



HAL
open science

Autrice, auteure, auteur? Between social norms, usage and morphological awareness

Hélène Giraud, Aurélien Morel

► **To cite this version:**

Hélène Giraud, Aurélien Morel. Autrice, auteure, auteur? Between social norms, usage and morphological awareness. *Gender and Language*, In press. hal-04379807

HAL Id: hal-04379807

<https://hal.science/hal-04379807v1>

Submitted on 8 Jan 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

1.3. *Autrice, auteure, auteur?* Between social norms, usage and morphological awareness

Hélène Giraudo & Aurélia Morel,
CLLE, Université de Toulouse &
CNRS, France

We conducted a study on the spontaneous production of feminine counterparts for three categories of job names among native speakers of French. These categories include «stable» job names, which have one established masculine and feminine form, «unstable» job names, which have one established masculine form with multiple feminine forms, and «epicene» job names, which use the same form for both male and female protagonists. We aimed to identify possible sources that explain the linguistic irregularity and instability of some feminine forms, including language use, linguistic competence of native speakers, and sociological profiles such as social gender, age, profession, and territory. Data were collected through a pen and paper questionnaire from 94 participants. The results revealed that one third of the produced feminine forms completely resisted feminization, confirming the presence of a male bias as described in previous literature (e.g., Gygax & Gabriel, 2008). Furthermore, our data clarified that the male bias effect creates a conflict between male social norms and participants' awareness of the ongoing political trend to increase the visibility of women in society.

Keywords: job names, gender stereotypes, word production, speaker profile

1. Introduction

French is a gendered language with two values: masculine and feminine. Noun gender in French can be marked through two morphological operations. The first is inflection, which assigns number, gender, and tense to a word (e.g., *ami*, *amie*, “friend_{Masc}, friend_{Fem}”). The second is derivation, which involves combining a base with an affix to create a word (e.g., *acteur*, *actrice* “actor, actress”). However, despite this binary system, the masculine form is considered unmarked and is rarely explained morphologically. This prominence of masculine nouns has linguistic and sociological implications, as noted by Michel (2016: 34-35) and in line with Gygax et al. (2021) (see Roché, 1992; Abbou, 2011 for an analysis on French, [see also and Corbett, 2014](#) for complementary perspectives on gender systems).

The gender of nouns can also be expressed through semantic context, as is the case with «epicene» nouns. These nouns have invariable forms that can refer to humans of either sex, such as *juge*, *ministre*, *linguiste*, *gynécologue*, *détective*, *professeur* «judge, minister, linguist, gynecologist, detective, professor», which can be used for both male and female individuals. Consequently, gender is expressed in text and discourse through the use of masculine or feminine pronouns (e.g., *le juge*, *la juge* “~~the_{Masc}~~~~the_{Masc}~~ judge, ~~the_{Fem}~~~~the_{Fem}~~ judge”), gendered nouns (e.g., *Monsieur le juge*, *Madame le juge* “Mr judge, Ms ~~judge~~~~judge~~”), or a combination of both (e.g., *Monsieur le juge*, *Madame la juge* “~~Mr~~ ~~the_{Masc}~~ ~~judge~~, ~~Ms~~ ~~the_{Fem}~~ ~~judge~~”).

When considering nouns related to occupations and social titles, the issue of gender becomes more complex due to psychological and sociolinguistic factors in gender assignment. Some job or role nouns fall into the category of «stable» forms, where both masculine and feminine forms coexist in synchrony (e.g., *serveur-serveuse*, “waiter-waitress”). Others can be classified as

“unstable”, with multiple feminine forms existing simultaneously ((e.g., *auteur* => *autrice*, *auteur*g “writer”_{Masc} => “writer”_{Fem1}, “writer”_{Fem2} despite the presence of an attested feminine form in historical usage and the possibility of applying a current morphological rule based on analogy with similar forms, such as the pair *acteur-actrice*).

At the text level, when both gender and number features are expressed, the masculine form can serve two distinct syntactic functions: “generic” and “specific”. In contrast, feminine forms only fulfill the “specific” function. The generic function arises from the grammatical rule that the masculine prevails over the feminine in the plural, regardless of the ratio of males and females¹. The specific function is inherent to the noun gender.

- (1) a. *le ~~eommerceant~~_{Masc.Sing} commerçant_{Masc.Sing} est toujours content durant les fêtes de Noël*
“~~the trader~~_{MASC} shopkeeper (male) is always happy during Christmas holidays”
b. *la ~~eommerceante~~_{Fem.Sing} commerçante_{Fem.Sing} est toujours contente durant les fêtes de Noël*
“~~the trader~~ shopkeeper (female) is always happy during Christmas holidays”
c. *les ~~eommerceants~~_{Plur} commerçants_{Plu} sont toujours contents durant les fêtes de Noël*
“~~the trader~~ the shopkeepers (males, or male(s) and female(s)) are always happy during Christmas holidays”

The examples in (1) illustrate that while the masculine form in (a) and the feminine form in (b) unambiguously refer to a man and a woman, respectively, the plural form in (c) is generic and defaults to the masculine form to designate either men only or a group of men and women (i.e., a group of people that includes at least one man). Despite guidelines to avoid using the masculine form exclusively in official announcements, it is still commonly used as a generic form in spoken and written language, as highlighted by Gyax et al. (2008: 465) and others.

1. Factors of variation in feminine role nouns

Beyond the historical division of labor based on sex and the political and sociological issues and consequences associated with the evolution of language through the «feminization» or «de-masculinization» of institutions (see Abbou, 2011, 2020; Burr, 2012; Gabriel & Gyax, 2016; Pérez et al., 2019; Yaguello, 2002; Viennot, 2014), the linguistic instability of certain feminine role nouns, particularly job titles, can have multiple origins. Three factors of variation can be identified. Firstly, native speakers of French use multiple forms for «unstable» feminine nouns when referring to individuals with a specific job or role, in contrast to «stable» and «epicene» forms. In a recent report (2019), the Académie Française, the institution responsible for establishing language rules, has recognized this as a source of «current linguistic instability» and stated that “les tentatives de modification des usages restent hésitantes et incertaines, sans qu’une tendance générale se dégage” “attempts to modify usage remain hesitant and uncertain, without any clear general trend emerging” (p. 2).

¹ According to *Le Bon Usage* (Grevisse & Goosse, 2007) “Si les donneurs ne sont pas du même genre, le receveur se met au genre indifférencié, *e’estc’est* à-dire au masculin” “If the donors are not of the same gender, the recipient puts to the undifferentiated gender, i.e. to the masculine” (p. 555, §442 a.). See also Michel (2016) for other grammatical sources.

Consequently, [the Académie Française](#) recommends that “il convient de laisser aux pratiques qui assurent la vitalité de la langue le soin de trancher: elles seules peuvent conférer à des appellations nouvelles la légitimité dont elles manquaient à l’origine” “the decision regarding the use of “stable” feminine forms should be left to the practices that ensure the vitality of the language. Only these practices can confer the legitimacy that new names originally lacked» (p. 7). The choice of “stable” feminine forms would thus be determined by native speakers in accordance with the morphosyntactic rules of French that govern word formation. However, these rules are not only explicitly stated by the grammar of a language but also form an implicit linguistic competence of native speakers, who possess potential awareness of the systematic correspondences between form and meaning (see Booij, 2018). Let us consider the following pairs of masculine and feminine job nouns in French:

(2) a.	<i>acteur</i>	<i>actrice</i>	“actor _{Masc} actress _{Fem} ”
b.	<i>créateur</i>	<i>créatrice</i>	“creator _{Masc} creator _{Fem} ”
c.	<i>lecteur</i>	<i>lectrice</i>	“reader _{Masc} -reader _{Fem} ”
d.	<i>réalisteur</i> <i>réalisateur</i>	<i>réalisatrice</i>	“director _{Masc} director _{Fem} ”
e.	<i>auteur</i>	<i>autrice</i>	“author _{Masc} author _{Fem} ”
(3) a.	<i>vendeur</i>	<i>vendeuse</i>	“seller _{Masc} seller _{Fem} ”
b.	<i>coiffeur</i>	<i>coiffeuse</i>	“hairdresser _{Masc} hairdresser _{Fem} ”
c.	<i>blanchisseur</i>	<i>blanchisseuse</i>	“launderer laundress”
d.	<i>éleveur</i>	<i>éleveuse</i>	“breeder _{Masc} breeder _{Fem} ”
e.	<i>professeur</i>	<i>professeuse</i>	“professor _{Masc} professor _{Fem} ”

The left and the right columns are related by systematic form-meaning relationships: In general, masculine words ending in *-(a)teur* have corresponding feminine forms ending in *-(a)trice* or *-euse* and all these words share the meaning “someone whose job consists in V”. Still, while examples (a.), (b.), (c.), (d.) in (2) and (3) demonstrate relative stability in language use, example (e.) does not. This highlights a second level of variation: the linguistic competence of native speakers, which is influenced by their awareness of morphological construction rules. From a linguistic perspective, the suffix *-eur* in French is used to form nouns that designate human agents. Following Fradin (2003), all the lexemes listed in (1) adhere to a construction rule in which the formation of a nominal lexeme derived from the suffix *-eur* requires a verb base with an agentive argument structure. In other words, the verb base must imply the existence of an agent in order to take the suffix *-eur*. The natural ability of native speakers to construct word forms in accordance with the general morphological rules of a language stems from their morphological awareness. Carlisle (2000) defines morphological awareness as the cognitive ability to perceive word structure and manipulate the smallest units of meaning in language. In theory, a language should consist of well-formed and stable words, with no incorrectly formed words. However, as noted by Le Draoulec and Perry-Woodley (2022), many

“incorrectly” formed words are attested in dictionaries and language use, despite the violation of the rule², suggesting that social and institutional contexts influence language usage.

Abbou also indicates that “Some irregularities appear between the uses of different writers and sometimes within the use of the same writer” (2011: 56), illustrating the cognitive dissonance between a native speaker’s natural linguistic competence (supported by morphological awareness) and their difficulty in feminizing certain nouns (such as *écrivaine* for example, see Le Draoulec & Perry-Woodley, 2016) to increase visibility of women in text and discourse. Taking a usage-based approach, which views language as an embodied and social behavior (Bybee & Beckner, 2010; Tomasello, 2003; Ellis, 2002), we can highlight the role of usage in shaping the mental representations stored in long-term memory through general cognitive mechanisms (exemplar-based, rational, associative learning).

As a result, given the recent phenomenon of feminization in text and discourse, it is not surprising to observe that the normative use of the masculine form leads to irregularities in speakers’ use and perception of feminine forms. Considering the influence of the social world and political factors in the process of language feminization, we identified a third potential factor of variation: the speakers’ sociological profile, including social gender, age, profession, and territory, which can potentially influence the mental representations and cognitive processing of feminine nouns.

2. The cognitive processing of the gender of role nouns

Studies addressing both the grammatical and social aspects of gender processing have emerged recently, particularly in French with the work of Houdebine (1998) and the review by Greco (2014). Despite attempts to reconsider traditional conceptions of grammatical gender in line with underlying beliefs and representations (as seen in Michel’s 2016 PhD thesis), the speaker’s behavioral dimension from a psychological perspective has remained somewhat peripheral. In the field of psycholinguistics, some researchers have taken up the challenge of exploring grammatical gender as a fundamental aspect of our cognitive system. Drawing from cognitive theories of reading comprehension (e.g., Van Dijk & Kinstch, 1983), these researchers have conducted numerous behavioral studies to examine how noun gender, stored in long-term memory, influences sentence processing and serves as an inferencing modifier in constructing mental representations of text. Specifically, at the text level, readers combine their world knowledge (derived from previous reading experiences) with the information provided in the text itself during online sentence processing. This process is explored in models such as Kinstch’s construction-integration model (1988).

However, when the gender of a noun is not morphologically marked (as is the case with plural and singular forms in languages like French or English), research has shown several key findings:

1. Readers cannot suppress the activation of gender stereotypes associated with social role nouns. For example, in a text containing the role noun “surgeon”, the default

² Michel Roché (cited by Le Draoulec & Perry-Péry-Woodley, 2022: 212) mentions the example of *bougeoir* “candlestick” and *glissière* “slider” (-oir selecting in principle verbal bases and -ier nominal bases, we should say **bougier* and **glissoire*); or *romantisme* “romanticism”, which does not respect the integrity of the formants (we should say – and it has been said – *romanticisme*, like *catholicisme* “catholicism”, since *romanticisme* is to *romantique* “romantic” what that *catholicisme* is to *catholique* “catholic”).

interpretation tends to be masculine, leading to the dominance of masculine interpretations in both online and offline text processing (Reynolds, Garnham & Oakhill, 2006).

2. The specific meaning of masculine forms precedes the generic interpretation. When a role term like *singers*_{NeutralStereotype} is paired with a kinship term like *brother*_{Masc} or *sister*_{Fem} the male-specific meaning overrides both the generic and female interpretations (Gygax & Gabriel, 2008).
3. The male interpretation bias persists even when participants are explicitly instructed to consider alternative meanings. It is more difficult for participants to link masculine forms to female referents compared to male referents (Gygax et al., 2012).
4. The use of gender-fair forms, which symmetrically and equally treat women and men (e.g., *joggeurs et joggeuses* “*joggers*_{Masc} and *joggers*_{fem}”, or contracted forms *joggeur.euses* “*joggers*_{Masc.Fem}”), increases participants’ perception of women in role nouns compared to the masculine form alone (Tibblin et al., 2022).
5. When gender-neutral word forms, such as *musicians* are compared to gendered role names like *engineers*, pairs like *David-musicians*, *Lea-musicians* are less sensitive to the male interpretation bias than pairs like *David-engineers*, *Lea-engineers* (Kim et al., 2022).

These findings suggest a strong interaction between word perception and social representations of role nouns. They support the hypothesis that the specific meaning of masculine forms prevails over the feminine and generic interpretations in a durable manner at the text and word levels, with early activation as the default value. Thus, when processing texts, readers automatically process the gender of role nouns and incorporate their gender stereotypicality into their mental representation of the text.

Taken together, these findings highlight the prevalence of the specific meaning of masculine forms and the “male bias” in mental representations of gender (see Gygax et al., 2021 for a review). They also emphasize the political dimensions of gender representation in language (see Burnett & Pozniak, 2021 for further discussion). Therefore, during the process of text comprehension, readers inherently and automatically process the gender of role nouns and incorporate their associated gender stereotypes. Gender stereotypicality refers to the extent to which readers believe or expect a certain role to be held by either a woman or a man (Gabriel et al., 2008). This gender stereotypicality becomes an integral part of readers’ mental representation of the text.

3. Producing feminine job nouns in a word association experiment

While previous psycholinguistic studies on grammatical gender have predominantly examined word perception and the relationship between the generic function of the masculine form and the male bias (e.g., Gygax & Gabriel, 2008; Lévy et al., 2014; Gygax et al., 2019), our current study aims to investigate the spontaneous production of feminine forms of job nouns in association with their masculine counterparts. Specifically, we focus on the written production of feminine job nouns, which are derived from a list of masculine job nouns classified into three categories: a. “stable” nouns, b. “unstable” nouns, and c. “epicene” nouns.

- a. The “stable” category includes nouns for which the feminine counterpart is well attested in synchrony, ~~then we considered it as a ‘stable’ category~~ (e.g., *ouvrier* ⇒ ↔ *ouvrière* “~~worker_{Masc} worker_{Fem}’~~), 2) *worker_{Masc} ↔ worker_{Fem}”*.
- b. The “unstable” category includes nouns for which more than one feminine form is attested in synchrony or for which the masculine form is sometimes used for woman protagonists (~~still, but~~ which are not epicene forms), ~~these nouns were labelled as an ‘instable’ category~~ (e.g., *auteur* ⇒ ↔ *autrice-auteure-auteur* “~~writer_{Masc} ↔ writer_{Fem1}—writer_{Fem2}—writer_{Masc}~~) and 3) *epicene writer_{Masc}”*.
- c. The “epicene” category includes nouns that do not have a lexical gender, e.g., *juge* ⇒ ↔ *juge* “*judge_{Epicene}*”.

French speakers with diverse sociological profiles (i.e., varying in social gender, age, profession, and territory) were asked to handwrite the feminine counterparts of each masculine job name provided in the given list. For example, when given the word *boulangier* “baker”, participants were expected to provide the corresponding role noun for a woman. Written productions were collected through a paper questionnaire. The pen and paper format was chosen to minimize experimental constraints and approximate a natural language situation.

The expected findings were as follows. Firstly, in line with previous results found in the experimental literature, which are linked to the effects of frequency of use (Bybee, 2006), we expected to observe a strong variation in the productions within the unstable category, with a high percentage of masculine forms (i.e., male bias). Secondly, we expected to observe an effect of the social profile of the participants on their word productions, with a reduced male bias among women and younger participants. The social construction of reality of the participants under 30 years old, influenced by their social network experiences and growing awareness of gender fluidity issues (Elder-Vass, 2012), could made them more sensitive to the political aspects of language feminization and consequently, their mental representations could be less gender dependent.

3.1. Method

3.1.1. Participants

Ninety-nine individuals participated in this study. The recruitment was conducted in undergraduate classes and within our private circle. Five participants who had a native language other than French were excluded from the analysis. The data of the remaining 94 participants were analyzed.

The age range of the participants was 18 to 79 years ($M = 35.5$ years, $SD = 17.1$ years). Within our sample, 67 participants identified themselves as having grown up in an urban environment, while 28 participants grew up in a rural area. Participation in the study was voluntary and not rewarded. To highlight a generational difference and for practical reasons, we excluded participants over the age of 30 and under the age of 39, as individuals in this age range typically enter the workforce. Tables 1 and 2 present additional sociological data describing our sample.

Table 1
Distribution of participants according to their main occupation by gender

	Students	Employees/Retirees	TOTAL
Women	37	28	65

Men	11	18	29
TOTAL	48	46	94

Table 2
Distribution of the sample according to their highest academic level

Participants	Social gender	Mean age	Aca. level	Territory
< 30 years N=53 incl. 79.2% of students	38 women	26.6 years	Baccalaureate or	Urban: 67.9%
	15 men	SD 2.9	inf.: 32.9%	Rural: 32.1%
		Range 18-29 years	Bachelor: 56.6% MA/PhD: 11.3%	
>30 years N= 41 100% employees incl. 14.6% of retirees	27 women	51.2 years	Baccalaureate or	Urban: 71.2%
	14 men	SD 12.1	inf.: 19.5%	Rural: 28.8%
		Range 39-79 years	Bachelor: 19.5% MA/PhD: 61%	

3.1.2. Materials

The experiment involved a written list of 68 singular masculine occupational/job nouns. These masculine nouns were selected from the French lexical database LEXIQUE (<http://www.lexique.org>, developed by New et al., 2001) based on two criteria: their frequency of use, ensuring that these nouns were relatively common and familiar ($M = 20.87$ occurrences per million, $SD = 42.97$), and the three aforementioned categories (i.e., stable, unstable, or epicene). The average length of these words was 8.7 letters ($SD = 1.6$).

We obtained the following categories: (a) 20 words classified as “stable” masculine-feminine forms, where the masculine has only one feminine counterpart attested in usage and dictionaries for several years (e.g., *ouvrier-ouvrière* “worker_{Masc}-worker_{Fem}”, *coiffeur-coiffeuse*, «*hairdresser_{Masc}-hairdresser_{Fem}-hairdresser_{Fem}*»), (b) 18 masculine words classified as “unstable” masculine-feminine forms, where the masculine can be associated with several feminine forms attested in usage and/or dictionaries (e.g., *auteur-autrice-auteure* “author_{Masc}- author_{Fem1}-author_{Fem2}”) and (c) 30 epicene occupational names, where the same form can refer to a man or a woman (e.g., *judge, doctor, artist*). The complete list of this linguistic material, along with its characteristics, are given in Appendix A.1.

3.1.3. Procedure

Before the start of the experiment, participants were provided with oral information regarding the conditions of participation and data collection. Subsequently, an informed consent form was provided to ensure that participants were willingly and fully consenting to take part in the study. Following a brief questionnaire to gather sociological data such as age, gender, level of education, place of residence, and mother tongue, participants were given written instructions. The instructions emphasized the importance of producing the feminine equivalent of a list of singular masculine occupational names in a spontaneous manner, without revising or correcting their responses. They were informed that there was no time limit, that multiple answers were

acceptable, and that leaving a blank response was also an option if they did not know or did not wish to provide an answer. Once the experiment began, there was no further intervention or interaction with the experimenters or other participants.

3.2. Results

A descriptive analysis was conducted on the written responses provided by the 99 participants. However, five participants who were not native speakers of French were excluded from this analysis³. For each masculine form, we have documented the type and number of occurrences of the produced feminine forms (referred to as *Fem forms*: attested forms and unattested forms⁴) and the number of times no answer was given (referred to as *Nb. of no answer* i.e., blank cells). Additionally, we calculated three proportions for each category: % *Fem. Prod* (% of feminine noun productions), % *Identic.* (% of forms identical to the masculine ones), and % *blank cells* (% of blank cells). All values (Nb and %) were calculated based on the total number of participants (i.e., 94). The production data for each of the three categories of nouns (unstable, stable, epicene) are presented in Tables 3.a, 3.b, and 3.c, respectively.

3.2.1. Descriptive analysis of the stable category (i.e., more than one possible feminine form)

Table 3.a
Production data in the unstable category

Masc. forms (N = 18)	Fem. Forms (Nb. of occ.)		Nb. of no answer	% fem prod.	% identic.	% blank cells
écrivain	écrivaine (81)	écrivain (13)	0	86.2	13.8	0
proviseur	proviseure (72)	proviseur (11) directrice (1)	0	77.4	11.7	0
chevalier	chevalière (53)	chevalier (27) princesse (1) gente dame (1)	12	64.6	32.9	12.8
ingénieur	ingénieure (74) ingénieuse (5)		1	81.7	16.1	1.5
plombier	plombière (73)	plombier (15)	6	83.0	17.0	6.4
poète	poète tesse poète tesse / poète tesse / poète tesse / poète tesse (53)		1	53.8	43.0	1.5
maire	mairresse (47)	maire (47) la maire (1)+	0	50.0	50.0	0
matelot	matelotte (19) matelote (12) *matelonne (2)	matelot (45)	16	39.7	57.7	17
chef	cheffe (71) cheftaine (2)	chef (18) directeur (1)	0	79.1	19.1	0

³- However, we note here that it would be interesting in another study to compare the data of the non-native speakers with those of the native speakers of French. The productions of these 5 people alone were indeed more related to a morphosyntactic and phonological logic than to a logic of use.

⁴ Unattested forms in dictionaries are preceded by an asterisk.

	chefette (1)					
	chefesse (1)					
enquêteur	enquêteuse (69)		0	100.0	0	0
	enquê(è)teuse enquêtu se/enquêteuse (12)					
	enquêteuse (10)					
	enquêteuse (2)					
	*enquêteuse (1)					
commis	commise (62)	commis (28)	4	66	28.9	4.3
carreleur	carreleuse (75)	carreleur (15)	3	83.5	16.5	3.2
	*carreleuse (1)					
chercheur	chercheuse (82)	chercheur (5)	0	94.7	5.3	0
	chercheuse (8)					
professeur	professeuse (70)	professeur (23)	0	74.5	24.5	0
		chercheur (1)				
soldat	soldate (27)	soldat (63)	5	29.2	70.4	5.3
auteur	autrice (53)	auteur (14)	0	85.1	14.9	0
	auteure (28)	écrivaine (1)				
gendarme	gendarmette (23)	gendarme (70)	1	24.7	74.2	1.5
	*gendarmette (1)					
préfet	préfète (37)	préfet (25)	1	67.7	26.9	1.5
	préfète (32)	sous préfet (1)				
sapeur-pompier	sapeur-pompier (9)	sapeur-pompier (62)	6	26.1	70.4	6.4
	sapeuse-pompier (11)					
	sapeuse-pompier (4)					
	sapeur-pompier (2)					
maçon	maçonne (51)	maçon (31)	7	62.1	35.6	7.4
	maçonne (2)					
	maçonnière (1)					
	maçonne (2)					
Means (SD)			3.2 (4.45)	66.5 (22.6)	31.4 (22.5)	1.9 (5.7)

Mis en forme : Couleur de police : Rouge, Surlignage

A descriptive analysis of the “unstable” nouns (refer to Table 3.a), which are defined as occupation names with an attested masculine form but more than one feminine form in use, reveals the following:

Firstly, 31.4% of the produced forms (tokens) resisted feminization, meaning that the masculine form was maintained for their feminine counterpart. In other words, despite being native speakers with morphological knowledge and skills, many participants considered these masculine forms to be exclusively masculine, disregarding their morphological awareness that should have led them to produce nouns constructed with the correct feminine suffix. Out of the 18 job names, 11 had over 25% of identical forms for both genders: *chevalier*, *poète*, *maire*, *matelot*, *commis*, *soldat*, *gendarme*, *préfet*, *sapeur-pompier*, *maçon* «knight, poet, mayor, sailor, clerk, soldier, policeman, prefect, firefighter, mason». Interestingly, these 11 job names

do not always refer to prestigious positions. For example, *matelot*, *commis*, *soldat*, and *maçon* are rarely classified at the top of the professional hierarchy, reflecting the internalized history of division of labor where certain tasks were traditionally assigned exclusively to men due to physical or social constraints.

However, among these forms, *poète*, *maire*, *chef*, and *gendarme* induced both many feminine forms (*poétesse*, *mairresse*, *chefesse*, *gendarmesse*) and identical forms (*poète*, *maire*). Some participants may have considered these forms to be epicene. Unlike other masculine names, these word forms are morphologically simple (not constructed with a base + a suffix). Therefore, in this particular experimental context, participants did not apply the derivational strategy based on the analysis of the morphological structure of the masculine forms. Instead, they chose the epicene option, possibly influenced by analogy with the 30 other epicene forms present in the experimental list.

Secondly, 66.5% of the produced words in the «unstable» category corresponded to words marked by a feminine suffix, more or less conforming to the morphological construction and spelling rules of French. For example, the name *chef* “chief” elicited 4 different feminine forms with different spellings: *cheffe*, *cheftaine*, *chefette*, *chefesse*. Similarly, *enquêteur* “investigator” resulted in different feminine forms: *enquêteurice*, **enquêteurice*, **enquêteurisse*, *enquêteuse*, *enquêteure*, with 3 suffixes (mainly *-rice*, *-euse* and *-eure*) varying in spellings. This multiplicity of forms reflects the uncertainty and unease among participants, who seemed to experience an internal conflict between the male social norm, the frequency of use in language, and their morphological awareness.

Thirdly, 2% of the masculine forms generated no response (i.e., empty cell). This was particularly the case for the masculine nouns *chevalier* and *matelot*, for which 12 and 16 participants, respectively, left an empty cell. This lack of answer is very difficult to interpret properly: does it mean that they simply don’t know or that they consider these job names as exclusively masculine? If so they would have reported the masculine form. On the other hand, the existence of the attested forms *chevalière* (which traditionally designates a “signet ring”) and *matelote* (which refers to a cooking recipe) may have hindered the production of these forms as counterparts to the masculine ones.

Finally, we identified some atypical productions used to designate the feminine counterpart of masculine role names: *princesse* “princess” and *gente dame* “nice lady” for *chevalier* “knight”; *chercheur* “researcher” for *professeur* “professor”; *sous-préfet* “sub-prefect_{Masc}” and *sous-préfète* “sub-prefect_{Masc}” for *préfet* “prefect”. The use of these forms reflects the lack of mental representation of these feminine forms, as well as the influence of gendered social representations inherited from a history that goes beyond the division of labor to encompass the broader roles of men and women in society.

3.2.2. Descriptive analysis of the stable category (i.e., more than one possible feminine form)

This category consisted of 30 masculine job names. In Table 3b, we chose to only present those that showed variation in word production (as the stable category included items that generated 100% of the expected feminine form). We obtained a set of crucial data for a total of 11 masculine forms.

Table 3.b

Linguistic data of the stable category

Masc. forms (N=11)	Fem. Forms (Nb. of occ.)		Nb. of no answer	% fem prod.	% identic.	% no answer
aviateur	aviatrice (88) aviateuse (1)	aviateur (3)	2	94.7	3.3	2.1
banquier	banquière (91)	banquier (2)	1	96.8	2.1	1.1
commerçant	commerçante (89)	commerçant (5)	0	94.7	5.3	0
directeur	directrice (92)	directeur (2)	0	97.9	2.1	0
éditeur	éditrice (88) *éditeuse (3) éditeuse (1)	éditeur (2)	0	97.9	2.1	0
élèveur	élèveuse (86) *élevetrice (1)	élèveur (7)	0	91.5	7.4	0
enseignant	enseignante (93)	professeure (1)	0	98.9	0	0
expert	experte (89) *expertrice (1)	expert (4)	0	94.7	4.2	0
facteur	factrice (88) facteure (1)	facteur (5)	1	94.6	5.4	1.1
mécanicien	mécanicienne (92)	mécanicien (2)	0	97.9	2.1	0
pharmacien	pharmacienne (92)	pharmacien (2)	0	97.9	2.1.	0
Means (SD)			0.3 (0.6)	97.8 (2.6)	2.2 (0.7)	0.4 (0.7)

In the “stable” category of nouns (refer to Table 3.b), where the masculine and feminine forms are morphologically marked by a specific suffix and correspond to attested words in dictionaries and everyday use, we observe that 2.2% of the productions still resist to feminization. This resistance persists despite the high frequency of use in language (we only selected familiar and frequent words in our material, see Appendix A.1) and the regular morphological construction of the corresponding feminine forms based on rules or analogy. For example, the job names *élèveur* *élèveur* “breeder and breeder” and *facteur* “postman” show this resistance to produce *élèveuse* “breeder_{Fem}” and *factrice* “postmistress”, respectively, despite the existence of numerous words constructed following the same morphological rule (e.g., *vendeur-vendeuse* “seller_{Masc}-seller_{Fem}”, *livreur-livreuse* “delivery man-delivery woman”, *acheteur-acheteuse* “buyer_{Masc}-buyer_{Fem}”, *acteur-actrice* “actor-actress”, *instituteur-institutrice* “teacher_{Masc}-teacher_{Fem}”, *conducteur-conductrice* “driver_{Masc}-drive_{Fem}” etc.). Furthermore, in 2.2% of cases, no answer was given, limited to the words *aviateur* “aviator”, *banquier* “banker”, and *facteur* “postman”. Given that these words belong to the stable category (attested, regular, and frequent feminine words) and their internal morphological complexity, it is difficult to explain this lack

Mis en forme : Police :Non Italique

Mis en forme : Police :Non Italique

Mis en forme : Police :Non Italique

Mis en forme : Police :Non Italique

Mis en forme : Police :Non Italique

of response, except in terms of a conflict between internalized social norms and language use that some participants experienced while filling out our questionnaire.

3.2.3. Descriptive analysis of the epicene category (i.e., the same word form designates both genders)

This category contained 30 items and as we did for the stable category, we have only analyzed those which gave rise to unexpected answers (i.e., forms other than epicene, or no failure to answer). Table 3.c presents the observed data from 11 epicenes.

Table 3.c

Linguistic data of the epicene category

Epicene forms (N=11)	Fem. Forms (Nb. of occ.)	Nb. of no answer	% fem prod.	% identic.	% no answer
mécène	mécène (82) *mécènesse (1)	11	1.2	98.8	11.7
journaliste	journaliste (90)	4	0	100.0	4.3
ministre	ministre (89)	5	0	100.0	5.3
capitaine	capitaine (91)	3	0	100.0	3.2
dentiste	dentiste (93) orthodontiste (1)	0	0	98.9	0
politologue	politologue (91)	3	0	100.0	3.2
vidéaste	vidéaste (93)	1	0	100.0	1.5
podologue	podologue (93)	1	0	100.0	1.5
acrobate	acrobate (92)	2	0	100.0	2.1
linguiste	linguiste (92)	2	0	100.0	2.1
médecin	médecin (87) médecine (5) doctoresse (1) doctoresse en médecine (1)	0	2.1	92.5	0
architecte	architecte (91) architectrice (3)				
Means (SD)		2.7 (3.2)	2.6 (7.1)	99.1 (2.2)	0.4 (0.7)

Among the 30 epicene forms (refer to Table 3.c), we observe that 3 words (*mécène* “sponsor”, *médecin* “doctor”, *architecte* “architect”) led 2.6% of our participants to produce feminized forms by adding a feminine suffix: *mécènesse*, *médecine*, *architectrice*. Additionally, 9 words resulted in a lack of response from 2.7% of the participants: *mécène*, *journaliste* “journalist”, *capitaine* “captain”, *dentiste* “dentist”, *politologue* “political scientist”, *vidéaste* “videographer”, *podologue* “chiropractist”, *acrobate* “acrobat”, *linguiste* “linguist”. The production of feminized forms may be attributed to the nature of the production task itself, combined with the influence of the lexicon, which could have prompted some participants to create word forms with a feminine suffix. Firstly, *mécène* might have been unfamiliar to some participants, leading them to apply a morphological rule to produce *mécènesse* by analogy with other similar forms ending in *-e*, such as *rude-rudesse* “harsh-harshness”, *juste-justesse* “just-

accuracy”, *robuste-robustesse* “robust-robustness”. Secondly, the forms *médecine* and *architectrice* actually exist in both language use and dictionaries.

Consequently, the existence of *médecine* and *architectrice* with different meanings could rather act as a barrier to its usage in referring to “a woman practicing medicine” or “architecture”. Moreover, the production of both *médecine* and *architectrice* may have been influenced by the availability of (1) a feminine noun that designates a field of study focused on “the study, treatment, and prevention of diseases” in the case of *médecine* and (2) a feminine adjective meaning “that builds in architecture” in the case of *architectrice*. In this latter case, where the adjective *architectrice* is unusual (according to the TLF), we can alternatively propose that it has been constructed on the noun *architect* through a semantic-formal analogy with *décoratrice* “decorator” (or *conservatrice* “conservator/curator”, *manipulatrice* “manipulator”, *factrice* “postwoman”, *observatrice* “observeress” ...), despite an inappropriate theme category. That is, *décoratrice* is constructed on the verbal base *décorer* «decorate», while *architectrice* includes a nominal base *architecte*. Alternatively, it may have been formed based on the general rule in French where the feminine form is built on the masculine form, aligning with stereotypical knowledge.

Finally, 9 items have resulted in a lack of response from some participants. These words (i.e., *mécène*, *journaliste* “journalist”, *capitaine* “captain”, *dentist* “dentist”, *politologue* «political scientist», *vidéaste* “videographer”, *podologue* “chiroprapist”, *acrobate* “acrobat”, *linguiste* “linguist”) correspond in majority to prestigious professions, and a possible explanation could be an irresolvable conflict between male social norms and the current need to feminize language. Participants may have chosen to consider these words as epicene but preferred to leave the box empty.

3.2.4. Effects of sociological data in feminine word production

In the present experiment, we collected sociological profiles of our participants based on four dimensions (i.e., social gender, age, profession, territory) as we anticipated observing an effect of these profiles on the production of feminine words, with a reduced male bias in women and younger participants. Table 3.d presents the observed data, considering social gender and age. Table 3.d

Proportions (in %) of observed answers in the three categories of job names, classified by social gender (i.e., men or woman) and age (i.e., under and greater than 30 years old).

		Age < 30, N = 53	Age > 30, N = 41	Total
Women	Epicene	.97	.98	.97
	Unstable	.64	.74	.68
	Stable	.96	.99	.97
Men	Epicene	.98	.97	.98
	Unstable	.62	.64	.65
	Stable	.97	.96	.98
Total	Epicene	.97	.98	
	Unstable	.64	.72	
	Stable	.96	.99	

A Chi-square test was conducted on the data for the two manipulated variables, Social Gender and Age. However, none of the observed values reached significance (in all cases, $\chi^2 < 0$). Therefore, contrary to our second hypothesis, we did not find a significant effect of either social gender or age on our participants.

3.3. Discussion

In this study, we examined the spontaneous word productions of feminine counterparts of masculine job names in French. The job names were categorized as stable, unstable, or epicene. Participants were recruited based on various sociological profiles, including social gender, age, profession, and territory. We had two main expectations: 1) to observe a male bias in the unstable category, reflecting a conflict between male social norms and language use, and 2) to find an effect of social profiles, with reduced variation in feminine productions in the unstable category among women and younger participants, given their hypothesized greater sensitivity to the current debate on feminization.

We analyzed the productions of 94 participants. The data related to the “unstable” category revealed that one-third of the produced forms resisted feminization completely. In many cases, participants chose to reproduce the masculine form in their answers, indicating that certain forms are still considered exclusively masculine despite the morphological awareness of native speakers. Additionally, we did not find any significant effect of participants’ social profiles on their productions, suggesting that resistance to the feminization of professional terms persists throughout the population in France, regardless of their sociological profile. Prestigious jobs either led to the retention of the masculine form to designate a female protagonist or resulted in participants providing no answer. Consequently, our data demonstrate two behaviors: 1) a strong male bias effect, leading speakers to prefer the masculine form over the feminine, and 2) a conflict between male social norms and participants’ awareness of the current political/cultural trend to increase the visibility of women in society.

When examining the production of feminine forms in the stable category, our data revealed a very marginal proportion (2.2%) where some participants still preferred to use the masculine form. Similarly, in the epicene category, a small proportion of observed answers (2.7%) resulted in no response (i.e., empty cells). This indicates that even in cases of well-attested and familiar words (in both usage and dictionaries), a male bias persists among native French speakers. Collectively, these data suggest that despite almost 40 years of political initiatives in favor of feminizing profession and role names in French (starting with a commission dedicated to the “vocabulary concerning the activities of women”, directed by the writer Benoîte Groult in 1984, see Houdebine-Gravaud, 1998; Burr, 2003), certain male social norms still persist in the minds and language behaviors of some speakers.

In this study, we acknowledge some biases that may have influenced the written productions, particularly the lack of counterbalancing the order of presentation, which could have had an effect from one word to another. For example, the positioning of *auteur* «author» close to *aviateur* “aviator” may have influenced the productions. Additionally, we can question how the production task itself may have influenced participants, potentially leading them to produce morphologically marked feminine forms (e.g., *médecin* “doctor” - *médecine* “medicine”), perhaps because the noun designating the profession is readily available in their lexicon (in the example provided: *médecine*).

Their productions also reveal the application of the general rule according to which feminine forms are built based on male forms by adding a final *-e* (a graphical mark without phonological consequence, like for example in the case of *auteure*, *chercheure*, *professeure*) or a feminine suffix (e.g., **mécènesse*).

Finally, although we utilized the LEXIQUE database to determine the frequency of occurrence of French words and the familiarity of the selected nouns, we did not explicitly verify whether the words were known to the participants. It is therefore possible, albeit unlikely, that the lack of responses to certain items (i.e., empty cells) could be explained in this manner.

The richness of this data necessitates additional qualitative and quantitative analyses, which will be conducted in future research. In particular, more detailed analyses of the interaction between sociological profiles and written productions should be undertaken to determine whether any of these dimensions or other factors could have influenced the observed variations. Linguistic analyses will also be pursued to further examine the morphological structure of certain neologisms (i.e., the type of constructions and the number of morphological operations involved) or to study the distributional characteristics of the produced forms within a French corpus (e.g., web usage, attested lexical frequency, number of phonological and orthographic neighbors of the forms, etc.).

4. General Discussion

The psycholinguistic literature postulates the existence of a masculine bias that influences the mental representations of referents, disadvantaging feminine names in the titles of professions, roles, and titles. We had put forward a hypothesis along similar lines. Production and perception of feminine nouns, respectively, have been found to generate significantly different morphological variations and longer reaction times (see Gyga et al., 2021 for a review).

The results of our study demonstrate that despite an inherent morphological awareness in all French speakers, difficulties arise when they are asked to produce the feminine counterparts of masculine occupational nouns (31.4% of the produced forms (tokens) resisted to feminization in the “unstable” category; 2.2% in the “stable” category while in the “epicene” category, 2.7% of the response cells remained empty). Moreover, contrary to our second hypothesis, we didn’t find any significant effect of the sociological profile of our participants on their productions. Neither their age range (30 < age < 30 years old) nor their social gender (masculine, feminine) revealed any significant effects, suggesting that in our experiment, these social characteristics were not sensitive to the precise context in which we tested the production of feminine nouns from masculine ones.

Taken together, our results shed light on the linguistic and political issues surrounding certain job names whose feminine forms remain unstable, both in usage and in dictionaries. One-third of the responses we observed in our study indicated resistance to producing a feminine counterpart for masculine job names, with variations among speakers that appear to be independent of their social profiles.

Our findings align with previous research, and our next objective is to collect data on the lexical accessibility of masculine, feminine, and epicene forms using psycholinguistic paradigms and tasks (e.g. masked priming in association with a semantic decision task) that allow us to record reaction times. The need to gather experimental data on the lexical accessibility of this specific category of words arose from the work of Gyga and colleagues. These initial production and

perception data open up a new research avenue in psycholinguistics, particularly emphasizing a scientific literature that addresses contemporary social struggles.

Recent debates in the socio-political sphere illustrate the increasing interest in research on the impact of gendered language and the necessity for a more neutral and inclusive language. However, there is little to no experimental psychological work that directly addresses these sociolinguistic movements in the Francophone sphere. To precisely establish the impact of language on mental representations, it would be relevant to conduct further studies on both lexical and semantic representations. This work is part of a long-term project and requires further exploration. It would be pertinent, for example, to examine whether other sociodemographic profiles have an effect on gender perception. Additionally, extending the research on the specific topic of title names, roles, and professions to other gendered languages with gender and number inflections would be interesting. Beatty-Martínez and Dussias (2019) investigated this issue using physiological measures and demonstrated that knowledge of one gendered language (e.g. Spanish) influences the brain's perception and linguistic expectations, even in a second language with less or no gender marking (e.g. English). Therefore, future research could examine the excitatory or inhibitory nature of the connections linking lexical representations.

References

- Abbou, Julie. 2011. Double gender marking in French: a linguistic practice of antisexism. In *Current Issues in Language Planning*, 12 (1), 55-75.
- Abbou, Julie. 2020. La langue est-elle toujours un lieu de lutte féministe? De la contrefaçon sémiotique à la libéralisation. *Recherches Féministes*, 32(2), 235-258.
- Académie Française. 2002. *Féminisation des noms de métiers, fonctions, grades et titres*. Published in March, 21st.
- Académie Française. 2019. *Rapport sur la féminisation des noms de métiers et de fonctions*. Published in February, 28th.
- Beatty-Martínez, Anne L., & Paola, E. Dussias. 2019. Revisiting masculine and feminine grammatical gender in Spanish: Linguistic, psycholinguistic, and neurolinguistic evidence. *Frontiers in Psychology*, 10, 751.
- Booij, Geert. 2018. The construction of words: Introduction and overview. In: Booij, G. (eds) *The construction of words*. Springer Studies in Morphology, 3-18.
- Burnett, Heather & Celine, Pozniak. 2021. Political dimensions of écriture inclusive in parisian universities. *Journal of Sociolinguistics*, 25, 44.
- Burr, Elisabeth. 2012. Gender and language politics in France. In Hellinger, Marlis / Bussman, Hadumod (eds.), *Gender across languages III. The deconstruction of gender through language variation and change*. Amsterdam: Benjamins, 119-139.
- Burr, Elisabeth. 2012. Planification linguistique et féminisation. Baider, Fabienne H. / Elmiger, Daniel / Abbou, Julie (eds.), *Intersexion. Langues romanes, Langue et genre*. München: Lincom Studies in Sociolinguistics, 29-39.
- Bybee, Joan. 2006. *Frequency of use and the organization of language*. New York: Oxford University Press.
- Bybee, Joan & Clay, Beckner. 2010. Usage-based theory. In Bernd Heine and Heiko Narrog (eds), *The Oxford Handbook of Linguistic Analysis*. Oxford: Oxford University Press, 827-856.

- Carlisle, Joan F. 2000. Awareness of the structure and meaning of morphologically complex words: Impact on reading. *Reading and Writing: An Interdisciplinary Journal*, 12, 169-190.
- Corbett, Greville G. 2014. *The expression of gender*. Berlin/Boston: Mouton de Gruyter.
- Elder-Vass, Dave. 2012. *The reality of social construction*. New York: Cambridge University Press.
- Ellis, Nick. C. 2002. Frequency effects in language acquisition: A review with implications for theories of implicit and explicit language acquisition. *Studies in Second Language Acquisition*, 24, 143-188.
- Evain, Aurore. 2012. —Histoire d'~~autrice~~'~~autrice~~ de l'~~époque~~'~~époque~~ latine à nos jours.- *Séméion, Travaux de sémiologie, Special issue: Femmes et langues*, 6, 53-62.
- Fradin, Bernard. 2003. Lexème et règles morphologiques. ~~Dans-In~~: Bernard Fradin, *Nouvelles approches en morphologie*. Paris cedex 14, France: Presses Universitaires de France, 235-261.
- Gabriel, Ute & Pascal, Gygax. 2016. Gender and Linguistic Sexism. In Howard Giles and Anne Maass (eds.), *Advances in intergroup communication*. Peter Lang Publishing, 177-192.
- Grevisse, Maurice & André, Goosse. 2008. *Le bon usage, Grevisse langue française*, 14e édition, Bruxelles: De Boeck Université.
- Gygax, Pascal & Ute, Gabriel. 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, Pascal, Ute, Gabriel, Arik, Lévy, Eva, Pool, Marjorie, Grivel, & Elena Pedrazzini. 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*, 24, 395-408.
- Gygax, Pascal, Ute, Gabriel, Oriane, Sarrasin, Alan, Garnham & Jane Oakhill. 2008. There is no generic masculine in French and German: When beauticians, musicians and mechanics are all men. *Language and Cognitive Processes*, 23, 464-485.
- Gygax, Pascal, Ute, Gabriel & Sandrine Zufferey. 2019. Le masculin et ses multiples sens : Un problème pour notre cerveau... et notre société. *Savoirs en Prisme*, 10.
- Houdebine-Gravaud, Anne-Marie. (1998), *La Féminisation des noms de métiers, en français et dans d'autres langues*, ~~ParisMontreal~~~~Paris, Montreal~~, L'Harmattan.
- Gygax, Pascal, Sayaka, Sato, Anton Öttl & Ute, Gabriel. 2021. The masculine form and its multiple interpretations: a challenge for our cognitive system. *Language Sciences*, 83.
- Greco, Luca. 2014. Les recherches linguistiques sur le genre : Un état de ~~l'art~~'~~art~~. *Langage et société*, 148, 11-29.
- Groult, Benoîte. 1984. Je suis une écrivaine...Entretien avec Benoîte Groult par Alian Fantapié. *Média et Langage* 19-20, 20-25.
- Kim, Jonathan, Sarah, Angst, Pascal, Gygax, Ute, Gabriel & Sandrine, Zufferey. 2022. The masculine bias in fully gendered languages and ways to avoid it: A study on gender neutral forms in Québec and Swiss French. *Journal of French Language Studies*, 1-26.
- Kintsch,Walter. 1988. The role of knowledge in discourse comprehension: a construction-integration model. *Psychological Review*, 95, 163.
- Le Draoulec, Anne & Marie-Paule, Perry-Woodley. 2016. La femme de l'écrivain. In *BLING, Blog de Linguistique*, published in February, 5th.

- Le Draoulec, Anne & Marie-Paule, Perry-Woodley. 2022. Tout est déjà dans «mademoiselle». In Benjamin, Fagard and Gabrielle, Le Tallec (eds), *Entre masculin et féminin – Approches contrastives dans les langues romanes*. Paris: Presses de la Sorbonne Nouvelle, 209-220.
- Lévy, Arik, Pascal, Gygax & Ute, Gabriel. 2014. Fostering the generic interpretation of grammatically masculine forms: When my aunt could be one of the mechanics. *The Journal of Cognitive Psychology*, 26, 27-38.
- Michel, Lucy. 2016. Penser la primauté du masculin – sémantique du genre grammatical, perspectives synchroniques et diachroniques. *CMLF, Congrès Mondial de Linguistique Française*, 27, 04005.
- Michel, Lucy. 2016. PhD dissertation. La relation entre genre grammatical et dénomination de la personne en langue française : Approches sémantiques. Dijon, Université de Dijon.
- New, Boris, Christophe, Pallier, Ludovic, Ferrand, Rafael, Matos. 2001 Une base de données lexicales du français contemporain sur internet: LEXIQUE, *L'Année Psychologique*, 101, 447-462.
- Pérez, Manuel, Katy, Barasc, & Hélène, Giraud. 2019. Des (dés)accords grammaticaux dans la dénomination écrite de la personne en France : un tumulte graphique entre passions tristes et passions joyeuses, *GLAD! [En ligne]*, 07.
- Reynolds, David, Alan, Garnham & Jane, Oakhill. 2006. Evidence of immediate activation of gender information from a social role name. *Quarterly Journal of Experimental Psychology*, 59(5), 886–903.
- Roché, Michel. 1992. Le masculin est-il plus productif que le féminin ? *Langue française*, 96, 113-124.
- Tibblin, Julia, Jost, Van de Weijer, Jonas, Granfeldt & Pascal, Gygax. 2022. There are more women in joggeur-euses than in joggeurs: On the effects of gender-fair forms on perceived gender ratios in French role nouns. *Journal of French Language Studies*, 1-24, First View.
- Tomasello, Micheal. 2003. *Constructing a Language: A Usage-Based Theory of Language Acquisition*. Cambridge, MA: Harvard University Press.
- van Dijk, Teun A. & Walter, Kintsch. 1983. *Strategies of Discourse Comprehension*. New York, NY: Academic Press.
- Viennot, Eliane. 2014. *Non, le masculin ne l'emporte pas sur le féminin*. Paris: Donnemarie-Dontilly Éditions.
- Yaguello, Marina. 2002. *Les mots et les femmes : essai d'approché»approche sociolinguistique de la condition féminine*. Paris: Payot.

Appendix

A.1 Grammatical class, frequency and length of masculine words in the three categories of job names and their attested feminine counterparts (found in dictionaries or on Google)

Category	Word	Grammatical class	Word frequency	Number of letters	Attested feminine forms
Stable	<i>Agriculteur</i> 'farmer'	NAME	1.06	11	<i>agricultrice</i>
	<i>Animateur</i> 'animator'	NAME	2.72	9	<i>animatrice</i>
	<i>Aviateur</i> 'aviator'	NAME	3.09	8	<i>aviatrice</i>
	<i>Avocat</i> 'lawyer'	NAME	112.69	6	<i>avocate</i>
	<i>Banquier</i> 'banker'	NAME	6.38	8	<i>banquière</i>
	<i>Boulangier</i> 'baker'	NAME	3.00	9	<i>boulangère</i>
	<i>Caissier</i> 'cashier'	NAME	4.32	8	<i>caissière</i>
	<i>Commerçant</i> 'trader'	NAME	4.34	10	<i>commerçante</i>
	<i>Couturier</i> 'dressmaker'	NAME	3.52	9	<i>couturière</i>
	<i>Danseur</i> 'dancer'	NAME	23.05	7	<i>danseuse</i>
	<i>Directeur</i> 'director'	NAME	64.71	9	<i>directrice</i>
	<i>Éditeur</i> 'publisher'	NAME	8.50	7	<i>éditrice</i>
	<i>Éleveur</i> 'breeder'	NAME	1.82	7	<i>éleveuse</i>
	<i>Enseignant</i> 'teacher'	NAME	3.94	10	<i>enseignante</i>
	<i>Expert</i> 'expert'	NAME	20.14	6	<i>experte</i>
	<i>Facteur</i> 'postman'	NAME	12.26	7	<i>factrice</i>
	<i>Infirmier</i> 'nurse'	NAME	39.56	9	<i>infirmière</i>
	<i>Mécanicien</i> 'mechanic'	NAME	5.81	10	<i>mécanicienne</i>
<i>Pâtissier</i> 'pastry chef'	NAME	2.37	9	<i>pâtissière</i>	
<i>Pharmacien</i> 'pharmacist'	NAME	3.71	10	<i>pharmacienne</i>	
Unstable	<i>Auteur</i> 'author'	NAME	23.52	6	<i>auteure</i> <i>autrice</i>
	<i>Carreleur</i> 'tiler'	NAME	0.14	9	<i>carreleure</i> <i>carreleuse</i>
	<i>Chef</i> 'chief'	NAME	205.26	4	<i>cheffe</i>
	<i>Chercheur</i> 'researcher'	NAME	5.74	9	<i>chercheure</i> <i>chercheuse</i>
	<i>Chevalier</i> 'knight'	NAME	15.91	9	<i>chevalière</i>
	<i>Commis</i> 'clerk, kitchen help'	NAME	2.99	6	<i>commise</i>
	<i>Écrivain</i> 'writer'	NAME	24.57	8	<i>écrivaine</i>
	<i>Enquêteur</i> 'investigator'	NAME	4.06	9	<i>enquêteurice</i> <i>enquêteuse</i>
	<i>Ingénieur</i> 'engineer'	NAME	21.12	9	<i>ingénieure</i>
	<i>Maçon</i> 'mason'	NAME	3.79	5	<i>maçonne</i>
	<i>Maire</i> 'mayor'	NAME	28.17	5	<i>maïresse</i>
	<i>Matelot</i> 'sailor'	NAME	7.04	7	<i>matelote</i>
	<i>Plombier</i> 'plumber'	NAME	5.85	8	<i>plombière</i>
	<i>Préfet</i> 'prefect'	NAME	7.56	6	<i>préfète</i>
	<i>Poète</i> 'poet'	NAME	22.65	5	<i>poétesse</i>
	<i>Professeur</i> 'professor'	NAME	98.55	10	<i>professeure</i>
	<i>Provisieur</i> 'principal'	NAME	4.45	9	<i>provisieuse</i>
	<i>Soldat</i> 'soldier'	NAME	107.92	6	<i>soldate</i>

Commenté [AM1]: Conforme aux RCL

Epicene					
	<i>Acrobate</i> ‘acrobat’	NAME	2.34	8	<i>acrobate</i>
	<i>Architecte</i> ‘architect’	NAME	9.98	10	<i>architecte</i>
	<i>Artiste</i> ‘artist’	NAME	40.78	7	<i>artiste</i>
	<i>Astronaute</i> ‘astronaut’	NAME	6.45	10	<i>astronaute</i>
	<i>Capitaine</i> ‘captain’	NAME	152.69	9	<i>capitaine</i>
	<i>Cineaste</i> ‘filmmaker’	NAME	3.56	8	<i>cinéaste</i>
	<i>Comptable</i> ‘accountant’	NAME	7.15	9	<i>comptable</i>
	<i>Cyclist</i> ‘cyclist’	NAME	1.08	8	<i>cycliste</i>
	<i>Dentiste</i> ‘dentist’	NAME	15.40	8	<i>dentiste</i>
	<i>Détective</i> ‘detective’	NAME	24.61	9	<i>détective</i>
	<i>Diplomate</i> ‘diplomat’	NAME	3.75	9	<i>diplomate</i>
	<i>Gendarme</i> ‘constable’	NAME	13.67	8	<i>gendarme</i>
	<i>Gymnaste</i> ‘gymnast’	NAME	0.35	8	<i>gymnaste</i>
	<i>Interprète</i> ‘interpreter’	NAME	4.81	10	<i>interprète</i>
	<i>Journaliste</i> ‘journalist’	NAME	35.29	11	<i>journaliste</i>
	<i>Juge</i> ‘judge’	NAME	66.45	4	<i>juge</i>
	<i>Juriste</i> ‘jurist’	NAME	2.57	7	<i>juriste</i>
	<i>Libraire</i> ‘bookseller’	NAME	2.10	8	<i>libraire</i>
	<i>Linguiste</i> ‘linguist’	NAME	0.50	9	<i>linguiste</i>
	<i>Mécène</i> ‘sponsor, patron’	NAME	0.82	6	<i>mécène</i>
	<i>Médecin</i> ‘doctor, physician’	NAME	140.19	7	<i>médecin</i>
	<i>Ministre</i> ‘minister’	NAME	41.41	8	<i>ministre</i>
	<i>Peintre</i> ‘painter’	NAME	17.02	7	<i>peintre</i>
	<i>Pianiste</i> ‘pianist’	NAME	5.75	8	<i>pianiste</i>
	<i>Podologue</i> ‘chiroprapist’	NAME	0.05	9	<i>podologue</i>
	<i>Thérapeute</i> ‘therapist’	NAME	3.67	10	<i>thérapeute</i>
	<i>Urgentiste</i> ‘emergency doctor’	NAME	0.25	10	<i>urgentiste</i>
	<i>Vidéaste</i> ‘videographer’	NAME	0.08	8	<i>vidéaste</i>
	<i>Zoologue</i> ‘zoologist’	NAME	0.02	8	<i>zoologue</i>

A.2 Observed feminine productions in the three categories of job names

Category	Masculine forms	Feminine productions	Grammatical class	Word Frequency
Stable	<i>Agriculteur</i>	<i>agricultrice</i>	NAME	1.06
	<i>Animateur</i>	<i>animatrice</i>	NOUN	2.62
	<i>Aviateur</i>	<i>aviatrice</i>	NOUN	3.09
		<i>*aviatrice</i>	Unattested	NA
		<i>*aviateuse</i>	Unattested	NA
	<i>Avocat</i>	<i>avocate</i>	NOUN	112.69
	<i>Banquier</i>	<i>banquière</i>	NOUN	6.38
	<i>Boulangier</i>	<i>boulangère</i>	NOUN	3
	<i>Caissier</i>	<i>caissière</i>	NOUN	4.32
	<i>Commerçant</i>	<i>commerçante</i>	NOUN	4.34
<i>Couturier</i>	<i>couturière</i>	NOUN	3.52	
<i>Danseur</i>	<i>danseuse</i>	NOUN	23.05	
<i>Directeur</i>	<i>directrice</i>	NOUN/ADJ	64.71	

<i>Éditeur</i>	<i>éditrice</i>	NOUN/ADJ	8.5	
	<i>*éditeure</i>	Unattested	NA	
	<i>éditeuse</i>	NOUN	NA	
<i>Éleveur</i>	<i>éleveuse</i>	NOUN	1.82	
	<i>*éleveure</i>	Unattested	NA	
	<i>élevatrice</i>	ADJ	NA	
<i>Enseignant</i>	<i>enseignante</i>	NOUN	3.94	
	<i>professeure</i>	NOUN	98.55	
<i>Expert</i>	<i>experte</i>	ADJ	7.66	
	<i>*expertrice</i>	Unattested	NA	
<i>Facteur</i>	<i>factrice</i>	NOUN	12.26	
	<i>*facteure</i>	Unattested	NA	
<i>Infirmier</i>	<i>infirmière</i>	NOUN	39.56	
<i>Mécanicien</i>	<i>mécanicienne</i>	NOUN	5.81	
<i>Pâtissier</i>	<i>pâtissière</i>	NOUN	2.37	
<i>Pharmacien</i>	<i>pharmacienne</i>	NOUN	3.71	
Unstable	<i>Auteur</i>	<i>autrice</i>	NOUN	NA
		<i>auteure</i>	NOUN	23.52
		<i>*auteuse</i>	Unattested	NA
<i>Carreleur</i>	<i>écrivaine</i>	NOUN	24.57	
	<i>carreleuse</i>	NOUN	NA	
	<i>*carreleure</i>	Unattested	NA	
<i>Chef</i>	<i>cheffe</i>	NOUN	NA	
	<i>chefesse</i>	NOUN	NA	
	<i>directeur</i>	NOUN	64.71	
<i>Chercheur</i>	<i>chercheuse</i>	NOUN	5.74	
	<i>chercheure</i>	NOUN	NA	
<i>Chevalier</i>	<i>chevalière</i>	NOUN	0.47	
	<i>princesse</i>	NOUN	98.9	
	<i>gente dame</i>	NOUN	NA	
<i>Commis</i>	<i>commise</i>	VERB	47.45	
<i>Écrivain</i>	<i>écrivaine</i>	NOUN	24.57	
	<i>*écrivainne</i>	Unattested	NA	
<i>Enquêteur</i>	<i>enquêteur</i>	NOUN	NA	
	<i>enquêteuse</i>	NOUN	4.06	
	<i>*enquêteurisse</i>	Unattested	NA	
<i>Ingénieur</i>	<i>ingénieure</i>	NOUN	NA	
	<i>ingénieuse</i>	ADJ.	3.55	
<i>Maçon</i>	<i>maçonne</i>	NOUN	3.79	
	<i>maçonnière</i>	ADJ	NA	
	<i>*maçone</i>	Unattested	NA	
<i>Maire</i>	<i>maïresse</i>	NOUN	28.17	
	<i>la maire</i>	ART+NOUN	NA	
<i>Matelot</i>	<i>matelote</i>	NOUN	0.04	
	<i>matelotte</i>	NOUN	NA	
	<i>*matelonne</i>	NOUN	NA	
<i>Plombier</i>	<i>plombière</i>	NOUN	NA	

Commenté [AM2]: forme au masculin

	<i>Préfet</i>	<i>*préfette</i>	Unattested	NA
		<i>préfète</i>	NOUN	NA
		<i>sous préfète</i>	NOUN	NA
	<i>Poète</i>	<i>poétesse</i>	NOUN	22.65
	<i>Professeur</i>	<i>professoress</i>	NOUN	NA
		<i>chercheur</i>	NOUN	5.74
	<i>Provisieur</i>	<i>provisseure</i>	NOUN	NA
		<i>directrice</i>	NOUN	64.71
	<i>Soldat</i>	<i>soldate</i>	NOUN	107.92
Epicene	<i>Acrobate</i>	<i>acrobate</i>	NOUN	2.34
	<i>Architecte</i>	<i>architecte</i>	NOUN	9.98
	<i>Artiste</i>	<i>artiste</i>	NOUN	40.78
	<i>Astronaute</i>	<i>astronaute</i>	NOUN	6.45
	<i>Capitaine</i>	<i>capitaine</i>	NOUN	152.69
	<i>Cineaste</i>	<i>cinéaste</i>	NOUN	3.56
	<i>Comptable</i>	<i>comptable</i>	NOUN	7.15
	<i>Cycliste</i>	<i>cycliste</i>	NOUN	1.08
	<i>Dentiste</i>	<i>dentiste</i>	NOUN	15.40
		<i>orthodontiste</i>	NOUN	NA
	<i>Déetective</i>	<i>déetective</i>	NOUN	24.61
	<i>Diplomate</i>	<i>diplomate</i>	NOUN	3.75
	<i>Gendarme</i>	<i>gendarme</i>	NOUN	13.67
		<i>gendarmette</i>	NOUN	NA
		<i>*gendarmesse</i>	Unattested	NA
	<i>Gymnaste</i>	<i>gymnaste</i>	NOUN	0.35
	<i>Interprète</i>	<i>interprète</i>	NOUN	4.81
	<i>Journaliste</i>	<i>journaliste</i>	NOUN	35.29
	<i>Juge</i>	<i>jug</i>	NOUN	66.45
	<i>Juriste</i>	<i>juriste</i>	NOUN	2.57
	<i>Libraire</i>	<i>libraire</i>	NOUN	2.10
	<i>Linguiste</i>	<i>linguiste</i>	NOUN	0.50
	<i>Mécène</i>	<i>mécène</i>	NOUN	0.82
		<i>mécèness</i>	NOUN	NA
	<i>Médecin</i>	<i>médecin</i>	NOUN	140.19
		<i>doctoresse en médecine</i>	NOUN	NA
		<i>doctoresse</i>	NOUN	233.86
	<i>Ministre</i>	<i>ministre</i>	NOUN	41.41
	<i>Peintre</i>	<i>peintre</i>	NOUN	17.02
	<i>Pianiste</i>	<i>pianiste</i>	NOUN	5.75
		<i>*pianniste</i>	Unattested	NA
	<i>Podologue</i>	<i>podologue</i>	NOUN	0.05
	<i>Thérapeute</i>	<i>thérapeute</i>	NOUN	3.67
	<i>Urgentiste</i>	<i>urgentiste</i>	NOUN	0.25
	<i>Vidéaste</i>	<i>vidéaste</i>	NOUN	0.08
	<i>Zoologue</i>	<i>zoologue</i>	NOUN	0.02

*Frequencies and lengths of the produced words are reported from the French lexical database LEXIQUE (New et al., 2001)
N.A.: no data available in LEXIQUE*

Print proof