruined-PL.M landlord-PL who-PL.F who.PL.M still live-3PL
 ‘The ruined landlords who are still alive’
- izgubil-e / izgubil-i su imetak poslije rat-a*
 lost-PL.F lost-PL.M AUX.3PL property after war-SG.GEN
 lost their property after the war
- On-i / *on-e još sanjaj-u o prošlost-i.*
 3-PL.M 3-PL.F still dream-3 PL about past-SG.LOC
 ‘They still dream about the past.’

Leko (2010: 99 footnote 44) points out that while all these variants are possible in principle, not all combinations are found.

The option is constrained by the Agreement Hierarchy (the evidence is presented in Corbett 1983: 14–17; a good source of examples is Marković 1954). Thus, while the feature system of Serbo-Croat would allow for such nouns to be full hybrids, they are not. They are split, being masculine in the singular (following meaning not form) but in the plural they are hybrids.

This split goes a long way back: Old Church Slavonic (sometimes called “Old Bulgarian”) is the oldest source for Slavonic; for this Vaillant (1964: 165, 1977: 11–12) says that comparable nouns (like *sluga* ‘servant’) were masculine in the singular and usually feminine in the plural and dual (though he points out that masculine agreements were found here too). Huntley considered the full Old Church

Slavonic corpus, and confirms that the nouns are hybrids in the dual and plural but not in the singular (1993: 135–136).⁹ He gives these figures (1989: 23):¹⁰

Table 5: Agreement with plural nouns like *slugy* ‘servants’ in Old Church Slavonic (Huntley 1989: 23)¹¹

attributive		predicate		relative pronoun		other pronouns	
FEM	MASC	FEM	MASC	FEM	MASC	FEM	MASC
29	2	10	15	0	1	0	4

Since there are relatively few examples, I give just the actual numbers here. It is evident that they fit the Agreement Hierarchy closely: in attributive position syntactic agreement is strongly preferred, while in the predicate there is a preference for semantic agreement; the few examples of pronouns all show semantic agreement.

Serbo-Croat is the best modern source, since these hybrids have been greatly reduced in the other Slavonic languages, either because the language no longer distinguishes gender in the plural, or because the nouns have been made masculine.¹² There is a fragment of evidence for such nouns being full hybrids, at one particular time; in Čakavian dialects of the 16th–17th centuries, Glavan (1927–28: 116) found a very few examples of feminine agreement in the singular (alongside many masculine agreements in the singular, and both masculine and feminine in the plural).

Gazda ‘landlord’ and the sizable group of similar nouns are split in Serbo-Croat; they are hybrids in one part only (the plural); this is not externally imposed by the feature system, rather the inconsistent agreement creates the split where in principle it need not have done so. We might imagine that the split can be neatly linked to the issues of lexical semantics considered earlier; after all, when more than one individual is referred to, we could argue that their role can be

⁹ He notes (1989: 23 fn. 6) that there is a instance of feminine agreement in the singular in an 11th century East Slavonic copy of an Old Church Slavonic source. We cannot put much store by that single instance in terms of finding full hybrids.

¹⁰ In addition, Huntley (1989: 23) cites just two sentences including instances of agreement with such nouns in the dual: in attributive position the feminine is used, and elsewhere (participial use) the masculine.

¹¹ The figures given in Huntley (1993: 135) vary slightly but not significantly from these; since the Agreement Hierarchy positions are separated out in the 1989 publication, I give these here.

¹² See Herrity (1983) for evidence; for the specific issue of the use of the agreeing numeral with these nouns see Corbett (2009).

more significant and their sex is less significant (indeed the group might perhaps include females). Things are more complex than that, as this example shows:

Serbo-Croat

- (10) *Pap-e su napusti-l-e Rim i obitava-l-i u*
 pope-PL AUX.3PL leave-PST-F.PL Rome and live-PST-M.PL in
Avignon-u u Francusk-oj od 1305. do 1377. godin-e
 Avignon-SG.LOC in France-SG.LOC from 1305 to 1377 year-SG.GEN
 'The popes left Rome and lived in Avignon in France from 1305 to 1377.'
 (wapedia.mobi/hr/Papa, accessed 23.11.2007)

Here we see the same controller taking first feminine then masculine agreement. Where the same target position on the Agreement Hierarchy is involved, we have 'parallelism' of the targets; if there can be a difference in agreement, it will be the further from the controller which shows semantically justified agreement, as here (Corbett 2006: 234–235). However, the key point here is the first target: even though there is absolutely no issue as to the sex of the referents, we can still have feminine agreement in the plural (but not in the singular). An account purely in terms of lexical semantics, therefore, appears unlikely.

4.4 Split hybrid: Nordreisa dialect (Northern Norwegian)

Consider now data from the Nordreisa Dialect of North Norwegian (Enger & Corbett 2012). While the distinction between masculine and feminine is close to being lost, enough is preserved to give some remarkable agreements with the noun *mama* 'mum':

Nordreisa Dialect of North Norwegian

(11a)	/ei	<i>mama/</i>	and	(11b)	/e:n	<i>mama/</i>
	INDEF.SG.F	mum			INDEF.SG.M	mum
	'a mum'				'a mum'	

It seems that almost any noun that can take the feminine determiner *ei* can optionally take the masculine determiner *e:n* in this dialect (but not vice versa). So what we see in the indefinite in (11a) and (11b) would be normal even for an ordinary feminine noun. But now look at this example:

- (12) /*mama-n di:-n*/
 mum-DEF.SG your-M
 ‘your mum’

The noun *mama* ‘mum’ triggers only masculine agreement, provided it is definite (as in (12)). However, this is restricted to the noun phrase: outside the noun phrase feminine agreement is much preferred:

- (13) /*mama-n mi:-n e li:t-a*/
 mum-DEF.SG my-M is small-F
 ‘My mum is small.’

With pronouns, only semantic agreement is possible. See Enger & Corbett (2012) for full details. The relevance here is that Nordreisa Norwegian shows another partial hybrid: we find the special effect only in the definite, even though in principle there would be nothing to prevent a similar situation in the indefinite. It seems to be the unusual form of the noun in the definite which produces the hybrid.

The main point is that we find, if rarely, instances of split hybrids, which are a considerable complication in the search for a general account of why particular nouns are hybrids and others are not.

5 The role of hybrids in diachrony

Hybrids may remain hybrids for extended periods. Given the mismatch which gives rise to their status as hybrids, there is no necessity for this to be resolved. Fleischer (2012: 190–192) shows how agreement with Old High German *wīb* and New High German *Weib* ‘woman, wife’ has ebbed and flowed between semantic and syntactic agreement through the 9th to 20th centuries. This ebb and flow has been up and down the Agreement Hierarchy, in accordance with its constraint at each point.

In other instances, however, hybrids may be the catalysts for more substantial change. Perhaps the best documented example of this is found in around thirty Bantu languages spoken on the coast of Kenya and northern Tanzania and surrounding areas. Here we see nouns moving into the 1/2 gender, from other genders, going through a hybrid stage. Besides the migration of nouns to a new gender, the additional change is that while the 1/2 gender was originally for nouns with human referents, it has been extended to include animates. Wald

(1975) shows how different languages are at different stages of the change, but they appear to make the change in accord with the Agreement Hierarchy, starting from the pronoun and moving down the targets till finally the attributive position is reached (see discussion in Corbett 1991: 98, 252–256).

This would be the direction of change we would expect: the personal pronoun can in principle be indefinitely distant from its antecedent. This means that there are instances of its use which could be anaphoric or deictic (see also Köpcke, Panther & Zubin 2010 on this). It is the latter use which is an obvious source of semantic agreement. It is probable, though we do not have clear evidence, that two other dramatic changes came about in this way. Lak (Daghestanian) has four genders, and previously the assignments were basically: male human (I), female human (II), other animates (III), though including many inanimates too, and a residue gender (IV), also with a few animates in it. There was an important exception, namely *duš* ‘girl, daughter’, which belonged to gender III rather than to gender II. Gender III agreements came to be used as a sign of politeness when addressing young women (Khaidakov 1963: 49–50), especially if they were earning their own living, and nouns denoting them have been transferred to gender III. This usage has extended so that now gender III agreement forms are appropriate for any woman outside the immediate family. Within the family, older women such as *ninu* ‘mother’ and *amu* ‘grandmother’ are addressed and referred to using gender II forms. Thus the semantic base of gender II has been substantially restricted, and it has few nouns in it. A comparable change has happened in Konkani (Indo-European, Miranda 1975: 208–13), where the word for ‘girl’ was neuter. Where human referents are concerned, the neuter has become the gender for young females (or those relatively younger from the speaker’s standpoint). The noun *awoy* ‘mother’ is a hybrid: with feminine agreement for attributive modifiers, but neuter agreement for remaining targets (Miranda 1975: 211, reported in Corbett 1991: 231–231); this suggests strongly that the change has started from the personal pronoun and moved down the Agreement Hierarchy.

Though we do not have the detailed documentary evidence to match that available for the Bantu change, there is an instance which suggests at least that a change can run “up” the Agreement Hierarchy, starting with attributive position. Again this has led to a change in the core meaning of genders. The evidence comes from some southern Polish dialects (Zaręba 1984–85, discussed in Corbett 1991: 24–26, 99–101). Nouns denoting girls and unmarried women (irrespective of age), and including hypocoristics, are of neuter gender, for example:

Southern Polish dialects

- (14) *Zuzię poszł-o*
 Zuzia go.PST-SG.N
 ‘Zuzia has gone’.

Neuter agreements are employed when unmarried women are addressed, and they use them for self-reference:

- (15) *jo był-o na grziby*
 1SG be-PST-SG.N on mushrooms
 ‘I was mushrooming’ (unmarried woman speaking)

In a limited area, to the south-west of Kraków, instead of the neuter the masculine is used (*Hanik prziszoł* (masculine) ‘Hania came’). In both types of dialect, the feminine is used for married women. The meaning of the feminine has changed in both dialect types, being restricted now to denote married women. (Nouns of feminine gender, whose gender is not semantically motivated, also remain feminine.)

The difference between the two dialects suggests the origin of this development. Hypocoristics and patronymics, which are used for girls and unmarried women, are formed in two ways. In the first dialect type, we find forms like *Hecze* ‘daughter of Heczko’, which follows an inflectional class whose nouns are normally neuter. In the second type, we find forms like *Hanik* ‘Hania (familiar)’, which follow a typically masculine inflectional class (see Zaręba 1984–85: 246). What appears to be a plausible scenario is that such nouns took neuter/masculine attributive modifiers, (with gender assignment according to the inflectional type of the noun) and from there these agreements spread rightwards along the hierarchy positions. Subsequently, all nouns and pronouns denoting unmarried females began to take neuter or masculine agreement (depending on the dialect).

6 Conclusion

We have extended the discussion of hybrids by discussing, in addition to the familiar ones such as *committee*, some more recently investigated examples. In trying to understand why some nouns are hybrids, while apparently similar nouns are not, an analysis in terms of subtler distinctions in lexical semantics proved promising, particularly for the data from German, English and Dutch. However, the issue of split hybrids demonstrated that there is more at stake. Full hybrids can exist, as the data from Old High German and Icelandic demonstrate.

And yet there are also instances which could in principle be full hybrids, yet are split (examples from Serbo-Croat and Nordreisa Norwegian). Here we could not easily link the split to the lexical semantics of the nouns in question. Our survey of hybrids in diachrony yielded a similar result. While change commonly starts from the top of the Agreement Hierarchy, with a semantic motivation, it may also start from the bottom, motivated by form. Hence at least for some types of hybrid, it is not simply a matter of lexical semantics: rather it is the form-meaning mismatch which is the underlying motivation.

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