Original Communication

Can a Group of Musicians be Composed of Women? Generic Interpretation of French Masculine Role Names in the Absence and Presence of Feminine Forms

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The malleability of the generic interpretation of masculine role names in French was investigated by manipulating readers' exposure to feminine forms. In two experiments, participants were to decide whether a person introduced by a kinship term (e.g., sister) could be part of a group represented by a role name (e.g., nurse, musicians). In Experiment 1, role names were presented in the masculine form in the first part and in either the masculine or the feminine form in the second part. Independent of role name stereotypicality, participants were less likely to relate female kinship terms to role names in the masculine form and even less likely when they were also exposed to feminine forms. These results were replicated in a second experiment, in which the communication source was varied: Before performing the experimental task, participants read job advertisements that either used only the masculine or both the masculine and the feminine form. When feminine forms were added, the generic interpretation of the masculine form decreased, even when the feminine forms were provided by a different source.

Keywords: gender representation, gender stereotypes, language, masculine as generic, job titles

When reading a text for comprehension, readers form a mental representation of the text composed of explicit and implicit elements (Garnham & Oakhill, 1996). For example, when reading the sentences, "We got some beer out of the trunk. The beer was warm." (from Haviland & Clark, 1974), readers will most likely form a representation that includes elements such as "beer" or "trunk" (i.e., explicit elements) and "sunny day" (i.e., implicit elements). The latter elements, often referred to as *inferences*, are based on the text and general knowledge (Graesser, Singer, & Tabasso, 1994; McKoon & Ratcliff, 1992). Although these sources of information are often considered crucial for narrative comprehension, their interaction is complex. This holds especially true for a particular inference, namely, the gender of the protagonists, which we address in this article.

In gender marked languages, such as French or German, the gender of a protagonist is often given by the morphological form of the noun or the determiner. For instance, "un musicien" generally refers to a male musician and "une musicienne" to a female musician. However, gender attribution is not always clear. For example, according to explicit grammatical rules, the masculine form is also used as the generic form (e.g., "Un musicien doit souvent répéter." "A musician needs to practice often.") and the masculine plural form is used to refer to a group of people (i.e., "les musiciens") regardless of whether the group is made up of only men or of men and women. Thus, when readers or listeners encounter a noun describing a group of people in the masculine form, they are confronted with a certain amount of ambiguity in that the masculine role name might be re-

ferring specifically to men or generically to both men and women. In this paper, we focus on the resolution of such ambiguity when reading.

Feminist linguists doubt that the masculine form can be used in a way that abstracts from the gender of its referents (i.e., in a generic way) and claim that the ambiguity about whether a word is used as a generic or not is usually resolved to women's disadvantage: The use of the masculine evokes concepts of men thus eliminating women as referents (e.g., Braun, 1996; Bussmann, 1995; Peyer & Wyss, 1998). The strongest "generic masculine bias" position states that grammatical gender is initially encoded and, thus, the use of the masculine always brings about male-biased associations regardless of whether the masculine is intended in a specific or a generic way. Most empirical research on the generic interpretation of the masculine seems to support this grammatical influence (e.g., Braun, Gottburgsen, Sczesny, & Stahlberg, 1998; Chatard, Guimond, & Martinot, 2005; Gabriel, Gygax, Sarrasin, Garnham, & Oakhill, 2008; Gabriel & Mellenberger, 2004; Gygax, Gabriel, Sarrasin, Oakhill, & Garnham, 2008; Heise, 2000, 2003; Irmen & Köhncke, 1996; Rothmund & Scheele, 2004; Scheele & Gauler, 1993; Stahlberg & Sczesny, 2001; Stahlberg, Sczesny, & Braun, 2001). Presenting texts that contain a masculine form most often results in the text being more strongly associated with males.

Beside its grammatical gender, the noun itself might carry gender-related information. More specifically, it might be gender stereotyped. Typically, the masculine intended as generic is used for role names, such as dentists, actors, or students, which are particularly prone to gender stereotypes (Baudino, 2001). Garnham, Oakhill, and Reynolds (2002) showed that in English, for example, where most nouns are not grammatically gender marked, participants not only build a representation of gender during reading (i.e., automatically), but they do so by relying on stereotypical information. Using a sentence evaluation paradigm, in which participants were to judge whether a sentence was a good continuation of the preceding context, they found that participants had the most trouble with, and took longer to respond to, sentences that were stereotypically incongruent with the role names presented in the preceding context (cf. also Duffy & Keir, 2004; Kennison & Trofe, 2003; Sturt, 2003; for German: Irmen & Roßberg, 2004).

The interaction between grammatical and stereotypical information was closely investigated by Gygax et al. (2008, cf. also Carreiras, Garnham, Oakhill, & Cain, 1996; Irmen & Roßberg, 2004). In their experiment, which was conducted in English, French, and German, they presented their participants with pairs of sentences. The first sentence introduced a role name that was stereotypically male, female, or neutral (e.g., "The social workers were walking through the station."), and the second sentence mentioned the gender of some of the members of the group (e.g., "Since sunny weather had been forecast, several of the women weren't wearing a coat."). Participants had to decide as fast as possible whether the second sentence was a sensible continu-

ation of the first. In French and German, independent of the stereotype portrayed by the role names, which were written in the masculine form, the proportion of negative answers was higher when the second sentence represented women. In English, where no mark of gender was present, the proportion of positive and negative judgment depended on the stereotype of the role names. So, for instance, English participants were more likely to respond negatively when a sentence composed of women followed a sentence in which a stereotypically male role name was presented (e.g., mechanics). Gygax et al. showed that the use of the masculine form in French and German, although intended as generic, biased reader's mental representation of gender towards a male representation.

Although Gygax et al.'s (2008) results suggest that the use of the masculine biased readers' mental representation of gender, their results did not indicate the extent to which the masculine plural form was considered a specifically masculine form. Participants, on several occasions, responded positively when sentences portraying women followed sentences introducing role names written in the masculine form (i.e., over 50% of the time). They concluded that participants' responses still reflected some level of generic interpretation, even though it was often overruled by a male-biased interpretation of the masculine. This paper furthers Gygax et al.'s findings. More specifically, we claim that even though a specific interpretation of the masculine generally overruled a generic one in their paper, there might be occasions when the masculine form is even less likely to be generically interpreted.

We hence suggest that (a) the generic interpretation is naturally difficult to implement (as shown by Gygax et al., 2008) and (b) there are occasions when such an interpretation becomes even less likely. We hypothesized that in a text in which some role names are presented in the masculine form and some in the feminine form, occurrences of role names written in the feminine form may force role names written in the masculine form to be less likely interpreted as generic (cf. e.g., Irmen & Köhnke, 1996, Experiment 1). In other words, employing specific feminine forms draws readers towards interpreting the masculine form as specific. The occurrence of different grammatical forms thus influences the way the ambiguity about the masculine form is resolved.

This issue has major practical implications for job descriptions, in French Swiss newspapers, for example, where some job descriptions use the masculine form (intended as generic), some use both masculine and feminine forms (particularly those eager to establish equal opportunity), and some only the feminine form. To our knowledge, no law or regulation enforces the use of non-sexist language in Switzerland. There are rules against employment discrimination, but they do not concern the way jobs are advertised. Usually, private or public institutions that are concerned with the discriminatory impact of sexist language attempt to overcome it by using intuitive rules or by following the guidance given by the given state's *Bureau de l'Egalité En-*

tre Femmes et Hommes. The Bureau de l'Egalité Entre Femmes et Hommes of the state of Vaud, for example, has published extensive literature to guide people interested in avoiding sexist language. For example, they advocate the use of both feminine and masculine forms when referring to role names and the use of the masculine form for subsequent adjectives (i.e., "les musiciennes et musiciens sont charmants"). It is important to stress that avoiding using only the masculine to describe jobs, for example, is entirely up to the advertiser. In addition, even if one is to avoid sexist language, the way to do it (i.e., the form) is also entirely up to the advertiser. Again, the guidance provided by the state Bureau de l'Egalité Entre Femmes et Hommes usually suffices. However, not everyone is aware of such guidance – even if one is motivated by the issue – resulting in great disparity in the way job descriptions are advertised. In this paper, we suggest that such disparity or, more specifically, such a mixture of different grammatical forms of role names, may have a detrimental effect resulting in an increased male-oriented cognitive interpretation of the masculine (i.e., even when intended as generic). This is of general interest as such a male interpretation might lower women's willingness to apply for an (otherwise suitable) job as has been shown by Bem and Bem (1973).

In the present experiment, we replicated in part the paradigm used by Oakhill, Garnham, and Reynolds (2005). In each of their six experiments, they presented participants with different pairs of terms. The first word was an occupation/role term, such as "bricklayer" or "butcher", and the second term was a kinship term, such as "father" or "sister". Participants' task was to decide as fast as possible whether the two terms could refer to the same person. So, for instance, a pair could be "bricklayer – sister", and participants had to decide whether a bricklayer can refer to a sister. The six experiments varied mainly in the presentation and instruction conditions. In all, the results showed that peoples' responses were mediated by the stereotypicality of the occupation/role terms. For example, participants responded negatively more often for a pair in which the kinship term (e.g., sister) was incongruent with the stereotype of the occupation/role term (e.g., bricklayer). Oakhill et al. found this result to be stable across all presentation and instruction conditions. In our study, we replicated their first experiment by slightly changing the instructions: Our participants were presented with a kinship term accompanied by a role name in the masculine plural form. They were to decide whether the person introduced by the kinship term could be part of the group referred to by the role names. For example, participants were to decide whether a sister ("une soeur") could be part of a group of mechanics ("des mécaniciens"). We extended the original experiment by adding a second part, in which some role names were presented in the masculine plural form and some in the feminine plural form. We expected two different findings. First, we expected our participants to respond less often positively when a woman was presented as part of a group written in the masculine form, irrelevant of the stereotypicality of the role name, mirroring the male bias induced by the use of the masculine form found in previous research. Secondly, we expected this male bias to be even stronger in the second part of the experiment, in which some role names were also presented in the feminine form, giving some cues that the masculine form could or should be specifically interpreted.

Experiment 1

Method

Participants

A total of 36 psychology students from the University of Fribourg participated in this experiment to earn course credits. Two students were excluded from analysis as they were not native French speakers. Of the remaining 34 students, there were 24 women and 10 men.

Material and procedure

As in Oakhill et al. (2005), participants were presented with pairs of terms, each pair composed of a role name and a kinship term. The participants' task was to decide whether the person represented by the kinship term could be part of the group represented by the role name. For example, participants were presented with "une soeur – musiciens". If they thought that a sister could be part of a group of musicians, participants pressed the "yes" button, but if they thought that a sister could not be part of a group of musicians, they pressed the "no" button. A list of 36 role names from Gabriel et al. (2008) was used in this experiment. The list was composed of 12 stereotypically female role names, 12 stereotypically male role names, and 12 stereotypically neutral role names. The list of role names is presented in Table 1. Six kinship terms were used to create the pairs: "sister", "aunt", "mother", "brother", "uncle", "father". In the first part of the experiment (i.e., Part I), 18 of the 36 role names (6 female, 6 male, and 6 neutral role names) were used and were only written in the masculine plural form. Each role name was associated with all kinship terms. In Part I, each role name appeared six times resulting in 108 experimental items. Fifty-four filler items, each composed of an unambiguous gender role name (e.g., godfathers) and an incongruent kinship term (e.g., a mother) were added. These filler sentences were added to ensure that participants would not consistently press the yes button without properly reading the pairs. For each participant, the pairs were presented in random order.

In Part II, the remaining 18 role names were used, but this time, each role name appeared six times (i.e., associated with the six kinship terms) in the masculine plural form and six times in the feminine plural form. Thus, in Part II,

Table 1
Role Names (English Translation in Parentheses) Along With the Evaluated Proportion of Men Reported by Gabriel et al. (2008)

Male stereotypes		%
Espions	(Spies)	74
Golfeurs	(Golfers)	73
Politiciens	(Politicians)	72
Policiers	(Police officers)	70
Statisticiens	(Statisticians)	74
Patrons	(Bosses)	74
Informaticiens	(Computer specialists)	67
Chirurgiens	(Surgeons)	75
Techniciens	(Technicians)	75
Ingénieurs	(Engineers)	74
Etudiants en physique	(Physics students)	67
Aviateurs	(Pilots)	74
Mean		*72*
Neutral stereotypes		
Chanteurs	(Singers)	48
Promeneurs	(Pedestrians)	52
Spectateurs de cinéma	(Cinema goers)	50
Auditeurs de concert	(Concert goers)	51
Ecoliers	(Schoolchildren)	53
Spectateurs	(Spectators)	51
Voisins	(Neighbors)	50
Nageurs	(Swimmers)	50
Joueurs de tennis	(Tennis players)	54
Auteurs	(Authors)	54
Musiciens	(Musicians)	59
Skieurs	(Skiers)	55
Mean		*52*
Female stereotypes		
Esthéticiens	(Beauticians)	18
Assistants maternels	(Birth attendants)	18
Diseurs de bonne aventure	(Fortune tellers)	28
Caissiers	(Cashiers)	24
Infirmiers	(Nurses)	30
Coiffeurs	(Hairdressers)	38
Etudiants en psychologie	(Psychology students)	33
Diététiciens	(Dieticians)	37
Couturiers	(Dressmakers)	40
Danseurs	(Dancers)	29
Vendeurs	(Sales assistants)	37
Assistants sociaux	(Social workers)	33
Mean		*30*

each role name appeared 12 times (i.e., instead of only 6 times as in Part I) and there were 216 experimental items. Twenty-seven filler items were also added. The filler items composed of unambiguous female role names and male kinship terms (used in Part I) were removed because, in Part II, experimental items written in the feminine form associated with a male kinship term already constituted occasions for which participants were expected to respond negatively.

In total, each participant was presented with 405 items, 162 in Part I and 243 in Part II. Note that Part II, which comprised role names written in the feminine form, always followed Part I. As our hypothesis regarded the effect of ex-

emplars written in the feminine form on the interpretation of role names written in the masculine form, the first part of the experiment excluded role names written in the feminine form. As half of the role names were used in Part I and half in Part II, we created two lists to make sure that each role name appeared an equal number of times in both parts.

Participants were tested individually in a quiet laboratory. They were asked to read each kinship term-role name pair carefully, and to decide, as quickly as possible, whether the person represented by the kinship term could be part of the group represented by the role name. The role names were always presented to the right of the kinship terms. After completing Part I, participants were asked to take a 2-min break to avoid any effects of fatigue. Prior to the experiment, participants had a six-item trial session composed of three yes answers and three no answers to become acquainted with the experimental setting. These items were not included in the experimental conditions.

Apparatus

The pairs were presented on a Macintosh computer (Power Macintosh 4400) using PsyScope Software (Cohen, MacWhinney, Flatt, & Provost, 1993). Responses were collected using a button box attached to the computer.

Results and Discussion

The experiment was divided into two parts, Part I and Part II. In Part I, all role names were presented in the masculine form, intended as generic. In Part II, some role names were presented in the masculine form and some in the feminine form. We hypothesized that exposure to role names written in the feminine form would reinforce participants' male-biased interpretation of the masculine. More specifically, although the proportion of positive responses should be lower when a woman rather than a man is presented as part of a group (role name) written in the masculine form (i.e., Part I), this proportion should be even lower when the presentation of role names in the masculine form is mixed with that of role names in the feminine form (i.e., Part II).

A 2 (Part: I vs. II) X 3 (Stereotype: female vs. male vs. neutral) X 2 (Person: woman vs. man) repeated measures ANOVA showed a main effect of part, $F(1, 33) = 5.68$, $p < .05$, a main effect of stereotype, $F(2, 66) = 6.56$, $p < .01$, and a main effect of person, $F(1, 33) = 45.19$, $p < .001$. The main effect of stereotype was characterized by a higher proportion of yes responses in the neutral condition than in the female or the male stereotype conditions. We believe that this effect is due to the nature of our neutral stimuli. As shown in Table 1, our neutral stimuli are mostly composed of role names essentially describing activities that can be interpreted as non-occupational (e.g., spectators, swimmers, etc.). Participants may therefore have interpreted

them as including a higher proportion of people, regardless of their sex. The two other main effects were qualified by a crucial part-by-person interaction, $F(1, 33) = 5.85$, $p < .05$. As shown in Figure 1, when a woman was presented, the proportion of yes responses was always lower, but it was even lower in Part II, where the participants were also exposed to exemplars written in the feminine form. This was true regardless of the stereotype as there was no stereotype-by-part-by-person interaction, $F(2, 66) = 0.37$, ns). We explored the source of the part-by-person interaction in a follow-up simple contrast analysis by comparing the proportion of yes responses in the woman condition in Part I to the proportion of yes responses in the woman condition in Part II. The contrast was significant, $p < .05$, indicating that, as expected, the exposure to the feminine form exemplars increased the already existing male-biased interpretation due to the use of the masculine form.

In this experiment, we assessed the gender ambiguity accompanying the use of the masculine when referring to role names and whether such ambiguity was influenced by the presence of role names written in the feminine form. The results suggest that the mere appearance of female form exemplars strengthened the male-dominated interpretation of the masculine.

The practical implications of these results concern the fact that in some newspapers, job descriptions written in the masculine form, intended as generic, are often placed next to job descriptions in which the feminine form appears. The present results suggest that a job description using only the masculine form, next to one in which the feminine form appears, might be considered less suitable for women (irrelevant of the stereotypicality of the job) as the masculine form may be interpreted as a specific form. Although this is a reasonable assumption to make, it may be the case that our par-

ticipants made a specific interpretation of the masculine form in Part II only because they assumed that both feminine and masculine forms were used by the same source of communication. They may not make such an assumption when reading different job advertisements in a newspaper. In our experiment, participants might have taken a Gricean cooperative perspective (Grice, 1967), assuming that there was a clear reason, or purpose, for the writer of the role names (i.e., the source of communication) to incorporate feminine role names. In natural conversation, a communicator is assumed to make certain facts manifest to enable an addressee to identify the informative intentions of the communicator (Sperber & Wilson, 1986). Switching from a masculine-only context to a masculine-and-feminine context may therefore be interpreted as a strategic process bearing a specific intentional meaning. Following this argument, if some role names were written in the feminine form, unambiguously referring to women, readers may believe that the writer's (i.e., the source of communication) intention was to indicate that role names in the masculine form exclusively and unambiguously referred to men. In a sense, readers may view the text as a communication instrument between the author(s) of the text and the reader(s). Although some text comprehension researchers (e.g., Dixon & Bortolussi, 2001) have questioned the idea that written texts, for which authors are not physically present, can be considered a form of communication between the author, meaning the source of communication, and the reader, we wanted to put this explanation to test. In Experiment 2, we investigated whether the specific interpretation of the masculine would still be stronger after the appearance of role names in the feminine form, these being presented in a different experimental task or, put differently, generated by a different source of communication.
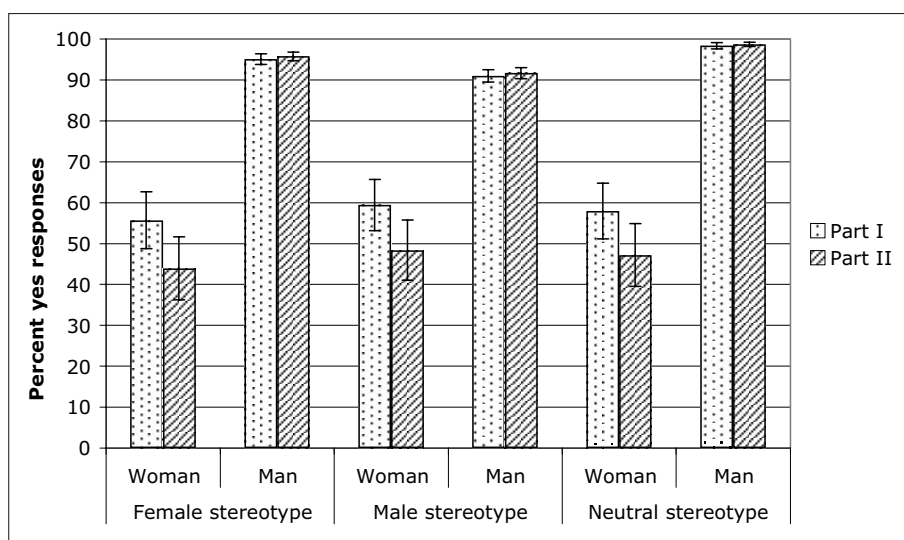

Figure 1: Proportion of positive answers in Experiment 1 when a woman or a man is presented as part of a group defined by the grammatically masculine role names. In Part I, all role names were presented in the masculine form, whereas in Part II some role names were in the feminine form.

Experiment 2

Method

Participants

A total of 35 psychology students from the University of Fribourg participated in this experiment to gain course credit. One student was excluded from analysis as she did not understand the instructions. Of the 34 remaining students, there were 28 women and 6 men, none of which had participated in Experiment 1.

Material and procedure

Part I of this experiment was exactly the same as that in Experiment 1. However, Part II was removed from the experiment and a new part, called "Advertisement", took place before Part I. In the advertisement part, participants were randomly presented with eight job advertisements[1], one after the other, which they were to read carefully in order to answer specific comprehension questions. After each advertisement, two comprehension questions were presented. These were intended to ensure that all advertisements were read carefully. An example of an advertisement is given in Figure 2. The eight jobs were, going from the most female stereotyped to the most male stereotyped role name: "waitress", "social worker", "cook", "apprentice", "banker", "gardener", "chemist", and "lawyer" (selected from Gabriel et al., 2008). None of those role names had been used in Part I. The participants were divided into two groups. Half the participants saw all role names in the job advertisements only in the masculine singular form (i.e., ad-masculine) whereas half the participants saw the role names written in a gender-fair form (i.e., written both in the masculine and in the feminine form: ad-feminine; Figure 2). In each job advertisement, the role names always appeared twice. In this task, participants' attention was not explicitly directed towards the role names, and the role names were written in the singular form.
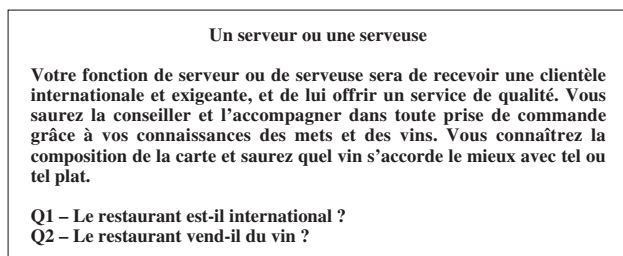

Un serveur ou une serveuse

Votre fonction de serveur ou de serveuse sera de recevoir une clientèle internationale et exigeante, et de lui offrir un service de qualité. Vous saurez la conseiller et l'accompagner dans toute prise de commande grâce à vos connaissances des mets et des vins. Vous connaîtrez la composition de la carte et saurez quel vin s'accorde le mieux avec tel ou tel plat.

Q1 – Le restaurant est-il international ?
Q2 – Le restaurant vend-il du vin ?

Figure 2: An example, in French, of an advertisement used in the Advertisement part of Experiment 2. The role name is in the gender-fair form.

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1   Based on job advertisements retrieved from http://www.jobs.ch.

Apparatus

The passages and pairs were presented on a Macintosh computer (Power Macintosh 4400) using PsyScope Software (Cohen et al., 1993). Responses were collected using a button box attached to the computer.

Results and Discussion

We hypothesized that if the results of Experiment 1 are independent of the source of communication, exposure to role names written in the feminine form in the Advertisement part should reinforce participants' male-biased interpretation of the masculine in Part I. More specifically, although the proportion of positive responses should be lower when a woman rather than a man is presented as part of a group (role name) written in the masculine form, this proportion should even be lower when the presentation of role names in the masculine form was preceded by a completely different task in which some role names appear in the feminine form (i.e., ad-feminine). However, if readers, from a Gricean cooperative perspective, attribute intentional meaning to the source of communication, the advertisement manipulation, implemented as a separate task, should have no impact on the response process in Part I.

A 2 (Advertisement: ad-feminine vs. ad-masculine) X 3 (Stereotype: female vs. male vs. neutral) X 2 (Person: woman vs. man) ANOVA, considering person and stereotype as within-subject and advertisement as a between-subject variable, showed a main effect of advertisement, $F(1, 32) = 12.18$, $p < .05$, a main effect of stereotype, $F(2, 64) = 10.14$, $p < .01$, and a main effect of person, $F(1, 32) = 43.35$, $p < .001$. As in Experiment 1, the main effect of stereotype was characterized by a higher proportion of yes responses in the neutral condition than in both the female and the male stereotype conditions. The two other main effects were qualified by a crucial advertisement-by-person interaction, $F(1, 33) = 5.53$, $p < .05$. As shown in Figure 3, when a woman was presented, the proportion of yes responses was always lower, but it was even lower when Part I was preceded by the advertisements including gender-fair language (i.e., ad-feminine), where the participants were also exposed to exemplars written in the feminine form. This was true regardless of the stereotype, as there was no stereotype-by-advertisement-by-person interaction, $F(2, 66) = 0.54$, ns. As we did in Experiment 1, we explored the source of the advertisement-by-person interaction in a follow-up post-hoc analysis by comparing the proportion of yes responses in the woman condition when Part I was preceded by advertisements including role names in the masculine form to the proportion of yes responses in the woman condition when Part I was preceded by advertisements including role names in the feminine form. The contrast was significant, $p < .05$, indicating that, as expected, the exposure to the feminine form exemplars increased the already existing male-biased interpretation due to the use of the masculine form.
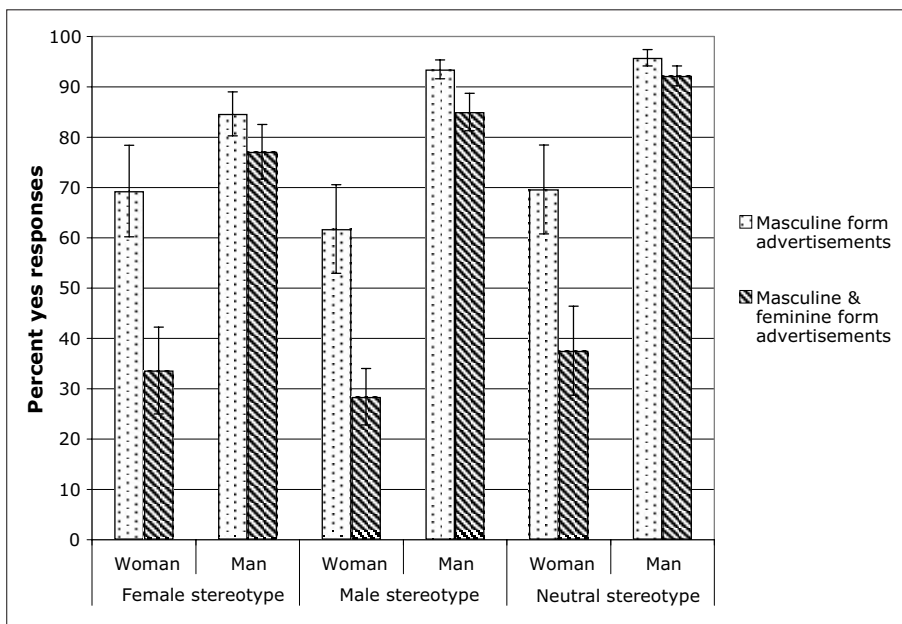
Figure 3: Proportion of positive answers in Experiment 2 when a woman or a man is presented as part of a group defined by the grammatically masculine role names. The task was preceded by job advertisements including role names either in the masculine form or in the masculine and the feminine form.

In this experiment, we assessed whether the influence of the role names written in the feminine form in Part II of Experiment 1 on the specific interpretation of the masculine form was due to an interpreted communicative function of the presence of the feminine form. Participants may have read those role names as generated by the same source of communication, hence attributing a communicative function to them. In this experiment, we included a completely different task in which half the participants were exposed to some role names in the feminine form before undergoing the experimental task (i.e., Part I). Although the role name could most unlikely be attributed to the same source of communication (i.e., completely different tasks and the role names were in the singular form), participants who read advertisements in which role names were also presented in the feminine form showed a stronger male-specific interpretation bias in Part I. This result demonstrates that, regardless of the source of communication, readers exposed to role names in the feminine form are drawn towards interpreting subsequent role names in the masculine form as being specifically composed of men.

General Discussion

We have shown that the ambiguity of the masculine form is very unlikely to be resolved in a generic way when role names in the feminine form are also presented (Experiment 1) and regardless of the source of communication (Experiment 2). This finding suggests a strong male-oriented representation when both masculine and feminine forms are presented.

According to the results presented in this article, a job description using only the masculine form will generally be considered less suitable for women, but even more so if other job advertisements use gender-fair language, such as presenting both masculine and feminine forms. A male-biased interpretation of the masculine seems ineluctable, but a generic interpretation is even less probable if readers come across role names written in the feminine form. Note that this is independent of the source of communication, which, from a Gricean perspective, could have explained the stronger bias in Part II of Experiment 1. We therefore believe that all job descriptions should be written in both the masculine and feminine forms to avoid such problems. As suggested by Gygax and Gesto (2007), this dual form does not necessarily impinge upon the reading process, but has the advantage of increasing the likelihood of attracting both male and female applicants.

Of course, we did not evaluate job descriptions directly. The job advertisements used in Experiment 2 were merely used to evaluate the effect of the appearance of feminine exemplars on the subsequent interpretation of role names written in the masculine form. However, we believe that our data demonstrate the cognitive processes by which a generic interpretation of the masculine, already difficult to induce, can be even more improbable under certain circumstances. Cognitively, this is interesting, as it demonstrates that reading processes are dynamic and depend on context. That is, a certain interpretation of a particular grammatical rule, or a certain resolution of ambiguity, depends on the context in which reading takes place. In Part I and in Part II of Experiment 1, the male representation was strong due to the fact that the role names were written in the masculine form; but in Part II such a male representation became even stronger, as readers adopted an even greater male-biased point of view, regardless of the stereotype of the role name. Similarly, in Experiment 2, a male bias was appar-

ent when job advertisements in the masculine form preceded the experiment, but was even stronger when the preceding job advertisements included role names in the feminine form. This latter result not only provides support for the idea that, irrelevant of the source of communication, exposure to role names written in the feminine form draws readers towards interpreting role names written in the masculine form as specific, but it may also provide support for the idea that reading processes are different than conversation processes (Dixon & Bortolussi, 2001, for a comprehensive discussion about this issue).

As the general male bias found in both Experiment 1 (Part I) and in Experiment 2 (i.e., ad-masculine) corroborates findings for other gender-marked languages (e.g., Irmen & Roßberg, 2004, in German; Carreiras et al., 1996, in Spanish; Bates, Devescovi, Hernandez, & Pizzamiglio, 1996, in Italian), we have reasons to believe that the processes identified in this paper should be similar in those languages. Interestingly, one exception to this might be Norwegian. In Norwegian, the feminine gender marking of role names has disappeared since the seventies as a result of a language policy of gender neutralization (Swan, 1992). Although the aim of such a policy was to neutralize the masculine form, Gabriel and Gygax (in press) showed that it only partly succeeded. They demonstrated that although readers' representation of role names was based on stereotype for stereotyped role names, it was based on grammar (i.e., the masculine form) for neutral role names.

Overall, we showed that the ambiguity accompanying the use of the masculine when referring to role names is usually resolved in disfavor of women: The masculine form is not likely to be interpreted as generic. We further demonstrated that under certain conditions, such as when some of the role names are presented in the feminine form, the masculine form is even less likely to be interpreted as generic. This process is independent of the source of communication, as shown in Experiment 2. In this latter experiment, we simulated the possibility that readers may come across role names, or jobs, written sometimes in the masculine form only, and sometimes in the feminine form. The very encountering of a feminine form may well draw readers to interpret any other masculine form specifically, and not generically. One could say that when encountering a feminine form, readers adopt a particular mode of interpretation that makes the masculine less likely generic. Future research needs to focus on the identification of the variables at the heart of this interpretation mode switching. It may be interesting to provide feedback to participants to try to block such a specific interpretation mode. Such a procedure may give us insight into the automaticity and fixedness of this process. In addition, individual variables such as reading skills may moderate this shift.

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