

## **The lack of full pro drop in Germanic as a consequence of overspecification**

**1. Introduction** Apart from incidental contexts in which Germanic varieties allow partial pro-drop (cf. Rosenkvist 2007), a categorical difference between Germanic and Romance languages is that none of former allow *full* pro-drop, whereas many of the latter do. One potential approach to account for this Germanic/Romance difference is to refer to overall richness (Rizzi 1982; Koenenman 2000; Tamburelli 2006): Some Germanic languages are *overall* poor in their verbal inflectional paradigms, so no pro-drop is possible; Romance pro-drop languages are generally rich and that is what licenses it. Such a parametric solution, however, is not only conceptually undesirable (as a paradigm has no theoretical status, see Bobaljik 2002) but also empirically flawed: Icelandic, German and Romanian all have only one syncretic form (Icelandic *-ir* German *-en* and Romanian *-a* all appear in more than one slot), and are thus equally rich (we take the 3SG/2PL *-t* similarity to be accidental). Yet only the latter exhibits full pro-drop. Hence, given a comparison between Germanic and Romance paradigms, the lack of full pro-drop in Germanic languages remains understood. This presence vs. absence of full pro-drop becomes even more puzzling under a non-paradigmatic approach: English *-s* and Italian *-a* are both non-syncretic and uniquely mark 3SG, yet English does not yield pro-drop even in 3SG contexts, but Italian does. Hence, it remains an open question why pro-drop is generally unattested in Germanic languages but not in Romance languages.

**2. The proposal** We propose that the agreement morpheme licensing *pro* cannot be underspecified as e.g. in (2b) (as standardly assumed, at least for full pro-drop languages) but crucially cannot be *overspecified* either, as it is in (2c). Overspecification happens when one morpheme expresses both tense and agreement features. We argue (contra Bobaljik & Thráinsson 1998) that this is the case in all Germanic languages, despite first appearances that suggest the existence of a separate past tense morpheme. Only if the licensing morpheme is neither underspecified nor overspecified (as in (2a)) is pro-drop possible. The question is then how to determine the status of each language: Why is Icelandic e.g. not a case of (2a), where pro-drop would be allowed, and why is Romanian not a case of (2b), where pro-drop would be forbidden? The answer lies in the past tense.

**3. Past tenses** We observe that all Germanic languages, irrespective of their richness, have in common that the form appearing in the 3SG present tense never reappears in the past, and that this is in contrast to Romance languages (3). We adopt a privative feature system and assume that the 3<sup>rd</sup> person is always the result of the absence of person (and number) values (Benveniste 1971). The fact that the 3SG form does not reappear in the past can then not be captured by an impoverishment rule as there are no feature values that can be impoverished. To capture the absence of these forms in the past tense, such (elsewhere) forms must not only compete with other *agreement* forms but also with the *past tense* form. This requires the existence of a morpheme that expresses both tense and agreement features that can be targeted by all spell-out rules alike, such as INFL. See (4) for one such analysis. This hybrid morpheme places Germanic languages firmly in category (2c). This leads to the overspecification problem and blocks pro-drop. The analysis of past tenses in Romance languages does not require competition between tense and agreement forms and these languages therefore have separate tense and agreement morphemes. See (5) for one such analysis. Italian only requires a context-sensitive allomorphic rule (6) to account for the *-iamo* > *-amo* alternation, and the 1SG/3SG syncretism in Spanish can be captured with an impoverishment rule deleting the [speaker] value (cf. 7). Romanian initially suggests that the 3SG *-ă* does not reappear in the past, but since the past tense form is *-a*, the combination of *-a* + *-ă* assimilates to *-a*, as also happens in the nominal domain when definite article *-a* is suffixed to a noun ending in *-ă*. Note that 3PL *-ă* becomes *-au* in the imperfect as a result of an allomorphic spell-out rule (8), where we take 3SG and 3PL *-ă* not to be syncretic but accidentally homophonous in the present tense.

**4. Analysis** As for the question why overspecification would forbid pro-drop, we assume that *pro* enters the tree without feature values and gets valued by the  $\phi$ -agreement features in the (split) IP domain. In

a language with separate morphemes for Agr and T, the former can do so straightforwardly. Since in the Germanic languages all agreement and tense features are bundled, *pro* would not only receive person and number features, but also tense features. Since tense is not interpretable on pronouns, *pro* would not be legible at LF and the derivation would crash.

(1) Present tenses in Romance and Germanic

	Romance			Germanic				
	Romanian (1st conj.)	Italian	Spanish	Icelandic	Faroese	German	Dutch	English
1SG	-∅	-o	-o	-i	-i	-e	-∅	-∅
2SG	-i	-i	-as	-ir	-ir	-st	-t	-∅
3SG	-ă	-a	-a	-ir	-ir	-t	-t	-s
1PL	-ăm	-iamo	-amos	-jum	-a	-en	-en	-∅
2PL	-ați	-ate	-áis	-ið	-a	-t	-en	-∅
3PL	-ă	-ano	-an	-a	-a	-en	-en	-∅

(2) Language types

	Subject <i>pro</i>	Morpheme X (on V)	Status	Prediction
a.	[person, number]	[person, number]	full specification	+pro drop
b.	[person, number]	[number]	underspecification	-pro drop
c.	[person, number]	[person, number, tense]	overspecification	-pro drop
d.	[person, number]	[number, tense]	under- & overspecification	-pro drop

(3) Past tenses in Romance and Germanic (imperfects for the Romance languages)

	Romance			Germanic				
	Romanian (1st conj.)	Italian	Spanish	Icelandic	Faroese	German	Dutch	English
1SG	-a-m	-av-o	-ab-a	-ð-i	-d-i	-te	-te	-ed
2SG	-a-i	-av-i	-ab-as	-ð-ir	-d-i	-te-st	-te	-ed
3SG	-a	-av-a	-ab-a	-ð-i	-d-i	-te	-te	-ed
1PL	-a-m	-av-amo	-ab-amos	-ð-um	-d-u	-te-n	-te-n	-ed
2PL	-a-ți	-av-ate	-ab-ais	-ð-uð	-d-u	-te-t	-te-n	-ed
3PL	-a-u	-av-ano	-ab-an	-ð-u	-d-u	-te-n	-te-n	-ed

(4) Modern Icelandic

*Inflection*

-i	◇	[T: ], [uφ: speaker]
-ir	◇	[T: ], [uφ: ]
-jum	◇	[T: ], [uφ: speaker, plural]
-ið	◇	[T: ], [uφ: addressee, plural]
-a	◇	[T: ], [uφ: plural]
-ði	◇	[T: past], [uφ: ]
-ðir	◇	[T: past], [uφ: addressee]
-ðum	◇	[T: past], [uφ: speaker, plural]
-ðuð	◇	[T: past], [uφ: addressee, plural]
-ðu	◇	[T: past], [uφ: plural]

(5) Italian

*Agreement*

-o	◇	[uφ: speaker]
-i	◇	[uφ: addressee]
-a	◇	[uφ]
-iamo	◇	[uφ: speaker, plural]
-ate	◇	[uφ: addressee, plural]
-ano	◇	[uφ: plural]

*Tense*

-∅	◇	[T: ] (present)
-av-	◇	[T: past]

(6) -amo ◇ [speaker] / [T: past] (rule for allomorphic spell out)

(7) [uφ: speaker] > [uφ: ] / [T: past] (impoverishment rule)

(8) u ◇ [uφ: plural] / [T: past] (rule for allomorphic spell out)