

On gender resolution in Polish

Ewa Willim (Jagiellonian University, Kraków)

1.0 Among the inflectional features of the Polish noun, gender is the only feature whose value is invariant. As a result, gender plays an important role in reference-tracking, which manifests itself most clearly under ellipsis. The recovery of the lexical content of the noun is only possible under gender constancy while neither number nor case constancy is required under ellipsis, as is illustrated in (1) below:

(1) *Dlaczego kupiłeś tylko [jedną_{F.SG.ACC} pepsię_{F.SG.ACC}]?*

‘Why did you buy only one Pepsi?’

*Prosiłam, żebyś kupił [dwie_{F.PL.ACC}/*dwóch/*dwa],*

*bo [jedną_{F.SG.NOM}/*jedno/*jeden/*jedni/*jedne] nie wystarczy.*

‘I asked you to buy two, because one won’t be enough.’

2.0 Grammatical gender is notoriously difficult to formalize in Polish and the question of the criteria of gender classification, the types of genders, as well as their number is debated. Depending on whether the gender categories are distinguished based on syntactic, morphological, semantic, or a mixture of semantic and morphosyntactic criteria, Polish has been analyzed to distinguish from 3 to 9 differently defined genders (cf. among others, Mańczak 1956, Corbett 1983, Saloni 1976, Przepiórkowski 2003, Zaron 2005). The best well-known gender classification comprises 5 distinct genders, which are kept constant across the singular and plural number opposition. The basic division is into the masculine (M), feminine (F) and neuter (N) genders, with the masculine gender subsuming three sub-genders (M1, M2, M3). The assignment to a noun of a particular value of the gender feature is based on the type of agreement that the noun triggers on a dependent adjectival modifier, numeral, and/or under subject-verb agreement on a verb in the past tense, where gender is morphologically marked. This classification for gender, which is understood as the agreement class of the noun, is illustrated in (2) below, where gender is captured as AGR(eement)C(lass):

(2) M1-AGRC: *brat* ‘brother’, *książę* ‘prince’, *mężczyzna* ‘man’, *naukowiec* ‘scientist’

M2-AGRC: *pies* ‘dog’, *papieros* ‘cigarette’ *babsztyl* ‘(pej., of woman) old cow’

M3-AGRC: *stół* ‘table’, *samolot* ‘airplane’, *ołówek* ‘pencil’

N-AGRC: *dziecko* ‘child’, *okno* ‘window’, *chłopisko* ‘bloke’, *babsko* ‘(pej.) old bag’

F-AGRC: *dziewczyna* ‘girl’, *osoba* ‘person’, *mysz* ‘mouse’, *lampa* ‘lamp’, *chłopina* ‘(pej.) man’

In the singular, Polish offers empirical evidence for the division of nouns in the M-AGRC into two sub-classes, M1&2 and M3. In the plural, the divide within the masculine gender is different: M1-AGRC nouns trigger one type of agreement while M2&3-AGRC nouns trigger another. Thus, with respect to the agreement it triggers, a noun like noun *pies* ‘dog’, classified in the M2-AGRC, belongs together with nouns like *chłopiec* ‘boy’, an M1-AGRC noun, in the singular, but it belongs with nouns like *dom* ‘house’, an M3-AGRC noun, in the plural, as shown in (3) and (4) below:

(3) a. *Widzę małego_{M1/M2.SG.ACC} chłopca_{M1.SG.ACC}/psa_{M2.SG.ACC}.*

‘(I) (can) see a small boy/dog.’

b. *Widzę mały_{M3.SG.ACC} dom_{M3.SG.ACC}.*

‘(I) (can) see a small house.’

(4) a. *Widzę małych_{M1.PL.ACC} chłopców_{M1.PL.ACC}.*

‘(I) (can) see (some) small boys.’

b. Widzę małe_{M2/M3.PL.ACC} psy_{M2.SG.ACC}/domy_{M3.PL.ACC}.

‘(I) (can) see (some) small dogs/houses.’

Building on Beard (1995), I will argue that the classification for gender defaults to the I(nflection)C(lass) of the noun in Polish. Polish has two broadly distinguished ICs, the so-called feminine IC in the singular, comprising nouns with the *-ą* ending in the instrumental case, and the so-called non-feminine IC, comprising nouns with the *-em* ending in the instrumental. Based on the case syncretism organizing all the specific inflectional paradigms subsumed under the non-feminine IC, the non-feminine IC falls into two distinct sub-ICs (M IC and N-IC). M-IC is further subdivided into two sub-classes (M1-IC and M2-IC). If AGRC defaults to IC, we expect three genders in the singular, one of which (M-AGRC) is expected to be further distinguished into two sub-genders (M1-AGRC and M2-AGRC). In the plural, two ICs are distinguished, one comprising only emotionally unmarked nouns with male human referents and the other comprising all other nouns. Consequently, two genders can be expected in the plural. The Polish ICs are illustrated in the singular and plural in (5) and (6), respectively. That Polish provides evidence for three AGRCs in the singular and two differently determined AGRCs in the plural is demonstrated in (7) with the forms of the adjective *mały* ‘small’ in the nominative singular:

(5) Singular ICs

F-IC {DAT=LOC}:

dziewczyna ‘girl’, *osoba* ‘person’, *mysz* ‘mouse’, *lampa* ‘lamp’, *chłopina* ‘(pej.) man’,

M1-IC {NOM.ACC, GEN=ACC}:

chłopiec ‘boy’, *brat* ‘brother’, *naukowiec* ‘scientist’, *pies* ‘dog’, *papieros* ‘cigarette’

M2-IC {NOM=ACC, GEN.ACC}:

stół ‘table’, *samolot* ‘airplane’, *ołówek* ‘pencil’

N-IC {NOM=ACC=VOC}:

dziecko ‘child’, *okno* ‘window’, *chłopisko* ‘bloke’, *książę* ‘prince’

(6) Plural ICs

[+M, +HUM, -EXPR], {NOM.ACC, GEN=ACC}:

chłopiec ‘boy’, *brat* ‘brother’, *naukowiec* ‘scientist’, *książę* ‘prince’

{NOM=ACC=VOC}:

dziewczyna ‘girl’, *lampa* ‘lamp’, *pies* ‘dog’, *papieros* ‘cigarette’, *stół* ‘table’, *dziecko* ‘child’, *okno* ‘window’, *chłopisko* ‘bloke’

(7)a. [MAL/Ł-‘small’, Adj, -PL]: *mały*, *mała*, *małe*

b. [MAL/Ł-‘small’, Adj, +PL]: *mali*, *male*

As shown in (6) above, nouns with male human referents like *chłopina*, *książę* and *chłopisko* disrupt the regular assignment of the value of the gender feature based on the IC of the noun in that they resist the morphological neutralization of their inflectional paradigm, which is not based on the identity of three case-forms in the plural, unlike in the case of all other plural nouns in Polish.

3.0 The algorithm predicting the assignment of the value of the gender feature presented here makes crucial use of three formal features: [+M], [+HUM] and [-EXPR], whose semantic counterparts represent reference to persons of male sex and lack of emotionality. Couched in the ‘Word and Paradigm’ model of morphology, the algorithm captures the basic inferential morphological rules stated informally in (8) below. (8a) is the special case and captures the ‘masculinization’ of emotionally unmarked male human nouns declining together with F-IC and N-IC nouns in the

singular, while (8b) and (8c) apply in the ‘Elsewhere’ fashion. Thus, *ksiązę* ‘prince’, which is classified with N-IC is assigned gender under (8a) while *chłopisko* ‘bloke’, also in the N-IC, is not assigned gender under (8a) as the latter is specified with the feature [+EXPR]. That the F-IC *osoba* ‘person’ does not have its gender assigned under (8a) follows on the assumption that the noun is not specified to refer to either a male or a female person, hence is classified in the grammar as [-M, -F]. The outputs of the inferential rules are interpreted accordingly at PF by morphophonological realization rules. Thus, the single mechanism of gender resolution proposed here is defined over IC, an uninterpretable formal feature, and three formal features interpreted at LF, i.e. [+M], [+HUM] and [-EXPR]:

- (8) a. [N, [+M, +HUM, -EXPR], IC_{NOM.ACC, GEN=ACC}], -PL/+PL] →
 [N, AGRC_{NOM.ACC, GEN=ACC}].
 b. [N, IC_ω, -PL] → [N, AGRC., -PL].
 c. [N, IC_ω, +PL] → IC_{NOM=ACC=VOC}, +PL].

Selected references

- Beard, R. (1995) The gender-animacy hypothesis. *Journal of Slavic Linguistics* 3: 59-96.
 Corbett, G. (1983) The number of genders in Polish. *Papers and Studies in Contrastive Linguistics* 16, 83-89.
 Mańczak, W. (1956): Ile rodzajów jest w polskim? *Język Polski* 36, 116-121.
 Saloni, Zygmunt (1976): Kategoria rodzaju we współczesnym języku polskim. [In:] R. Laskowski (ed.): *Kategorie gramatyczne grup imiennych w języku polskim*; Wrocław: Ossolineum, 43-78.
 Przepiórkowski, A. (2003): A hierarchy of Polish genders. [In:] P. Bański, A. Przepiórkowski (eds.): *Proceedings of GLiP*; Warsaw: Institute of Computer Science, Polish Academy of Sciences, 109-122.
 Zaron, Z. (2005): The inflectional aspect of the Polish category of gender. *Studies in Polish Linguistics* 2, 111-122.