Changing gender systems:
A multidisciplinary approach

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This article addresses various issues in the diachrony of gender marking, such as the origin and typology of gender systems, pathways of change and the question of directionality in relation to the Agreement Hierarchy, and the semantic basis of changes in gender systems in relation to the Individuation Hierarchy. It also offers an overview of recent multidisciplinary approaches to the evolution of gender systems including language acquisition research, contact linguistics, and theoretical syntax.

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1. Introduction

It probably goes without saying that gender is an important category, not only in real life, for real speakers, but also in the life of languages and in their shape and structure. Most simply put, gender as a linguistic category can be thought of as a means by which speakers, in their language, reflect groupings of real-world elements along various dimensions. Admittedly, a more nuanced view has to recognize that such groupings can be arbitrary and lack (full) semantic motivation, but even in such cases it is usually assumed that there once was a semantic basis to the groupings. Inasmuch as these elements are usually the kinds of entities that in most languages are given linguistic substance as nouns, it is typically in the nominal system that gender becomes an issue, though once again, a more careful cross-linguistic consideration reveals that gender distinctions can play a role in

all parts of grammar. Just what these aforementioned dimensions are, of course, varies considerably from language to language; some may have semantic value, some merely grammatical value, but, importantly, all of them give linguists a sense of glimpsing into what speakers deem – or have deemed – to be salient for dividing up the totality of the physical, emotional, spiritual, and even ethereal world.

One can think in terms of several methodologies that can inform the study of gender: experimental, via carefully designed controlled elicitation and experimentation on how speakers create and categorize novel objects; typological, via surveying the range of types of classifications found in different languages; analytic, via determination of the actual morphological categories and marking, of the generalizations that speakers have made, and of the semantics of particular classes (where appropriate); sociolinguistic, via the investigation of the social value assigned to particular class markers; and historical, via the examination of synchronic variation (under the assumption that variation can signal change in progress), via careful philological analysis of different stages of a language, via corpus-based work (which of course can be synchronic in nature), via the study of loanwords and how they are assigned to gender classes, or via reconstruction and a consideration of what it tells us about unattested stages. Taken together, these various methodologies add up to the rather remarkable fact that gender is one of the few linguistic features to have spurred research with such a broad range of methods, carried out by linguists of virtually all theoretical persuasions.

Many of these methods are realized and put into practice in the articles in this volume, but a few words are in order to elucidate the historical dimension. We would like to emphasize, though, that studying the history of gender systems is not just an exercise in historical investigation. One can argue, as Kiparsky (1968: 174) did, that historical developments offer a "window on the form of linguistic competence". Under that view, the decisions, whether conscious or (more likely) unconscious, that speakers make to assign loanwords to gender classes, or to mark a noun innovatively in a particular way that aligns it with other, say semantically related nouns, or to generalize over a group of nouns and mark them with a certain morpheme, all such decisions reflect on what speakers at some synchronic point do with and to their language. As such, these decisions show the workings of the synchronic grammar and thus are just like the results of controlled psycholinguistic experiments, for instance.

Further, also on the historical side of things, it must be admitted that a lot of what we believe we know about gender systems and how they change is inferential. There is very little direct observation of change, except for some reshuffling of distinctions, including especially the loss of distinctions, and virtually no observation of how they arise in the first place and get to be so pervasive across large swaths of the grammar. We can witness instances of the creation of minor distinctions, typically involving small categories that take in just a relatively few nouns, so that we can suppose that the larger marking systems arise from the generalization and extension of such minor distinctions and (sub-)categories. That is, we make reasonable assumptions, especially that distinctions are meaningful at least at their first appearance, and further assume that well-understood processes of change, such as analogy, semantic bleaching, metaphorical extension (perhaps itself a kind of analogy), and reanalysis, can interact in such a way as to bring about changes in systems that originally had a clear semantic basis. But oftentimes, the "clear semantic basis" is just a hypothesis and not a fact, in the technical sense, not something we know for sure but rather something that we believe is a reasonable starting point (or pathway of change, or the like).

In a sense, then, observed cross-linguistic diversity and observed genealogical diversity within particular languages go hand-in-hand; synchronic studies offer a basis for the understanding of starting points and endpoints of change, while diachronic studies offer a basis for understanding the processes by which one moves from that starting point to a particular endpoint.

2. Current issues in the diachrony of gender systems

The articles collected in this special issue address some of the major issues in the diachrony of gender marking on the basis of data from several Indo-European language families, viz. Germanic, Romance and Celtic, with occasional references to other language families and typological work. All of them either directly or indirectly address the question of the semantic basis of gender systems and particularly the role of basic semantic distinctions such as animate versus inanimate, human versus non-human, male vs. versus female or mass versus count in the diachronic development of gender systems (for further discussion see also Dahl 1999 and Nesset 2006).

Silvia Luraghi focuses on a highly controversial issue in comparative Indo-European linguistics, viz. the origin of the two-gender system reconstructed for Proto-Indo-European and its further development into a three-gender system after the split of the Anatolian (Hittite-Luwian) group. She argues that the Proto-Indo-European two-gender system did not arise as a semantic system resulting from the grammaticalization of classifiers ('gender from above' in Luraghi's terminology) but rather as a formal system based on preexisting morphosyntactic agreement patterns ('gender from below'). The opposition between the so-called common and neuter gender in Anatolian does not correspond to a semantic distinction between animate and inanimate, but the subsequent introduction of the feminine gender in non-Anatolian Indo-European was a sex-based split within the formal category of animate gender. The split originated in the creation of a separate feminine demonstrative and was later extended to other agreement targets such as adjectives. On the basis of her findings and of cross-linguistic typological work, Luraghi concludes that gender systems may originate from above as well as from below according to their primary function, viz. classificatory (semantic) or morphosyntactic (formal), the opposition being scalar rather than binary.

Although the interpretation of the Proto-Indo-European two-gender system as a formal instead of a semantic system may be controversial, the subsequent expansion into a three-gender system follows a cross-linguistically widely attested pathway, originating in (personal) pronouns and extending to other agreement targets following the Agreement Hierarchy (Corbett 1991), using typologically common parameters such as animacy, sex and individuation. The contribution by Lien De Vos & Gunther De Vogelaer illustrates how the decline of gender systems often proceeds along similar lines. They describe the incipient demise of the traditional three-gender system in the Dutch dialect of Moerzeke, which, like many other southern Dutch varieties, has retained a more elaborate system of gender morphology in the noun phrase than its northern Dutch counterparts. Due to phonological conditions, however, the difference between masculine and feminine nouns is not consistently marked, a situation which complicates the system despite its relative transparency. As a result, the pronominal gender system of Moerzeke Dutch is currently undergoing a process of resemanticization using the parameters of animacy and individuation: abstract and mass nouns are increasingly referred to with neuter pronouns, collectives with feminine pronouns, and nouns referring

to animals with masculine or, in the case of some higher female animals, with feminine pronouns. Using data from an apparent-time investigation and building on research in language acquisition, De Vos & De Vogelaer argue that the agents of language change are language-acquiring children. The observed process of resemanticization thus qualifies as an example of change through transmission. The authors project their findings on Germanic varieties in which the relevant change has been completed.

Peter Siemund & Florian Dolberg observe a similar pattern in the transition from Old to early Middle English. Their corpus-based investigation confirms that the change from lexical to referential gender in English follows the Agreement Hierarchy in that it first affected pronominal agreement, which is shown to be much more sensitive to semantic factors such as animacy, sex, and individuation than adnominal agreement. The latter is shown to be more sensitive to formal factors such as number and case (both morphological and structural) which turn out to be robust predictors for gender agreement mismatches. Where they occur, however, such mismatches are generally in accordance with the Individuation Hierarchy and affect abstract and mass nouns in particular.

It is interesting to compare the findings of Siemund & Dolberg with those of Alessio Frenda, who investigates changes in the gender system of present-day spoken Irish, which is currently undergoing a process of simplification resulting in the familiar split along the Agreement Hierarchy. Whereas agreement within the noun phrase is still rather conservative and largely based on formal factors, pronominal agreement has become almost exclusively determined by semantic factors, particularly sex: feminine pronouns are used to refer to female antecedents, masculine pronouns to all others. Like De Vos & De Vogelaer, Frenda uses data from an apparent-time comparison. His corpus consists of spoken data from three age groups recorded between 1997 and 2007, supplemented by a real-time comparison with older spoken data, yielding a time frame of three to four decades. Frenda explains the observed change as resulting from structural convergence due to prolonged language contact with English. Similar developments are found in other varieties of Celtic, some of which are now extinct. He notes, however, that the change was facilitated by language-internal developments such as phonetic erosion and the resulting loss of inflections.

Like Siemund & Dolberg, Sebastian Kürschner & Damaris Nübling focus on less-studied variables, particularly the relationship between

gender and declension. Documented developments in the history of German are reanalyzed against the background of a 'profiling hypothesis' which stipulates that gender and declension over time came to be used complementarily in the sense that gender profiles the singular, whereas declension profiles the plural. Comparing several Germanic languages and German dialects, they conclude that the observed interaction depends on the level of morphological complexity and the number of genders and declensions. A decrease in complexity may result in a stronger association of gender and declension or lead to the complete dissociation of both and the development of new, more transparent conditioning factors.

Morphological complexity in German is also the topic of Bettina Jobin's article. Introducing the notion of 'contextual gender' to include both sex-based distinctions as well as distinctions based on individuation, she shows how gender systems are increasingly subject to semantic restructurings on the basis of cross-linguistic evidence from the documented history of Germanic and Romance languages, in which the distinctions between animate and inanimate and mass and count turn out to be of particular importance. This 'Semantic Restructuring Principle' is then applied to the history of German adjective inflection. Jobin demonstrates that adjectival gender marking was repeatedly restructured on the basis of semantic principles in the history of German. She thus argues that in this particular case adjectival rather than pronominal agreement was the locus of resemanticization, which runs counter to the cross-linguistically much more widely attested pathway along the Agreement Hierarchy.

Another, though better-documented, exception to the Agreement Hierarchy can be found in the contribution by Michele Loporcaro & Tania Paciaroni, in which a remarkable development of the Latin three-gender system in Central-Southern Italo-Romance is discussed. Whereas the neuter gender merged with the masculine gender in the development of the modern Romance languages and their dialects, it split into two different neuters, viz. one for mass nouns without a plural, the other for count nouns originally with a dedicated plural which alternated and eventually merged with the feminine plural, hence its designation as 'alternating neuter' (reminiscent of the Romanian 'ambigeneric neuter'). The split is thus based on the resemanticization of the neuter pronouns on the basis of distinctions from the Individuation Hierarchy, but the locus of the development is not the pronoun but the definite article, which is at the opposite end of the Agreement Hierarchy. Loporcaro & Paciaroni point out

that the seemingly exceptional development of the Latin three-gender into the Central-Southern Italo-Romance four-gender system is probably just a transitory step towards the familiar two-gender system found in the other Romance languages, the split being a sign of instability and the change one from target to controller gender.

The article by Sandro Sessarego & Javier Gutiérrez-Rexach analyzes variable gender agreement in Afro-Bolivian Spanish, an Afro-Hispanic vernacular developed from an original bozal language. The authors argue that the variation is an instance of cross-generational change which consists in the systematic substitution of stigmatized basilectal Afro-Bolivian features with more prestigious Bolivian Spanish ones. The transition is seen as driven by sociolinguistic factors but regulated by syntactic restrictions and configurations which are described in terms of the Minimalist Program, more specifically as a locality condition on agreement. The findings also provide support for recent theories on second language acquisition such as Pienemann's Processability Theory, in which it is proposed that the acquisition of processing procedures follows certain implicational hierarchies.

3. Conclusion

Throughout this collection of articles, therefore, we see how synchronic and diachronic investigations feed into and off of one another, offering the possibility of different strands of evidence pointing to the same conclusions. In this way, the study of gender systems is no different from the study of any linguistic phenomenon, even if we are still a long way from fully understanding them. In doing so, this collection testifies to the fact that diachronic research increasingly seems to become an interdisciplinary discipline. As noted above, and perhaps trivially, most articles adopt a cross-linguistic approach or draw on data from typological surveys in which global diversity is addressed. Most articles, in addition, attempt to reconcile their historical conclusions with findings from a variety of fields, including language acquisition research, contact linguistics, and theoretical syntax. There seems to be at least one indication that converging evidence on processes of change in gender systems, and the nature of such systems in general, can indeed be achieved: nearly all articles address the role of 'basic' semantic distinctions (such as natural gender, animate vs. inanimate or mass vs. count) in processes of change in gender systems (see also Dahl

1999, Nesset 2006 for discussion). But while this converging evidence on the role of basic semantic distinctions is definitely encouraging, it becomes all the more mysterious how gender systems may evolve in such a way that core semantic distinctions are confined to playing a minor role. Clearly, these are the types of questions that should keep historical linguists busy for years to come.

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