

Distributed GENDER Hypothesis

1. Goal. In this paper we claim that GENDER does not instantiate a uniform morpho-syntactic category. We argue that GENDER is syntactically heterogeneous and occupies different positions in the syntactic structure. We refer to this as the *Distributed GENDER Hypothesis*. Evidence will be drawn from the following genetically unrelated languages: Russian (Slavic), German (Germanic), and Halkomelem (Salish). The Distributed GENDER Hypothesis allows us to better understand the range of language internal and cross-linguistic variation in gender marking.

2. Variation in GENDER. As a point of departure consider Russian data, where nouns denoting male individuals are always masculine (1a), while nouns denoting female individuals are always feminine (1b).

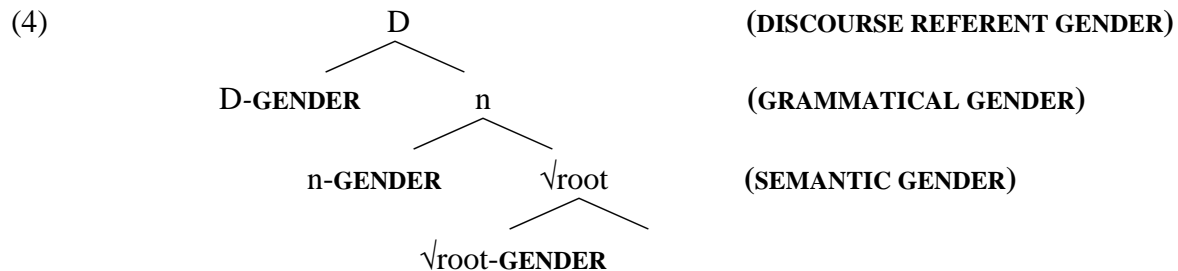
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| <p>(1) a. xoróš-ij ot'éc
 <i>good-MASC.N.SG</i> <i>father.N.SG (MASC)</i>
 'good father'</p> | <p>b. xoróš-aja mát'
 <i>good-FEM.N.SG</i> <i>mother.N.SG (FEM)</i>
 'good mother'</p> |
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Thus, we can predict grammatical gender of a noun ('masculine' or 'feminine') on the basis of its semantics ('male' or 'female') (Corbett 1991). But what happens when a noun does not contain such semantic information? In this case, we observe that Russian nouns still have grammatical gender, evident by the grammatical agreement with an adjective (2–3).

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| <p>(2) a. xoróš-ij č'elov'ék
 <i>good-MASC.N.SG</i> <i>person.N.SG (MASC)</i>
 'good person'</p> | <p>b. *xoróš-aja č'elov'ék
 <i>good-FEM.N.SG</i> <i>person.N.SG (FEM)</i>
 'good person'</p> |
| <p>(3) a. xoróš-ij s'ivot-á
 <i>good-MASC.N.SG</i> <i>orphan-N.SG (MASC)</i>
 'good orphan'</p> | <p>b. xoróš-aja s'ivot-á
 <i>good-FEM.N.SG</i> <i>orphan-N.SG (FEM)</i>
 'good orphan'</p> |

An interesting puzzle surrounding the examples (2–3) is that some nouns can only have one gender (2), while others (so-called 'common gender nouns') can have double gender (3). With respect to the data above, the following question arises: how can we explain the differences in gender across all three different types of nouns, illustrated in (1–3)?

3. Proposal. We propose that the patterns in (1–3) can be accounted for by the Distributed GENDER Hypothesis. According to this hypothesis, gender is distributed across three distinct syntactic positions: Determiner (D), noun (n), and $\sqrt{\text{root}}$ (in the sense of Marantz 1997) (4). It follows from (4) that cross-linguistically, we expect to find languages which use all three positions for gender, as well as languages which use only one or two positions for gender.



4. Analysis. In Russian, we find nouns with $\sqrt{\text{root}}$ -GENDER (1), n-GENDER (2), and D-GENDER (3). In (1), the $\sqrt{\text{root}}$ *ot'ec* 'father' is semantically male, while the $\sqrt{\text{root}}$ *mat'* is semantically female.

As a result, the nouns can only trigger masculine or feminine agreement, respectively. This type of agreement can never change, even when a gender-changing derivational suffix is used. In contrast, in (2), the $\sqrt{\text{root}}$ *č'elov'ek* 'person' does not have semantic gender and can denote both male and female persons. Nevertheless, it has n-GENDER 'masculine', evident from the masculine grammatical agreement. This type of agreement can change when a gender-changing derivational suffix is used. In (3), *s'ivot-a* 'orphan' has neither $\sqrt{\text{root}}$ -GENDER, nor n-GENDER. The only type of gender it has is D-GENDER, as the gender of the noun (and its grammatical agreement) always depends on a Discourse referent (masculine/feminine when referring to male/female referents).

5. Cross-linguistic variation in GENDER-marking. Further evidence for the Distributed GENDER Hypothesis stems from cross-linguistic variation. Specifically, we show that German lacks D-GENDER, while Halkomelem lacks n-GENDER.

5.1. German lacks D-GENDER. German has $\sqrt{\text{root}}$ -GENDER and n-GENDER, but lacks D-GENDER. This results in a system with semantic and grammatical genders. Consequently we find only two sets of nouns: ones that unambiguously denote male or female individuals (i.e. nouns with $\sqrt{\text{root}}$ -GENDER). Such nouns are associated with the corresponding grammatical gender (5).

- (5) a. *der Vater* b. *die Mutter*
det.MASC father.MASC *the.FEM mother.FEM*
 'the father' 'the mother'

Second, we find nouns that lack the semantic information regarding gender (no $\sqrt{\text{root}}$ -GENDER). For such nouns, grammatical gender seems to be determined arbitrarily (6).

- (6) a. *der Mond* b. *die Sonne* c. *das Wasser*
det.MASC moon.MASC *det.FEM sun.FEM* *det.NEUT water.NEUT*
 'the moon' 'the sun' 'the water'

Crucially, German lacks D-GENDER. German has no nouns equivalent to common gender nouns in Russian and thus, a noun which is not semantically specified for gender is always associated with arbitrary grammatical gender.

5.2. Halkomelem lacks n-GENDER. Halkomelem has $\sqrt{\text{root}}$ -GENDER: nouns that denote male or female individuals (7a/b). For nouns which can denote both male and female individuals (7c/d), the gender of the referent is indicated on the determiner. We analyze this as an instance of D-GENDER. However, there are no nouns that are arbitrarily associated with grammatical gender and thus, we conclude that Halkomelem lacks n-GENDER.

- (7) a. *te swiyeqe* b. *the slhali* c. *te alex* d. *the alex*
det man *det.FEM woman* *det sibling* *det.FEM sibling*
 'the man' 'the woman' 'the sibling' 'the sister'

6. Conclusion. GENDER is introduced in different positions in the syntactic structure. The question remains as to which gender takes precedence (in the presence of more than one gender).

TYPE OF GENDER	FUNCTION OF GENDER	EXAMPLES
D-GENDER	Discourse referent gender	Russian, Halkomelem
n-GENDER	Grammatical gender	Russian, German
$\sqrt{\text{root}}$ -GENDER	Semantic gender	Russian, German, Halkomelem