Chapter Eleven in: H. Giles & A. Maass (Eds), *Advances in intergroup communication*. New York, NY: Peter Lang

Gender and Linguistic Sexism

UTE GABRIEL & PASCAL GYGAX

Thought has no gender
Vanna Bonta

Language, as a vehicle of representations, can highlight, accentuate or even blur intergroup boundaries. This idea is illustrated by *grammatical gender* and the normative use of masculine terms in gendered languages, which, although they potentially carry a generic gender meaning, leads to an empirically demonstrated invisibility, or even exclusion of women in gender representations. The mere existence of morphological (e.g. in French "doctor*esse*") or semantic gender markers (calling a doctor "*female* doctor") activates gender categories, suggesting that gender is relevant even when it is not, thus perpetuating differing expectations and gender stereotypes.

Accordingly, in this chapter, we approach the issue of "grammaticalization of gender" from an intergroup relations perspective. Using social identity theory, and more specifically self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), we argue that grammaticalization of gender strongly contributes to the salience, or accessibility, of the social category "gender". Relatedly, we contend that the dual use of grammatically masculine forms to refer to people in general (i.e., as generic forms) as well as to men in particular (i.e., as gender-specific forms) is a reflection of intergroup hierarchies and helps to delimit intergroup boundaries in a

way that disadvantages women.

Our research complements previous work applying self-categorization theory to gendered communication effects (e.g., Palomares, 2004, 2012) as we focus not on the communicative consequences of identifying with a gender group, but on how particular features of language help to make gender a salient category, demarcate intergroup boundaries so as to include or exclude women from the general discourse and promote or hinder women's engagement in specific domains.

As a starting point for our argument, we present the concepts of self-categorization and grammaticalization of gender. We demonstrate how these can be linked together and discuss recent empirical evidence in light of this framework. We then focus on the asymmetric use of grammatical gender forms, which is prevalent in many gendered languages, and its consequences for the overall invisibility of women in discourse as well as for individuals' sense of belonging.

Against this background we discuss neutralization and feminization as linguistic approaches to addressing the negative consequences of the grammaticalization of gender, which have been promoted by political and language-regulating institutions, and conclude with outlining future research directions.

Self-Categorization Theory

The Prologue to this volume (see Giles & Maass) outlined the remarkable influence of social identity theory (e.g., Tajfel & Turner, 1986), which has been adapted and extended within the field of communication, by Giles and colleagues and may others, on research into the social psychological processes that underlie group behavior. Self-categorization theory (Turner et al., 1987; Greenaway, Peters, & Haslam, this volume), which sits within the broader framework of social identity theory, posits that individuals' cognitive acts of self-categorization provide the psychological foundation

of group processes. Turner and colleagues (1987) argue that cognitive representations of the self take the form of self-categorizations with at least three levels of abstraction that are relevant to the social self-concept: self-categorizations based on one's identity as a human being, self-categorizations that define one as a member of certain social groups (and not others), and self-categorizations based on differentiating oneself from other in-group members.

It is assumed that the ways in which we categorize ourselves (together with the content of that category) affect our social experiences and behavior, so the question of what factors determine which of our latent self-categories become salient in a given situation is central to the issue of social identity. In a nutshell, self-categorization theory postulates that category salience is a product of the interaction between the relative accessibility of a category in a given situation and the fit between the context and the category characteristics. The accessibility of a category (i.e. the individual's predisposition to use it) depends not only on an individual's current expectations or needs, but also on previous experiences (Turner, Oakes, Haslam, & McGarty, 1994).

Central to this chapter is the notion that self-categorization *depersonalizes* self-perceptions, leading individuals to subscribe to categories that will generate a sense of belonging and elicit mental processes and behaviors that conform to the prototype of their in-group; in other words self-categorization encourages individuals to self-stereotype (Hogg & Reid, 2006).

Central to the concept of self-categorization are the means by which self-categories are generated or constructed. We argue in this chapter that the grammaticalization of gender contributes – to use the terminology of self-categorization theory – to the salience of the gender category by improving the *fit*

between language input and gender categories (because language is a stimulus material that carries gender information) and by increasing a person's *readiness* to use gender as a category by making it more meaningful or relevant (one is more predisposed to attend to gender as this information is required when producing discourse).

Grammaticalization of Gender

Nouns and pronouns that refer to humans can carry gender information. In most if not all cases, the gender of the person referred to is coded semantically or lexically, in other words the gender of the referent constitutes part of the word's meaning. For example, in English *queen* and *she* refer to a female person whereas *king* and *he* refer to a male person. Similarly the words "Cat*woman*" and "Spider*man*" refer unequivocally to the gender of their referents. The semantic coding of gender operates in a similar way to the semantic coding of other categories in nouns, such as those used to refer to age groups (e.g. infant, child, adult), sexual orientation (e.g. lesbian, gay, straight, see Fasoli, Maass, & Sulpizio, this volume) or physical appearance (e.g. giant, dwarf). The gender of human referents can, however, also be coded grammatically.

A language is considered a grammatical gender language if words related to nouns have to *agree* grammatically with the form of the noun, this agreement being the very essence of grammatical gender systems (Corbett, 1991). Gender systems can be made up of two, three or more grammatical genders and *may* be based on sex (or on the human/non-human or the animate/inanimate distinction). In fact, 112 of the 257 languages (44%) included in the World Atlas of Language Structures (WALS: Dryer & Haspelmath, 2013) have a gender system, and in 84 cases this is sex-based. In sex-based gender systems gender assignment in the case of animate beings

typically reflects the sex of the referent (e.g. *Regarde la danseuse* in French [Look at the dancer$_{female}$]) rather than the sex of the speaker (in the example above both male and female speakers would use the same form, but see Dunn (2014) for examples of languages that mark the gender of the speaker).

In English, gender is marked only in personal pronouns, making English a rare example of a pronominal gender system (Corbett, 1991); furthermore, as the pronouns *she* and *he* refer to the sex of human referents whilst nearly all non-human entities are referred to as "it" English has been described as a *natural gender language* (e.g., Stahlberg, Braun, Irmen & Sczesny, 2007). English is therefore often considered to occupy an intermediate position with respect to grammaticalization of gender; gender is not grammaticalized as in sex-based grammatical gender languages (such as French or German) but it is still grammaticalized more often than in languages that lack sex-based grammaticalization (such as Finnish or Mandarin Chinese).

The grammaticalization of referents' sex has consequences. Slobin's (2003) "Thinking for Speaking" approach assumes that because languages vary in terms of the options they provide for grammatical encoding they also vary in the influence they exert on mental processes linked to linguistic expression. In the case of role nouns (i.e. nouns that refer to activities or occupations) German, for example, provides morphological and grammatical cues for distinguishing referents according to their gender. To describe an event in German, for instance "the professor gave a powerful and memorable lecture", the speaker must select from die Professorin [the female professor] and der Professor [the male professor], whereas in English the speaker would not be obliged to indicate gender, but could add gender markers, for example the female professor or the male professor.

In some languages one cannot avoid providing information about the gender

of a referent. These languages thus require speakers and listeners to consider – consciously or unconsciously – the gender of referents. This also applies to the reading and writing of text, although the "Thinking for Speaking" approach is usually discussed in the context of speech production. Readers of sex-based gendered languages, but not readers of non-sex-based gendered languages or non-gendered languages, can reasonably expect the gender of referents to be grammatically encoded in and thus retrievable from a text.

A challenge for languages that have a sex-based gender system is to determine which grammatical gender to use in cases where the referent's gender is not known or is irrelevant or is a mixed-gender group. There are different solutions to this problem. One is the use of epicene pronouns (e.g. English *they*) or nouns (e.g. in French *une personne* [a person] is used to refer to men and women alike); another is the invention of new forms to signal "either gender", such as the third person pronoun *hen* in Swedish (Gustafsson-Sendén, Bäck, & Lindqvist 2015), or the suggestion in German to use the suffix –x as in *Professx (professor)* (see AG Feministisch Sprachhandeln der Humboldt Universität zu Berlin [2014]).

A common solution in Indo-European languages (for exceptions, see Corbett, 1991) is the dual use of masculine grammatical forms. Whilst grammatically and morphologically marked feminine role nouns unequivocally indicate female referents, masculine grammatical forms can indicate male referents (*specific* meaning), both male and female referents, or that the gender of referents is irrelevant (*generic* meaning).

A semantic consequence of this dual meaning rule is that masculine forms are ambiguous (Irmen & Kurovskaja, 2010). A social consequence is that it implies the default human gender is male and contributes to women's invisibility in discourse

(e.g., Martyna, 1980). The use of masculine forms as generics has therefore been criticized as relegating women to second place (i.e. being sexist), a claim that is supported by extensive empirical evidence that the prevailing spontaneous interpretation of masculine forms is *specific*, thus rendering it less likely that an intended generic meaning will be successfully conveyed (Stahlberg et al., 2007). In addition, whether a person considers the generic use of masculine forms as problematic is, in most cases, inversely related to that person's endorsement of sexist beliefs (e.g., Sarrasin, Gabriel, & Gygax, 2012).

In summary, the requirements for the specification of referents' gender vary across languages. Of most interest to this chapter, gender-marked languages require referents' gender to be grammatically encoded and in most of these languages – at least in Indo-European languages – hierarchical language relationships have been implemented such that some forms (e.g., the masculine form) have more than one meaning and are used to refer to a person whose sex is unknown or irrelevant or to a group that comprises persons of both sexes. It is precisely this asymmetry (i.e. *feminine forms = women* whereas *masculine forms = men or other meanings*) rather than the simple existence of sex-based gender systems that gives rise to the claim that languages can be sexist (see also Stahlberg et al., 2007).

Perceptual and Social impact of the Grammaticalization of Gender

As hinted earlier, we suggest that the grammaticalization of language contributes to the salience of the gender category in two ways: first, when the sex of human referents is marked morphologically or phonologically the perceptual salience of gender is heightened and second, the necessity of marking the sex of human referents makes gender a meaningful category and contributes to overall sensitivity to gender. This latter argument rests on the postulate that sex-based gender languages compel

the speaker to pay routine attention to the gender category to which the person or persons to which they refer belong. In summary – and all other things being equal – the social category *gender* should surface more easily for speakers of sex-based gender languages than for speakers of other languages. It should not be forgotten, however, that speaking a sex-based gender language is not a prerequisite for self-categorizing in terms of gender as there are many other variables (not all language-related) that contribute to the salience of the gender category (e.g., actual distribution of gender, perceptual gender markings such as clothing, etc.).

When evaluating the consequences of grammaticalization of gender in terms of perceptual and social correlates one needs to bear in mind that language is learned through social interactions and thus socially and culturally anchored. Speakers of one language may differ from speakers of another language in other relevant culturally bound variables than the language spoken. Some of the authors whose research we present in this section have addressed this issue by focusing on bilingual speakers (Dong, Wen, Zeng, & Ji, 2014; Sato, Gygax, & Gabriel, 2013) whilst others have run cross-linguistic comparisons and sought to minimize or control for sub-sample variety (Chen & Su, 2010; Guiora, Beit-Hallahmi, Fried, & Yoder, 1982; Wasserman & Weseley, 2009).

Does grammaticalization affect the salience of gender categories?

Chen and Su (2010) and Dong and colleagues (2014) exploited a difference between English and Chinese, namely that the former differentiates between female and male pronouns, whereas the latter (at least orally) does not.

Dong and colleagues (2014) examined errors in pronominal gender in English when proficient Chinese learners of English were exposed to matching or mismatching English antecedent-pronoun phrases (example mismatch: $\text{Mark}_{\text{male}}$

antecedent goes to the zoo every day after work to watch animals to get a good rest. She female pronoun considers it the best way to relax.). In line with the assumption that Chinese speakers seldom process the gender of referent information through linguistic devices, the authors found a match-mismatch effect (i.e. longer reading time when the gender of the pronoun mismatched the gender of the name than when the gender of the pronoun matched the gender of the name) for the Chinese L2-English readers only when the antecedent (e.g. *Marc*) preceding the target pronoun was introduced by a gender-matching picture.

In a comparison of the performance of English and Chinese speakers on listening (Experiment 1) and reading (Experiment 2) tasks Chen and Su (2010) found that Chinese speakers responded less accurately to gender-related questions than to non-gender related questions, whereas English speakers' accuracy was independent of question type. Furthermore, English speakers were much faster to respond to gender-related questions than to gender-unrelated ones, whereas this was not the case for Chinese speakers.

Sato and colleagues (2013) investigated the effects of the grammatical gender information about nouns in bilingual speakers of French (sex-based gender language, i.e. nouns are grammatically marked for gender) and English (nouns are not grammatically marked for gender). They found a L1-transfer effect, particularly for less balanced bilinguals in their L2: L1-French speakers interpreted English nouns in line with the corresponding French grammatical gender markings whereas L1-English speakers ignored grammatical markings in French, as they are not available in English. This can be interpreted as an indication that readiness to look for grammatical markers of gender depends on one's L1.

More than 30 years ago, Guiora and colleagues (1982) tested 16- to 42-month-

old children's ability to categorize themselves as female or male. All children were monolingual and brought up in Hebrew (sex-based gender system), English (sex-based pronominal gender system) or Finnish (no gender system). More than 50% of all children brought up in Hebrew were able to categorize themselves correctly as female or male from the age of 25 to 27 months onwards, whereas the majority of children in the English and Finnish samples were not able to do so until the age of 34 to 36 months.

Together, these findings provide preliminary evidence that the grammaticalization of gender influences the ease with which gender categories surface.

Does grammaticalization influence sexism and gender equality?

We are aware of only two studies that have explored the impact of the grammaticalization of gender on variables other than perceptual or linguistic salience and readiness; one on sexism (Wasserman & Weseley, 2009), and one on gender equality (Prewitt-Freilino, Caswell, & Laakso, 2012). Such an impact is not self-evident, as one could argue that although the mere existence of a sex-based gender system can be interpreted as a hint that a language community attaches sufficient significance to sex differences that it warrants them being represented by grammatical categories, this does not necessarily mean that the sexes are evaluated or treated differently.

Wasserman and Weseley (2009) argued that sex-based gender languages signal that women and men are different and that:

> because women have traditionally been an oppressed group, this notion of difference may translate into a constant intimidation that women are inferior and prime negative attitudes toward women's pursuit of equal opportunity. (p. 635).

In their third experiment, bilingual high school students read an 80-word passage from a novel and completed a survey on sexist attitudes either in English (pronominal gender system) or Spanish (sex-based gender system). In line with the researchers' expectations, students who read the passage and answered the survey in English tended to express less sexist attitudes than students who read and answered in Spanish. Although these results potentially illustrate the effect of grammaticalization on sexism they should be interpreted with caution, as the design of the experiment did not firmly identify the underlying cognitive or motivational mechanisms by which participants' responses were primed.

Prewitt-Freilino and colleagues (2011) also investigated the link between grammatical gender and social gender equality empirically. One hundred and eleven countries were categorized, according to the grammatical relevance of sex to the language(s) predominantly spoken there, as *gendered* (73), *genderless* (26) or *natural gender* (11), using the criteria discussed by Stahlberg and colleagues (2007). The analysis, which controlled for geographic location, religious tradition, system of government and human development index, revealed a significant difference between *genderless* and *gendered* languages on the Global Gender Gap scale (Hausmann, Tyson, & Zahidi, 2009), mainly reflecting the fact that the countries in the gendered language group scored lower in the economic participation sub-index than those in the genderless languages group. The small group of countries speaking a natural gender language received the highest Global Gender Gap score, mainly reflecting the fact that women's access to political power was comparatively high in that group.

Again, whilst potentially illustrative of the impact of grammaticalization, these results should be interpreted with caution, as it is difficult to link the effects to linguistic (rather than historico-cultural) similarities. The *natural gender* language

group was made up of only two clusters: a geographical-linguistic cluster (Scandinavian countries speaking North Germanic languages) and a cluster that shared a history of British colonization (seven countries where English had become one of the official languages as a result of colonization). Furthermore, it was not possible to disentangle the effects of grammaticalization and asymmetry in the use of grammatical gender forms on the basis of these data on gender gap differences between the *gendered* language group and the *genderless* language group.

Asymmetries in the Use and Perception of Grammatical Forms

A variety of methods have been used to investigate how readers of gender-marked languages interpret masculine and feminine forms (e.g. eye-tracking in Esaulova, Reali, & von Stockhausen, 2014; magnetoencephalographic activity in Molinaro, Barber, Pérez, Parkkonen, & Carreiras, 2013; ERP measures in Caffarra, Siyanova-Chanturia, Pesciarelli, Vespignani, & Cacciari, 2015; employing an artificial language in Öttl & Behne, under review). By and large, empirical research on the use of the masculine form indicates that even when it can be interpreted as generic readers are more inclined to interpret it specifically, at least in situations where no contradictory linguistic or non-linguistic information is present.

We believe that this tendency to interpret masculine forms as referring to men has strong implications for self-relevant cognitions that are based on group membership (self-stereotyping) and consequently for career interests and hence occupational choices.

"Does this mean me?" Masculine grammatical form and group boundaries

Whereas grammaticalization of gender helps to make the gender category salient, using masculine forms generically to refer to all the members of a domain contributes to women's uncertainty about whether the masculine form marks a gender boundary

or not. Put differently, it creates an ambiguity as to whether their group (women) belongs to that particular domain. This is absolutely crucial, as a sense of belonging is essential to engagement and achievement motivation (Walton & Cohen, 2007).

Vervecken, Hannover, and Wolter (2013) showed for German and Dutch (sex-based gender languages) that children's (aged 6 to 12 years) gender associations and perceptions of men's and women's occupational success were influenced by whether stereotypically male occupations were referred to only by the masculine form (which can be interpreted as generic) or in the feminine *and* masculine form (called *dual form* or *pair form*). Girls' – but not boys'– interest in male occupations was influenced by the form used; girls expressed less interest in these occupations when they were presented only in masculine form than when they were presented in dual form, whereas boys' interest was unaffected by the linguistic form (for similar results in French with an adolescent sample, aged 14 to 15 years, see Vervecken, Gygax, Gabriel, Guillod, & Hannover, in press).

Stout and Dasgupta (2011) showed that in English the use of the pronoun "he" to refer to the ideal applicant during a mock job interview led women to report a lower sense of belonging, less motivation to pursue the job and the expectation to be less identified with the job than when the interviewer used gender-neutral generics ("one"; "he or she"). The choice of pronoun was seen as an indication of whether the participant's in-group (in this context, women) was or was not entitled to membership of the relevant category. Use of "he", presumably intended as a generic pronoun, nevertheless appears to have been perceived by women as ostracism. Horvath and Sczesny (2015) also showed that applicant evaluators were affected by language when assessing female applicants for high-status leadership positions.

Similarly, in research based on evidence that recall is affected by personal

relevance, Crawford and English (1984) demonstrated that female, but not male, participants recalled descriptions of professions (e.g. psychologist, lawyer) better when gender-inclusive pronouns were used than when only male pronouns were used.

Overcoming boundaries – Meaning Activation Model

Although it appears that the specific interpretation of the masculine form predominates, the underlying reasons for this are not yet entirely clear. Recently, we tentatively proposed an explanation based on a *meaning activation* model (Lévy, Gygax, & Gabriel, 2014). In line with the activation-selection model (Gorfein, Brown, & DeBiasi, 2007) words are represented as a set of weighted attributes, whose initial activation (e.g., whether reading "right" activates the concept "opposite of left" or "accurate") depends on their general activation weight. The selection of a particular meaning (e.g., "accurate") increases the weight of the attributes associated with this meaning and thus renders it more likely that this meaning will be activated in the future. In the context of processing role nouns in the masculine form, one could argue that the meaning attributed to them is determined by the relative weight of the features associated with the specific and generic meanings. This weight in turn depends on the frequency with which readers have been exposed to the two meanings. Given the sequence in which the meanings are learnt – the specific meaning is usually learnt a couple of years before the generic one (Gygax, Gabriel, Sarrasin, Garnham, & Oakhill, 2009) – and given that there are more stereotypically male occupations than stereotypically female ones in contemporary society (Gabriel, Gygax, Sarrasin, Garnham, & Oakhill 2008; Misersky et al., 2014), which is likely to result in greater exposure to *men* in media reports, it is reasonable to assume that the specific meaning is activated much more frequently.

Evidence for a meaning activation model comes from a series of experimental

studies in French (Gygax & Gabriel, 2008; Gygax et al., 2012; Lévy et al., 2014), which attempted to modify the *masculine = male* link. In all of these experiments participants were typically presented with word pairs consisting of a female or male kinship term in the singular form and a role noun in the masculine plural form (e.g. *soeur* [sister] - *musiciens* [musicians] or *frère* [brother] - *musiciens* [musicians]) and asked to indicate whether the person referred to by the kinship term could be part of the group referred to by the role noun (e.g. Could a *sister* be part of a group of *musicians*?). Results across all experiments, independently from the additional experimental manipulations, showed that participants gave fewer and slower positive responses to experimental word pairs that included a female kinship term (e.g. a sister) rather than a male kinship term (e.g. a brother), indicating a tendency to interpret the masculine form in the gender-specific sense rather than the generic sense.

Gygax and Gabriel (2008, Experiment 2) showed that activation of the generic meaning of the masculine form could even further decrease in certain *contexts*. For instance, when participants were presented with nouns in the feminine form in an unrelated preliminary task, their responses in the main experimental task indicated even more strongly that they interpreted the masculine form in its specific sense (i.e. even fewer positive responses to experimental word pairs that included a female kinship term). In other words, activating *feminine form = women* appeared, perhaps through a contrast mechanism, to increase the relative activation of *masculine form = men*.

In an attempt to modify the initial activation of the generic interpretation of masculine forms Gygax and colleagues (2012) explicitly reminded participants of the rule that the masculine form can be interpreted as a generic form and instructed them to bear the rule in mind when completing the experiment. Although the reminder led

to an increase in positive responses to experimental word pairs that included a female kinship term, participants were still much slower to respond positively to these pairs than to those that included a male kinship term. The authors argued that this was because the specific meaning of the masculine form is always activated through a passive (i.e. uncontrollable) process, whereas the generic meaning is only activated through a strategic process, which is not capable of overriding the passive activation process. In the terminology of the activation-selection model, an explicit reminder of the generic interpretation of the masculine form is not sufficient to compensate for the weight of the attributes associated with its specific meaning.

Lévy and colleagues (2014) employed a more subtle experimental manipulation to try to increase the relative weight of the generic interpretation of the masculine form. They gradually increased the proportion of pairs in the task, which included a female kinship term rather than a male kinship term (the role noun was always in the masculine form). This appeared to increase the activation of the generic interpretation: as the proportion of pairs including a female kinship term increased, participants became more likely to accept *female kinship – role nouns in the masculine form* pairs. A simple increase in exposure to *women – masculine form* pairs was sufficient to partially erase the boundary represented by the use of masculine forms.

This research documents that readers can be compelled to understand the masculine forms in a generic way and that this – in line with a meaning activation model – is more easily achieved by exposing people to particular stimuli than by explaining how a grammatical form could or should be interpreted.

Strategies for Eliminating Asymmetry

The asymmetry in the use of grammatical gender forms has been a topic of political

debate since the 1970s. Linguistic alternatives have been suggested and have become established across Europe to varying degrees (e.g. Moser, Sato, Chiarini, Dmitrow-Devold, & Kuhn, 2011). Yet, although speakers of *gender-conscious* languages are perceived positively (Vervecken & Hannover, 2012), the implementation of such language is a far from trivial undertaking (e.g., Koeser, Kuhn & Sczesny, 2015; Kuhn & Gabriel, 2014). Two main strategies for eliminating asymmetry have been suggested (for a review, see Hellinger & Pauwels, 2007): visibility by feminization (e.g. use of dual forms in German: *Studentinnen und Studenten* [female and male students]), and de-gendering by neutralization (e.g. one form to refer to both men and women, such as nominalizsed forms in German. e.g., *Studierende* [those who study]).

In the terminology of self-categorization theory, neutralization strategies help to make the gender category less salient, whereas feminization strategies keep the gender category salient but (a) seek to heighten the visibility of women in discourse by referring explicitly to women and (b) avoid the asymmetrical use of the masculine and feminine grammatical forms.

Although neutralization strategies should lead to interesting changes in speakers and readers' mental representations of gender (and associated behaviors) they have not yet received much attention, although two relevant studies are available (Gabriel & Gygax, 2008; Sato, Gabriel, & Gygax, under review).

In Norwegian feminine suffixes have gradually become obsolete and so speakers have increasingly been exposed to masculine forms referring to women (as in the experimental manipulation of Lévy et al., 2014). Gabriel and Gygax (2008) found that the Norwegian strategy had resulted in the grammatical masculine form partially losing its gender-specific meaning, however their results also indicated that readers' gender representations were based on gender stereotypes. At first glance

these results signal another form of discrimination with a different source.

In German nominalized participles and adjectives are not gender-marked, unlike nouns (e.g. nouns: *der Student*$_{masculine}$ [the male student], *die Studentin*$_{feminine}$ [the female student]; nominalised forms: *die/der* Studierende [the one who is studying]). A study by Sato and colleagues (under review) showed that nominalized forms result in more balanced representations than their semantically related masculine nouns.

Although feminization strategies may lead to gender salience, even when referent sex might be irrelevant from the speaker's perspective, it has been argued – and demonstrated empirically - that they heighten the visibility of women in discourse because they refer explicitly to women (e.g., Gabriel et al., 2008).

Some authors have argued, however, that feminization will only be successful if feminine forms are selected and used with care. Merkel, Maass, and Frommelt (2012) found that in Italian female professionals referred to by newly coined symmetrical feminine forms (e.g. *la presidente* [the female president]) were perceived as having the same social status as those described by masculine forms (e.g., *il presidente*), whereas those referred to by traditional feminine forms (e.g., *la presidentessa* [the female president], a word historically used also to denote *the wife of the president*) were ascribed lower social status.

A similarly cautious note was sounded by Formanowicz, Bedynska, Cisłak, Braun, & Sczesny (2013) in their investigation in the Polish context of how the evaluation of female applicants was influenced by the grammatical form in which their profession was presented. Across three studies, female applicants with a job title in the grammatically feminine form in their CV were evaluated less favorably than male applicants and female applicants using a grammatically masculine form.

Similarly, Budziszewska, Hansen, & Bilewicz (2014) found that men, but not women, perceived women described with feminine job titles as less warm and non-significantly less competent than women with masculine job titles.

In summary, either strategy (feminization and neutralization) has advantages and disadvantages, and deciding which strategy to adopt depends on the specific goals and the linguistic and societal context. However, more research delineating the consequences for each strategy still remains to be done.

Conclusions

In this chapter, we have focused on how particular features of language help to make gender a salient category and influence intergroup boundaries. We argued that these features influence the extent to which women are included in the general discourse and engaged in specific domains.

Languages vary greatly in the extent to which the sex of human referents is grammaticalized. If sex is grammaticalized, speakers and listeners must constantly attend to referents' sex. We have argued that grammaticalization of gender contributes to the salience of gender categories thus rendering it more likely that gender is used as a basis for self-categorization. Although its impact on social interactions has been relatively understudied, there is evidence in support of this assumption. Palomares (2004), for example, showed that gender-based communication differences only emerge when gender is salient. Future research is needed to better understand how the use of grammatically gender marked references contributes to this dynamic.

In turn, grammaticalization of gender inevitably raises the issue of how to indicate that gender is irrelevant. The asymmetric use of grammatical word forms – which remains widespread – is not a solution, as the potential ambiguity has

consequences that extend beyond discourse. Neutralization and feminization strategies as two alternatives to a generic use of masculine terms have gained unequal attention from empirical research. This is unfortunate as although both strategies aim at the same goal (providing gender equality), they may come with different side effects. In the context of racial and ethnic groups, the general diversity ideologies of colorblindness and multiculturalism have been found to have disparate effects for example on stereotyping and prejudice, and on minority and majority members (Rattan & Ambady 2013). One fruitful avenue for future research might thus be to compare how the linguistic strategies affect intergroup interactions, to explore whether they have disparate outcomes for women and men, and whether group membership predicts the support of either strategy.

In the past, this topic has mostly attracted the attention of those interested in the English language, but the body of research focusing on other languages is growing. Broadening the diversity of languages studied is most welcome, as this may allow us to better disentangle general effects from linguistic-cultural ones.

References

AG Feministisch Sprachhandeln der Humboldt Universität zu Berlin (2014). Leitfaden zum antidiskriminierenden Sprachhandeln [Guide to non-discriminatory language]. Retrieved from http://www.feministisch-sprachhandeln.org

Budziszewska, M., Hansen, K., & Bilewicz, M. (2014). Backlash over gender-fair language: the impact of feminine job titles on men's and women's perception of women. *Journal of Language and Social Psychology*, *33*, 681–691.

Caffarra, S., Siyanova-Chanturia, A., Pesciarelli, F., Vespignani, F., & Cacciari, C.

(2015). Is the noun ending a cue to grammatical gender processing? An ERP study on sentences in Italian: ERP effects of gender-to-ending consistency. *Psychophysiology*, *52,* 1019-1030.

Chen, J.-Y., & Su, J.-J. (2010). Differential sensitivity to the gender of a person by English and Chinese speakers. *Journal of Psycholinguistic Research*, *40*, 195–203.

Corbett, G. G. (1991). *Gender*. Cambridge, UK: Cambridge University Press.

Crawford, M., & English, L. (1984). Generic versus specific inclusion of women in language: Effects on recall. *Journal of Psycholinguistic Research*, *13*, 373–381.

Dong, Y., Wen, Y., Zeng, X., & Ji, Y. (2014). Exploring the cause of english pronoun gender errors by Chinese learners of English: Evidence from the self-paced reading paradigm. *Journal of Psycholinguistic Research*. Advance online publication. 1–15. doi: 10.1007/s10936-014-9314-6

Dryer, M. S., & Haspelmath, M. (Eds.). (2013). *The world atlas of language structures online*. Leipzig, Germany: Max Planck Institute for Evolutionary Anthropology. Retrieved from http://wals.info

Dunn, M. (2014) Gender determined dialect variation. In G. G. Corbett (Ed.), *The expression of gender* (pp. 39-68). Berlin, Germany: De Gruyter.

Esaulova, Y., Reali, C., & von Stockhausen, L. (2014). Influences of grammatical and stereotypical gender during reading: Eye movements in pronominal and noun phrase anaphor resolution. *Language, Cognition, and Neuroscience*, *29,* 781-803.

Formanowicz, M., Bedynska, S., Cisłak, A., Braun, F., & Sczesny, S. (2013). Side effects of gender-fair language: How feminine job titles influence the

evaluation of female applicants. *European Journal of Social Psychology*, *43*, 62–71.

Gabriel, U., & Gygax, P. (2008). Can societal language amendments change gender representation? The case of Norway. *Scandinavian Journal of Psychology*, *49*, 451–457.

Gabriel, U., Gygax, P., Sarrasin, O., Garnham, A., & Oakhill, J. (2008). Au pairs are rarely male: Norms on the gender perception of role names across English, French, and German. *Behavior Research Methods*, *40*, 206–212.

Gorfein, D. S., Brown, V. R., & DeBiasi, C. (2007). The activation—selection model of meaning: Explaining why the son comes out after the sun. *Memory and Cognition, 35*, 1986–2000.

Guiora, A. Z., Beit-Hallahmi, B., Fried, R., & Yoder, C. (1982). Language environment and gender identity attainment. *Language Learning*, *32*, 289–304.

Gustafsson-Sendén, M., Bäck, E. A., & Lindqvist, A. (2015). Introducing a gender-neutral pronoun in a natural gender language: The influence of time on attitudes and behavior. *Frontiers in Psychology 6*, 893.

Gygax, P., & Gabriel, U. (2008). Can a group of musicians be composed of women? Generic interpretation of French masculine role names in the absence and presence of feminine forms. *Swiss Journal of Psychology, 67*, 143–151.

Gygax, P., Gabriel, U., Sarrasin, O., Garnham, A., & Oakhill, J. (2009). Some grammatical rules are more difficult than others: The case of the generic interpretation of the masculine. *European Journal of Psychology of Education, 24*, 235-246.

Gygax, P., Gabriel, U., Lévy, A., Pool, E., Grivel, M., & Pedrazzini, E. (2012). The

masculine form and its competing interpretations in French: When linking grammatically masculine role names to female referents is difficult. *Journal of Cognitive Psychology*, 1–14.

Hausmann, R., Tyson, L.D., & Zahidi, S. (2009). *The global gender gap 2009*. Geneva, Switzerland: World Economic Forum. Retrieved from http://www.weforum.org/pdf/gendergap/report2009.pdf

Hellinger, M., & Pauwels, A. (2007) *Language and communication: Diversity and change.* Berlin, Germany: Mouton-De Gruyter.

Hogg, M. A., & Reid, S. A. (2006). Social identity, self-categorization, and the communication of group norms. *Communication Theory*, *16*, 7–30.

Horvath, L. K., & Sczesny, S. (2015). Reducing women's lack of fit with leadership positions? Effects of the wording of job advertisements. *European Journal of Work and Organizational Psychology*. Advance online publication. doi: 10.1080/1359432X.2015.1067611

Irmen, L., & Kurovskaja, J. (2010). On the semantic content of grammatical gender and its impact on the representation of human referents. *Experimental Psychology*, *57*, 367–375.

Koeser, S., Kuhn, E. A., & Sczesny, S. (2015). Just Reading? How Gender-Fair Language Triggers Readers' Use of Gender-Fair Forms. *Journal of Language and Social Psychology, 34*, 343–357.

Kuhn, E. A., & Gabriel, U. (2014). Actual and potential gender-fair language use the role of language competence and the motivation to use accurate language. *Journal of Language and Social Psychology*, *33*, 214–225.

Lévy, A., Gygax, P., & Gabriel, U. (2014). Fostering the generic interpretation of grammatically masculine forms: When my aunt could be one of the

mechanics. *Journal of Cognitive Psychology*, *26*, 27–38.

Martyna, W. (1980). Beyond the "he/man" approach: The case for non-sexist language. *Signs*, *5*, 482–493.

Merkel, E., Maass, A., & Frommelt, L. (2012). Shielding women against status loss the masculine form and its alternatives in the Italian language. *Journal of Language and Social Psychology*, *31*, 311–320.

Misersky, J., Gygax, P. M., Canal, P., Gabriel, U., Garnham, A., Braun, F., … Sczesny, S. (2014). Norms on the gender perception of role nouns in Czech, English, French, German, Italian, Norwegian, and Slovak. *Behavior Research Methods*, *46*, 841–871.

Molinaro, N., Barber, H.A., Pérez, A., Parkkonen, L., & Carreiras, M., (2013). Left fronto-temporal dynamics during agreement processing: Evidence for feature-specific computations. *Neuroimage, 78*, 339-352.

Moser, F., Sato, S., Chiarini, T., Dmitrow-Devold, K., & Kuhn, E. (2011). *Comparative analysis of existing guidelines for gender-fair language. Marie Curie Initial Training Network-Language, Cognition, & Gender, Workpackage B: Report on Milestone 1*. Retrieved from http://www.unifr.ch/psycho/itn-lcg/assets/files/ITN_publications/guidelines_final_may2011.pdf

Öttl, A., & Behne, D. M. (under review). *Experience-based probabilities and the formation of new representations: Evidence from a gender coded artificial language.*

Palomares, N. A. (2004). Gender schematicity, gender identity salience, and gender-linked language use. *Human Communication Research*, *30*, 556–588.

Palomares, N. A. (2012). Gender and intergroup communication. In H. Giles (Ed.),

The handbook of intergroup communication (pp. 197–210). New York, NY: Routledge.

Prewitt-Freilino, J. L., Caswell, T. A., & Laakso, E. K. (2011). The gendering of language: a comparison of gender equality in countries with gendered, natural gender, and genderless languages. *Sex Roles*, *66*, 268–281.

Rattan, A., & Ambady, N. (2013). Diversity ideologies and intergroup relations: An examination of colorblindness and multiculturalism. *European Journal of Social Psychology, 43*, 12-21

Sarrasin, O., Gabriel, U., & Gygax, P. (2012). Sexism and attitudes toward gender-neutral language. *Swiss Journal of Psychology*, *71*, 113–124.

Sato, S., Gabriel, U., & Gygax, P. (under review). *Grammatical neutralization forms in German as a way to temper masculine biases*.

Sato, S., Gygax, P. M., & Gabriel, U. (2013). Gender inferences: Grammatical features and their impact on the representation of gender in bilinguals. *Bilingualism: Language and Cognition*, *16*, 792–807.

Slobin, D. I. (2003). Language and thought online: Cognitive consequences of linguistic relativity. In D. Gentner & S. Goldin-Meadow (Eds.), *Language in mind: Advances in the study of language and thought* (pp. 157–192). Cambridge, MA: MIT Press.

Stahlberg, D., Braun, F., Irmen, L., & Sczesny, S. (2007). Representation of the sexes in language. In K. Fiedler (Ed.), *Social communication* (pp. 163–187). New York, NY: Psychology Press.

Stout, J. G., & Dasgupta, N. (2011). When he doesn't mean you: Gender-exclusive language as ostracism. *Personality and Social Psychology Bulletin*, *37*, 757–769.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behaviour. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7-24). Chicago, IL: Nelson-Hall.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory.* Oxford, UK: Blackwell.

Turner, J. C., Oakes, P. J., Haslam, S. A., & McGarty, C. A. (1994). Self and collective: Cognition and social context. *Personality and Social Psychology Bulletin, 20*, 454-463.

Vervecken, D., Gygax, P., Gabriel, U., Guillod, M., & Hannover, B. (in press). Warm-hearted businessmen, competitive housewives? Effects of gender-fair language on adolescents' perceptions of occupations. *Frontiers in Psychology*.

Vervecken, D., & Hannover, B. (2012). Ambassadors of gender equality? How use of pair forms versus masculines as generics impacts perception of the speaker. *European Journal of Social Psychology*, *42*, 754–762.

Vervecken, D., Hannover, B., & Wolter, I. (2013). Changing (s)expectations: How gender fair job descriptions impact children's perceptions and interest regarding traditionally male occupations. *Journal of Vocational Behavior*, *82*, 208–220.

Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*, *92*, 82–96.

Wasserman, B. D., & Weseley, A. J. (2009). ¿Qué? Quoi? Do languages with grammatical gender promote sexist attitudes? *Sex Roles*, *61*, 634–643.