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REVIEW ARTICLE

Gender in grammar and cognition. Part 1. Approaches to gender. Part 2. Manifestations of gender edited by Barbara Unterbeck and Matti Rissanen. Pp. xlvi + 836. Berlin and New York: Mouton de Gruyter. 2000.

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The category of gender and its status with respect to other types of nominal classification belong to the most thought-provoking subjects in linguistics. This sizeable contribution provides the reader with a state-of-the-art overview of contemporary research in the area. The volume begins with a Preface (pp. ix-xiv), where the Editors provide a description of the research leading up to the publication of the present work. In addition, they offer justification for the structure of the volume: its two parts, "Approaches to gender" and "Manifestations of gender", largely represent the contribution of two workshops on gender held in Berlin in 1994 and Helsinki in 1996 respectively. In the Introduction ("Gender: New light on an old category. An introduction", pp. xv-xlvi), one of the Editors, Barbara Unterbeck, sets the stage for the following discussion by attempting to establish a tertium comparationis for the four types of nominal classification: gender, together with noun class, numeral and verbal classification. This common platform of reference consists in the application of unified terminology, as well as a common treatment of formal and semantic aspects. 28 papers make up the main body of the book. As they are arranged alphabetically, I will review them according to the following broadly defined topics: a) gender analysis and the diachrony of gender; b) gender and number in a comparative and historical perspective, also in a comparison with the other types of nominal classification; c) gender assignment and acquisition; d) gender and inflection; and finally e) gender and norm, and the historiography of gender. The volume is complemented with three indexes (by name, language and subject) (pp. 807-836).

Before I turn to the collected papers, let me consider some of the issues taken up by Barbara Unterbeck in the Introduction. The central idea behind the volume lies in the search for common features in the seemingly disparate types of nominal classification. In most of mainstream work on gender and noun classes these two phenomena are treated together. In addition to the common presence of agreement, both have a semantic basis which is however differently realised as noun class systems are not based on the opposition male: female. As regards numeral and verbal classi-

fication, there are certain parallels between semantic criteria in classifier languages and semantic gender assignment. On the other hand, these systems differ considerably from gender in the number of classes established as the number of classifiers in a language may reach one hundred.

According to Unterbeck, all the four systems should be analysed together: in addition to the common function of classification, all possess agreement, seen here in a wider sense, including also the noun as the locus of classification. Here Unterbeck follows Wurzel's (1986) treatment of agreement: in contrast to the most widely used definition of gender given by Hockett (1958), Wurzel allows also for the expression of nominal class in the noun itself. The unified terminology proposed by Unterbeck reflects the noun stem or root as the base element and the expression of class and the marking of agreement. The elements which express class membership are referred to as perspective markers ("perspectivizers"), and may be located either in the noun, as gender or noun class markers, or outside the noun, as in numeral and verbal classifiers; in this last type noun classes are reflected in verb stems. It is with the noun and perspective markers that agreement elements agree. These reflectors, or in Hockett's definition "associated words" may be located in the attributive and predicative positions, or in numerals, pronouns and genitive connectors. Such treatment allows us to capture, e.g., the presence in Swedish of agreement elements both in and outside the noun, as in den gamle mannen 'the old man' (see Andersson 1980; Källström 1994, together with Dahl's "Elementary gender distinctions", pp. 577-593, and Andersson's "How many gender categories are there in Swedish?", pp. 545-559). According to Unterbeck, "[t]his terminology serves a double aim: to improve the instruments to compare the different systems and at the same time to focus on the special traits of gender" (p. xvii). The author compares these terms with those used by Corbett (1991), where Corbett's controller gender corresponds to the base element and perspective markers, while target gender corresponds to reflectors. The presence of a perspective marker on the noun may be interpreted analogously to overt gender, while its lack corresponds to covert gender.

The other *tertium comparationis* can be established on the basis of semantic distinctions and their function in the category. Here the four systems can be located along a continuum: at one end we have gender with the primary criteria of sex and animacy, along with the secondary criterion of ±count; at the other end the remaining three systems take the primary criterion of shape or ±count, together with the secondary criteria of sex and animacy. It appears thus that the central role is played by the distinction count: mass. Several articles in the volume attempt to apply this distinction to the German gender system, and related accounts are given for other Indo-European languages. As Unterbeck comments, it is problematic however how to relate this opposition with those based on sex and animacy (p. xxxii). Unfortunately, this connection either remains unclear or is skirted completely (see especially the paper by Elisabeth Leiss "Gender in Old High German", pp. 237-258). The issue suggests a line for future research.

I would like to begin with five papers dealing with the analysis of gender generally and its diachrony. Here we find two contributions by Östen Dahl. In the paper "Animacy and the notion of semantic gender" (pp. 99-115) Dahl considers the role of animacy as the semantic core of any gender system. Central to the discussion is the notion of semantic core or basis (Greenberg 1966; Aksenov 1984; Corbett 1991). Dahl points to the parallels between the following dimensions: animate: inanimate, semantic: formal and referential: lexical. This last distinction is an alternative to Corbett's (1991) distinction between formal and semantic, and enables him to cope with a range of conflicts in gender assignment. In his second contribution, "Elementary gender distinctions" (pp. 577-593), Dahl argues for the value of the distinction animate: inanimate as one of elementary gender distinctions, or "building blocks" in the analysis of gender systems. Dahl's approach can be contrasted with the holistic model of gender in Corbett's (1991) book, which has the disadvantage of concealing semantic oppositions that make up the system. These elementary gender distinctions are useful not only in a crosslinguistic analysis but also in a description of the layered, mosaic-like outcome of grammaticalisation processes. Dahl distinguishes two types of combinations: serial, as in English and Dyirbal, and parallel, which enable him to cope neatly with the heterogene agreement in Romanian. The analysis is further applied to the Slavic sub-genders, gender-like distinctions in declensions, and finally the complex gender system in Swedish. As the author acknowledges, this approach is however problematic in the case of multi-gender systems which cannot be reduced to such elementary distinctions. The differences between adjectival and pronominal gender make Swedish a particularly rewarding place to look for gender categories. Determining the number of genders in Swedish is also taken up by Erik Andersson in his article "How many gender categories are there in Swedish?" (pp. 545-559). Andersson approaches the issue from the point of view of the distinction between lexical and referential gender. Dahl's and Andersson's treatment of plural inflection, where declensions are seen as "agreement phenomena within the word" (p. 557), can be compared with Unterbeck's notion of perspective markers.

In their contribution "Default genders" (pp. 55-97), Greville G. Corbett and Norman M. Fraser focus on the notion of "default" and its application in the analysis of gender. This concept has enjoyed a rather chequered history in the literature, being occasionally reduced to a dustbin category, especially in accounts of gender assignment. The authors distinguish two types of default: normal (or typical) and exceptional case defaults, which they apply in the analysis of gender assignment and agreement in Russian, including several types of non-prototypical controllers. This contribution is especially relevant as it demonstrates the value of applying such notions as default inheritance and default network, borrowed from Artificial Intelligence. Both are central to Network Morphology, the framework in which the study has been conducted (cf. Corbett and Fraser 1993).

At this point I would also like to comment on three papers dealing with diachronic aspects of gender. Kurt Braunmüller's "Gender in North Germanic: A

diasystematic and functional approach" (pp. 25-53) introduces us to the variety found in the Scandinavian gender systems: the standard varieties and dialects exhibit a different number of genders (from three down to zero) and different patterns in gender agreement.³ The reanalysis in the function of gender to express the opposition count: mass in certain Danish dialects is described by Braunmller against the background of parallels in the use of neuter gender with generic and abstract reference in the standard Scandinavian varieties. Martin Haase's "Reorganization of a gender system: The Central Italian neuters" (pp. 221-236), examines a related development resulting in the re-emergence of the neuter gender in Italian. Here a sub-class of mass nouns has been isolated within the masculine gender, with the effect that non-feminine nouns are either masculine or neuter and the contrast is equivalent to that of count: mass. These changes suggest a close relation between these oppositions; we shall return to the issue presently.

The role of language contact features prominently in Caroline Sandström's "The changing system of grammatical gender in the Swedish dialects of Nyland, Finland" (pp. 793-806). In this contact situation we are dealing with a pocket of Swedish dialects isolated from Standard Swedish, and confronted with Finnish, a gender-less language. Sandström's synchronic comparison reveals a predictable development: while some varieties preserve the archaic three-gender system of Old Swedish, others tend towards the reduced two-gender system found in Standard Swedish, with a partial loss of gender in areas described as traditionally bilingual. As the last paper in this group I would like to mention Juhani Härmä's "Gender in French: A diachronic perspective" (pp. 609-619). The issues addressed in this diachronic sketch concentrate around the role of gender as a cohesive device. Compared with number, neutralisation is shown to be more likely in gender assignment/agreement rules.

As was mentioned above, the distinction count: mass is one of the recurring motifs in the volume. Two aspects have been examined: the role of the distinction in gender systems and the analogies with the other types of nominal classification. Elisabeth Leiss in "Gender in Old High German" (pp. 237-258) considers the fact that gender does not normally offer paradigmatic options like the categories of case and number, and this forces her to pose the following question: "Is gender a grammatical category at all?" According to Leiss such selection can be found in Old High German nouns with double and triple gender, where the genders take on the follow-

ing meanings: m. as count, f. as collective and n. as mass. The role of these distinctions is said to demonstrate the close functional affinity of gender and number: while number expresses multitude, gender allows us to express perspectives on multitude. This analysis rests heavily on W.P. Lehmann's (1958) paper on Proto-Indo-European gender. Lehmann derived grammatical gender from four different forms of a single paradigm applied to any noun base (i.e. individual, resultative, collective and vocative), denying explicitly any original motivation from sex and animacy. Unfortunately, all that Leiss has to offer us on this point in this otherwise informative paper is reduced to the following statement: "[gender] has nothing or at least very little to do with biological gender" (p. 237). In similar vein, she puts to ridicule Zubin and Köpcke's (1984) interpretation of German gender in terms of the features extroversion and introversion.⁴

The relation between gender and quantity is also taken up in Petra Maria Vogel's analysis of "Nominal abstracts and gender in Modern German: A "quantitative" approach towards the function of gender" (pp. 461-493). German abstract nouns are arranged along a continuum from the least to the most abstract (m. vs. f. vs. n.), reflecting the count: mass opposition. Admittedly, Vogel tries to relate quantity with animacy and sex, but the connection is unclear if the expression of quantity is regarded as the original function. Doris Weber, in her paper "On the function of gender" (pp. 495-509), takes an analogous approach to German word formation, analysed according to the feature ±particularised. While gender is described as secondary to number, and its function as specification of a certain nominal aspect or "perspectivization", the exact nature of the relation is again unclear.

Moving on to gender systems outside Indo-European, two papers deal with Afro-Asiatic: Jaakko Hämeen-Anttila's "Grammatical gender and its development in Classical Arabic" (pp. 595-608) and Arvi Hurskainen's "Noun classification in African languages" (pp. 665-687). Hämeen-Anttila offers a detailed description of grammatical gender in Arabic, focusing on its morphological realisation. The author considers also the well-known feature of Arabic, the suffix -at-: its multifunctional nature as feminine, abstract and collective provides a bridge between gender and quantity, which is especially relevant considering the approaches discussed above. In turn, Arvi Hurskainen provides us with a survey of nominal classification in Africa, "a continent of noun class and gender systems" (p. 666). While gender appears in Afro-Asiatic, noun classes are typical of the Niger-Kordofanian languages. Hurskainen's semantically-based analysis of Swahili noun classes in terms of the opposition shape: non-shape demonstrates the value of the analysis of noun-class languages in comparison with other systems of nominal classification.

On the question of the differences between two- and three-gender systems, Braunmüller states that "only grammatical rules operate in languages with a three-gender system" (p. 44), while in two-gender systems grammatical principles compete with semantic ones. This ignores the presence of semantics rules in such more complex systems, as shown in, e.g., G das Mädchen (one of Braunmüller's examples), pronominalised as sie (f.) or es (n.). The same reservation applies to Dieter Kastovsky's treatment of Old English gender discussed below ("Inflectional classes, morphological restructuring, and the dissolution of Old English grammatical gender", pp. 709-727).

In addition, I find the concluding statement of the paper rather puzzling: "A person who wants to learn something about the structure of human cognition can collect more relevant data from a trip through the history of language than from diagnostic imaging in neurology." (p. 254).

Juha Janhunen takes us to Asia in "Grammatical gender from east to west" (pp. 689-707). Janhunen provides support for Unterbeck's claim towards a common treatment of various forms of nominal classification. The author considers the two types of analytic and synthetic classifier systems of East Asian languages. The distinction ±count in Tungusic and Mongolian may be compared here with those of typical noun class languages. While East Asia is not a gender area, Janhunen points to the presence of grammatical gender in Yeniseic and in the earlier stages of Mongolian, together with the problematic status of gender in Selkup (Uralic). Here Mongolian provides another example of the role of language contact as its three types of classification (numeral, class and gender) can be attributed to areal influence. Diachronically, two centres of innovation can be suggested: West Asia for grammatical gender and East Asia for classifier systems. Elisabeth Löbel's "Classifiers versus genders and noun classes: A case study in Vietnamese" (pp. 259-319) discusses the semantic function of classification in this typical numeral classifier language. Contrary to Emeneau's (1951) treatment of Vietnamese nouns as classified and non-classified, Löbel proposes a distinction between entity- and mass-denoting nouns. This approach emphasises the possibility of paradigmatic choices available to nouns in Vietnamese, rather than a classification into clear-cut categories.

The last two papers dealing with non-Indo-European languages are Ulrike Mosel and Ruth Spriggs' analysis of "Gender in Teop (Bougainville, Papua New Guinea)" (pp. 321-349), and Barbara Unterbeck's "Verbal classification and number: A case study in Navajo (Athapaskan/Na-Dene)" (pp. 401-460). Mosel and Spriggs' contribution is especially welcome as we are dealing here with an isolated example of an Austronesian gender language. Its peculiarities include the status of semantic assignment rules and the proposed origin from a deictic system. In contrast, Unterbeck provides us with a detailed account of the notoriously intricate verbal classification system of Navajo. Verbal classification is a type of nominal classification which is reflected in the choice of the verb stem. Such a locus of nominal classification is clearly unique: Unterbeck refers to it as "a grammatical revolution" (p. 411). The 12 analysed classificatory verb stems convey the semantic categories of singular, plural, collective and mass, and so, according to the author, can be reduced to the opposition count: mass. Notice here the clear analogy with the approaches to German gender discussed above.

The question to what degree gender assignment is arbitrary, and what tools can be used to analyse it, is dealt with in several papers in the volume. Ursula Doleschal in "Gender assignment revisited" (pp. 117-165) discusses the process of gender assignment in Russian by way of a "schema-based" analysis, schemata being comparable with assignment rules. The advantage of this approach lies in that it tries to cope with aggregate contribution of distinct semantic and formal schemata. However, as it is acknowledged by the author herself, the relative strength of the schemata is not demonstrated quantitatively. Doleschal's model is further applied in Ahti Nikunlassi's paper "On gender assignment in Russian" (pp. 771-791). The author

points to the model's ability to find prototypical members and analyses the assignment of Russian hybrid and common gender nouns. Raymond Hickey's "On the phonology of gender in Modern German" (pp. 621-663) considers the functional status of gender as a category, described as semantically irrelevant. As regards phonological assignment rules, and particularly the type of syllable structure, Hickey believes it to be "in the final analysis arbitrary and as such lexically stored by speakers" (p. 641). Thus phonological rules appear to be accompanied with lexical information. One may however question the worth of this analysis, as Hickey's claims as to the predictability of the analysed rules are not supported quantitatively. The value of a quantitative approach to gender assignment has been demonstrated by the present author in a study of gender in Scandinavian (Kilarski 2001). In another paper on gender assignment, Kari Fraurud considers "Proper names and gender in Swedish" (pp. 167-219). The assignment of this class of nouns is attributed to a hierarchy of semantic and formal criteria: primarily ontological and semantic properties of the referent of the proper name and secondarily morphological/lexical properties of the name. Fraurud's interpretation of the divisions among proper names in terms of three basic ontological distinctions (co-actors, possible people containers and objects of manipulation or vision) is analogous with the analyses in Rosch (1977) and Lakoff (1986). Both recognize the anthropocentric structure of the nominal group and reflect our interaction with the environment. As regards the arbitrariness in the assignment of proper and common nouns, Fraurud soundly acknowledges the presence of core semantic principles, yet she points out that "we cannot on theoretical grounds exclude the possibility of a lower or higher degree of arbitrariness in any particular gender system." (p. 205).

Additional evidence for the status of gender assignment rules comes from studies of first and second language acquisition. Natascha Müller in "Gender and number in acquisition" (pp. 351-399) discusses the results of a study of three bilingual French/German children. It appears that semantic and formal properties of the two grammatical categories are recognised simultaneously. The author emphasizes the key role played in acquisition by indefinite articles. In contrast, Heide Wegener's "German gender in children's second language acquisition" (pp. 511-544), a study of children with Polish, Russian and Turkish as their first language, shows that the acquisition of gender in L2 is semantically based, with sex and animacy taking priority. In addition, the acquisition of gender following the categories of number and case points to their greater functionality. Gender is further encoded in the opposition agent: patient, with animate nouns typically occurring in the subject position, and neuter nouns relatively more likely to occur in the object position. And finally, Helena Lehečková in "Use and misuse of gender in Czech" (pp. 749-770) discusses the relative strength of genders in Czech, as shown in first and second language acquisition and in the speech of aphasic patients. It appears that masculine gender is acquired first, while errors typically occur in agreement. Likewise, in aphasic speech masculine gender typically replaces feminine and neuter forms. A frequent error in the speech of Finnish students is predictably the underdifferentiation of personal pronouns.

The nature of the relationship between gender and inflection constitutes one of the central questions posed in the literature. Contrary accounts have been given in which the motivation is either located in gender, viewed as a primitive category (Bittner 1994; Dressler - Thornton 1996; Wurzel 1984, 1986), or alternatively, where gender is derived from declensional type (Corbett 1991; Corbett and Fraser's "Default genders", pp. 55-97). More balanced accounts have been given by, e.g., Zubin and Köpcke (1981) and Doleschal in the present volume, who concludes that "there is no universal preference for the directionality of the interrelation of gender and declensional class, and even in one and the same language mappings may occur in both directions, although usually one direction will be preferred systematically over the other." (p. 125). An example of the former treatment is given by Dagmar Bittner's "Gender classification and the inflectional system of German nouns" (pp. 1-23). In this study, carried out within the framework of Natural Morphology, the author proposes to view gender as the primary criterion for German inflection. The opposition ±feminine becomes then a driving force both for feminine as opposed to masculine and neuter genders, as well as for singular and plural inflection. In diachronic terms, the development of German gender is interpreted as a "compromise between the semiotically optimal structure and the inherited formal structure of the inflectional system" (p. 20).

Dieter Kastovsky's paper on "Inflectional classes, morphological restructuring, and the dissolution of Old English grammatical gender" (pp. 709-727) examines the close interplay between gender and inflection in gender change. The development is seen as part of an overall restructuring of morphology, a function of the following changes: a) the loss of overt marking of inflectional classes and the rise in Old English of the bipartite structure of stem+inflection, leading to a dissolution of inflectional classes; b) the loss of nominal inflection due to phonological changes; and c) the movement towards a system with a primary role of number and a secondary role of case. Kastovsky's discussion of Old English gender is however problematic. It is described in the following way: "First of all, [gender affiliation of nouns] was not correlated with any semantic properties of the nouns themselves or any extralinguistic properties associated with their referents. This is of course what is characteristic of grammatical as against natural gender, where there is some semantic and/or extralinguistic/pragmatic rationale for gender assignment." (p. 711). Such a description is misleading, as it ignores the presence of a semantic core in any gender language (cf. Dahl's contribution on "Animacy and the notion of semantic genaer", pp. 99-115). While this has not been demonstrated quantitatively, semantic assignment rules were present in Old English (cf. however Kilarski and Krygier, in prep.), and were naturally accompanied with phonological and morphological rules. The presence of semantic criteria is demonstrated by the semantic assignment of n. animates, e.g., mægden 'maiden', wîf 'wife'.

I would like to finish the review with two papers dealing with gender and norm (Barbara Kryk-Kastovsky's "Norm versus use: On gender in Polish", pp. 729-747) and the historiography of gender (Anne Curzan's "Gender categories in early English grammars: Their message to the modern grammarian", pp. 561-576). In her paper Kryk-Kastovsky contrasts the linguistic creativity of Polish speakers with the norm set by traditional normative sources, and provides the reader with a range of entertaining examples of gender assignment and agreement. Anne Curzan's paper on the treatments of English gender in pre-1650 English grammars is the only one dealing exclusively with the history of research on gender. The difficulties the grammarians had to face when accounting for the anomalous English gender make their grammars "both questionable and informative for a study of gender" (p. 563). Curzan further suggests that the grammarians' conception of sex or "kind" is synonymous with the modern socially-constructed gender.

As regards the formal side of the volume, the structure imposed by the editors has resulted in some duplication, particularly in the accounts of German and Russian genders. I would not however regard it as a major flaw, as the value of the book lies in that it documents an ongoing discussion. In addition, the reader may benefit from alternative accounts of the same phenomenon. Nevertheless, the reference sections should have followed more closely a common style sheet - cf. the 12 different ways in which Corbett's (1991) book is given in the references. In addition, a common format of abbreviations would be useful. Some of the bibliographic entries are incomplete, with missing names of publishers and page numbers. The translations of titles of books and articles from Danish, Swedish, and Slavic are given inconsistently, while it is hardly customary to translate Russian and Scandinavian titles of journals. What I also found rather irritating is the use of non-standard fonts for the characters schwa, eth and thorn, as well as the awkward placing of diacritics over Slavic consonantal graphemes. Problems with typesetting involve also a few missing words and additional characters. About two dozen spelling mistakes could easily have been avoided by using a spell checker; those in place names can be attributed to an incomplete translation from German, e.g., Papua-Neuguinea (p. xl), Aristoteles, Metaphysik (p. 469). The same applies to style and syntax which in places matches the German original.

Previous research in the area can be described as "frequently murky" (Greenberg 1978: 80). The volume edited by Barbara Unterbeck and Matti Rissanen is exceptional not only in the wealth of data presented in a clear and absorbing way, but also in that it has been able to convey the enthusiasm shared by all students of the discipline.

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