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2023

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Male Bias in Generic Statements:  
A Contrastive Analysis of English and German Role Nouns

By

Sarah M Harris

A dissertation submitted in partial satisfaction of the  
requirements for the degree of

Doctor of Philosophy

in

German

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Thomas Shannon, Chair

Professor Irmengard Rauch

Professor Justin Davidson

Summer 2023

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by

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## Abstract

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Professor Thomas Shannon, Chair

Language users frequently encounter generic personal statements, which refer to a person or group of people whose gender is irrelevant or unknown (e.g., “A doctor must go to medical school.”). Though intended as gender-neutral, generic terms have been found to elicit an assumption of a male referent – i.e., a male bias. Whereas male bias studies in English have typically analyzed generic-used pronouns, German studies have overwhelmingly focused on plural nouns. As a result, male bias in English and German singular nouns is less understood. Furthermore, it remains unclear whether English and German language users are equally likely to read a singular generically intended noun as male. My dissertation remedies this gap by analyzing how linguistic differences between English and German impact the likelihood of interpreting a generically intended singular noun as male. Specifically, in my project, I contrast how the two languages impart gender information, both as a result of inherent properties – e.g., grammatical and lexical gender – as well as linguistic practices, such as the generic masculine (GM) – the “generic” use of male-specific terms – and the adoption of GM alternatives. I argue that singular generic nouns are more likely to elicit a male bias in German due to grammatical gender, higher rates of gender-specific personal nouns, and increased use of gender-specific terms in generic contexts. By contrasting English and German singular nouns, this project sheds new light on the potential sources of male bias in generic language.

Keywords: role noun, male bias, grammatical gender, lexical gender, language policy

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## LIST OF ABBREVIATIONS AND SYMBOLS

1	first person
2	second person
3	third person
ACC	accusative
DAT	dative
DEF	definite
FEM	feminine
GN	generic
GEN	genitive
GG	grammatical gender
GM	generic masculine
INDEF	indefinite
lit.	literally
MASC	masculine
NEUT	neuter
NOM	nominative
NP	noun phrase
pej.	pejorative
PL	plural
SG	singular

## ACKNOWLEDGEMENTS

I am grateful for the opportunity to acknowledge and laud the many people who helped to make this dissertation a reality. First, I wish to thank my dissertation chair, Professor Thomas Shannon, whose expertise, detailed feedback, and encouragement have been invaluable. I am also grateful to Professor Irmengard Rauch for her incredible support, especially regarding opportunities like BAG, the Linguistics Roundtable, and Semiotic Circle. I would also like to thank Professor Justin Davidson for his guidance as my outside member and to express my gratitude towards the late Professor Gary Holland, who kindly served on my exams committee. Additionally, I would like to sincerely thank the German Department's administrative staff – including current and past members. Particularly, I am grateful to Andrea Rapport, Nadia Samadi, Cathie Jones, Myriam Cotton, and Veronica Lopez.

This dissertation would not have been possible without generous financial support from many sources. I am particularly grateful to the Department of German and the UC Berkeley Graduate Division. I must also thank the Institute for European Studies (IES), the United States Department of Education and Foreign Language and Area Studies (FLAS) Program, and the Max Kade Foundation.

It has been an incredible privilege to be a Berkeley student. I want to thank all the other graduate students with whom – and from whom – I have learned, whether in my department or as part of writing groups, workshops, or fellowships. Even more so, it has been an absolute honor to teach Berkeley students, and I am humbled by what they have taught me over the years. If I have left them with a spark of joy for German, writing, or science fiction, then I am beyond proud.

Special thanks are due to my colleagues in the German department, especially my fellow linguists: Vera Felder, Zainab Hossainzadeh, Lindsay Preseau, Evelyn Roth, Scott Shell, Christine Vais, and Peter Woods. I am especially grateful to Carolyn Hawkshaw for her companionship and commiseration as we raced toward the finish line. I would also like to thank my friends for their encouragement, support, and distraction from my dissertation: Alicia Roy, Emily Cobbs, Daniel Legrand, Daniel Toker, Nika Sepehri, Jeff Metcho, Kenny Derryberry, and Berlin Hernandez.

Lastly, I would like to express my endless gratitude for my wonderful family. Thank you for believing in me and encouraging me to believe in myself. To my parents – two mathematicians with two linguists for daughters – thank you for trusting me to do this. To my sister, thank you for modeling the person I want to be. To Peregrine, thank you for keeping me company and making me laugh on the darkest days. To my partner Zach Leisz, there is no version of this dissertation that doesn't have you in it – your kindness, support, and love. Thank you for taking care of me so I could take care of this.

## CHAPTER 1

### INTRODUCTION

A man and his son were away for a trip. They were driving along the highway when they had a terrible accident. The man was killed outright but the son was alive, although badly injured. The son was rushed to the hospital and was to have an emergency operation. On entering the operating theatre, the surgeon looked at the boy, and said, “I can’t do this operation. This boy is my son.” How can this be?

(Sanford 1985:311)

---

Although the above riddle has many possible solutions, the intended one is as follows: the surgeon is the boy’s mother. Notably, when asked to solve this puzzle,<sup>1</sup> English- and German-speaking<sup>2</sup> respondents overwhelmingly propose male solutions such as a gay parent, guardian, biological father, adopted father, stepfather, father-in-law, sperm donor, priest, or father’s ghost (e.g., Belle et al. 2021, Morehouse et al. 2022, Reynolds et al. 2006 in English; Kollmayer et al. 2018, Stoeger et al. 2004 in German). These riddle studies,<sup>3</sup> therefore, reveal a male bias for the terms *surgeon* and German *Koryphäe* ‘luminary’ – i.e., the nouns are “predominantly interpreted as referring to males” and “evok[e] predominantly masculine exemplars and images of masculinity” (Formanowicz & Hansen 2022:133).

#### 1.1 CENTRAL RESEARCH QUESTIONS

In English and German, male bias is well-studied in personal generics – i.e., statements that refer to a person or group of people whose gender is irrelevant or unknown (e.g., “A doctor must attend medical school.”). Whereas male bias studies in English generics have typically analyzed pronouns, German studies have overwhelmingly focused on plural nouns. As a result, male bias in English and German singular generic nouns is less understood, and it remains unclear whether English and German speakers are equally likely to interpret a generically used singular noun as male. Furthermore, most male bias studies examine the generic masculine (GM)

---

<sup>1</sup> Many variations of this riddle exist (see Appendix A), though the core aspects remain the same: a father, a son, and a medical professional who refuses to treat the boy on parental grounds.

<sup>2</sup> One German version is as follows (cited in Kollmayer et al. 2018): “Ein Vater und sein Sohn fahren gemeinsam im Auto und haben einen grässlichen Autounfall. Der Vater ist sofort tot. Der Sohn wird mit Blaulicht ins Krankenhaus gefahren und sofort in den Operationsaal gebracht. Der Arzt besieht ihn sich kurz und meint, man müsse eine Koryphäe zu Rate ziehen. Diese kommt, sieht den jungen Mann auf dem Operationstisch und meint: ‘Ich kann ihn nicht operieren, er ist mein Sohn.’ – Wie ist das möglich?” ‘A father and his son are driving together and are involved in a horrific car accident. The father dies instantly. The son is driven to the hospital in an ambulance with lights flashing and is immediately taken to the operating room. The doctor sees him briefly and says that a luminary should be consulted. The luminary arrives, sees the young man on the operating table and says: ‘I cannot operate on him, he is my son.’ – How is that possible?’

<sup>3</sup> Morehouse et al. 2022 tested whether the presentation of the question as a riddle affected participant responses and found no significant effect when framing the question as a “riddle” versus a “story” (study 5).

– a linguistic practice in which male-specific nouns are used for all people.<sup>4</sup> However, the surgeon riddle demonstrates that male bias can also occur in generically intended nouns that are not grammatically masculine or lexically male (e.g., Morehouse et al. 2022, Stoeger et al. 2004) – i.e., terms that are not usually classified under the terms ‘generic masculine’ or ‘male generic’.<sup>5</sup> To better understand male bias in a language, therefore, it helps not only to examine GM forms but also those forms that have similar effects despite different features. The central questions of this study can be summarized as follows:

1. Are English and German speakers equally likely to interpret a generically intended noun as referring to men?
2. If not,
  - a. in what language are speakers more likely to read generically intended nouns as male – i.e., in which language is the male bias higher?
  - b. within a language, are some generically intended nouns more likely to evoke predominantly male exemplars?
  - c. what factors could contribute to the disparity in the strength of the male bias?

## 1.2 FRAMEWORK

To answer this study’s central questions, it is fruitful to examine distinctions in how – and how often – English and German reference gender identity in language. To this end, I analyze three variables of interest that indicate contrasts in the methods or frequency of gender expression in English and German: 1) grammatical gender, 2) lexical gender, and 3) language policy and advocacy concerning gender-specific language. Of particular interest to this dissertation are words that reference people (German *Personenbezeichnung*) – specifically ROLE NOUNS or ROLE NAMES – i.e., nouns that “incorporate features used to describe a person or a group of people,” including occupations, traits, and hobbies (Gabriel et al. 2008:206), such as *teacher*, *diabetic*, or *guitarist*.<sup>6</sup>

Grammatical gender is a noun class system found in German but absent in English. Though grammatical gender does not always reference real-world gender, masculine and feminine nouns for humans often reflect gender identity. In contrast, lexical gender is a semantic

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<sup>4</sup> Male-specific nouns – also referred to as lexically male nouns – are those that can be used to refer explicitly to men, regardless of whether the term can also be used generically.

<sup>5</sup> In languages with grammatical gender, “generic masculine” refers to the use of grammatically masculine forms. For languages without grammatical gender, Hellinger & Bußmann (2003:9) prefer the term “male generics” in which “male” denotes a “lexical-semantic property.” This dissertation will use “generic masculine” to mean male-specific language used generically, regardless of whether the means of expressing the gender identity is lexical, grammatical, or a combination of both, as is common in German.

<sup>6</sup> This dissertation uses a broad definition of role noun that designates any noun used to describe a person (e.g., *woman*, *king*, *student*). In contrast, Gyax and colleagues (2021:1) limit the term “role noun” to nouns “that designate certain functions or position” (e.g., *student*) and thereby exclude nouns “which have gender as part of their core meaning, such as queen or king [sic].” Further, Zobel (2017:440-1) distinguishes “role nouns,” which describe non-permanent properties (e.g., *student*) from “class nouns” – i.e., nouns which describe a referent’s intrinsic properties, such as sex (e.g., *woman*). All descriptive nouns are grouped herein as role nouns because all can be used generically. When relevant, this dissertation will recognize distinctions among role noun subtypes.

property that specifies a term as female- or male-specific (Hellinger & Bußmann 2003a:7).<sup>7</sup> Lexical gender is found in languages with or without grammatical gender (Hellinger & Pauwels 2007:658) and in languages like German, grammatical and lexical gender often align for human nouns (e.g., lexically female nouns like *Frau* [f] ‘woman’ are grammatically feminine, and lexically male nouns like *Mann* [m] ‘man’ are grammatically masculine). Nominal lexical gender is extensive in German nouns, though relatively rare in English. An additional point of interest is how the frequency of gender-specific language has changed in English and German as a result of language advocacy. For example, in response to language policy activism, English has decreased gender references in everyday language over the past 50 years, whereas German has increased gender-specific references.

I argue throughout this work that role nouns carry more gender information in German due to inherent properties – such as grammatical and lexical gender – and social practices, including the frequency of generic masculine use and adoption of gender-neutral alternatives. In particular, my research hypothesizes that German speakers are more likely to interpret generically intended role nouns as male than English speakers due to increased gender information in nouns and increased activation of gender stereotypes during reading and listening. Significantly, male bias in language is associated with social, legal, and economic consequences for women and non-binary individuals (e.g., Grabrucker 1993, Hord 2016, Spender 1980, Stout & Dasgupta 2011, Vervecken et al. 2013). This dissertation contributes to a better understanding of this bias in singular English and German role nouns.

Notably, contrasts in gender-specific vocabulary can complicate English-German glosses, especially when a term is gender-specific in one language but its counterpart is gender-unspecified. In in-line glosses, gender-specific terms will be glossed with their specific interpretation (even if a generic meaning is possible) and have grammatical gender shown when relevant – e.g., *Professor* [m] ‘male professor,’ *Professorin* [f] ‘female professor, employee’. In-line glosses of plural German nouns will indicate plurality (“pl”) followed by whether the lexeme is male-specific ‘male’ or female-specific ‘female’ (e.g., *Professoren* [pl, male] and *Professorinnen* [pl, female]).

Additionally, many examples using male-specific language show ambiguity between a generic (gender-neutral) and specific reading (explicitly male) (1.1a and b, respectively).

- (1.1) Ein guter Chef<sub>MASC</sub> redet gar nicht so viel, er<sub>MASC</sub> hört eher zu.
- a. ‘A good boss doesn’t talk much, they rather listen.’
  - b. ‘A good male boss doesn’t talk that much, he rather listens.’

(Nicolai 2021)

---

<sup>7</sup> Significantly, though some terms are specific to nonbinary individuals (e.g., *zir* and *xier* series of pronouns in English and German, respectively), this analysis will use a narrow definition of lexical gender, which includes female-specific and male-specific terms. As a result, a term like 3SG *they* is not seen as having lexical gender, even though it may be used to refer to a specific non-binary individual. Gender-specific non-binary terms are an essential field of study, though outside the scope of this dissertation.

To show both generic and specific interpretations, glosses in numbered examples will use the following methods:

- i. Grammatical gender is in subscript for relevant terms: *Chef*<sub>MASC</sub>
- ii. When English-German gender-equivalent translations
  - a. exist, they will be used in the gloss: *Schwester*<sub>FEM</sub> ‘sister’  
*Bruder*<sub>MASC</sub> ‘brother’
  - b. do not exist, clarifying subscripts will be added: *Lehrerin*<sub>FEM</sub> ‘teacher<sub>FEMALE</sub>’  
*Lehrer*<sub>MASC</sub> ‘teacher<sub>MALE</sub>’
- iii. English glosses of German masculine terms will indicate whether gender is
  - a. specifically male, using the subscript MALE: *er*<sub>MASC</sub> ‘he<sub>MALE</sub>’
  - b. generic (gender-neutral), using subscript GN: *er*<sub>MASC</sub> 3SG ‘they<sub>GN</sub>’
  - c. ambiguous, using both subscript GN and MALE: *er*<sub>MASC</sub> ‘they<sub>GN</sub> / he<sub>MALE</sub>’  
i.e., *boss*<sub>GN/MALE</sub> indicates that both a generic reading (‘boss of any gender’) and a specifically male reading (‘male boss’) are possible
- iv. Noun phrases will be marked at the end of relevant gender information, with the subscript including all leftward NP elements. Therefore, the MASC marking on *Chef* in 1.2 also includes the determiner *ein*<sub>MASC</sub> ‘a’ and the attributive adjective *guter*<sub>MASC</sub> ‘good’.

Therefore, the sentence in examples 1.1a and b could also be written as 1.2.

- (1.2) Ein guter *Chef*<sub>MASC</sub> redet gar nicht so viel, *er*<sub>MASC</sub> hört eher zu.  
 ‘A good *boss*<sub>GN/MALE</sub> doesn’t talk much, they<sub>GN</sub> / he<sub>MALE</sub> rather listen(s).’  
 (Nicolai 2021)

There are three research limitations that deserve recognition. First, this dissertation makes claims as to the mental states of speakers, which cannot be known given the methods used herein. To approximate this knowledge, this dissertation brings extensive amounts of research on male bias into conversation with one another, specifically focusing on known cognitive and social effects in both languages and the contexts in which they appear. That said, this dissertation can only propose hypotheses which require empirical research to confirm or reject. Secondly, when speaking of English and German, this work is referring only to a subset of those language communities. References to “English” in this dissertation refer to American English, with grammatical judgments based on “Standard English” taught in American academic institutions. References to “German” refer to modern standard German, as spoken in Germany, unless references to other nations are made (e.g., Austria, Switzerland). Notably, from 1949 to 1990, Germany was divided into East Germany (officially *Deutsche Demokratische Republik* or *DDR* ‘German Democratic Republic’) and West Germany (*Bundesrepublik Deutschland* or *BRD* ‘Federal Republic of Germany’). Statements concerning Germany, therefore, either reference post-reunification Germany or instances where there is no divergence between East and West Germany.

Thirdly, as this study is an analysis of existing research, the limitations of those studies become those of this work. For example, though this dissertation makes claims concerning singular nouns, many of the male bias studies cited used plural nouns. Where relevant, distinctions between singular and plural nouns are clarified. An additional limitation of relying on other studies is the use of study participants who do not represent the diversity of the language's speakers. Specifically, many study participants are college students and therefore represent a populace of highly educated young adults who are often native speakers. Significantly, many studies examining gender in language operate from a binary female-male gender dichotomy, whether in self-categorization of participants or in female- and male-specific language in experiments. Furthermore, the majority of research on male bias and its social effects has focused on the consequences faced by women. Though some feminist concerns and solutions concerning gender-based language discrimination are directly applicable to non-binary and genderqueer individuals, many are not. Research concerning the linguistic exclusion of non-binary and genderqueer individuals is vital, though outside the scope of this dissertation. An additional challenge related to gender research is the alacrity with which terminology has changed. Specifically, many sources cited herein use terms now recognized as polysemous, inaccurate, or offensive. Concerns in cited research include connotations of gender and biological sex, and an assumption of a binary gender system categorization – beliefs that erase intersex and nonbinary individuals and are not supported by the author of this dissertation.

### 1.3 CHAPTER OVERVIEW

This dissertation presents hypotheses concerning male bias in role nouns by analyzing three variables that align with critical distinctions in gender representation in English and German: grammatical gender, gender-specific nouns and morphology, and gendered language practices. Chapter 1 presents the central research questions and an overview of the dissertation's structure. Chapter 2 reviews the terms and literature relevant to male bias, beginning with a clarification of gender identity compared to linguistic gender. This chapter also provides an overview of English and German, how the languages express gender identity, and how that has changed over the past 50 years.

Chapter 3 focuses on the cognitive and social effects of grammatical gender (GG), a noun class system found in German but absent in English. Research concerning grammatical gender is then linked to the interpretation of generic statements, and I propose that German role nouns, due to GG, express an additional layer of gender information that is unavailable to English speakers. I argue that this gender expression in generic statements – overwhelmingly masculine – increases male bias for German speakers relative to English speakers.

Chapter 4 examines different types of role nouns and their potential effects on male bias. The chapter first identifies key differences in lexical gender between English and German, such as the frequency of gender-specific terms and morphology. It then distinguishes five types of nouns based on features such as grammatical gender, lexical gender, gender-specific morphology, and whether the noun has a gender-neutral alternative. Ultimately the chapter argues that the more of these features a role noun has, the likelier it is to generate a male bias.

Chapter 5 examines the effects of social change and language policy on English and German role nouns. Social change here refers specifically to the increased visibility and labor participation of women. This chapter argues that the male bias of English and German role nouns likely responds differently to increased numbers of women in the workforce. Language policy

concerns the adoption of generic masculine alternatives, feminization, and neutralization. While both English and German adopted a mixture of the two methods, English tended towards neutralization, whereas German relied more on feminization. This chapter argues that experience with feminization – versus neutralization – has increased the salience of gender and stereotypes and made GM more likely to be interpreted as male in German compared to English.

Chapter 6 concludes the dissertation with a review of arguments, a discussion of research implications, and considerations for future work.



## CHAPTER 2

### LITERATURE REVIEW

This chapter aims to clarify key concepts related to gender, gendered language, and male bias in generic statements. I begin by defining gender identity and then contrast the methods to express gender identity in English and German, focusing on grammatical and conceptual gender. With this background in mind, I examine androcentric asymmetries in gender-specific language, including the generic masculine (GM) – a language practice that uses male-specific terms to refer to all humans. I then survey GM alternative strategies in English and German before discussing research pertaining to male bias in English and German.

#### 2.1 GENDER AND IDENTITY

Though the terms SEX and GENDER are often used interchangeably, it is crucial to distinguish them. Sex (German *Geschlecht*) is the biological “division of humans and many other animals into female and male classes, based on reproductive potential” (McConnell-Ginet 2013:3). Though sex is typically assigned based on genitalia at birth or in utero, there is no “single objective biological criterion” (Eckert & McConnell-Ginet 2013:2) nor a “standard legal or medical definition” of sex (Romaine 1999:45). Instead, sex is “based in a combination of anatomical, endocrinal, and chromosomal features,” with “criteria for sex assignment...based very much on cultural beliefs about what actually makes someone male or female” (Eckert & McConnell-Ginet 2013:2). Though sex is perceived in much of the world as a binary opposition between female and male, roughly 1.7% of the world’s population is intersex, i.e., born with variations in chromosomes, hormones, or genitals and not easily categorized into male or female (Fausto-Sterling 2000). Simply put, though female and male are often viewed as the only sexes, they are merely the most common.

Whereas sex is based on biological traits, gender (German *Gender* or *soziales Geschlecht* ‘social sex’) is “a social construct of norms, behaviors and roles that varies between societies and over time” (Wamsley 2021). Gender “builds on biological sex, but it exaggerates biological difference, and it carries biological difference into domains in which it is completely irrelevant” (Eckert & McConnell-Ginet 2013:2). For example, gendered behaviors (e.g., dress, hobbies, communication styles) are not determined by chromosomal or anatomical sex characteristics but are a “cultural performance” (Romaine 1999:8, Butler 1990) that is “socially constructed” and “learn[ed]” (Julé 2008:5). An individual’s “internal self of self and their gender” is their gender identity (*Geschlechtsidentität*) (Wamsley 2021). For CISGENDER individuals, gender identity and assigned sex are the same, whereas TRANSGENDER is an umbrella term for numerous gender identities associated with variation from assigned sex, including transwomen, transmen, and gender identities outside of the binary (e.g., nonbinary, agender, genderqueer, or genderfluid). There is tremendous social pressure to reproduce the gender roles of one’s assigned sex, such that individuals assigned male-at-birth “are expected to display behaviors that are perceived and understood...as masculine” in their society,<sup>8</sup> while individuals assigned female-at-birth are encouraged to demonstrate feminine behaviors (Julé 2008:5). Knowing that they will be

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<sup>8</sup> Gender organization is culturally specific and what is deemed feminine in one culture may be masculine in another or non-gendered in a third. As Romaine (1999:7) notes, “If biology alone were responsible for behavior patterns,” researchers “would not find such great cultural diversity” in the expression of gender.

categorized based on gender expression, “most people carefully construct their appearance according to cultural gender rules to ensure that others reliably categorize them” (Ridgeway & Correll 2004:515).

At the individual level, gender-specific linguistic terms such as nouns, pronouns, and titles can assist in the “creation and reinforcement of an individual’s identity” (Liu et al. 2018:86) and are used to express and perform gender (Motschenbacher 2016). Whereas affirming use of gendered terms by others can signal respect, MISGENDERING, i.e., the use of inaccurate gender – whether intentional or not – can be derogatory and cause emotional harm (Hord 2016). At the societal level, gender-specific language influences perceptions of women and men (Gygax et al. 2019), whether through the “transmission and maintenance of stereotypes” (Hodel et al. 2017:384-5) or in the visibility of women and men (Tuchman 2000 [1978]). Socially, gender is an organized system of power (Romaine 1999), one that allocates “rights and obligations, freedoms and constraints, limits and possibilities, power and subordination” (Eckert & McConnell-Ginet 2013:22). Gender creates inequities by “constituting [women and men] as two significantly different categories,” and then “organizing social relations of inequality on the basis of that difference” (Ridgeway & Correll 2004:510). Due to SEXISM,<sup>9</sup> men are seen as the standard, while women have been viewed as exceptions to the norm, at best (Julé 2008), and defective or deficient men, at worst (Romaine 1999:34). For example, despite roughly equal populations of women and men, men have historically had greater access to rights, resources, and social status.

## 2.2 GENDER AND LANGUAGE

There are many ways to refer to gender identity in language, and English and German have some notable distinctions. To better understand these distinctions, this section clarifies terms related to expressing and inferring gender identity in language, based on four categories of gender introduced by Hellinger & Bußmann (2003:6–11): 1) grammatical, 2) lexical, 3) referential, and 4) social. Of these categories, grammatical and lexical gender are inherent properties, whereas referential and social gender are extralinguistic. This section will provide an overview of these four categories – as well as the umbrella term conceptual gender – before examining German grammatical gender (§ 2.2.1) in depth. With essential terms clarified, I then distinguish how English and German express gender identity information (§ 2.2.2 and § 2.2.3, respectively).

GRAMMATICAL GENDER (GG) is “an inherent morphosyntactic property of the noun which controls agreement between the noun and some gender-variable satellite element” such as an article, adjective, or pronoun (Hellinger & Pauwels 2007:657). Grammatical gender is found predominantly in the Indo-European, Afro-Asiatic, and Niger-Congo families (Corbett 2013c), and, in languages with grammatical gender, the most common number of genders is two (Corbett 2013a). In German, all nouns belong to one of three genders: masculine, feminine, and neuter. Among Germanic languages, only German, Frisian, Icelandic, and Norwegian Nynorsk have

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<sup>9</sup> The term “gender-based discrimination” would be more accurate, since it is unlikely that a person is aware of another’s chromosomal properties or reproductive organs, interactions are based on gender expression, such as clothing, grooming, or behaviors. As Ridgeway and Correll (2004:515) note, “in everyday social relational contexts, we sex categorize others based on appearance and behavioral cues (e.g., dress, hairstyles, voice tone) that are culturally presumed to stand for physical sex differences.”

retained their tripartite system from Indo-European (Bußmann & Hellinger 2003:143).<sup>10</sup> Whereas English has lost grammatical gender completely, Dutch, Danish, Swedish, and Norwegian Bokmål have a two-gender system in which the neuter class has remained, but masculine and feminine have collapsed into a single class: common (Bär 2004, Bußmann & Hellinger 2003).

Significantly, not all languages with grammatical gender are of equal interest in discussions of linguistic gender bias. Specifically, though grammatical gender is often defined by the presence of noun classes and agreement between nouns and their dependent elements (Corbett 1991:4, Hockett 1958:231), Gygax and colleagues (2019:2) note that it is helpful to use a narrower definition of grammatical gender from Dixon (1982), which includes a third criterion: words for women and men which are consolidated into different classes. These so-called “sex-based systems” are found in roughly three-quarters of languages with grammatical gender (Corbett 2013b) – such as German, Spanish, and French – and are especially helpful for research “concerned with gender-fairness” and “mental representations of women and men” (Gygax et al. 2019:2). In languages that fulfill Dixon’s three criteria, words for people and commonly bred animals are assigned gender semantically, also known as the natural gender principle (Zubin & Köpcke 1984b). Accordingly, words specifying men are typically members of the masculine class, and words for women are consolidated into a feminine class (Dahl 2000:101).<sup>11</sup> Dixon’s narrower definition includes languages with masculine and feminine categories, regardless of the presence of additional categories – like neuter – as is found in German. However, Dixon’s definition leaves out languages like Dutch, Danish, Swedish, and Norwegian, in which gender-specific words for people are grouped into one noun class (Bär 2004). This dissertation will use Dixon’s narrower definition, referring to sex-based GG languages, such as German, as grammatical gender languages, whereas languages like Dutch – i.e., languages with lexical gender, but the female- and male-specific words do not belong to different grammatical classes – are called non-sex-based grammatical gender languages.

LEXICAL GENDER – better described as lexico-semantic gender – is a semantic property that specifies animate terms as gender-specific. Lexical gender is particularly relevant for personal nouns and is found in languages with or without grammatical gender (Hellinger & Pauwels 2007:658). In English and German, gender-specific terms typically have either the property [female] or [male], which is often expressed nominally, pronominally, or adjectivally (e.g., *woman*, *she*, *female*). To say a term is lexically female is to say that it is female-specific – i.e., that it can be used to explicitly refer to women (e.g., *congresswoman*). A lexically male term is male-specific and can be used to refer explicitly to men – e.g., *congressman* – even if it can also be used in a generic sense, see § 2.4). Gender-specified terms are in opposition to epicene terms, which refer to sexed and gendered beings but do not differentiate them by sex or gender (Corbett 1991:67–68) – e.g., *congressperson*, third person singular *they*, and *gender-neutral*. Whereas gender-specified terms form complementary pairs with female (*Frau* [f] ‘woman’) and male forms (*Mann* [m] ‘man’), gender-neutral epicenes (e.g., *Person* [f] ‘person’) have a single form that applies to referents regardless of gender (Table 2.1).

<sup>10</sup> See Steinmetz (2001) for more information concerning the attrition of the neuter class in IE languages.

<sup>11</sup> The origins of these IE classes likely stem from an animate (common) vs. inanimate (neuter) distinction, with the feminine gender being a later development that initially expressed a type of numeral aspect, such as abstract or collective (Luraghi 2009, 2011).

Table 2.1 English and German epicene and lexically gendered nouns

		Lexical Gender	
		Male-Specific	Female-Specific
English	person	man	woman
German	<i>Person</i> <sub>FEM</sub> 'person'	<i>Mann</i> <sub>MASC</sub> 'man'	<i>Frau</i> <sub>FEM</sub> 'woman'

REFERENTIAL GENDER “relates linguistic expressions to the non-linguistic reality ... [identifying] a referent as ‘female,’ ‘male,’ or ‘gender-indefinite” (Hellinger & Bußmann 2003a:8) and is context dependent. For example, the word *nurse* has no referential gender in a generic statement: “A nurse works long hours.” In contrast, the word *nurse* in the sentence “Nurse John works long hours” is referentially male because it refers to a man.

SOCIAL GENDER “refers to the [female or male] semantic bias” of a linguistic term (Doleschal 2015:1160) based on “social and cultural stereotypes of female and male character traits, behaviors and roles” (Bußmann & Hellinger 2003:149). For example, neither *nurse* nor *surgeon* has lexical gender, but the social gender of the former word is female, whereas the latter is male (Misersky et al. 2014). These stereotypes may be expressed linguistically through pronouns, with higher-status occupations anaphorically marked with *he* rather than *she* (Hellinger 2006:267),<sup>12</sup> or through adjectival marking to indicate deviations from stereotypes “female surgeon or male nurse” (Hellinger & Bußmann 2003a:11). Social gender is not expressed by a linguistic term – it is inferred by a language user based on cultural knowledge about gender.

Notably, a noun may reflect different information in the four gender categories: For example, in the phrase “Sabine is a neurosurgeon,” *neurosurgeon* is lexically gender-neutral (i.e., there is no lexical gender), referentially female, and socially male. Additionally, in the phrase, *Susanne ist ein netter Mensch* ‘Susanne is a nice person,’ *Mensch* is “lexically gender-neutral, socially gender-neutral, grammatically masculine and referentially female” (Motschenbacher 2014:248). Furthermore, all four gender categories (grammatical, lexical, referential, and social) can affect pronominal agreement (Motschenbacher 2014:247).

Many studies make a distinction between grammatical gender – a formal property – and the semantic category CONCEPTUAL GENDER, an umbrella term for reference to femininity and masculinity (e.g., Bassetti 2011, Irmen 2007, Zubin & Köpcke 2009). This dissertation will use the definition of conceptual gender from Irmen (2007:432), which states that conceptual gender is “based on lexical semantics or stereotypical knowledge” – i.e., it can be seen as a combination of the lexical and social gender categories from Hellinger and Bußmann (2003a). For nouns with lexical gender, conceptual gender is equivalent to lexical gender – e.g., *waitress* is conceptually female because the term is female-specific (i.e., has female lexical gender), as is German *Mädchen* [n] (‘girl’).<sup>13</sup> For epicenes, conceptual gender refers to stereotypical gender. For example, *nurse* has no lexical gender, but it is conceptually female due to social stereotypes

<sup>12</sup> For example, the generic statements “A surgeon must be wise with his time.”; “A nurse must be wise with her time.”

<sup>13</sup> If a term has lexical gender, social gender will be the same as the lexical gender – e.g., ‘girl’ is stereotypically female because the lexeme is female-specific.

about who is more likely to be a nurse. Similarly, the conceptual gender for a German epicene would be determined by stereotype – e.g., *Geisel* [f] ‘hostage’ would be conceptually female. Notably, to say that GG is conceptually gendered or motivated for a set of German nouns is to say that the feminine class is referencing femaleness, and the masculine class is referencing maleness (e.g., *Frau* [f] ‘woman’, *Herr* [m] ‘man’). The term conceptual gender also expresses cultural or stereotypical knowledge of inanimate referents, such that a hammer may be considered conceptually male, while a necklace is conceptually female (Sato & Athanasopoulos 2018:175). Similarly, the adjectives *pretty* and *handsome* both denote *good looking* but “have background meanings corresponding to cultural ideals of good looks for females and males respectively” (Eckert & McConnell-Ginet 2013:62).

### 2.2.1 GRAMMATICAL GENDER

The principles of gender assignment for German can be divided into two main categories: sex-differentiable nouns (i.e., words for women and men) and all others (Table 2.2).<sup>14</sup> Table 2.2 shows a German noun from each gender class, presented in the nominative case with its definite article.

Table 2.2 Sex-differentiable and non-sex-differentiable German nouns

	Sex-Differentiable Nouns <sup>a</sup>	Non-Sex-Differentiable Nouns
FEM	<i>die Frau</i> ‘the woman’	<i>die Gabel</i> ‘the fork’
MASC	<i>der Mann</i> ‘the man’	<i>der Löffel</i> ‘the spoon’
NEUT		<i>das Messer</i> ‘the knife’

*Note:* Nouns presented in the nominative case with definite articles

Sex-differentiable nouns “refer to male or female humans or male or female (higher) animals” and are conceptually motivated – i.e., grammatical gender aligns with biological sex or gender identity (Fedden & Corbett 2019:195). For example, *Frau* [f] ‘woman, wife’ and *Stute* [f] ‘mare’ belong to the *feminine* noun class, whereas *Mann* [m] ‘man, husband’ and *Hengst* [m] ‘stallion’ are grammatically masculine. Notably, the use of neuter gender for adults is often derogatory, whether nominally (*Weib* [n] ‘woman’ pej.) or pronominally (*es* [n] ‘it’).<sup>15</sup> Neuter is not pejorative when referring to the young – human and otherwise – e.g., *Kind* [n] ‘child’, *Baby* [n] ‘baby’, *Fohlen* [n] ‘foal’ (Zubin & Köpcke 1984b). For most nouns not referring to people, grammatical gender is “semantically arbitrary” (Bassetti 2014:274) – i.e., not conceptually motivated.<sup>16</sup> Instead, class assignment for these nouns is morphologically or phonologically motivated (Köpcke & Zubin 1983, 1984), such that “gender class membership can be predicted

<sup>14</sup> Exceptions are covered in Table 2.3.

<sup>15</sup> See Lind & Nübling (2021) for information concerning neuter terms as pejorative for nonbinary individuals.

<sup>16</sup> However, for insights into conceptual motivations of grammatical gender in German – such as predators being masculine (Zubin & Köpcke 1984b) – see Köpcke & Zubin 1983, 1984, 1996 and Zubin & Köpcke 1984a, 1984b, 1986, 2009.

from morphophonological criteria” for 90% of monosyllabic German nouns (Bußmann & Hellinger 2003:143).<sup>17</sup>

Grammatical gender serves many functions in German (Zubin & Köpcke 1984b:60–66), including complex NP framing and deixis. For example, agreement serves to increase “the syntagmatic cohesion” (Mills 1986:37) and enables language users to detect the “onset and the closure of NPs” (Zubin & Köpcke 1984b:63), as in 2.1, in which the neuter article *das* primes the reader for the neuter noun *Heu* ‘hay’ (in bold), thereby clarifying the boundaries of the internal NP (underlined).

- (2.1) **Das den Bauern für 100 DM abgekaufte Heu.**  
 ‘**The hay** bought from the farmers for 100 Marks.’  
 (Zubin & Köpcke 1984b:63, including translation)

Grammatical gender can also serve a deictic function, as in 2.2, where the pronoun’s gender clarifies the referent, given two possible options (masculine referents in bold, feminine referents underlined). In 2.3, pronouns are also used to reflect conceptual gender for the female and male referents Maria and Tobias, (subscripts a and b, respectively), whereas the neuter pronoun refers to the house (subscript c).

- (2.2) a. **Der Krug**<sub>MASC</sub> fiel in die Schale<sub>FEM</sub>, aber sie<sub>FEM</sub> zerbrach nicht.  
 ‘**The pitcher** fell into the bowl, but it (the bowl) didn’t break.’
- b. **Der Krug**<sub>MASC</sub> fiel in die Schale<sub>FEM</sub>, aber **er**<sub>MASC</sub> zerbrach nicht.  
 ‘**The pitcher** fell into the bowl, but **it (the pitcher)** didn’t break.’  
 (Zubin & Köpcke 1984b:62, including translation)
- (2.3) Maria<sub>a</sub> fotografierte Tobias<sub>b</sub> vor dem Haus<sub>c</sub>, als (sie<sub>a</sub> / er<sub>b</sub> / es<sub>c</sub>) 10 Jahre alt war  
 ‘Maria<sub>a</sub> photographed Tobias<sub>b</sub> in front of the house<sub>c</sub> when (she<sub>a</sub> / he<sub>b</sub> / it<sub>c</sub>) was 10 years old.’  
 (Mills 1986:38)

Agreement is typically based on the noun’s grammatical gender, though exceptions can occur for so-called hybrid nouns, which have incongruent grammatical and conceptual gender (Corbett 1991:66) – e.g., *Mädchen* ‘girl’, which is grammatically neuter due to its suffix *-chen* but is conceptually female. For these terms, pronoun choice can be grammatically (i.e., syntactically) or conceptually (i.e., semantically) determined, therefore both the neuter pronoun

<sup>17</sup> Historically, there is a long tradition of attributing a conceptual motivation to grammatical gender assignment for non-sex differentiated nouns, which is seen as early as antiquity (Irmen & Steiger 2005) and as late as the nineteenth century (Cameron 1985). This “semantic” argument contends that grammatical gender for even inanimate nouns has a “natural basis” in that it is “determined not by form but at some deeper level by meaning and may reflect the reality of masculine and feminine attributes” (Cameron 1985:22). Therefore, an object is grammatically masculine because it has qualities associated with human masculinity, for example, such as action, agency, or strength. In German, this argument was especially prominent during the 18<sup>th</sup> and 19<sup>th</sup> centuries (Irmen & Steiger 2005), with advocates like Herder (1772), Adelung (1782), and Grimm (1831). For Grimm (1831:357), the masculine gender was associated with concepts such as earlier, larger, firmer, inflexibility, and quickness; the feminine gender was conceptually later, smaller, smoother, receptive and passive; and the neuter was linked to concepts including undeveloped, collective, dull, and lifeless.

*es* and the feminine *sie* are appropriate pronouns for *Mädchen*. Notably, the further the pronoun is from the controlling noun, the more likely the anaphor is to be conceptually rather than syntactically motivated (Corbett 1991:240), a phenomenon known as the Linear Distance Principle (Köpcke et al. 2010:183). Further, syntactic agreement is more likely with attributive elements (e.g., articles, attributive adjectives) and relative pronouns, whereas conceptual agreement is more likely to occur with personal pronouns (Corbett 1979:204).

## 2.2.2 EXPRESSING GENDER IN ENGLISH

In English, lexical gender is relatively rare in nouns, though it occurs more often in specific subareas (Motschenbacher 2013:222): core gender-specific vocabulary (e.g., *woman/man*), address terms (e.g., *Ms./Mr.*), nobility titles (*queen/king*), “(traditionally) heterosexual role names” (*wife/husband*) and kinship terms (*sister/brother*). Nominally, lexical gender can be lexeme-inherent (e.g., *prince*) or result from a process such as derivation or compounding (*princess, spokeswoman*). The most common female-specific suffix in English is *-ess*, of French origin (Bußmann & Hellinger 2003:153) – e.g., *actress, waitress, stewardess, duchess, lioness*. This suffix is no longer productive, and many *-ess* terms are now seen as outdated or demeaning (e.g., *poetess, authoress*). Other outdated female-specific suffixes in English include *-atrix*, which now has overtly sexual implications – likely due to analogy with *dominatrix* – and *-ienne* (e.g., *comedienne*), which can be used pejoratively. A common source of gender-specific words in English is compounds with *woman* or *man* as the head (e.g., *chairwoman/chairman*). Gender-neutral alternatives to these forms include *-person* compounds (e.g., *chairperson*), or shortening of the form, when applicable (e.g., *chair*, but no *\*spoke(s)* for *spokesperson*). Along with nouns, there are additional ways to express gender identity in English. Most common are gender-specific third person singular pronouns, with female- and male-specific personal pronouns used for people (e.g., *she/he*), and the gender-neutral *it* used for inanimate objects.<sup>18</sup> In addition to personal pronouns, conceptual gender can also be expressed through reflexive and possessive pronouns (e.g., *herself/himself, hers/his*), as well as possessive determiners (*her/his*). Adjectives may also express gender, and are commonly used with epicenes (e.g., *male surgeon*).

English is often referred to as a “natural” or “biological” gender language because gender-specific forms often reflect the referent’s sex. However, gender in English is not at all “natural” – i.e., it is not an “objective mapping from sex to linguistic form” (Zubin & Köpcke 2009:251). Instead, “pronominal usage cannot be understood without considering sociocultural gender and the ideas about sex and sexuality current at a given time” (McConnell-Ginet 2013:6). For example, for men performing in drag, female-specific terms *are* “the ‘natural’ gender” (Zubin & Köpcke 2009:251), even though male-specific terms may be *natural* in all other contexts. Therefore, the authors conclude: “The fact that fem-gender is used for men with specific socio-cultural connotations implicates that the general use of masc-gender for men also constitutes a conceptual classification” (Zubin & Köpcke 2009:251). In other words, that both female- and male-specific terms can be accurately used for the same referent implies that both

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<sup>18</sup> However, referents without gender identity may be marked with *she* or *he* in colloquial English, due to “lively style,” in which inanimate objects, or animate creatures whose sex is unknown, receive gendered pronouns, which is especially “common in speech to children” (Mills 1986:93). When used for possessions, “lively style” typically uses female-specific pronouns, especially for items like boats or cars, establishing an “asymmetrical relation between the (stereotypically male) possessor and the ‘possessed’ object” (Hellinger 2006:267–8).

are conceptually informed. Therefore, so-called natural gender languages<sup>19</sup> like English are more accurately described as languages with conceptual gender.

### 2.2.3 EXPRESSING GENDER IN GERMAN

In contrast to English, nominal lexical gender is extensive in German, whether lexeme-inherent, or in derived or compound nouns (e.g., *König* [m] ‘king’, *Königin* [f] ‘queen’, *Geschäftsfrau* [f] ‘businesswoman’, respectively). Derivation through suffixation is common, and the most productive suffix is the morpheme *-er* (P. Braun 1997:57) which is grammatically masculine<sup>20</sup> (e.g., *Lehrer* [m] ‘male teacher’). The most common feminine suffixes include *-in*, *-euse*, *-ess(e)*, *-ette*, and *-trice*. Apart from *-in*, most female-specific suffixes are either outdated or have derogatory connotations (Bußmann & Hellinger 2003:153–4). Significantly, the suffix *-in* is highly productive in creating female-specific nouns from male-specific nouns (e.g., *Lehrerin* [f] ‘female teacher’). The derivation of female-specific nouns from male-specific ones – and vice versa – is known in German as *Movierung* or *Motion*, from Latin *motio substantivorum* (Doleschal 1992, 2015). For compounds, male-specific nouns often end in *-herr* and *-mann*, whereas female-specific compounds typically end in *-frau* or *-dame*.

Because German is a sex-based GG language, it is often redundant to speak of GG and lexical gender for role nouns (i.e., most lexically male nouns are masculine, and most lexically female nouns are feminine). However, there are a few cases in which grammatical gender and lexical gender diverge (Table 2.3).

Table 2.3 Conceptually and non-conceptually motivated singular role nouns in German

Type	Role Noun	Grammatical Gender	Lexical Gender
Conceptually Motivated Role Nouns			
Specific Feminine	<i>Frau</i> ‘woman’	FEM	female
Specific Masculine	<i>Mann</i> ‘man’	MASC	male
Non-Conceptually Motivated Role Nouns			
Hybrid	<i>Mädchen</i> ‘girl’	NEUT	female
Pejorative	<i>Memme</i> ‘coward’	FEM	male
Epicene	<i>Genie</i> ‘genius’	NEUT	none

Grammatical and lexical gender are distinct in German for hybrid nouns – e.g., *Mädchen* ‘girl’ is grammatically neuter, but lexically female – and some pejorative nouns – e.g., *Memme* ‘coward, sissy,’ which is grammatically feminine and lexically male. Additionally, epicene

<sup>19</sup> The clarity of “natural gender” is further complicated by the term’s polysemy. Throughout the literature, the term is used to mean both “sex” and “gender identity.” Furthermore, the term “natural” often has had biological implications of gender naturally arising from sex – which is not only incorrect but invalidates many trans identities.

<sup>20</sup> The element *-ter*, found in kinship terms like *Mutter* ‘mother’, *Vater* ‘father’, *Schwester* ‘sister’, and *Tochter* ‘daughter’ comes from Indo-Germanic *\*-ter*, which is distinct from the nominalizing suffix *-er* (e.g., *Arbeiter* ‘worker’ from *arbeiten* ‘to work’ (Lutjeharms 2004:192).



nouns<sup>21</sup> – which do not have lexical gender (e.g., *Genie* [n] ‘genius’, *Star* [m]<sup>22</sup> ‘star, celebrity’) – cannot have aligned grammatical and lexical gender, leading to seemingly incongruent referents (2.4a and b). In examples 2.4 through 2.6, epicene NPs are in bold, while the specific-gender NPs and referents are underlined.

- (2.4) a. **Ein «Genie»<sub>NEUT</sub>**: Die Frau<sub>FEM</sub> hinter Verstappens Triumpfen in der Formel 1.  
 ‘A “genius<sub>GN</sub>”’: The woman behind Verstappen’s triumphs in Formula 1.’  
 (Marx 2022)
- b. **Pop-Genie**<sub>NEUT</sub> für viele Generationen: Sir Paul McCartney wird 80.  
 ‘Pop genius<sub>GN</sub> for many generations: Sir Paul McCartney turns 80.’  
 (Herpell 2022)

To clarify referential gender for epicenes, a gender-specific adjective is often added (e.g., *weiblich* ‘female’ in 2.5a), or a gender-specific predicate nominal in apposition, such as *die Lyrikerin* [f] ‘the female poet, lyricist’ (2.5b).

- (2.5) a. [Gwyneth] Paltrow ist übrigens nicht **der einzige weibliche Star**<sub>MASC</sub>...  
 ‘Incidentally, Paltrow is not **the only female star**<sub>GN</sub>...’  
 (Bauernebel 2016)
- b. Lyrikerin<sub>FEM</sub> als **globaler Superstar**<sub>MASC</sub>: Amanda Gorman ist zum **poetischen Liebling**<sub>MASC</sub> avanciert.  
 ‘Female poet as **global superstar**<sub>GN</sub>: Amanda Gorman has become a **poetic darling**<sub>GN</sub>.’  
 (Lyrikerin als globaler Superstar 2022)

For epicene role nouns, pronouns can be assigned based on grammatical gender (e.g., *Das Kind...es* ‘the child...it’) or conceptual gender (e.g., *Das Kind...sie* ‘the child...she’) as can be seen in 2.6 (masculine elements in bold, female-specific elements underlined). Example 2.6 also exemplifies both Corbett’s agreement hierarchy (1979) – e.g., the article and relative pronoun show syntactic agreement, whereas personal pronouns show conceptual agreement – and the Linear Distance Principle (Köpcke et al. 2010), in that the first anaphoric reference following the antecedent is masculine, in agreement with the epicene *Popstar* [m] ‘popstar,’ and the second one – which is further from its antecedent – is feminine.

- (2.6) Sie<sub>FEM</sub> ist **ein Popstar**<sub>MASC</sub>, an **dem**<sub>MASC</sub> niemand vorbeikommt – egal wie man zu ihr<sub>FEM</sub> steht.  
 ‘She is a **popstar**<sub>GN</sub> **whom**<sub>GN</sub> no one can ignore – regardless of how you feel about her.’  
 (Fatoba 2021)

Beyond nouns, conceptual gender can be expressed by different types of determiners, including articles, demonstratives, and possessives (e.g., *die Deutsche* [f] /*der Deutsche* [m] ‘the

<sup>21</sup> Glosses for German epicene nouns will use GN to indicate that the noun is generic.

<sup>22</sup> The grammatical gender of compound words is determined by “the last noun, including its affixes,” also known as the Last Member Principle (Corbett 1991:50). Therefore, compounds built from the masculine *Star* [m] ‘star, celebrity’ – such as *Superstar* ‘superstar’ and *Popstar* ‘popstar’ – are also grammatically masculine.

German woman’/ ‘the German man’, *diese Deutsche* [f] /*dieser Deutsche* [m] ‘this German woman’/ ‘this German man’, and *ihr-/sein-* ‘her/his’, respectively). Third person singular pronouns can also express conceptual gender (e.g., *sie/er* ‘she/he’) as can adjectives (e.g., *weiblich* ‘female’).

### 2.3 GENDERED LANGUAGE

GENDERED LANGUAGE<sup>23</sup> comprises terms that denote gender identity, such as names, nouns, pronouns, and forms of address. Though gendered language is not inherently sexist, it is rarely neutral, and does not simply express the linguistic “distinction of female versus male” (Stahlberg et al. 2007:163). Instead, gendered language reflects unequal “power relations between the genders” (Vainapel et al. 2015:1517) and is “characterized by asymmetries which communicate evaluations and stereotypes” of female and male behavior (Stahlberg et al. 2007:163). These asymmetries often reflect ANDROCENTRISM, i.e., the “propensity to center society around men and men’s needs, priorities, and values and to relegate women to the periphery” (Bailey et al. 2018:1). Androcentrism positions maleness as a neutral standard, or as “foundational” while women are “understood as a special case” (Bailey et al. 2018:2) or as deviations from men (Bailey & LaFrance 2017:683). Also known as the MAN principle (“male as norm”) (Hellinger & Bierbach 1993), androcentrism treats men as “more prototypically human” than women (Hamilton 1991:399), even in contexts with roughly equal representation of women and men (Kowal et al. 1995). As a result, the experiences of male humans are seen as generalizable to all humans (Bailey et al. 2018:3), while female experiences are seen as specific to women. In fact, men are perceived as “so central that they seem gender-neutral, capable of representing humanity as a whole” (Bailey et al. 2018:16).

Linguistically, androcentrism “positions men as the gender-neutral standard while marking women as gender-specific” (Bailey et al. 2018:1), which often involves overtly marking feminine terms, whether through derivation (e.g., *actress*, derived from *actor*), or adjectival marking (e.g., *female doctor*). Androcentric asymmetries among gender-specific terms can be understood through MARKEDNESS, a “hierarchical structure of difference,” originating in the Prague School in phonology, and “borrowed and extended by a number of scholars” in various fields (Bucholtz & Hall 2004:372). Markedness “is correlated with the asymmetric relationship between two choices” (Waugh & Lafford 2006:491), in which one choice is perceived as UNMARKED, and therefore is treated as prototypical, or the default. In contrast, the other form is designated as MARKED, and treated as a deviation or a special case.

Significantly, in most languages with gender-specific terms, male-specific ones are perceived as unmarked (Diewald & Steinhauer 2017:26), and female-specific as marked (Spender 1998:20), which contributes to androcentric asymmetries in many domains (Table 2.4), including syntactic (Gygax et al. 2019; Motschenbacher 2014:256), morphological (Baron 1986:115, Schuh 2011), semantic (Kremer 1997, Schulz 1975), and distributional (Bußmann & Hellinger 2003:160).

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<sup>23</sup> Gendered language (no article) refers to language which denotes human gender. Gendered language is distinct from a gendered language, in which all nouns belong to a grammatical class (i.e., grammatical gender). For clarity, when discussing languages with grammatical gender, I will use the term languages with grammatical gender or grammatically gendered language.

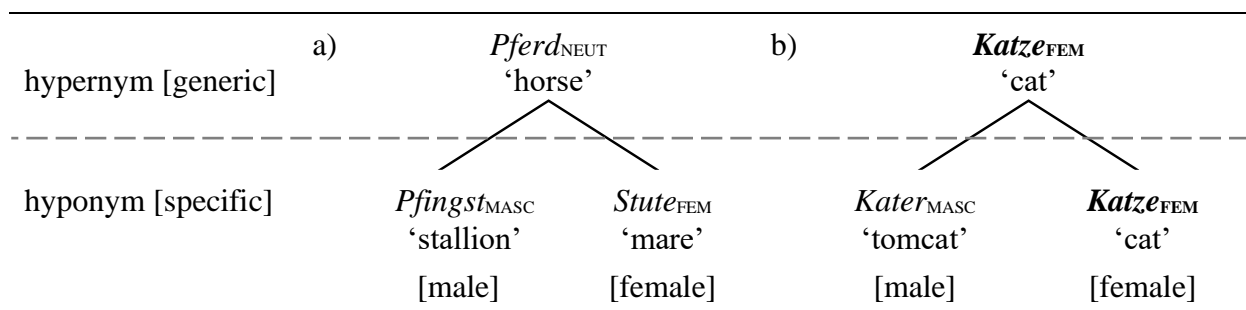
Table 2.4 Attributes of unmarked (male) and marked (female) gender-specific terms in English and German

	Unmarked		Marked	
	Male-Specific		Female-Specific	
Syntax	<ul style="list-style-type: none"> <li>typically appears first in gender-specific binomials</li> </ul>	<ul style="list-style-type: none"> <li>typically appears last in mixed-gender binomials</li> </ul>		
Morphology	<ul style="list-style-type: none"> <li>citation form</li> </ul>		<ul style="list-style-type: none"> <li>often derived from male form</li> <li>more complex than male form</li> </ul>	
Semantics	<ul style="list-style-type: none"> <li>connotations: neutral, positive</li> <li>neutral or high status, prestige</li> </ul>		<ul style="list-style-type: none"> <li>connotations: negative, sexualized, pejorative</li> <li>lower status, less prestige</li> <li>lexical gaps</li> </ul>	
Distribution	<ul style="list-style-type: none"> <li>used in wide contexts</li> <li>can be used generically</li> <li>highly frequent</li> </ul>		<ul style="list-style-type: none"> <li>used in narrow contexts</li> <li>female specific (cannot be generic)</li> <li>lower frequency than male forms</li> </ul>	

Syntactic asymmetries can be found in word order patterns that consistently place masculine terms first. Morphologically, feminine forms are often derived from masculine ones (Pauwels 2003:553), with male lexemes seen as the standard or citation form of the word (Budziszewska et al. 2014:2). In terms of semantics, feminine words in word pairs often have more negative connotations than the male terms (Schulz 1975:67), or express minor or sexual status (Stahlberg et al. 2007:168). Distributionally, feminine nouns are less frequent overall, and specifically refer to female referents, whereas grammatically masculine nouns have a wider referential potential (Gygax et al. 2008:465, Hellinger & Bußmann 2003a:9), and are used “generically.”

### 2.3.1 AUTOHYPONOMY

A potential consequence of gender-specification is ambiguity, which can result when a lexeme serves as both the generic citation form and a specific version of the citation form – i.e., a word acts as both the supertype (HYPERNYM) and subtype (HYPONYM) of itself, a relationship known as AUTOHYPONOMY (Horn 1984:32). Compare the two examples in (Figure 2.1). The first of which – *das Pferd* ‘horse’ (a) – is symmetrical, in that there are no repeated forms at multiple levels (hypernyms are distinct from hyponyms, i.e., the hypernym is not gender-specific). The second example – *Katze* ‘cat’ (b) depicts an asymmetrical relationship in the word pair in that one term is both hypernym and hyponym (repeated term in bold).

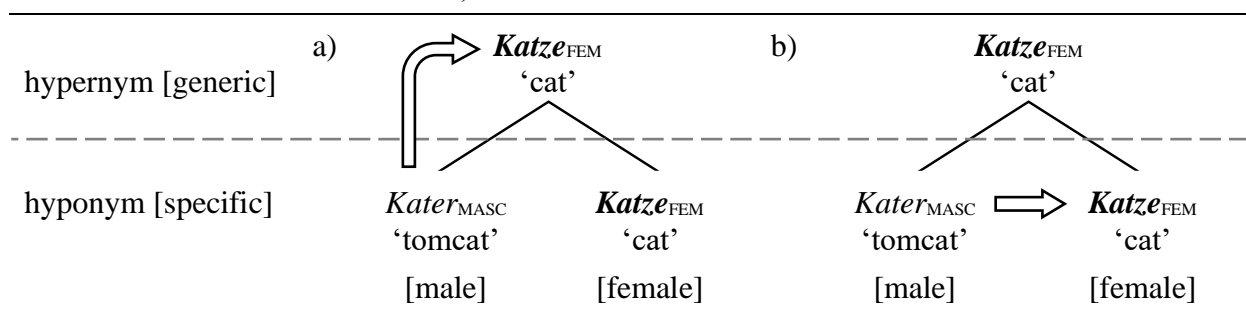
Figure 2.1 Hyponymy relationships of a) *Pferd* ‘horse’ and b) *Katze* ‘cat’

Autohyponymy can create ambiguity and sentences that initially seem like paradoxes, such as the following example from Bär (2004:156), in which two opposing statements are both true (2.7a and b): a) “Ein Kater ist eine Katze” b) “Ein Kater ist keine Katze.”

- (2.7) a. Ein Kater ist eine Katze.  
‘A tomcat is a cat.’  
b. Ein Kater ist keine Katze.  
‘A tomcat is not a cat.’

(Bär 2004:156)

As Bär notes (2004:156) this seeming paradox is a result of the two meanings of *Katze* ‘cat’ present. The two sentences can be mapped out as the following trees (Figure 2.2). In a, the male cat *Kater* is being compared to the species *Felis catus*, of which it is a member, and therefore a is a true statement (A tomcat is a cat). In b, the male cat *Kater* is being compared with its co-hyponym: a female cat *Katze*, and they are not the same (A tomcat is not a female cat). Notably, this example is exceptional in that it shows a female hyponym as identical to the hypernym. In the vast majority of cases of autohyponymy in gendered word pairs, the male hyponym is identical to the hypernym.

Figure 2.2 Hyponymy relationships of *Katze* ‘cat’ in the following phrases: a) Ein Kater ist eine Katze. ‘A tomcat is a cat.’ / b) Ein Kater ist keine Katze. ‘A tomcat is not a cat.’

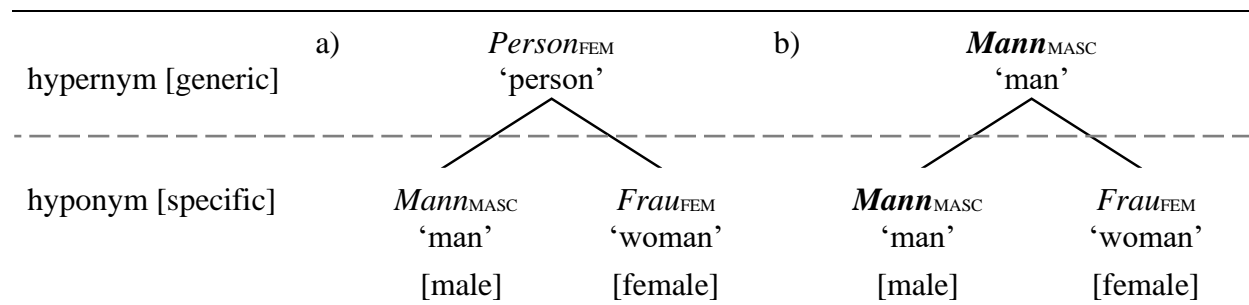
Note: Arrow indicates direction of comparison.

In a – *Ein Kater ist eine Katze* ‘A tomcat is a cat’ – *Kater* ‘tomcat’ is being compared to the hypernym *Katze*, which has the generic meaning of the species *cat* (*Felis catus*).

In b – *Ein Kater ist keine Katze* ‘A tomcat is not a cat’) – *Kater* ‘tomcat’ is being compared to its co-hyponym *Katze*, which has the specific meaning of female cat.

Of particular concern to this dissertation is autohyponymy occurring with role nouns. Compare the following two examples (Figure 2.3). In the symmetrical a example – the hypernym is *person*, which has the male *man* and female *woman* as hyponyms. In the asymmetrical example b, the male-specific hyponym *man* is used as a hypernym – i.e., generically.

Figure 2.3 Hyponymy relationships of a) *Person* ‘person’ and b) *Mann* ‘man’



### 2.3.2 SYNTACTIC ASYMMETRY

At a syntactic level, word order is a potential site of asymmetry in mixed gender binomials, which can signal “semantic and societal hierarchies” (Gygax et al. 2019:2) and is therefore “linked to power” (Motschenbacher 2014:256). Pairs of female- and male-specific terms typically begin with the male-specific word (e.g., Spender 1998:147, Motschenbacher 2013 in English; P. Braun 1997, Nübling 2019 in German), a phenomenon known as “male firstness” (Willis & Jozkowski 2018). Male firstness can be seen with nouns<sup>24</sup> (e.g., *Männer und Frauen* ‘men and women’), pronouns (*er und sie* ‘he and she’), personal names (*Adam und Eva* ‘Adam and Eve’), and adjectives (*männlich und weiblich* ‘male and female’).

### 2.3.3 MORPHOLOGICAL ASYMMETRIES

Morphologically, nouns exhibit asymmetry when masculine forms are treated as the base from which feminine terms are derived, and when the feminine form is morphologically marked. Female-specific derived forms are inherently more complex and show more overt gender marking than do male forms (Bailey et al. 2018:2, Bußmann & Hellinger 2003:157, Diewald & Steinhauer 2017:26, Spender 1998:20), making them marked in comparison to the unmarked male-specific form. This asymmetry is found not only in English and German, but in many languages – in fact, Stahlberg and colleagues (2007:168) emphasize that they “do not know of any languages in which forms referring to females are systemically shorter and less complex than those referring to males.”

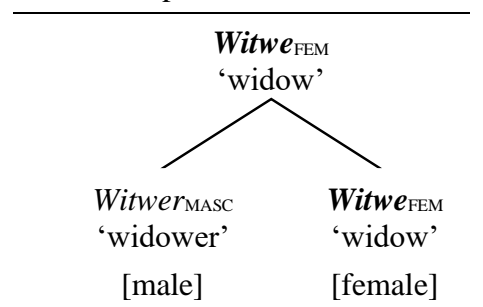
Further, derivation through suffixation inherently creates an unbalanced word pair by “[implying] the derivation of one of the terms from the other” (Baron 1986:115-16) and thereby depicting women as secondary to (Bußmann & Hellinger 2003:157), and dependent on, men (Pauwels 2003:553). Additionally, space-saving word pairs in German (*Sparformen*) are often abbreviated such that the masculine noun form is written in full, and the feminine ending is shown as an optional addition: *Lehrer/in* ‘male / female teacher’. Due to the direction of

<sup>24</sup> Exceptions to male-firstness are limited and include *Ladies and Gentlemen* and its German equivalent *Meine Damen und Herren*.

derivation, it is not possible to place the feminine form first, as it is more morphologically complex (Motschenbacher 2014:256).

Derivation of gendered forms is further asymmetrical in that it is only productive in one direction. Though many feminine terms in English and German are derived from masculine ones, masculine derivations of feminine terms are exceedingly rare, with most examples from the personal relationship domain, including *Witwer* [m] ‘widower’ (Figure 2.4) and *Bräutigam* [m] ‘bridegroom’ (Bußmann & Hellinger 2003:157).

Figure 2.4 Hyponymy  
relationship of *Witwe* ‘widow’



Notably, as more women entered the workforce, new female-specific terms in German were created through suffixation of masculine forms. However, when men have taken on traditionally female occupations, entirely new words have been created, rather than deriving a term from the existing feminine noun (Bußmann & Hellinger 2003:157). For example, a male nurse is a *Krankenpfleger* [m] ‘male medical-caregiver’ or *Pfleger* [m] ‘male caregiver’ (whereas the equivalent to the feminine *Krankenschwester* [f] ‘nurse – literally ‘medical sister’ – would have been *Krankenbruder* [m] ‘medical brother’). Additionally, a male birthing assistant is not a \**Hebammer* [m] (derived from *Hebamme* [f] ‘midwife’), but an *Entbindungspfleger* [m] ‘male delivery caregiver, male midwife’ or *Geburtshelfer* [m] ‘male birthing assistant, male midwife’ (Schuh 2011:17). Often a newly created term for men will suggest higher prestige or increased labor than the feminine words that initially existed, such that the new masculine words then became feminized through derivation (*Entbindungspflegerin* [f] ‘midwife’, *Krankenpflegerin* [f] ‘female nurse’) (Pauwels 2003:553).

#### 2.3.4 SEMANTIC ASYMMETRIES

Semantic androcentric asymmetries exist when words in a gender-specific word pair have different values or connotations. Specifically, whereas “masculine/male terms are either neutral or carry positive connotations” (Hellinger & Pauwels 2007:662), the female-specific term often carries additional negative connotations – e.g., overtly sexual meanings (Stahlberg et al. 2007:168), or dependence on men (Pauwels 2003:553). As Spender (1998:2) describes it, “there are two fundamental categories, *male* and *minus male*” and to be associated with male “is to be linked to a range of meanings which are positive and good” but “to be linked to minus male is to be linked to the *absence* of those qualities, that is, to be decidedly negative and usually sexually debased.”

Word pairs are also androcentrically asymmetrical when male forms have higher prestige or value than equivalent female forms. Though many gendered word pairs such as *waiter* and

*waitress* are roughly equivalent in value, some, such as *governor* and *governess* have developed strikingly different meanings as a result of SEMANTIC DEROGATION, in which “words indicating the stations, relationship, or occupation of men have remained untainted” but terms for women have degraded, acquired negative connotations, and often become derogatory (Schulz 1975:67).<sup>25</sup> For example, in the pair *governor* and *governess*, the male-specific form denotes an administrative leader, and the female-specific term has declined in status to mean a woman who is employed to raise and educate children. As a result, the term *governor* has come to be seen as a gender-neutral term for a leader, however *governess* has remained female-specific. At times, word pair items will connote different social values, while denoting the same concept. For example, though both *bachelor* and *spinster* refer to an unmarried person, *spinster* has additional negative connotations, whereas *bachelor* has no negative or socially devalued connotations.

Semantic derogation is visible in English (e.g., Schulz 1975) and German (e.g., Nübling 2011), whether in democratic leveling or pejoration. Democratic leveling occurs when a term “once reserved for persons in high places is generalized to refer to people in all levels of society” (Schulz 1975:65). For example, while *lord* denotes “deities and certain Englishmen” the once equivalent term *lady* can now be used for any woman (Schulz 1975:65). German shows a similar leveling to English *lady* with the term *Frau*, which initially referred to a ‘noble woman’ in contrast to *Weib* [n] which denoted a common woman in Middle High German (Zubin & Köpcke 1984b:33). Though it was the “basic-level term for ‘woman’ until the 16<sup>th</sup> century,” in modern German (Köpcke & Zubin 2003:153), *Weib* [n] is now pejorative, signifying a ‘nasty (old) woman’, and *Frau* has leveled to denote any woman, regardless of nobility (Zubin & Köpcke 1984b:33). An additional source of semantic derogation is PEJORATION “a semantic change whereby a word acquires debased or obscene reference” (Schulz 1975:65). Semantic pejoration overwhelmingly occurs with female-specific words, leading neutral or positive terms for women to “[acquire] negative implications ... becom[e] abusive and [end] as a sexual slur” (Schulz 1975:65), as in the pair *master/mistress*. Similarly, the honorific *sir* has not gained sexual connotations and is still used, whereas the once equivalent *madam* now commonly denotes a woman who runs a brothel. Semantic degradation may be gradual, and go through multiple stages, as with the pejorative term *hussy*, which “derives from Old English *huswif* ‘housewife’ and at one time meant simply ‘the female head of the house’” and later came to denote a “rustic, rude woman,” until becoming a term for a promiscuous woman (Schulz 1975:66). In German, *Jungfrau* [f] and *Dirne* [f] both originally denoted “girl” in Middle High German but came to take on sexualized meanings: ‘virgin’ for the former and ‘prostitute’ for the latter (Zubin & Köpcke 1984b:33).

Asymmetrical pairs can also be found in German in “a small number of long-established words” (Kremer 1997:97). For example, though *Sekretär* [m] ‘male secretary’ refers to a man in a high position, such as a Secretary of Defense or Commerce, *Sekretärin* [f] ‘female secretary’ typically refers to a woman who does office work for someone with a higher position.<sup>26</sup> As with English, there is a distinction between a state leader (*der Gouverneur* [m]) and a nanny (*Gouvernante* [f]), such that the newer form *die Gouverneurin* [f] – derived from the masculine

<sup>25</sup> Word pairs also become asymmetrical through the amelioration of male terms, in which male-specific words take on more prestigious or positive connotations.

<sup>26</sup> As Motschenbacher (2016:77) notes, “the social gender of personal nouns can change over time, often as a reflection of changed social realities” such as “increasing numbers of women or men working in a certain profession.” Initially, *secretary* was “strongly socially male” though it is “strongly socially female in its connotation” in today’s language – “a development that seems to go hand in hand with a decrease in the prestige of the profession” (Motschenbacher 2016:77).

with a Germanic suffix rather than the originally borrowed French – is used for a female leader. Pairs built from compound terms can also show asymmetries. For example, *Hauptmann* [m] (lit. ‘main / head man’) denotes a captain in the military, whereas *Hauptfrau* [f] denotes the principle wife of a polygamous relationship.

Asymmetries can also arise from lexical gaps, i.e., the “absence of words to denote women in a variety of roles, professions, and occupations” (Pauwels 2003:553). Lexical gaps often reveal themselves in incomplete word pairs, when terms for women do not exist (Kremer 1997:88) or were added at a much later time than the masculine term. Lexical gaps “[reflect] the historical fact that originally men were the first to perform most prestigious or ‘male’ occupations and professions” whereas “few, and generally low-status occupational terms developed from female domains” (Bußmann & Hellinger 2003:157). When a male-specific lexical gap exists, it is often for a role or occupation seen as typically performed by women (e.g., *Hebamme* [f] ‘midwife’, *Putzfrau* [f] ‘cleaning lady’). As previously mentioned, male lexical gaps are often filled by creating a new term, rather than deriving a term from an existing feminine word, resulting in nouns and phrases such as *Entbindungshelfer* ‘male delivery caregiver, male midwife’ and *Mitglied [n] des Reinigungspersonals* ‘member of the cleaning personnel’ (Bußmann & Hellinger 2003:157). Lexical gaps on the male side also indicate societal interest in a woman’s marriage status. For example, though *Mr.* is used for an adult man regardless of whether he has a spouse, both English and German have had forms which differentiated a married woman (*Mrs. / Frau*) from an unmarried woman (*Miss / Fräulein*).<sup>27</sup> Notably, there is no male equivalent to *Miss* (Stahlberg et al. 2007:168). Bigler and Leaper (2015:189) note that this asymmetry in honorifics “[defines] women by their relationship to men” – which can be seen in phrases such as “Man and wife” (Sarrasin et al. 2012:113) – but that the reverse is not – men are never defined in relationship to women.

### 2.3.5 DISTRIBUTIONAL ASYMMETRIES

Word pairs are distributionally asymmetrical when the male form can appear in a wider variety of contexts than the feminine (Bußmann & Hellinger 2003:160), i.e., when male-specific terms have wider referential potential (Motschenbacher 2014:247). In both English and German, masculine terms are seen as more comprehensive, (Kirkby 1746, cited in Spender 1998:148<sup>28</sup>), – e.g., they can be used to represent the category human (Ehrlich & King 1994:74) regardless of gender.<sup>29</sup> This comprehensiveness is due in large part to male-specific forms being perceived as unmarked, and therefore neutral. In contrast, the highly marked feminine terms can only represent the category “female human” (Garnham et al. 2012:483). Significantly, while male forms can be used generically for women, to use a feminine term for a male person is considered insulting (Schulz 1975:65). As Spender (1998:23) notes, “there is no loss of prestige when females are referred to in male terms but there is a loss of prestige when males are referred to in female terms.” Therefore, it is socially acceptable to greet a mixed-gender group with male-

<sup>27</sup> Both *Miss* and *Fräulein* are outdated, and *Fräulein* is not recommended for adult women (*Fräulein* on Duden Online). English *Ms.* is meant as an equivalent to *Mr.* in that it can be used by those who are or are not married.

<sup>28</sup> Rule 21: “The Masculine Person answers to the general Name, which comprehends both Male and Female; as *Any Person, who knows what he says*” (Kirkby 1746:117).

<sup>29</sup> For German, Zubin & Köpcke (1984b:9) explain this through their “Perceived Sex Principle” in which referents classified as male/female are assigned masc/fem gender. However, if “the referent is perceived as human, but sex is not distinguished, then the noun is assigned masc-gender” (Zubin & Köpcke 1984b:9).



specific language such as “Hey guys”, but not female-specific forms of address like “Hey gals” or “Hey ladies” (Spender 1998:23).

Asymmetries also appear in the frequency of gendered terms: because masculine forms are used generically in both German and English, they occur more frequently than feminine ones (Gabriel et al. 2018:847). This imbalance can be seen nominally and pronominally: in English alone, masculine pronouns are three times as frequent as corresponding feminine pronouns as anaphoric for epicene nouns (Hellinger & Bußmann 2003a:10). In both American and German media, male-specific role nouns are much more common than female-specific ones (Gustafsson Sendén et al. 2014, Macharia 2020), which may “make men *appear* more numerous than women,” despite roughly equal representation in the population (Bailey et al. 2018:8, emphasis in the original).

Many of these asymmetries affect each other. For example, because of the direction of derivation, it is often not possible to place the feminine form first, as it is more morphologically complex (Motschenbacher 2014:256) – an example of male firstness. Further, because the male-specific form is seen as more gender-neutral, it has a wider distribution and increased frequency due to its use as a generic. Notably, these asymmetries are used as validation for GM, as an argument that the masculine form is conceptually and morphologically neutral, and therefore has a wider referential potential. However, this argument is, of course, circular (Cameron 1985)<sup>30</sup> – i.e., many of these asymmetries are likely the result of the generic masculine, or have been strengthened by GM.

## 2.4 GENERIC STATEMENTS AND GENDERED LANGUAGE

Androcentric language is an example of exclusive language – i.e., language that “exclude[s], trivialize[s], or insult[s] (mainly) women”<sup>31</sup> (Hellinger 2006:265). A common exclusive practice is the generic masculine, i.e., the use of male-specific<sup>32</sup> terms to represent humans, often in contexts when gender identity is irrelevant or unknown, or for mixed-gender groups. In contrast, inclusive language seeks to decrease male bias through two opposing processes:<sup>33</sup> feminization – i.e., “making women linguistically visible besides men” – and neutralization – i.e., “making men just as invisible as women” (Motschenbacher 2014:248).<sup>34</sup> The choice of feminization or neutralization is determined by multiple factors, including the language’s morphosyntactic structure (Hellinger & Pauwels 2007, Motschenbacher 2016, Sczesny et al. 2016), the social context (Bußmann & Hellinger 2003, Gabriel et al. 2018), and

<sup>30</sup> As Cameron (1985:24) notes, “The masculine is generic because it is unmarked, but it is unmarked because it is generic!”

<sup>31</sup> Much of the research into sexism has been based on a gender binary: “Although sexist language could also be used to diminish, trivialize, or exclude men, it is women who predominantly bear the brunt of its effects” (Douglas & Sutton 2014:668). However, nonbinary individuals can be discriminated against through androcentric language.

<sup>32</sup> There are very few languages in which the female-specific form is unmarked or used generically, e.g., Iroquoian languages Seneca and Oneida, as well as some aboriginal languages of Australia (Hellinger & Bußmann 2003a:9).

<sup>33</sup> Both methods belong to the German concept *gendern* (derived from English ‘to gender’), i.e., the linguistic process to ensure equality between women and men in language usage (Diewald & Steinhauer 2017:5), which results in *geschlechtergerechte Sprache* (ggS) ‘gender-equitable language’.

<sup>34</sup> Most research pertaining to “inclusive” language has focused on a binary gender structure, and the discrimination of women compared to men. This definition of inclusion notably excludes nonbinary and genderqueer individuals. Of the two “inclusive principles” outlined here, only gender-neutral language is inclusive of trans and genderqueer identities. In German particularly, gender-neutral language is a challenge, and many trans and nonbinary individuals feel excluded by binary language (de Sylvain & Balzer 2008:40). See Hord (2016) for an overview.

the speaker's gender ideology (Hellinger & Pauwels 2007). A language community may rely predominantly on feminization or neutralization, change methods over time, or combine the two methods. Whereas English has historically used feminization for pronouns and forms of address, it relies more on neutralization for nouns, and has come to use the neutral third-person singular pronoun *they* more regularly. In contrast, German has typically used feminization and employed neutralization where possible, though its applicability is limited by grammatical gender.

#### 2.4.1 GENERIC MASCULINE

The generic masculine (GM) is essentially an example of autohyponymy, in which male-specific terms function at both the generic level – i.e., referring to a person, regardless of gender – and the specific level – i.e., referring explicitly to male gender identity. In English, GM can appear nominally, with or without a determiner (2.8a and 2.8b, respectively). However, GM is most commonly expressed through the third-person singular personal pronoun *he*, and possessive determiner *his*, which often appear in apposition to another form (2.8c, and d, respectively).

(2.8) a. The best **man** for the job.

b. **Man** is mortal.

c. But Nowinski noted potential “gaps” in the NFL’s protocol: A doctor can send a player back into a game, for instance, if **he** concludes that signs of an apparent concussion — like a player stumbling to stand after a blow to the head — are caused by something besides a head injury.

(Diamond 2022)

d. An American drinks **his** coffee black.

(Hellinger & Pauwels 2007:660)

In German, the generic masculine (*generisches Maskulinum* or *geschlechtsübergreifendes Maskulinum* ‘gender-comprehensive masculine’) is often expressed nominally.<sup>35</sup> GM occurs both in the singular and in the plural, where mixed-gender groups are marked with male-specific terms, regardless of the number of women present (Table 2.5). In addition to nouns (2.9a), GM is also expressed with the indefinite pronoun *man* (‘one’<sup>36</sup>), which is lexically neutral and grammatically masculine (2.9b).<sup>37</sup> Further, GM pronouns or possessive determiners often appear in apposition to a NP (2.9c, d) but also, rarely, appear on their own (2.9e), as in an article discussing a lotto winner who matched five of six numbers.

<sup>35</sup> For a history of the generic masculine in German, see Doleschal 2002 and Trutkowski & Weiß 2023.

<sup>36</sup> In both English and German *man* originally referred to all humans – deriving from PIE root \*man- – and male-specific use is attested in English at the end of late Old English (“Man” on Online Etymology Dictionary).

<sup>37</sup> The accusative and dative forms for *man* follow the masculine indefinite article paradigm: *einen* and *einem*, respectively. The possessive form is *sein-*.

Table 2.5 German singular and plural indefinite nouns used specifically and generically

	Female-Specific	Male-Specific
	Indefinite Singular	
	<i>Eine Studentin muss fleißig arbeiten.</i>	<i>Ein Student muss fleißig arbeiten.</i>
SPECIFIC	‘A female student must work diligently.’	‘A male student must work diligently.’
GENERIC	[shaded]	‘A student must work diligently.’
	Indefinite Plural	
	<i>Studentinnen müssen fleißig arbeiten.</i>	<i>Studenten müssen fleißig arbeiten.</i>
SPECIFIC	‘Female students must work diligently.’	‘Male students must work diligently.’
GENERIC	[shaded]	‘Students must work diligently.’

- (2.9) a. Dieses Buch wird **den Leser**<sub>MASC</sub> nicht enttäuschen.  
‘This book will not disappoint **the reader**<sub>GN/MALE</sub>.’  
(F. Braun et al. 1998:265)
- b. Wie **man**<sub>MASC</sub> sein<sub>MASC</sub> Geld in Zeiten der Inflation anlegen sollte.  
‘How **one**<sub>GN</sub> should invest their<sub>GN</sub> / his<sub>MALE</sub> money in times of inflation.  
(Schleidt 2021)
- c. Ein durchschnittlicher Autofahrer<sub>MASC</sub> musste gemessen an **seinem**<sub>MASC</sub> Gehalt also damals mehr bezahlen als er<sub>MASC</sub> es aktuell tut...  
‘An average driver<sub>GN/MALE</sub> had to pay more than they<sub>GN</sub> / he<sub>MALE</sub> currently do(es), based on **their**<sub>GN</sub> / **his**<sub>MALE</sub> salary.’  
(Filges 2022)
- d. Falls die Deutsche Bank einen neuen Chef<sub>MASC</sub> bekommt, wird **er**<sub>MASC</sub> es also alles andere als leicht haben.  
‘If Deutsche Bank gets a new boss<sub>GN/MALE</sub>, things will be anything but easy for **them**<sub>GN</sub> / **him**<sub>MALE</sub>.’  
(Herrmann 2018)
- e. Sechs Richtige hat **er**<sub>MASC</sub> zwar nicht gehabt.  
‘**They**<sub>GN</sub> / **He**<sub>MALE</sub> didn’t have six correct [numbers].’  
(Hesse kassiert fast 300.000 Euro im Lotto 2020)

Whereas female-specific terms only refer to women, male-specific terms are ambiguous in that they are sometimes gender-specific, and at other times, gender-neutral (Hellinger 2004:278). Interpreting and producing GM is therefore a learned behavior, as a speaker must understand that male-specific terms can be explicitly male in reference (i.e., specific reading) or generic, and that the grammatical gender expressed by male-specific forms can be arbitrary or meaningful (Gygax et al. 2009:237). Because it is not possible to “deduce from the word alone

whether it is being used in a specific or generic way” (Gabriel & Mellenberger 2004:273), readers and listeners “are confronted with a certain amount of ambiguity” (Gygax & Gabriel 2008:143) and must attend to “context information (provided by the text or derived from their own knowledge) to correctly identify whether a word” is specific or generic (Gabriel et al. 2008:206). For example, in 2.10a, it is not immediately clear whether male-specific references like *er* ‘he’ and *Spender* [m] ‘male donor’ are explicitly male or generic.

- (2.10a) «**Er**<sub>MASC</sub> ist immer bei mir», sagt Peter Fricke über den unbekanntem **Spender**<sub>MASC</sub>, dessen<sub>MASC</sub> Herz seit mehr als 30 Jahren in seiner Brust schlägt. «Vielleicht steht **er**<sub>MASC</sub> gerade hinter mir und stößt mich an, wenn ich irgendwelchen Mist erzähle.»  
 ““**They**<sub>GN</sub> / **He**<sub>MALE</sub> are/is always with me” says Peter Fricke about the unknown **donor**<sub>GN/MALE</sub>, whose<sub>GN/MALE</sub> heart has beat in his chest for more than 30 years.  
 “Maybe **they**<sub>reGN</sub> / **he**<sub>sMALE</sub> right behind me and give(s) me a nudge if I say some crap.””

(Sticht 2022)

Disambiguation can come from additional information, as seen in 2.10b – the continuation of 2.10a – where it is clarified that masculine terms are used generically.

- (2.10b) Ob **der Spender**<sub>MASC</sub> ein Mann<sub>MASC</sub> oder eine Frau<sub>FEM</sub> war, habe [Peter] nie interessiert. «Was zählt ist, dass **er**<sub>MASC</sub> etwas Tolles gemacht hat. Ich bin **ihm**<sub>MASC</sub> unendlich dankbar für 32 geschenkte Lebensjahre.»  
 ‘Whether the **donor**<sub>GN</sub> was a man or woman has never interested [Peter]. “What counts is that **they**<sub>GN</sub> did something great. I’m endlessly thankful to **them**<sub>GN</sub> for 32 gifted years of life.’

(Sticht 2022)

When context clues or textual information do not prove helpful in disambiguating, readers typically turn to cultural knowledge, including gender stereotypes, which may be cisnormative<sup>38</sup> and heteronormative.<sup>39</sup> For example, disambiguation between generic and explicit male-specific terms may be based on references to clothing (2.11), or spousal gender (2.12)

- (2.11) **Die Biologen**<sub>[PL, MALE]</sub> und **Chemiker**<sub>[PL, MALE]</sub> wechselten Jeans, Birkenstock und T-Shirt gegen Anzug und Krawatte.  
 ‘**The biologists**<sub>MALE</sub> and **chemists**<sub>MALE</sub> changed from jeans, sandals, and T-shirt into suit and tie.’

(Bußmann & Hellinger 2003:159, including translation)

<sup>38</sup> Cisnormativity is an assumption that a person’s gender is in alignment with their sex (cisgenderism), as in “A woman has a womb”, which excludes trans women. Cisnormativity may also be present in expectations about gender roles. For example, it is cisnormative to assume that a reference to a person in a suit is male.

<sup>39</sup> Heteronormativity sees heterosexuality as the social norm, and thereby marks homosexuality or other sexualities as outside the norm. For example, it is heteronormative to assume that a reference to a wife means that the other spouse is male.

- (2.12) **Junge, qualifizierte Ausländer**<sub>[PL, MALE]</sub> werden die Mühsal, Deutsch zu lernen, nur auf sich nehmen, wenn es sich langfristig für sie lohnt, wenn sie sich also fest niederlassen, selbständig machen, Frauen und Kinder mitbringen dürfen.  
 ‘**Young, qualified foreigners**<sub>MALE</sub> will only submit to the toil of learning German, if this pays off long-term, i.e. [sic] if they are allowed to settle down permanently, to set up their own business, to bring along their wives and children.’  
 (Bußmann & Hellinger 2003:159, including translation)

#### 2.4.2 FEMINIZATION

One alternative to GM is FEMINIZATION, which replaces male-specific terms with female-male word pairs, a process sometimes called GENDER-SPLITTING, with the result known as SPLIT FORMS. Split forms are commonly nouns, but may also be adjectives, pronouns, or articles. Feminization is most common in languages with grammatical gender (Motschenbacher 2016:71), and in contexts where gender is relevant (Gabriel et al. 2018:854), or female and male representation is equally likely. Ideologically, feminization is associated with philosophies of equal treatment of women and men, and an emphasis on increasing female visibility (Hellinger & Pauwels 2007:663). Opponents of feminization argue that it makes gender hyper-salient, “thus continuing to highlight gender boundaries” (Gabriel et al. 2018:844) and contributing to bias and in-group favoritism (Bigler & Leaper 2015). Further, feminization is criticized for imposing a binary organization of gender, which excludes non-binary individuals (Bigler & Leaper 2015:187, Hord 2016, Vergoossen et al. 2020).

Due to the dearth of gender-specific words in English, pair forms are mostly limited to kinship binomials (e.g., *brother/sister*), forms of address (e.g., *Ladies/Gentleman*), or the rare pair with a female-specific form derived from the male-specific (e.g., *actor/actress*). However, the most common English feminized form is the pronoun set *she and he* – a common replacement for “generic” *he*. When the pair is presented fully, the masculine typically comes first: *he* or *she*, or the shortened *he / she*, meaning ‘he or she’. The abbreviated form *s/he* is also possible, which places the feminine form first for spelling reasons. Adjectives and possessive determiners can also be split (e.g., *fe/male*, *his/her*, respectively). Feminization is much more effective for German nouns, due to the productivity of the feminine suffix *-in* (Hellinger & Pauwels 2007:663). There are numerous feminizing strategies, many of which incorporate orthographic symbols or internal capitalization (Table 2.6). Adjectives and articles may also appear in pair forms, especially with nouns that could express female or male gender: *weibliche / männliche Teilnehmende* ‘male / female participants’; *die/der Angestellte* ‘the female / the male employee’.

Table 2.6 German feminization strategies shown on two noun types: 1) role noun derived with *-er* (*Lehrer/Lehrerin* ‘male teacher/female teacher’) from *lehren* ‘to teach’ and 2) non-*er* role noun (*Student/Studentin* ‘male student/female student’)

Feminization Strategy	Singular	Plural
Pair Forms		
<i>Doppelnennung</i> ‘double naming’; <i>Beidnennung</i> ‘both naming’	<i>Lehrer und Lehrerin</i> <i>Student oder Studentin</i>	<i>Lehrer und Lehrerinnen</i> <i>Studenten oder Studentinnen</i>
<i>Doppelnennung mit Schrägstrich</i> ‘double naming with slash’	<i>Lehrer / Lehrerin</i> <i>Student / Studentin</i>	<i>Lehrer / Lehrerinnen</i> <i>Studenten / Studentinnen</i>
Abbreviated Pair Forms		
<i>Schrägstrich</i> ‘slash form’	<i>Lehrer/in</i> <i>Student/in</i>	<i>Lehrer/innen</i> <i>Student/innen</i> <sup>40</sup>
<i>Schräg- und Ergänzungsstrich</i> ‘slash with hyphen’	<i>Lehrer/-in</i> <i>Student/-in</i>	<i>Lehrer/-innen</i> <i>Student/-innen</i>
<i>Binnen-I</i> <sup>41</sup> or <i>Binnenmajuskel</i> ‘internal capital I’	<i>LehrerIn</i> <i>StudentIn</i>	<i>LehrerInnen</i> <i>StudentInnen</i>
<i>Klammern</i> <sup>42</sup> ‘brackets’	<i>Lehrer(in)</i> <i>Student(in)</i>	<i>Lehrer(innen)</i> <i>Student(innen)</i>

Pair forms of female- and male-specific nouns – also known as *Beidnennung* (‘both naming’ or *Doppelnennung* ‘duplication’ literally ‘double naming’) – are common (e.g., *Lehrer und Lehrerin* ‘male and female teacher’), especially in direct address: *Damen und Herren* ‘ladies and gentlemen’. Pair forms can be long (*ausführliche Doppelnennung* ‘detailed duplication’), as in *Jeder Lehrer und jede Lehrerin* ‘every male teacher and every female teacher’ (Hellinger & Pauwels 2007:663) or short (*verkürzte Doppelnennung* ‘abbreviated duplication’): *Jede/r Lehrer/in* ‘every male/female teacher’. Even when shortened, pair forms can result in lengthy and complex NPs due to adjectival and satellite agreement and case (Hellinger & Bußmann 2003a:19) (2.13, with grammatically feminine forms underlined and masculine forms in bold).

(2.13) Jede<sub>FEM</sub>/**r**<sub>MASC</sub> **Mitarbeiter**<sub>MASC</sub>/in<sub>FEM</sub>, **der**<sub>MASC</sub>/die<sub>FEM</sub> zu spät kommt, muss **seine**<sub>MASC</sub>/ihre<sub>FEM</sub> Verspätung entschuldigen.

Any<sub>FEMALE/MALE</sub> employee<sub>MALE/FEMALE</sub> who<sub>MALE/FEMALE</sub> arrives late must apologize for his<sub>MALE</sub>/ her<sub>FEMALE</sub> tardiness.

(adapted from Diewald & Steinhauer 2017:49)

<sup>40</sup> Note that there is no way to correctly account for the morphology in this and many other shortened nouns forms, as the masculine plural *Studenten* is not the stem of the affix *-innen*, but the root *Student*. This issue also occurs with words like *Beamte / Beamtinnen*, which is often shortened to *Beamt/-innen* (Kremer 1997:98, fn. 37).

<sup>41</sup> Though similar in appearance, internal-I is distinguishable from the feminine suffix *-in* through the letter’s capitalization: *Leserinnen* (women readers), *LeserInnen* (female and/or male readers) (F. Braun et al. 2005:3).

<sup>42</sup> Brackets are rarely used in modern German, as it gives the impression that the feminine form is secondary and less important (Diewald & Steinhauer 2017:48).

Due to the complexity and length of pair forms in a grammatically gendered language, abbreviated forms – known as *Sparformen* ‘economy forms’ – are a common replacement. There are many styles of abbreviation in German, each with its own history and connections to specific communities or inclusive-language ideologies. Abbreviation methods such as the slash and brackets overtly include women through the addition of the feminine suffix and are meant to be interpreted as inclusive of women and men. For example, *Leser/-in* refers to a person who is reading who may be female or male, and *Leser/-innen* can be translated as “male and/or female readers.” Many of these forms first appeared in German in the 1980s and 1990s as a result of second-wave feminist advocacy. Many of these shortened terms exemplify LINGUISTIC DISRUPTION, a strategy which seeks to draw attention to linguistic sexism through forms which break morphological rules or grammatical conventions, e.g., *herstory* as a replacement to *history* or the form *Lehrer/innen* ‘male/female teachers’ (Pauwels 2003:555).<sup>43</sup>

Each of the shortened forms has faced criticism, whether due to orthography<sup>44</sup> or pronunciation. Furthermore, many of these shortened forms do not work in every grammatical case, such as dative plural, or the genitive. Further, many of the methods are not effective for feminine nouns that do not simply add *-in* to the masculine form (e.g., *Beamte / Beamtin* ‘male / female clerk’), or those receiving umlauts, (e.g., *Arzt / Ärztin* ‘male / female doctor’). Additionally, for combined forms such as *Lehrer/-in* (from *der Lehrer* and *die Lehrerin*), it is unclear what gender article it should take or how adjectives should be declined. Of the options listed above, only the slash and bracket methods are considered orthographically acceptable.<sup>45</sup> For pronunciation, shortened forms can be read aloud using the pair forms (e.g., pronouncing abbreviated forms like “saint” for the written form “St.”) (Diewald & Steinhauer 2017:44). The Binnen-I can be pronounced with a glottal stop or a short pause (Bußmann & Hellinger 2003:155), also known as a *Gender-Pause* ‘gender pause’.

### 2.4.3 NEUTRALIZATION

In contrast to feminization’s emphasis on making gender explicit, NEUTRALIZATION replaces gender-specific terms with gender-neutral forms and structures (Kollmayer et al. 2018:3). Neutralization is most effective in languages with little formal gender marking (Sczesny et al. 2016:3), and in contexts where gender is irrelevant or unknown. Ideologically, neutral forms de-emphasize gender distinctions and avoid “unnecessary activation of gender association” (Gabriel et al. 2018:849), resulting in decreased gender-based stereotypes and prejudice (Bigler & Leaper 2015:191). Significantly, neutralized forms do not impose a binary gender dichotomy, enabling expression of nonbinary gender identities (Hord 2016), and thereby “[treating] women and men (and all other gendered identities) on an equal footing” (Motschenbacher 2014:253). Neutralization is not only inclusive for trans and nonbinary

<sup>43</sup> The “a-form” can also be used to build compound words, replacing the masculine *-er* suffix in words such as *Türöffna* (door opener), *Computa* (computer) or *Drucka* (printer): “Unsa Lautsprecha ist permanent auf Demos unterwegs. Ea erfreut sich hoher Beliebtheit.” (AG Feministisch Sprachhandeln 2015:27).

<sup>44</sup> Except for the slash form (with the feminine suffix introduced with a hyphen), symbols are not officially accepted. Further, while German spelling rules do not explicitly allow for word-internal capitalization (so called “Camel Case”), Bußmann & Hellinger (2003:155) note that internal capital letters have become increasingly common, as in terms such as *BahnCard* and *InterRegio*.

<sup>45</sup> A slash without a hyphen to mark the suffix – e.g., *Lehrer/innen* – is not officially orthographically acceptable, though it is very commonly used (Geschlechtergerechter Sprachgebrauch).

individuals (Hord 2016), it may also better serve women who have not benefited from explicit female reference (Hellinger & Bußmann 2003a:19, Hellinger & Pauwels 2007:663).

In English, neutralization relies heavily on epicene nouns such as *sibling* to replace gender-specific terms (e.g., *brother*). In compounds, the male-specific affix *-man-* is replaced by the neutral *-person* (e.g., *chairperson*, rather than *chairman*), or other lexemes: (e.g., *firefighter* from *fireman*) (Hellinger & Pauwels 2007:664). Pronominally, *he* can be neutralized with the gender-neutral third-person singular *they*.<sup>46</sup> Gender-neutral forms of address (e.g., *Mx.*) and neopronouns are also becoming more common, including series such as *ze/zir/zirs*<sup>47</sup> or the Spivak pronoun series *e/em/eir* (McConnell-Ginet 2013:24). Additionally, the “generic” use of *man* can be replaced with neutral forms, such as *one*, *human*, or *a person*.

Unlike English, German has few epicene nouns (Table 2.7), and relies on a wider range of neutralization strategies.

Table 2.7 A non-exhaustive list of German epicene nouns

Epicene Nouns	
FEM	<i>Fachkraft</i> ‘skilled worker, professional’, <i>Geisel</i> ‘hostage’, <i>Kraft</i> ‘staff member’, <i>Leiche</i> ‘corpse’, <i>Person</i> ‘person’, <i>Waise</i> ‘orphan’
NEUT	<i>Elternteil</i> ‘parent’, <i>Genie</i> ‘genius’, <i>Geschöpf</i> ‘creature’, <i>Individuum</i> ‘individual’, <i>Kind</i> ‘child’, <i>Mitglied</i> ‘member’, <i>Opfer</i> ‘victim’, <i>Wesen</i> ‘being, creature’
MASC	<i>Fan</i> ‘fan, supporter’, <i>Gast</i> ‘guest’, <i>Mensch</i> ‘human, person, individual’, <i>Prüfling</i> ‘testee’, <i>Säugling</i> ‘infant’, <i>Schützling</i> ‘protégé’, <i>Star</i> ‘celebrity’, <i>Vormund</i> ‘legal guardian’, <i>Zögling</i> ‘pupil’

Sources: Bußmann & Hellinger 2003:148, Diewald & Steiner 2017:19, Hellinger 2004:280, Kremer 1997:86

Notably, neutralization is complicated by the necessity of assigning gender-neutral forms a grammatical gender, which may be interpreted as referential. As a result, gender-neutral alternatives are not always available (Motschenbacher 2014:258), which Hord (2016) attributes to grammatically gendered languages having less linguistic room to adapt to neutral language. Pronominally, there is no formally recognized epicene pronoun in German – and the use of 3SG neuter *es* ‘it’ is typically pejorative in reference to a person. Various neopronouns have been proposed, including the *xier* series (Heger 2013) and *nin* series (de Sylvain & Balzer 2008).

A common neutralization strategy in German is the use of abstract forms – i.e., gender-neutral terms which designate functions, institutions, or collectives (Schuh 2011:33) rather than a specific person. For example, the male-specific *Minister* [m] ‘minister, secretary’ can be replaced in generic contexts by *Ministerium* ‘ministry.’ Abstractions may also include

<sup>46</sup> Though controversial, singular *they* has a rich history in English as a gender-neutral pronoun (Bodine 1975:126) and “was used by many as a default epicene pronoun...until successful 19th century proscriptive efforts to abolish [its] usage” in favor of the generic masculine (Everett 2011:134).

<sup>47</sup> Pronoun series are often listed in one of the following formats: 1) X/Y or 2) X/Y/Z where X is the subject pronoun, Y is the object pronoun, and Z is the possessive pronoun. For example, she/her/hers.



compounds with gender-neutral elements such as *-person* ‘-person’ (e.g., *Erwerbsperson* ‘employed person’), *-personal* ‘personnel, staff’ (e.g., *Lehrpersonal* ‘teaching staff’), *-leute* ‘people’ (e.g., *Kaufleute* ‘merchants’), and *-kraft* (e.g., *Lehrkraft* ‘teacher’).

An additional German neutralization strategy is to create nouns from adjectives.<sup>48</sup> These nouns are known as non-differentiating forms, in that the female- and male-specific forms are often indistinguishable, and gender is specified by another element, such as an article. A criticism of replacing role nouns with non-differentiating forms is that the latter has an implication of ‘one who is currently doing’ an action. However, Diewald and Steinhauer (2017:55) counter that participial nominalization, along with marking an activity in progress, can describe an inherent property or permanent state. Therefore, *Studierende* – literally ‘studying ones’ – can be interpreted not only as referring to those currently engaged in studying, but those who typically or habitually study a subject – i.e., ‘students’. Notably, though substantivized adjectives can express gender identity in the singular, plural forms do not (Table 2.8).

Table 2.8 German substantivized adjectives

	Definite		Indefinite	
Adjective: <i>alt</i> ‘old’				
FEM	<i>die Alte</i>	‘the old woman’	<i>eine Alte</i>	‘an old woman’
MASC	<i>der Alte</i>	‘the old man’	<i>ein Alter</i>	‘an old man’
PL	<i>die Alten</i>	‘the old people’	<i>Alte</i>	‘old people’
Adjective from present participle ( <i>Partizip I</i> ): <i>studieren</i> ‘to study’				
FEM	<i>die Studierende</i>	‘the female student’	<i>eine Studierende</i>	‘a female student’
MASC	<i>der Studierende</i>	‘the male student’	<i>ein Studierender</i>	‘a male student’
PL	<i>die Studierenden</i>	‘the students’	<i>Studierende</i>	‘students’
Adjective from past participle ( <i>Partizip II</i> ): <i>anstellen</i> ‘to employ’				
FEM	<i>die Angestellte</i>	‘the female employee’	<i>eine Angestellte</i>	‘a female employee’
MASC	<i>der Angestellte</i>	‘the male employee’	<i>ein Angestellter</i>	‘a male employee’
PL	<i>die Angestellten</i>	‘the employees’	<i>Angestellte</i>	‘employees’

Neutralized forms can also be created by merging male- and female-specific terms by means of an orthographic symbol (Table 2.9). Unlike feminization, this is not an abbreviation meant to suggest either of two genders, but a new gender-neutral form that can be used generically, or as specific reference for nonbinary individuals (Diewald & Steinhauer 2017:47). For example, a form such as *Lehrer:in* can be interpreted as 1) a person (gender irrelevant) who teaches (the concept of a teacher); 2) a nonbinary person who teaches. Like some of the feminized abbreviations, the following forms also exemplify linguistic disruption, but are more recent than those used for feminization, with many coming from 2000 and later. The asterisk and colon methods (itself an update for the underscore) are growing more common, as they fit needs

<sup>48</sup> Many German adjectives are derived from present and past participial verbal forms, such as *Studierende* ‘students’ (from *studieren* ‘to study’), and *Angestellte* ‘employees’ (from *angestellt* ‘employed’ from *anstellen* ‘to employ’), respectively.

for many people and contexts (Diewald & Steinhauer 2017:46). Two newer deverbal forms – the *X*-form and *\*-Form* eschew –combining female- and male-specific lexemes for adding letters or orthographic symbols to the verbal stem. As with the shortened feminized forms, all of these neutral forms have been criticized for their difficulty related to orthography and pronunciation. None of the following terms are orthographically acceptable in formal contexts and, as with the *Binnen-I*, a *Gender-Pause* can be used to pronounce the asterisk, gender gap, and colon.

Table 2.9 German neutralization strategies shown on two noun types: 1) role noun derived with *-er* (*Lehrer/Lehrerin* ‘male teacher/female teacher’) from *lehren* ‘to teach’ and 2) non-*-er* role noun (*Student/Studentin* ‘male student/female student’)

Neutralization Strategy	Singular	Plural
<i>Gender-Gap</i> <sup>49</sup> ‘gender-gap’	<i>Lehrer_in</i> <i>Student_in</i>	<i>Lehrer_innen</i> <i>Student_innen</i>
<i>Dynamisch Unterstrich</i> <sup>50</sup> ‘dynamic underscore’	<i>Leh_rerin</i> <i>Stu_dentin</i>	<i>Leh_rerinnen</i> <i>Stu_dentinnen</i>
<i>Genderstern</i> or <i>Sternchen</i> ‘gender-star’ or ‘asterisk’	<i>Lehrer*in</i> <i>Student*in</i>	<i>Lehrer*innen</i> <i>Student*innen</i>
<i>Doppelpunkt</i> ‘colon’	<i>Lehrer:in</i> <i>Student:in</i>	<i>Lehrer:innen</i> <i>Student:innen</i>
<i>X-Form</i> <sup>51</sup> ‘x-form’	<i>Lehrx</i> <i>Studierx</i>	<i>Lehrxs</i> <i>Studierxs</i>
<i>*-Form</i> ‘*-form’	<i>Lehr*</i> <i>Studier*</i>	<i>Lehr**</i> <i>Studier**</i>

In German, male-specific role nouns are often avoided through reformulations (Table 2.10). Common reformulation strategies include the passive voice, use of 1PL statements, and the indefinite pronoun *man*. Role nouns are also replaced using direct address and relative statements – either using epicenes or interrogative pronouns like *wer* ‘who’. Additionally, some phrases built with role nouns can be replaced with adjectival forms.

<sup>49</sup> “Die erste Amtshandlung der neugewählten Präsidentin war es, alle Mitarbeiter\_innen aufzufordern, die Kolleg\_innen über die zentrale Arbeit der Antidiskriminierungsstelle der Universität zu informieren.” (AG Feministisch Sprachhandeln 2015:25).

<sup>50</sup> “We\_lche Mita\_rbeiterin will denn i\_hre nächste Fortbildung zu antidiskriminierender Lehre machen? Sie\_r soll sich melden. Der K\_urs ist bald voll.” (AG Feministisch Sprachhandeln 2015:23).

<sup>51</sup> “Dix Studierx hat in xs Vortrag darauf aufmerksam gemacht, dass es unglaublich ist, wie die Universität strukturiert ist, dass es nur so wenige Schwarze/PoC Professxs gibt” (AG Feministisch Sprachhandeln 2015:22).

Table 2.10 German GM examples with reformulation strategies

GM Example	Reformulation Strategy & Example	
<i>Mitarbeiter</i> <sub>[PL, MALE]</sub> <i>müssen Folgendes beachten.</i> <sup>1</sup> 'Employees <sub>[MALE]</sub> must note the following.'		
	Passive	<i>Es muss Folgendes beachtet werden.</i> <sup>1</sup> 'The following must be noted.'
	<i>man</i>	<i>Man muss Folgendes beachten.</i> <sup>1</sup> 'One must note the following.'
	1PL	<i>Wir müssen Folgendes beachten.</i> <sup>1</sup> 'We must note the following.'
<i>Antragsteller</i> <sub>[PL, MALE]</sub> <i>werden benachrichtigt.</i> <sup>1</sup> 'Applicants <sub>[MALE]</sub> will be notified.'		
	Direct Address	<i>Sie werden benachrichtigt.</i> <sup>1</sup> 'You will be notified.'
<i>Der Antragsteller</i> <sub>[MASC]</sub> <i>muss ein Formular ausfüllen.</i> <sup>2</sup> 'The applicant <sub>[MALE]</sub> must fill out a form.'		
	Relative Sentences	<i>Personen, die einen Antrag stellen müssen ein Formular ausfüllen.</i> <sup>2</sup> 'Persons who are applying must fill out a form.'
		<i>Wer einen Antrag stellen möchten, muss ein Formular ausfüllen.</i> <sup>2</sup> 'Who[ever] would like to file an application must fill out a form.'
<i>Herausgeber</i> <sub>[MASC]</sub> 'male editor'		
	Adjectival	<i>herausgegeben von</i> 'edited by'

Sources: <sup>1</sup>Diewald & Steinhauer (2017:59-63), <sup>2</sup>Motschenbacher (2014:254)

#### 2.4.4 MALE BIAS OF GM AND ITS ALTERNATIVES

Though GM is prescribed as conceptually gender-neutral, speakers and readers of many languages overwhelmingly interpret the “generic” masculine as specifically male (Gastil 1990, Gygax et al. 2012, Horvath et al. 2016, Martyna 1978, Misersky et al. 2019, Sato, Gabriel, and Gygax 2016, Sato, Gygax, and Gabriel 2016). The majority of GM research has focused on a binary representation of women and men, finding that androcentric generics “invoke significantly more male than female imagery” (Hellinger & Pauwels 2007:661), “[trigger] the lowest or slowest cognitive inclusion of women” (F. Braun et al. 2005:16) and “[restrict] the cognitive availability of women” (Kollmayer et al. 2018:3). In sum, when GM is used, people think of men and not of women (Blake & Klimmt 2010, Keith et al. 2022, Misersky et al. 2019, Stahlberg et al. 2001). Even when speakers are aware that the male-specific forms can be

generic, they typically interpret them as explicitly referring to a man (Gygax et al. 2009, MacKay & Fulkerson 1979, Miller & James 2009), unless contextual information implies a female referent (Gygax et al. 2008:480, Heise 2000:11).

Research on GM in English began in the early 1970s, finding that *he*, *his*, *man*, and role nouns built with *-man* were interpreted as male (e.g., Kidd 1971, MacKay & Fulkerson 1979, Martyna 1978, Moulton et al. 1978, Schneider & Hacker 1973). German GM research began in the late 1980s and focused on nouns, also finding a male bias for “generic” masculine terms (e.g., F. Braun et al. 1998, Heise 2000, Keith et al. 2022, Klein 1988, Irmen & Köhncke 1996, Misersky et al. 2019, Rothermund 1998, Scheele & Gauler 1993, Schunack & Binanzer 2023, Stahlberg & Sczesny 2001, Stahlberg et al. 2001). Research methods in English and German have been diverse (e.g., F. Braun et al. 2005, Kollmayer et al. 2018), with findings affected by participant characteristics including gender (F. Braun et al. 1998, 2007, Gabriel & Mellenberger 2004, Kennison & Trofe 2003), political views (Formanowicz et al. 2013), attitude toward non-sexist language or language reform (F. Braun et al. 2005, Koeser et al. 2015, MacKay 1980), and factors such as the context (Klein 2004) and stereotypical associations (Rothmund & Scheele 2004).

In contrast to GM, both feminized and neutralized language make women “cognitively more salient” (F. Braun et al. 2005:16, Körner et al. 2022), with feminization proving to be particularly effective for engendering thoughts of women (Bailey & LaFrance 2017, Moulton et al. 1978 in English; Blake & Klimmt 2010, Gabriel & Mellenberger 2004, Hansen et al. 2016 in German), though results vary by the feminization strategy used. Therefore, increasing the cognitive inclusion of women requires that women “become linguistically visible” (Spender 1998:162) through multiple, explicit references (Hellinger & Pauwels 2007, Irmen & Roßberg 2004, Rothmund & Scheele 2004:50), as any forms not overtly marked as feminine will be interpreted as masculine (Heise 2000:11). The necessity for explicit female-specific reference to improve female cognitive availability is supported by a Rothmund and Scheele study (2004), which examined the so-called footnote method (*Generalklausel*) in German. The footnote method occurs when the generic masculine is used with a “general clause, provision condition” – typically presented in a footnote or endnote – indicating that all male-specific forms are to be interpreted gender-neutrally. Rather than decrease bias, using the footnote with GM actually increased male bias of GM (Rothmund & Scheele 2004). In some experimental conditions, neutralized forms increased the number of women mentioned (Gastil 1990 in English; Stahlberg & Sczesny 2001, Steiger-Loerbroks & von Stockhausen 2014 in German), but they were not as effective as feminized terms in making participants think of women. In other contexts, neutralizations were even found to have a male bias, though not as strong as the bias from GM forms (Bailey & LaFrance 2017, Hamilton 1991, Heise 2000, Sato, Gabriel, and Gygax 2016). To explain the mixed results of neutralization, Stahlberg and colleagues (2007:176) suggest that “the effect of neutral forms is especially context-sensitive” and therefore particularly influenced by a person’s stereotypical knowledge of gender roles and representation in society.

Research has linked male bias due to GM to deleterious social effects for women (Pusch 1984, Stout & Dasgupta 2011, Vervecken et al. 2015), ranging from negative impacts on inclusion and visibility, to consequences for legal rights and economic opportunities. Whereas GM makes men into a prototypical norm (Häberlin et al. 1992), for example, women are perceived as a variation (Julé 2008), peripheral (Bailey et al. 2018), or subordinate (Bußmann & Hellinger 2003), if they are perceived at all. Due to androcentric generics, women are not adequately (Diewald 2018:295) or equally (F. Braun et al. 1998, Vainapel et al. 2015:1517)

mentally represented, and are therefore far less visible in most contexts than men (McConnell-Ginet 2013:34). Furthermore, because GM is used for mixed-gender groups, women can be obscured by the presence of a single man, regardless of how many women are present. As Pusch (2017:80) notes, 9,999 *Sängerinnen* [pl, female] ‘female singers’ plus 1 *Sänger* [m] ‘male singer’ equals 10,000 *Sänger* [pl, male]. Significantly, women and their accomplishments are often made invisible through GM (F. Braun et al. 1998, Häberlin et al. 1992, Lutjeharms 2004, Spender 1998), a concept known as symbolic annihilation (Gerbner 1972), in which women are absent, condemned, or trivialized (Tuchman 2000 [1978]). For example, the phrase *Väter des Grundgesetzes* ‘fathers of the constitution’ obscures the participation and contributions of four women (Stahlberg et al. 2007:170). Ultimately, androcentric generics “[bias] gender representations in a way that is discriminatory to women” (Gygax et al. 2008:480).

Male bias due to GM can create legal issues for women (Grabrucker 1993, Guentherodt 1984, Hamilton et al. 1992, Lamb & Nereo 2012, Ritchie 1975), such as when “documents (especially from the past) do not clarify whether they pertain to all people, or explicitly to men” (Prewitt-Freilino et al. 2012:271). This ambiguity as to whether a male or human reading is intended “can easily be used to exclude women from rights and privileges” (Stahlberg et al. 2007:171), including suffrage (Grabrucker 1993, Trömel-Plötz 1982) and parental rights (Guentherodt 1984). Women, therefore, “cannot rely on laws being applied to their case when these laws are written in the masculine” instead, they “can only lay claim to their rights...when they are mentioned explicitly” (Stahlberg et al. 2007:171).

As Guentherodt (1984) and Lamb & Nereo (2012) have discussed, the German-language version of the Swiss constitution (*Bundesverfassung der Schweizerischen Eidgenossenschaft*, abbreviated as BV) offers an intriguing opportunity to analyze male-specific language in legal texts. For example, in the original Swiss constitution (BV 1848), the male-specific *Schweizer* ‘Swiss men’ explicitly referred to men in statements concerning equality (2.14a) and voting rights (2.15a). The 1874 constitution also uses *Schweizer* in its declaration of equality (2.14b), but that term is clearly made generic by an addendum in 1981 (AS 1981 1243), which added an article clarifying that *Schweizer* referred to women and men (2.14c). As Lamb and Nereo (2012) note, the current constitution (BV 1999) uses an epicene for the declaration of equality (2.14d).

- (2.14) a. **Alle Schweizer**<sub>[PL, MALE]</sub> sind vor dem Gesetze gleich. Es gibt in der Schweiz keine Untertanenverhältnisse, keine Vorrechte des Orts, der Geburt, der Familien oder Personen.  
 ‘**All Swiss**<sub>MALE</sub> are equal before the law. There are no subjects in Switzerland, no privileges of the place, the birth, families, or people.’  
 (Art. 4, BV 1848)
- b. **Alle Schweizer**<sub>[PL, MALE]</sub> sind vor dem Gesetze gleich. Es gibt in der Schweiz keine Untertanenverhältnisse, keine Vorrechte des Orts, der Geburt, der Familien oder Personen.  
 ‘**All Swiss**<sub>MALE</sub> are equal before the law. There are no subjects in Switzerland, no privileges of the place, the birth, families, or people.’  
 (Art. 4, BV 1874)
- c. [§1] **Alle Schweizer**<sub>[PL, MALE]</sub> sind vor dem Gesetze gleich. Es gibt in der Schweiz keine Untertanenverhältnisse, keine Vorrechte des Orts, der Geburt, der Familien oder Personen.  
 [§1] ‘**All Swiss**<sub>GN</sub> are equal before the law. There are no subjects in Switzerland, no privileges of the place, the birth, families, or people.’
- [§3] Mann<sub>MASC</sub> und Frau<sub>FEM</sub> sind gleichberechtigt. Das Gesetz sorgt für ihre Gleichstellung, vor allem in Familie, Ausbildung und Arbeit. Mann und Frau haben Anspruch auf gleichen Lohn für gleichwertige Arbeit.  
 [§3] ‘Men and women have equal rights. The law shall ensure their equality, both in law and in practice, most particularly in the family, in education, and in the workplace. Men and women have the right to equal pay for work of equal value.’  
 (Art. 8, §1,3, BV 1874 1981)
- d. Alle **Menschen**<sub>[PL, NEUTRAL]</sub> sind vor dem Gesetze gleich.  
 ‘All **people**<sub>GN</sub> are equal before the law.’  
 (Art. 8, §1, BV 1999)

For voting rights, the original 1848 constitution guarantees men the right to vote (2.15a). Notably, Swiss women were not eligible to vote in federal elections until a 1971 referendum (AS 1971 325), at which time the suffrage portion of the constitution was rewritten to include female-specific reference (2.15b, feminine forms underlined).

- (2.15) a. Stimmberechtigt ist **jeder Schweizer**<sub>MASC</sub>, **der**<sub>MASC</sub> das zwanzigste Altersjahr zurückgelegt hat und im Übrigen nach der Gesetzgebung des Kantons, in welchem **er**<sub>MASC</sub> **seinen**<sub>MASC</sub> Wohnsitz hat, nicht vom Aktivbürgerrecht ausgeschlossen ist.  
 ‘**Every Swiss man**<sub>MALE</sub> **who**<sub>MALE</sub> has reached the age of twenty – and is not excluded from active citizenship under the legislation of the canton in which **he** has **his** residence – is entitled to vote.’

(Art. 63, BV 1848)

b. Bei eidgenössischen Abstimmungen und Wahlen haben **Schweizer**<sub>[PL, MALE]</sub> und **Schweizerinnen**<sub>[PL, FEMALE]</sub> die gleichen politischen Rechte und Pflichten. Stimm- und wahlberechtigt bei solchen Abstimmungen und Wahlen sind alle **Schweizer**<sub>[PL, MALE]</sub> und **Schweizerinnen**<sub>[PL, FEMALE]</sub>, die das 20. Altersjahr zurückgelegt haben und nicht nach dem Rechte des Bundes vom Aktivbürgerrecht ausgeschlossen sind.

‘In federal votes and elections, **Swiss men** and **Swiss women** have the same political rights and obligations. All **Swiss men** and **Swiss women** who have reached the age of 20 and are not excluded from active citizenship under federal law are entitled to vote and be elected in such elections.’

(Art. 74, BV 1874 1971)

Significantly, the same form – *Schweizer* – has, among the versions of the Swiss constitution, both explicitly referred to men and their rights, and referred generically to Swiss citizens, regardless of gender (Guentherodt 1984).

Economically, gendered language may affect “the development of women’s professional plans and careers,” because androcentric generics can “affect women’s interest in a profession, their willingness to apply for a certain post, or the professional competence ascribed to women” (Stahlberg et al. 2007:180). Indeed, use of GM in job descriptions or advertisements is associated with lowered interest in the position or career among women (Briere & Lanktree 1983, Stout & Dasgupta 2011); lessened motivation to apply for the position (Stout & Dasgupta 2011); and a decrease in the number of women applying (Bem & Bem 1973). Among children and adolescents, GM was associated with decreased estimates of women in an occupation, and less interest among girls in stereotypically male occupations (Vervecken et al. 2013). Female primary school students learning about stereotypically male positions in GM felt the job was less accessible, and that they would be less successful at it (Vervecken & Hannover 2015). In hiring, GM use is associated with “female applicants being perceived to fit less well” with high-status positions compared to male applicants, “even though they were perceived to be equally competent” (Horvath & Sczesny 2016:316). In contrast, pair forms helped reduce male bias and “increase women’s visibility” (Horvath et al. 2016:1), as well as improve “women’s perceived fit with top management” (Horvath & Sczesny 2016:323).

When masculine forms are used generically, women are assumed to be included, or *mitgemeint* (lit. ‘meant along with’) (Diewald & Steinhauer 2017, Heise 2000, Hellinger & Bierbach 1993). Whereas men are always referenced by masculine language, “linking the masculine form to a female exemplar is context-dependent and requires language users to search for specific contextual cues” (Gabriel et al. 2018:847). Such “he/man” language (Martyna 1980) “[equates] maleness and humanness” (Stahlberg et al. 2007:169), a phenomenon that Moulton and colleagues (1978:1035) refer to as “parasitic reference,” in that masculine forms “[receive] the referential benefits intended for a more equitable distribution.” However, “many texts lack a

definite clue as to whether a ‘male’ ... or ‘human’ reading is intended” (Stahlberg et al. 2007:171) and therefore determining inclusion is not always possible (Bußmann & Hellinger 2003). Faced with this ambiguity, women are tasked with the additional labor of determining their inclusion (Posch 2011, Schmidt 2004, Silveira 1980) “whereas no such problem existed for males who can never be ambiguous in such structures” (Spender 1998:146).

GM use in media could thereby contribute to an under-counting of women, engender less accurate news, and make men seem more newsworthy. Already underrepresented in global media, women appear in only 24% of news stories – an increase from 17% in 1995 – and often in stereotypical roles as victims, mothers, and wives (Macharia et al. 2010:iii-viii). Though the number of female news subjects has steadily risen in the US and Germany – up to 23% and 26%, respectively (Macharia et al. 2010:67), these numbers remain well below the percentage of women in those countries. In both English and German, the generic masculine may be playing a role in obscuring the presence of women. In 2015, for example, news of an airplane crash was commonly reported in the generic masculine (*Zwei Lehrer und 16 Schüler* ‘two male teachers and 16 male primary students), obfuscating the reality that both teachers were women, and fourteen of the sixteen children were girls (Macharia & Journalistinnenbund 2015).

Though GM is still prevalent, GM is less common than before in German (Elmiger et al. 2017, Merkel 2011) and, especially in English (Bigler & Leaper 2015, Earp 2012). Feminization and neutralization have been employed in various contexts, including administrative, academic, and in every-day language such as ads, forms, brochures, and instructions for medication (F. Braun et al. 2007:6). As social understandings of gender have evolved, the focus on inclusive language pertains less to the invisibility of women and more to the gender binary, which leads to the exclusion of nonbinary individuals (Günthner 2018). As a result, many people, especially younger women, have become critical of feminization, due to the “[reinforcement of] a binary conception of gender” (Bigler & Leaper 2015:191). Many young women have turned to neutralized forms for gender-neutral reference, while some young German-speaking women have seemingly returned to or “reclaimed” GM in some linguistic contexts (Günthner 2018, Schröter et al. 2012, Wesian 2007), though they find it more acceptable in usage than they are likely to use it themselves (Schröter et al. 2012). Renewed use of GM has been associated with those who feel that feminine forms reduce women to gender<sup>52</sup> and that young women today experience lower levels of sexism compared to their foremothers (Günthner 2018:7-8).

## 2.5 GENERIC STATEMENTS, STEREOTYPES, AND GENDER BIAS

Though gender bias in generic masculine statements has received the majority of research, the surgeon riddle from the introduction shows that non-GM nouns can also engender male bias – i.e., an “implicit belief that a word describing an undefined person describes a man” (Lindqvist et al. 2019:109). This dissertation examines singular role nouns used generically – i.e., when reference is made to a person (existing or otherwise) whose gender identity is unknown or irrelevant.

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<sup>52</sup> Though they make women visible, feminized forms can have the negative effect of treating women as a special case and overtly gendered, in contrast to the “neutral” male form (Lutjeharms 2004:192).



Although generic statements are comprehensible without knowing the subject's gender, speakers and readers nonetheless construct mental representations of the referent's gender (Becker 2008, Oakhill et al. 2005). These inferences about gender identity are made by “combining text information with available world knowledge” (Gygax et al. 2021:3). Text information can include grammatical gender (e.g., Gygax et al. 2008, 2009, Irmen 2007, Irmen et al. 2010, Irmen & Kurovskaja 2010) and gender-specific morphology (e.g., Irmen & Roßberg 2004, Khan & Daneman 2011, Scheutz & Eberhard 2004). World knowledge comprises many factors – e.g., the utterance context, shared knowledge between speakers, etc. However, one of the best studied non-textual sources of male bias is gender stereotype (e.g., Banaji & Hardin 1996, Oakhill et al. 2005, Reynolds et al. 2006, Sato et al. 2013 in English; Garnham et al. 2012, Sato, Gygax, and Gabriel 2016 in German).

While grammatical gender has already been discussed (§ 2.2.1), it is helpful here to define stereotypes. For this dissertation, STEREOTYPE refers to information about a role noun that is known to the language user. In general, stereotypes are “means for constructing and highlighting social categories” (Eckert & McConnell-Ginet 2013:58). In particular, gender stereotypes are “standardized representations of men and women within a culture..., which polarize differences” in aspects such as “physical appearance, traits, behaviours, and occupations” (Chandler & Munday 2020). Whereas women are linked with concepts such as “communal..., warm [and] helpful” (Hodel et al. 2017), men are perceived as agentic and instrumental (Eagly et al. 2000), e.g., “ambitious,” and “independent” (Hodel et al. 2017). In addition, binary gender stereotypes “have a hierarchical dimension of status inequality,” in which “men are viewed as more status worthy and competent overall and more competent at the things that ‘count most’” (Ridgeway & Correll 2004:513). In contrast, women are perceived as “less competent in general but ‘nicer’” and “better at communal tasks,” which are “less valued” (Ridgeway & Correll 2004:513).

As a result, role nouns stereotypically associated with men (e.g., *executive*, *football coach*, *rapist*) or appearing in stereotypically male contexts have a higher likelihood of evoking male exemplars than nouns that are stereotypically female (e.g., *au pair*, *secretary*, *rape victim*) or appear in female contexts (Kennison & Trofe 2003, Stahlberg et al. 2007).<sup>53</sup> However, many role nouns not overtly connected with male activities, masculine traits or roles, exhibit male bias (e.g., *Teenager* ‘teenager’) (Gabriel et al. 2008, Misersky et al. 2014) – which is linked to androcentrism (e.g., Bailey et al. 2018, Spender 1980). Even seemingly neutral words like *Mensch* ‘human being’ (Scheele & Gauler 1993) and *Person* ‘person’ are more associated with male exemplars than female exemplars (Bailey et al. 2022, Hamilton 1991).

To better understand gender stereotypes, this dissertation relies on a study by Misersky and colleagues (2014), which reports participant beliefs about the proportion of women and men in a given role. Performed in many languages, including English and German, this study surveys the gender bias of over 400 role nouns, many of them occupations.<sup>54</sup> Notably, the authors found that role nouns were similarly ranked between English and German (i.e., English and German speakers had similar judgments for how many women or men were in a given role such as *actor*, *engineer*, or *pilot*), and that the “overall proportion of women in the role nouns ranged from .42

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<sup>53</sup> In some domains (e.g., nursing, secretary work, birth attendant), women outnumber men. In these situations, a neutral term, or even a generic masculine “may evoke female and not male associations” (F. Braun et al. 2005:17).

<sup>54</sup> Due to the diversity of forms used (plural, many noun types treated as one class, etc.), these studies do not allow us to directly address the impact of language or morphology on a given role noun.

to .45 across languages, signaling globally stronger male stereotypes than female” (Misersky et al. 2014:846).<sup>55</sup>

## 2.6 DISCUSSION

This literature review has provided an overview of themes relevant to the central questions of this dissertation. First, this review clarified terms related to gender identity, grammatical gender, lexical gender, and conceptual gender. It then discussed gender-specific language in English and German and asymmetries between female- and male-specific words. The literature review then contrasted language practices such as the generic masculine, feminization, and neutralization, before reviewing the effects of grammatical gender and stereotype on male bias. With this background established, the dissertation will now examine male bias in generically used singular role nouns in English and German. Specifically, the subsequent chapters will analyze the consequences of the following themes on male bias: 1) grammatical gender, 2) gender-specific nouns and morphology, 3) language policies and social change.

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<sup>55</sup> Misersky et al.’s 2014 study included German-speaking participants from Germany and UK-based English-speaking participants.

## CHAPTER 3

### GRAMMATICAL GENDER AND MALE BIAS

In comparing English and German, grammatical gender is a potential variable influencing gender bias of generic role nouns. Grammatical gender can be used in German to express gender identity, though it does not always do so – e.g., epicene nouns. Though GG is a formal property, research has found many connections between grammatical gender and conceptual gender – i.e., concepts of femaleness and maleness – whether in cultural productions such as art, advertisement, and mythology (e.g., Bassetti 2014, Jakobson 1959, Köpcke & Zubin 2012) or psycholinguistic studies (e.g., Bender et al. 2011, Konishi 1993, Semenuks et al. 2017). Further, there is evidence that GG languages are linked to increased gender inequality (Prewitt-Freilino et al. 2012) and decreased economic and political opportunities for women (e.g., Gay et al. 2013, 2018). This chapter is concerned with the cognitive effects and social consequences of grammatical gender relative to male bias and how this may relate to interpretation differences between English and German speakers. It argues that German role nouns, due to GG, convey an additional layer of gender information that is unavailable to English speakers. It is argued that this gender expression in generic statements – overwhelmingly masculine due to GM – increases male bias for German speakers relative to English speakers.

#### 3.1 GRAMMATICAL GENDER ACTIVATION

Grammatical gender is a constant presence in speakers' minds, often at levels below their awareness. Cognitive studies reveal that speakers “spontaneously, yet unconsciously [access]” grammatical gender (Bender et al. 2018:1583), a process which occurs “almost automatically,” “prior to syntactic and phonological information” (Flaherty 2001:19). GG is activated “regardless of whether syntactic information is necessary” (Flaherty 2001:19), such as when a noun is produced without a definite article (La Heij et al. 1998). In German, grammatical gender is also activated when speakers produce plural noun phrases (Schiller & Caramazza 2003, Schriefers et al. 2002), though German only distinguishes grammatical gender in the singular. Further, gender activation occurs even in non-linguistic tasks in which verbalization is not required (Bender et al. 2018), such as when looking at images of an object (Boutonnet et al. 2012, Cubelli et al. 2005) or being exposed to an object (Sato & Athanasopolous 2018).

#### 3.2 GRAMMATICAL GENDER AND LINGUISTIC RELATIVITY

Studies show that the grammatical structure of a language can influence speakers' cognition, a principle known as linguistic relativity. Known by many as the Sapir-Whorf hypothesis (Whorf 1956), linguistic relativity states that language influences its speakers' “conceptual representations” (Bender et al. 2011:1821) and “judgments about what [they] perceive” (Samuel et al. 2019:1767). Strong Sapir-Whorf readings, also called linguistic determinism, imply that language determines or constrains what we can think, a view that “has long been abandoned in cognitive science” (Boroditsky et al. 2003:61). However, weaker readings of linguistic relativity argue that language guides and influences speakers, but does not delimit cognition and perception, evidence for which has been extensive (Boroditsky & Schmidt 2000, Boroditsky et al. 2003, Flaherty 2001, Konishi 1993, Sera et al. 2002). Notably, “grammatical distinction[s] in language” can influence decision making (Boroditsky et al.

2003:75) and “[appear] to be involved in many more aspects of our mental lives than scientists had previously supposed” (Boroditsky 2011:65). Grammatical categories can “greatly affect speakers’ online cognitive processes, including attention, memory, construal of entities, reasoning, and decision making” (Imai et al. 2014:532). Ultimately, “the way [speakers] interpret reality and make evaluative judgments of perceptual stimuli very much depends on the grammatical categories of the languages [speakers] use” (Sato & Athanasopoulos 2018:228).

Linguistic relativity for grammatical gender argues that gender systems are linked in speakers’ minds to concepts of femaleness and maleness, even for nouns that are not conceptually motivated in their gender assignment (e.g., non-animate nouns). In effect, linguistic relativity contends that grammatical gender adds connotations of biological sex or gender identity to the referent, i.e., that masculine nouns make people think of men or are linked to masculine properties, whereas feminine nouns are linked to women or femininity. Notably, these conceptual effects of grammatical gender (i.e., gender effects) were argued against by Sapir in his discussion of relativity (Bassetti 2011:358): “It goes without saying that a Frenchman has no clear sex notion in his mind when he speaks of *un arbre* (‘a-masculine tree’) or of *une pomme* (‘a-feminine apple’)” (Sapir 1921:102, cited in Bassetti 2011:358). However, there is evidence that grammatical gender does impact object conceptualization (Boroditsky & Schmidt 2000, Semenuks et al. 2017), which can be seen in cultural representations as well as in cognitive studies.

### 3.2.1 CULTURAL EXPRESSIONS

Congruence between grammatical gender and conceptual gender is visible in many cultural symbols. Personifications of abstract concepts, for example, tend to align with their grammatical gender (Jakobson 1959), such as depictions of the sun – grammatically masculine in German and feminine in Italian – which are depicted as a man and woman, respectively (Bassetti 2007:255). Congruence between GG and conceptual gender is especially common when an “affect reaction” is sought (Köpcke & Zubin 2012:405), as in poetry (Bassetti 2007), art and iconography (Bassetti 2014, Segel & Boroditsky 2011), and mythology (Jakobson 1959, Köpcke & Zubin 2012). Gender congruence is also especially prevalent in advertisements (Köpcke & Zubin 2012, Yorkston & De Mello 2005), media designed to be playful and humorous, and in products for children (Köpcke & Zubin 2012:405), such as fairytales (Bassetti 2014, Mills 1986), in which “anthropomorphised animals and objects are represented as fable in line with the grammatical gender of their nouns” (Bassetti 2014:276). Notably, grammatical gender is often used to depict love stories through masculine-feminine paired items or concepts (Köpcke & Zubin 2012:405), as is highlighted by the Heinrich Heine poem “Ein Fichtenbaum steht einsam” (1827:137). In this poem, the grammatically masculine fir tree longs for the grammatically feminine palm tree. Though the masculine pronoun *er* can be translated as *he*, it is hard to render the feminine nature of the palm tree into English, and this information is often left out – e.g., the English translation of Heine’s poem (Heine 1982).

German	English
Ein Fichtenbaum steht einsam Im Norden auf kahler Höh' Ihn schläfert; mit weißer Decke Umhüllen ihn Eis und Schnee.	A pine is standing lonely In the North on a bare plateau. He sleeps; a bright white blanket Enshrouds him in ice and snow.
Er träumt von einer Palme, Die, fern im Morgenland, Einsam und schweigend trauert Auf brennender Felsenwand.	He's dreaming of a palm tree Far away in the Eastern land Lonely and silently mourning On a sunburnt rocky strand. <sup>56</sup>

(Heine 1827:137)

### 3.2.2 COGNITIVE STUDIES

Cognitive studies in gendered languages have found “gender effects on object conceptualization” (Bender et al. 2011:1822) – i.e., that speakers of a grammatical gender language “perceive feminine characteristics in referents of grammatically feminine nouns and masculine characteristics in referents of grammatically masculine nouns” (Bassetti 2014:275). Notably, grammatical gender affects “real-life behaviors” (Bassetti 2011:358) in a variety of tasks (e.g., Boroditsky et al. 2003, Flaherty 2001, Imai et al. 2014, Mills 1986, Pavlidou & Alvanoudi 2013, 2019, Saalbach et al. 2012, Semenuks et al. 2017, Sera et al. 2002, Vigliocco et al. 2005). Studies show that grammatical gender can influence memory (Boroditsky & Schmidt 2000), assessments of similarity (Phillips & Boroditsky 2003), noun personification (Jakobson 1959, Mills 1986), and “ratings of object characteristics” (Phillips & Boroditsky 2003:932). For example, in German, grammatically masculine words and phrases are rated higher in potency than feminine ones (Konishi 1993, 1994), and masculine affect nouns were rated as more extroverted than feminine ones (Zubin & Köpcke 1984a).

Grammatical gender also influences participant’s descriptions of objects (Semenuks et al. 2017) – i.e., masculine nouns elicit more conceptually masculine adjectives and feminine nouns generating conceptually feminine adjectives (Boroditsky et al. 2003, Semenuks et al. 2017:1064, Williams et al. 2021). This effect occurs even when participants who speak GG languages perform the task in English and have no access to phonological or morphological gender cues, “suggest[ing] that gender information is quite central in people’s mental representations” (Semenuks et al. 2017:1065). Notably, young adult monolingual speakers of GG languages consider “grammatical gender [to be] semantically motivated” and link “gender assignments to perceived masculine or feminine connotations of referents” (Bassetti 2014:273).

To argue relativity effects for grammatical gender is not without controversy, due, in part, to the diversity of findings (Bender et al. 2011), which arise from testing differences in language types (Sera et al. 2002), participant age (Bassetti 2011), noun category (Bender et al. 2016), and methods (Beller et al. 2015, Samuel et al. 2019).<sup>57</sup> Patterns among research findings suggest that conceptual effects of grammatical gender are stronger with animate nouns compared with inanimate nouns or artifacts (Forbes et al. 2008, Sera et al. 2002, Vigliocco et al. 2005). Results

<sup>56</sup> Translation by Hal Draper (Heine 1982:62).

<sup>57</sup> For an overview of study types, see Pavlidou & Alvanoudi 2019 and Samuel et al. 2019.

are also more likely to support relativity when “gender and/or sex is a salient context in the experiment” (Samuel et al. 2019:1769) and in linguistic versus nonlinguistic tasks (Bender et al. 2016). Notably, grammatical gender effects for inanimate referents, while present in German, are more consistent and robust in GG languages with two gender categories, like Spanish, French, and Italian (Saalbach et al. 2012, Samuel et al. 2019, Sera et al. 2002, Vigliocco et al. 2005). This difference in effect likelihood and strength may be due to an easier mapping between grammatical and conceptual categories without the presence of a third neuter class, which is never tied to conceptual gender (Bender et al. 2018:1582). Differences in findings between German and other languages could also be due to German’s “more complex GG system, with a larger number of endings that provide less-reliable clues to GG, compared with Italian or Spanish” (Bassetti 2011:375).

### 3.2.3 LINGUISTIC RELATIVITY CAUSES AND PROCESSES

Researchers posit numerous mechanisms behind gender-based relativity effects. Many of these hypotheses focus on the ability of language to focus speakers’ attention on specific elements or aspects of an event (Jakobson 1959, Slobin 1996, Wolff & Holmes 2011). Jakobson (1959:236), citing Boas (1938), noted that languages are distinguished by what “they *must* convey” through their grammar and that speakers “will be constantly focused on such items as are compulsory in their verbal code” (emphasis in original). This concept is furthered by *Thinking for Speaking* (Slobin 1987, 1996), which argues that language shapes perception by focusing attention on specific aspects which are grammatically required. A German speaker, for example, must be aware of a referent’s gender to select the correct role noun, whereas English speakers often do not need such an awareness. This increased attention has been referred to as a spotlight (or as creating a spotlight effect) because grammatical distinctions highlight “particular information in a regular and sustained manner” (Bender et al. 2018:1580). The speaker’s attention “may linger” on these grammatically encoded properties with language “act[ing] as a spotlight, making certain aspects of the world more salient than others” (Wolff & Holmes 2011:259). Unlike English speakers, thinking to speak in German requires speakers to “mark gender almost every time they utter a noun (hundreds or thousands of times a day),” whether through definite articles, pronouns, or agreement inflections (Phillips & Boroditsky 2003:929). Significantly, the “sheer weight of repetition (of needing to refer to objects as masculine or feminine) may leave its semantic trace, making the objects’ masculine or feminine qualities more salient” (Phillips & Boroditsky 2003:929, Sato & Athanasopoulos 2018).

Increased salience may also assist language learners who must memorize each noun’s grammatical gender (Boroditsky et al. 2003:65). For example, a speaker whose language classifies the sun as masculine “might try to remember this by conceiving of the sun in terms of what are perceived as stereotypically masculine properties like powerful and threatening,” but for a feminine “sun,” the speaker “might focus on its warming and nourishing qualities” (Boroditsky et al. 2003:65). In studies, speakers associated grammatically feminine terms with concepts like *beauty*, *elegance*, *delicacy*, and *smallness*, while grammatically masculine terms were associated with concepts such as *strong*, *aggressive*, *big*, and *ugly* (Bassetti 2014,

Boroditsky et al. 2003).<sup>58</sup> Learning a language with grammatical gender can therefore “lead speakers of a language to think about inanimate objects in terms of properties that they associate with males and females” (Sera et al. 2002:396).

Gender effects may also result from categorization and subsequent overgeneralization of learned associations. Grammatical gender “creates categories of entities that have nothing in common in the real world” (Bassetti 2011:358), but by grouping items into the same category, “languages may invite their speakers to (not necessarily consciously) carry out comparisons that they wouldn’t have otherwise carried out (or perhaps wouldn’t have carried out as often or with the same goals in mind)” (Phillips & Boroditsky 2003:932). Notably, while “carrying out these comparisons, people may discover meaningful similarities between objects,” which are then “highlighted in the representations of the objects” (Phillips & Boroditsky 2003:932). A key similarity noticed by language learners is that the majority of nouns for women are grammatically feminine, and the majority of nouns for men are grammatically masculine. According to the SEX AND GENDER HYPOTHESIS (Vigliocco et al. 2005), children notice this link between grammatical gender and referential gender for human referents and overgeneralize female and male associations to other nouns (Saalbach et al. 2012).

Additionally, speakers may assume that the noun classes are inherently meaningful, especially during language development (Bassetti 2014). For example, children learn that “many grammatical distinctions reflect differences that are observable in the world (the plural inflection, for example),” and, therefore, “have no a priori reason to believe that grammatical gender doesn’t indicate a meaningful distinction between types of objects” (Phillips & Boroditsky 2003:929). Monolingual children, “have no opportunity to perform the comparative linguistics necessary to discover the seemingly arbitrary nature of grammatical gender assignment” and may even believe that “the grammatical genders assigned by their language are the true universal genders of objects” (Phillips & Boroditsky 2003:929). In support of this, studies find that monolingual speakers older than eight years often see grammatical gender not as arbitrary, but conceptually motivated (Bassetti 2014, Flaherty 2001), even for inanimate nouns. However, knowing more than one language with grammatical gender is linked to “increased awareness of grammatical gender arbitrariness and lower levels of perceived [conceptual] motivation” (Bassetti 2014:289).

### 3.2.4 LINGUISTIC RELATIVITY AND GERMAN

Significantly, there is also reason to believe that German may have *stronger* gender effects due to its 3-class system compared to GG languages with only feminine and masculine categories. Due to German’s neuter gender, “a higher proportion of grammatically feminine and masculine words refer to feminine and masculine referents, whereas in languages where all words must be either masculine or feminine a higher proportion of masculine and feminine words have asexual referents” (Bassetti 2007:257). This neuter class effect may have significant consequences concerning role nouns and the generic masculine in German. For example, though a tri-partite GG system is linked to less likely and lower-intensity gender effects for inanimate

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<sup>58</sup> Though some of these terms seemingly align with Grimm’s semantic argument of nominal gender (1831:357), Boroditsky and colleague’s findings do not show that the nouns were assigned gender based on their qualities – as Grimm argues – but that speakers link masculine and feminine characteristics to nouns of those genders as a potential memorization strategy (2003).

nouns, it may be that having a neuter class *increases* gender effects for animate nouns, due to the higher percentage of conceptually motivated nouns within the network of activation.

Though gender effects vary in intensity between GG languages, comparing a GG language to a non-GG language is much clearer: German exhibits gender effects (Boroditsky et al. 2003, Imai et al. 2014, Konishi 1993, 1994, Pavlidou & Alvanoudi 2019, Saalbach et al. 2012), whereas there can be no such effect in English at all. Studies in German find that speakers' "ideas about the genders of objects are strongly influenced by the grammatical genders assigned to these objects in their native language" (Boroditsky & Schmidt 2000:5) – specifically, that German speakers "associate masculine nouns for animates and non-animates more strongly with male properties, and feminine nouns more strongly with female properties" (Bender et al. 2018:1594). Significantly, the influencing effects of GG are strongest when "gender and/or sex is a salient context" (Samuel et al. 2019:1769), which is inherently applicable when talking about people – e.g., the generic masculine.

### 3.3 GRAMMATICAL GENDER AND SOCIAL OUTCOMES

Speakers of GG languages must frequently "make gender-based references in the words and grammatical structures of everyday communication" (Liu et al. 2018:87), making conceptual gender more accessible and salient (Bigler & Leaper 2015, Gabriel & Gygax 2016). Increased gender salience is also linked to increased salience of gender stereotypes (DeFranza et al. 2020) and "translates into more pronounced differences between gender in-groups and out-groups" (Liu et al. 2018:87). As a result, GG is associated with "adverse effect[s] on gender equality" (Mavisakalyan 2015:421) and the promotion of "sexist attitudes" (Wasserman & Weseley 2009:641). In young learners, repeated exposure to masculine role nouns "may anchor [their] representations of a particular occupation as being male dominated" (Gygax et al. 2009:242). Further, studies show that children who speak GG languages "may be more gender aware from an earlier age" compared to speakers of so-called *natural gender* languages like English (Flaherty 2001:30), and aware of their own gender identity at a younger age (Guiora et al. 1982).

At the national level, countries where GG languages are the dominant language exhibit increased adverse social effects for women compared to countries with "natural gender" languages. Worsened outcomes for women in GG-language countries can be found in labor type and participation (Gay et al. 2013, 2018, Mavisakalyan 2015), income parity (Shoham & Lee 2018, van der Velde et al. 2015), education attainment (Jakiela & Ozier 2020), political participation (Gay et al. 2013) household chore assignment (Hicks et al. 2015), or access to leadership positions (Santacreu-Vasut et al. 2014). In a 2013 study, Santacreu-Vasut and colleagues examined "two key policy instruments for increasing female participation in politics" – gender political quotas and enforcement sanctions – in more than 84 countries (495). Though factors such as "economic development, religion, ... political system" and colonial history play a role, the frequency and intensity of female-male distinctions in the country's most-spoken language was the "most strongly related variable to the adoption of quotas" aimed to increase female political participation. The authors conclude that the "structure of languages grammar has a strong link to socioeconomic structures" (Santacreu-Vasut et al. 2013:495). Many of the documented effects on women remain even after a speaker has immigrated to a country with a non-gendered dominant language (Hicks et al. 2015). For example, married female immigrants in the US who speak a sex-based grammatically gendered language "exhibit lower labor force participation, hours worked, and weeks worked" than married female immigrants who speak a



non-sex-based language (Gay et al. 2018). Ultimately, compared to countries with genderless or natural gender languages, countries where grammatically gendered languages are dominant exhibit increased prejudice (DeFranza et al. 2020), inequality (Prewitt-Freilino et al. 2012), and “discriminatory attitudes” (Mavisakayalyan 2015:403) towards women.

Intentional misuse of grammatical gender for a human referent when a suitable noun exists<sup>59</sup> is often pejorative and reveals a clear hierarchy (Zubin & Köpcke 1984b), in which men are “downgraded” with grammatically feminine terms.<sup>60</sup> Women, however, are downgraded with the neuter gender (Lind & Nübling 2021),<sup>61</sup> which is often used to “[express] negative affect such as disapproval, rejection, scorn, dislike” or “trivialization” (Köpcke & Zubin 2003:156).<sup>62</sup> For women, grammatically feminine terms “convey adult (sexual) womanliness” and independence, whereas neuter often conveys “downgrading for presexual innocence or pejorative effect” (Zubin & Köpcke 1984b:67) and dependent social status (Köpcke & Zubin 2003). Neuter gender for women also occurs when “the experiencer treats the referent as a visual object” or “as an object of inspection..., which typically implicates depersonalization” (Köpcke & Zubin 2003:156),<sup>63</sup> or for women who are viewed as “undesirable, old, unattractive [and] unpleasant, from a stereotypic male perspective” (Zubin & Köpcke 2009:253).<sup>64</sup> In sum, to call a man a woman is an insult; to insult a woman is to call her a thing.<sup>65</sup> Ultimately, intentionally using grammatical gender that does not align with the referent’s gender identity often communicates perceived divergence from stereotypical gendered norms – i.e., that men are behaving in a feminine way or that women are not feminine enough (either because they are acting in a masculine way, have been objectified, or because they are, from a male perspective, no longer desirable).

### 3.4 GRAMMATICAL GENDER AND THE GENERIC MASCULINE

When determining whether a masculine term is generic or male-specific, GG speakers form a mental representation of gender that is based both on grammatical gender and stereotype (Gygax et al. 2008, 2009, Garnham et al. 2012, Sato et al. 2013, Sato, Gygax, and Gabriel 2016), whereas speakers of “natural gender” languages are influenced by stereotype alone (Banaji & Hardin 1996, Carreiras et al. 1996, Kennison & Trofe 2003, Oakhill et al. 2005, Reynolds et al. 2006). In other words, whereas English speakers are influenced by stereotype when reading or hearing “boss”, German speakers are additionally affected by the masculine grammatical gender of *Chef* [m] ‘male boss’ (Esaulova et al. 2014, Irmen 2007, Irmen et al. 2010, Irmen & Kurovskaja 2010, Irmen & Roßberg 2004). Notably, German studies show that grammatical gender “may override the stereotypicality’s influence” in some contexts (Irmen & Roßberg

<sup>59</sup> Using a feminine epicene for a man, for example, would not be an intentional misuse of grammatical gender.

<sup>60</sup> Additional examples include: *Fotze* [f] ‘pussy’, *Memme* [f] ‘coward, sissy’, *Schwuchtel* [f] ‘fairy, homosexual’, *Tunte* [f] ‘fairy, homosexual’.

<sup>61</sup> Additional examples include: *Frauenzimmer* [z] ‘woman’ (pej.), *Luder* [n] ‘slut, bitch’, *Mensch* [n] ‘whore’, *Weib* [n] ‘woman’ (pej.).

<sup>62</sup> In some regional dialects, both feminine and neuter gender are acceptable for adult female referents (Busley & Nübling 2021, Nübling et al. 2013).

<sup>63</sup> *Girl* [n] ‘girl’, *Callgirl* [n] ‘callgirl’, *Groupie* [n] ‘groupie’.

<sup>64</sup> *Aas* [n] ‘rotten carcass, bitch’, *Reff* [n] ‘skeleton, old gaunt woman’, *Schrapnell* [n] ‘unattractive older woman’.

<sup>65</sup> In a few cases, women are pejoratively referred to with masculine gender, seemingly to indicate that the woman is (inappropriately) taking on masculine characteristics of aggression, such as *Drachen* [m] ‘scold, quarrelsome woman’ lit. ‘dragon’ and *Besen* [m] ‘abrasive, gruff woman’.

2004:272, Gygax et al. 2008). As a result, grammatical gender can be seen as an additional data point in German role nouns – i.e., a level of gender information unavailable to English speakers. Due to this additional layer of masculine information and the resulting increased salience of gender, it is likely that German speakers are more likely to interpret generic language as specifically male. Of particular interest is whether grammatical gender is conceptually motivated – e.g., masculine for a male-specific referent – or non-conceptually motivated, as with epicenes. The following sections highlight key properties of interest and how they could contribute to a strengthened male bias in German compared to English. These properties include 1) conceptual grammatical gender, and 2) repetition of information due to agreement.

### 3.4.1 CONCEPTUAL GRAMMATICAL GENDER

German nouns used in generic statements likely express different amounts of gender information based on whether grammatical gender reflects real-world gender. Two noun types are relevant here (Table 3.1): 1) male-specific and 2) epicene. The first category – male-specific nouns – are lexically male and grammatically masculine – i.e., grammatical gender is conceptual. In contrast, epicene nouns are lexico-semantically gender-neutral, and grammatical gender can be masculine, neuter, or feminine. Therefore, epicenes do not have conceptually motivated grammatical gender.

Table 3.1 Generically used nouns in German by grammatical gender

Noun Type	Example
a) male-specific, grammatically masculine	<i>Chef</i> ‘male boss’
b) epicene, grammatically masculine	<i>Mensch</i> ‘human being, person’
c) epicene, grammatically neuter	<i>Individuum</i> ‘individual’
d) epicene, grammatically feminine	<i>Person</i> ‘person’

Most role nouns with grammatical gender are also lexically specified for gender, which provides an additional layer of gender information to speakers. A humorous example from Mark Twain’s *The Awful German Language* (1880:260) highlights this seeming redundancy from the perspective of an English speaker (and, notably, uses the generic masculine in doing so):

A German speaks of an Englishman as the *Engländer*; to change the sex, he adds *inn*, and that stands for Englishwoman, – *Engländerinn* [*sic*]. That seems descriptive enough, but still it is not exact enough for a German; so he precedes the word with that article which indicates that the creature to follow is feminine, and writes it down thus: “*die Engländerinn*,” – which means “the *she-English-woman*.” I consider that that person is over-described.

What Twain calls “over-description” can also be seen as a repetition of gender information. Here, Twain’s example is reinforced with gendered morphology (to be discussed in chapter 4), which likely further strengthens the gender bias effect. However, even at its most basic level – i.e., a grammatically masculine and lexically male noun with no male-specific suffix or compound element, as in *Chef* [m] ‘male boss’ (3.1) – there is a repetition of gender

information. This repetition increases gender salience and encourages the language user to interpret grammatical gender as conceptual, increasing the likelihood that generic masculine statements will be read as referentially male. In 3.1, for example, though German speakers may be aware that jobs cannot legally be made available to only one gender,<sup>66</sup> masculine nouns may engender assumptions about the gender of the boss. In contrast, there is no such gender information expressed by the English word *boss*.

(3.1) PR-Agentur sucht **Chef**<sub>MASC</sub>.

‘PR agency is looking for a **boss**<sub>GN/MALE</sub>.’

(PR-Agentur sucht Chef 2022)

It is helpful here to reference a study by de Backer and de Cuypere (2012), which compared lexically male nouns in German and Dutch. In German, lexically male nouns overwhelmingly have masculine grammatical gender – i.e., grammatical gender is conceptual for these nouns. In Dutch, lexically male nouns and lexically female nouns belong to the class common, meaning that grammatical gender is purely a formal category for Dutch role nouns, and not linked to concepts of felinity or masculinity. Notably, comparisons between German and Dutch find that male-specific words in German are interpreted as less gender-neutral than their Dutch counterparts (de Backer & de Cuypere 2012). In other words, male-specific forms were less generic (more male-biased) in the language where grammatical gender is conceptual, suggesting that grammatical gender is a supplemental layer of information that increases gender bias effects compared to lexical gender alone. These findings suggest that German gender-specific role nouns will express more gender information than English gender-specific role nouns, which have no grammatical gender.

In contrast, epicene nouns are likely to transmit the least amount of gender identity information in German. These words are meant to be inherently gender neutral – i.e., even though there is grammatical gender, epicene nouns do not have lexical gender. However, though the grammatical gender of epicene nouns is not intended as conceptual gender information, it is likely often interpreted that way. For example, when encountering a masculine epicene in a generically intended sentence, the masculine “gender marking makes gender a salient feature,” whether intentional or not (Gygax et al. 2021:7). Of particular concern is the highly frequent masculine epicene *Mensch* ‘human being, person’ – which has been found to have a male bias (Scheele & Gauler 1993) – as it may worsen androcentric assumptions that men are prototypical (3.2 and 3.3).

(3.2) Der gute Arzt<sub>MASC</sub> sieht **den Menschen**<sub>MASC</sub>, nicht nur die Symptome.

‘The good doctor<sub>GN/MALE</sub> sees **the person**<sub>GN</sub>, not just the symptoms.’

(Müller-Jung 2022)

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<sup>66</sup> Germany’s *Allgemeines Gleichbehandlungsgesetz* (AGG) (‘General Action Equal Treatment’) prohibits gender-based discrimination in jobs and job applications (§ 7 AGG). Exceptions exist for cases in which gender is necessary for the fulfillment of the position, e.g., a female singer is needed rather than a male singer (§ 8 AGG).

- (3.3) **Der Mensch**<sub>MASC</sub> kann mit seinen<sub>MASC</sub> kognitiven Möglichkeiten in jede einzelne Entscheidung höchstens fünf bis zehn Fakten gleichzeitig einfließen lassen.  
 ‘A human<sub>GN</sub>, with their<sub>GN</sub> / his<sub>MALE</sub> cognitive abilities, can incorporate a maximum of five to ten facts into each individual decision at the same time.’  
 (Müller-Jung 2022)

For epicenes, the masculine grammatical gender is most likely to be interpreted as conceptually motivated and engender a male bias. However, non-masculine epicenes can also engender a male bias (Irmen & Roßberg 2004, Kollmayer et al. 2018, Scheele & Gauler 1993), particularly in contexts with high male stereotypicality (Stahlberg et al. 2007). For example, the German version of the surgeon riddle from the dissertation’s opening showed a male bias for the feminine epicene *Koryphäe* [f] ‘luminary’ (Kollmayer et al. 2018, Stoeger et al. 2004). Should stereotypes be equal, masculine epicenes are most likely to be increase male bias, followed by neuter, and then feminine epicenes. Though, masculine epicenes are most likely among the epicenes to be interpreted as conceptually motivated and thereby increase male bias, they are less likely to do so than a grammatically masculine noun that is also lexically male. In contrast, English speakers have no linguistic gender information for their epicene role nouns. Therefore, if an English epicene noun and German epicene noun have equivalent stereotype ratings, but the German noun has masculine gender, the German noun would likely produce more male inferences than the English noun.

#### 3.4.2 AGREEMENT AS REPETITION

In German, the grammatical gender of role nouns is often visible through agreement – whether NP-internal or in anaphor. This repetition of gender information is linked to increased salience of conceptual gender. Within the NP, gender agreement information can appear in the article and adjectival endings (3.4).

- (3.4) *der*                      *gut-e*                      *Arzt*  
 the.MASC.NOM.SG    new-MASC.NOM.SG    doctor.MASC.NOM.SG  
 ‘the good doctor<sub>GN/MALE</sub>’

Commonly, repetition of gender information occurs in satellite forms, such as pronouns (Table 3.2).

Table 3.2 German singular personal and relative pronouns

	Masculine	Neutral	Feminine
3SG Personal Pronouns			
Nominative	er	es	sie
Accusative	ihn	es	sie
Dative	ihm	ihm	ihr
Genitive	seiner	seiner	ihrer
3SG Relative Pronouns			
Nominative	der	das	die
Accusative	den	das	die
Dative	dem	dem	der
Genitive	dessen	dessen	deren

For example, generic statements may be made with masculine personal pronouns (3.5a), relative pronouns (3.5b), or anaphorically through possessive determiners: *sein-* ('his/ its') (3.5c). Grammatical gender may also be reflected in apposition (3.5d).

- (3.5) a. Ein guter Chef<sub>MASC</sub> macht nicht alle Fehler selbst. **Er**<sub>MASC</sub> gibt auch anderen eine Chance.  
 'A good boss<sub>GN/MALE</sub> doesn't make all the mistakes themselves<sub>GN</sub> / himself<sub>MALE</sub>.  
**They**<sub>GN</sub> / **He**<sub>MALE</sub> also give(s) others a chance.'  
 (Koch 2022)
- b. Ein guter Chef<sub>MASC</sub> ist ein Chef<sub>MASC</sub>, **der**<sub>MASC</sub> sich selbst irgendwann überflüssig macht.  
 'A good boss<sub>GN/MALE</sub> is a boss<sub>GN/MALE</sub> **who**<sub>GN/MALE</sub> eventually makes themselves<sub>GN</sub> / himself<sub>MALE</sub> superfluous.'  
 (vom Lehn 2020)
- c. Ein durchschnittlicher Deutscher schüttelt etwa 15 000-mal während **seines Lebens** den Mitmenschen die Hand, haben Wissenschaftler ausgerechnet.  
 'Scientists have calculated that an average German<sub>GN/MALE</sub> shakes hands with others around 15,000 times during **their**<sub>GN</sub> / **his**<sub>MALE</sub> **lifetime**.  
 (Brauer 2019)
- d. Ein guter Koch<sub>MASC</sub> ist zugleich **ein exzellenter Handwerker**<sub>MASC</sub>.  
 'A good chef<sub>GN/MALE</sub> is, at the same time, **an excellent craftsman**<sub>GN</sub> / **craftsman**<sub>MALE</sub>.'  
 (Desrues 2020)

Notably, to produce and understand such anaphoric references, German speakers "reaccess the lemma of the antecedent noun in the lexicon, which includes its syntactic and semantic features"

(Lago et al. 2017:41). Said another way, coreference in German requires the cognitive re-activation of the antecedent, including its gender information. In contrast, this lexical retrieval process is not required of English speakers (Lago et al. 2017), resulting in a higher level and increased repetition of lexical and gender activation in German compared to English. Due to grammatical gender, “masculine generics concern more word classes” in German, and “masculine markings are much more frequent in a text,” which “could intensify ‘male’ associations and produce a stronger male bias than in English” (F. Braun et al. 2005:5). Notably, when a masculine form is used, all anaphoric references will also be masculine, which increases the number of masculine forms in the text and potentially reinforces a specifically male interpretation.

Though the noun’s GG determines the gender of the anaphoric reference, increased distance between anaphor and referent may lead readers to assume that terms like ‘his’ were chosen for their conceptual gender rather than grammatical – i.e., reflecting the Linear Distance Principle (Köpcke et al. 2010) and Corbett’s agreement hierarchy (1979). In 3.6, for example, both the possessive determiner *sein* ‘his’ and the masculine pronoun *er* appear multiple times, which readers may misinterpret as conceptually male, especially as readers move further away from the epicene noun ‘guest.’

- (3.6) **Der Gast**<sub>MASC</sub> sollte vor **seiner**<sub>MASC</sub> Anreise ausführlich über die neuen Abläufe informiert werden. Darüber, dass **er**<sub>MASC</sub> Mund-Nasen-Schutz in öffentlichen Räumen tragen muss, dass nur bargeldlos bezahlt werden kann oder dass es hilfreich wäre, wenn **er**<sub>MASC</sub> die Nachverfolgungs-App auf **seinem**<sub>MASC</sub> Handy installiert, sollte es sie bis dahin geben.

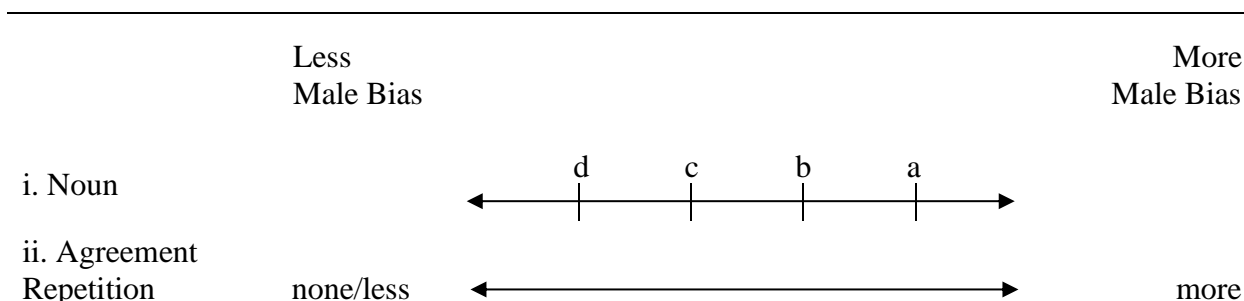
‘The **guest**<sub>GN</sub> should be informed in detail about the new procedures before **their**<sub>GN</sub> / **his**<sub>MALE</sub> arrival. About the fact that **they**<sub>GN</sub> / **he**<sub>MALE</sub> must wear mouth and nose protection in public spaces, that payment can only be made without cash or that it would be helpful if **they**<sub>GN</sub> / **he**<sub>MALE</sub> installed the tracking app on **their**<sub>GN</sub> / **his**<sub>MALE</sub> cell phone if it was available by then.’

(Wyssuwa 2020)

### 3.5 DISCUSSION

Using the findings from the previous sections, I propose that German role nouns and NPs express an additional layer of gender information that is unavailable to English speakers. In generic statements, it is likely that this gender expression – overwhelmingly masculine – increases male bias for German speakers relative to English speakers. In German, the amount of gender information is likely influenced by multiple factors related to grammatical gender (Figure 3.1), including whether GG is conceptual (i), and the frequency of references to the noun. Terms expressing less gender information appear on the left side of the scale, while higher amounts of gender information appear on the right.

Figure 3.1 Hypothesized effects of linguistic factors on male bias among German NPs



*Note:* This scale does not attempt to quantify the male bias in a word, only to show when a form or type is more or less likely to engender male bias compared to other forms.

The amount of masculine or male gender information in the generic phrase depends partly on whether the noun has conceptually motivated grammatical gender (Table 3.3). Most generically used role nouns are lexically male and grammatically masculine (a) – i.e., they have conceptually motivated grammatical gender. For epicenes – e.g., non-conceptually motivated GG nouns – gender in a generic role noun can be masculine (b), neuter (c), or feminine (d).

Table 3.3 German male-specific and epicene nouns

Code, and Noun Type	Lexical Gender	Grammatical Gender		
	MALE	MASC	NEUT	FEM
a: male-specific, grammatically masculine	X	X		
b: epicene, grammatically masculine		X		
c: epicene, grammatically neuter			X	
d: epicene, grammatically feminine				X

Among German epicenes, the masculine epicenes (b) are likely to cause the strongest male bias effect, followed by neuter epicenes (c), and then feminine epicenes (d). Grammatically masculine, lexically male nouns (a) express the most masculine information. Additionally, repeated reference to gender through agreement (ii) is also assumed to be associated with a rightward direction on this scale. In essence, the more masculine and male gender information in the noun phrase, the more likely a speaker is to interpret the NP as explicitly male rather than generically gender neutral.

Analyzing the impact of grammatical gender on gender conceptualization implies that GG language speakers often receive an additional layer of information through grammatical gender. Though grammatical gender is impactful at many levels, one significant way it influences speakers is by repeatedly activating a network of same-gendered nouns, many of which are conceptually motivated. Though German speakers cannot always be sure whether grammatical gender is conceptually meaningful for role nouns, studies show that they often interpret it as such, leading to an increased male bias for the generic masculine. These findings are relevant not only for German but also for other languages with grammatical gender systems. This effect is likely also particularly strong in languages with only masculine and feminine noun

classes, such as Spanish, Italian, and French, and in those with extensive and overt gender agreement. Grammatical gender is a powerful variable influencing GM interpretation, and its presence in German likely means that German speakers are more likely to interpret forms as masculine than English speakers.



## CHAPTER 4

### GENDER-SPECIFICATION AND MALE BIAS

Along with grammatical gender, lexical gender and gender-marking morphology provide information to language users as they interpret ambiguous generic statements. Whereas GG is a formal property, lexical gender is a lexico-semantic property in which lexemes are specified as [female] or [male] – in contrast to epicene terms which are conceptually gender-neutral. Whereas English has a limited set of gender-specified nouns and few productive gender-specific morphemes, lexical gender is pervasive and extensively marked in German role nouns. Research on male bias in English role nouns has focused on the effects of stereotype, with little examination of morphology – in part because gender-specific nouns are so rare. In German, studies of male bias have typically contrasted generic masculine forms (e.g., *der Lehrer*) against gender-fair alternatives (e.g., *Lehrer und Lehrerin* or *LehrerIn*). Though such research is helpful in understanding the effects of GM vs. alternative forms, these studies often fail to account for the diversity of generically used noun forms and to indicate how this diversity may affect male bias. Further, noun studies in both English and German have overwhelmingly use plural forms, which often neutralize overt gender reference. To remedy this gap, this chapter examines singular role nouns used generically in English and German by distinguishes five types of singular role noun, which may impart varying amounts of gender information. Specifically, this chapter analyzes the impact of grammatical and lexical gender on the amount of gendered information imparted to speakers and makes claims as to how it may affect male bias in English and German. Analyses include a same-language comparison (e.g., English type-1 against other English noun types, German type-1 nouns compared to other German noun types) and two cross-language comparisons: 1) a same-type comparison – i.e., English type-1 against German type-1, and 2) a cross-type comparison – English type-1 against German type-2. Ultimately, this chapter argues the following: As a result of increased gender specification in the lexicon and gender-marking on generically used nouns, German speakers likely experience increased male bias for nouns intended as generic, compared to English speakers.

#### 4.1 NOUN TYPE OVERVIEW

Studies using plural nouns indicate that male bias can vary due to factors such as grammatical gender (e.g., Gygax et al. 2008, 2009, Garnham et al. 2012), lexical gender (e.g., Irmen & Roßberg 2004, Scheele & Gauler 1993), and morphology (e.g., Irmen & Roßberg 2006, Sato, Gabriel, and Gygax 2016, Scheutz & Eberhard 2004). To analyze the importance of these factors in the singular, English and German nouns used in generic statements have been categorized into five types (Table 4.1).<sup>67</sup> These noun types are delineated among four categories: grammatical gender, lexically male, male-specific morpheme, and a gender-unspecified hypernym. The option for each variable is either yes – which is quantified as a point – or no, which is quantified as a zero. This dissertation argues that a noun type that fulfills more of these variables (i.e., more “yes” answers, resulting in a higher score) is more likely to evoke a male-biased interpretation than a noun with fewer “yes” answers.

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<sup>67</sup> Note that this doesn’t account for all role nouns in English and German, simply those most likely to be used generically. For example, hybrid and pejorative terms that may be unaligned in terms of grammatical and lexical gender are not typically used generically, and not presented here.

Table 4.1 Role noun types used in English and German generic statements

	English	German
Type 1: Epicenes		
Grammatical Gender	no	yes
Male-Specific	no	no
Male-Specific Morpheme	no	no
Gender-Unspecified Hypernym	no	no
Type 2: Male-Specific Substantivized Adjectives		
Grammatical Gender		yes
Male-Specific		yes
Male-Specific Morpheme		no <sup>a</sup>
Gender-Unspecified Hypernym		no
Type 3: Male-Specific Monomorphemic		
Grammatical Gender	no	yes
Male-Specific	yes	yes
Male-Specific Morpheme	no	no
Gender-Unspecified Hypernym	yes <sup>b</sup>	no <sup>c</sup>
Type 4: Male-Specific Polymorphemic – Suffix		
Grammatical Gender	no	yes
Male-Specific	yes	yes
Male-Specific Morpheme	no	yes
Gender-Unspecified Hypernym	no	no
Type 5: Male-Specific Polymorphemic – Compound		
Grammatical Gender	no	yes
Male-Specific	yes	yes
Male-Specific Morpheme	yes	yes
Gender-Unspecified Hypernym	yes	no

<sup>a</sup> Only one singular noun form shows gender-marking that is uniquely male-specific: the masculine dative in a bare NP (see § 4.1.2 and Table 4.4).

<sup>b</sup> Most nouns in this category have a gender-unspecified hypernym (see § 4.1.3).

<sup>c</sup> Only a few nouns in this category have a gender-unspecified hypernym (see § 4.1.3).

The first category is grammatical gender, which is extensively discussed in Chapter 3. GG is absent in English and present in German, where nouns belong to the masculine, feminine, or neuter class.

Lexically male – also known as “male-specific” – refers to whether the noun can be used to explicitly refer to men (even if it can also be used generically). For example, *waiter* can be used exclusively for men, even if it can be used as a generic to include other genders.

Significantly, whether a term is male-specific is defined largely by its opposition to a female counterpart. Said another way, in a language with a binary lexical gender distinction, there is rarely a lexically male word without a female counterpart or vice versa.<sup>68</sup> For example, the English word *guest* is not lexically specified for gender, whereas the word *waiter* is [male] in part due to its [female] counterpart *waitress*. Many English role nouns that are epicene today were originally in gender-specific word pairs, but the loss of female-specific terms have made a previously male-biased term neutral. For example, *ancestor* is gender-neutral in modern English, though it was specifically male when it had *ancestress* as a common and used counterpart.<sup>69</sup> In contrast to English's loss of female-specific terms, German can easily create, and is constantly creating new feminine terms, due to the productivity of the feminine suffix *-in*. That a grammatically masculine role noun can be feminized "implies, but does not specify" that the citation form is male (Eckert & McConnell-Ginet 2013:85). Said another way, due to the possibility of adding *-in*, the masculine word is no longer regarded as gender-neutral (Lutjeharms 2004).

The third category concerns whether the role noun ends in a morpheme associated with male-specific reference, including suffixes or compound elements.<sup>70</sup> In English, many gender-specific suffixes are borrowed from other languages and are not productive. In German, gender-specific suffixes and compound elements belong to specific gender classes – e.g., the suffix *-er* is grammatically masculine, whereas *-in* is grammatically feminine. The fourth category is concerned with whether a male-specific term has a lexically gender-unspecified hypernym<sup>71</sup> – which is linked here to assumptions about communicative intent. For example, when a speaker hears a gender-neutral term like *Person* [f] 'person', they may be influenced by the noun's grammatical gender, but they are not overtly looking for gender identity information because they know that *Person* is lexically gender-unspecified. However, when a gender-specific term (e.g., *Mann* 'man') is chosen over a term like *Person*, it implies that gender is relevant. Further, when a lexically male term is chosen over an otherwise equivalent lexically female co-hyponym (e.g., *Mann* 'man' over *Frau* 'woman'), the reader or listener is likely to assume that the choice is communicative (Grice 1975). Whether the communicative intent was to indicate maleness, or to use the form generically may not be clarified for the language user.

Whereas type-1 role nouns are lexically gender-unspecified, nouns in categories two through five are male-specific. In German, types two through five have conceptually motivated grammatical gender – i.e., the lexically male nouns are grammatically masculine. Category 2 comprises nominalized adjectives, a noun type that does not exist in English.<sup>72</sup> Though this category is a common GM alternative in plural statements, substantivized adjectives are an example of the generic masculine in the singular. Category 2 forms vary in the presence of distinctly male-specific morphology, based on case and noun phrase definiteness. Category 2 examples will use a mixed form (e.g., *Deutsche(r)* 'the German man') to show the varying nominative forms (e.g., definite article: *der Deutsche* 'the German man'; indefinite article: *ein Deutscher* 'a German man'; no article: *Deutscher* 'German man'). Category three comprises

<sup>68</sup> Exceptions include gender-specific roles, e.g., *pope*.

<sup>69</sup> Additional outdated female-specific terms include *authoress*, *aviatrix*, *doctress*, *philosopheress*, and *poetess*.

<sup>70</sup> Notably, neither the word *man* nor its German counterpart *Mann* are seen as ending in a male-specific morpheme. However, words that end in *-man* and *-mann* are part of this category (e.g., *fireman*, *Feuerwehrmann* [m] 'fireman').

<sup>71</sup> This category is not relevant for category 1 nouns (i.e., only lexically gendered words are considered here to have a hypernym).

<sup>72</sup> Though English also, rarely, nominalizes adjectives (e.g., F. Scott Fitzgerald's *The Beautiful and Damned*), these nouns do not express gender.

gender-specific role nouns that are mono-morphemic. The final two categories result from word formation – whether derivation (category four) or compounding (category five). Whereas the majority of English role nouns are in category one (Kremer 1997), most German role nouns result from word-formation processes and belong to types four and five (P. Braun 1997). Though German has many male-specific derivational suffixes and compound elements, to better compare English and German, category four will focus on the suffix<sup>73</sup> *-er*, and category five will analyze compounds built with *-mann* ‘-man’, as these forms are found in both languages.

#### 4.1.1 TYPE 1: EPICENE

Category-1 nouns are epicenes – i.e., gender-neutral role nouns (Table 4.2).

Table 4.2 English and German type 1 nouns: Epicene

	Grammatical Gender	Male- Specific	Male-Specific Morpheme	Gender- Unspecified Hypernym
English <i>person</i> <i>student</i> <i>biologist</i>	no	no	no	no
German <i>Mensch</i> <sub>MASC</sub> ‘person, human’ <i>Individuum</i> <sub>NEUT</sub> ‘individual’ <i>Person</i> <sub>FEM</sub> ‘person’	yes	no	no	no

In English, epicene nouns (e.g., *person*, *farmer*) are the dominant role noun type, whereas this is a relatively small category in German. German epicenes (e.g., *Geisel* [f] ‘hostage’, *Star* [m] ‘star, celebrity’) belong to one of the three grammatical genders – however, this gender is not conceptual – i.e., it is not intended to communicate gender identity information. Additionally, epicene nouns cannot be feminized (there is no *\*guestess*, *\*personess* in English, nor *\*Gästin* or *\*Menschin* in German).<sup>74</sup> As they are not gender-specific, epicene nouns cannot have a gender-unspecified hypernym.

<sup>73</sup> Some terms in category four (e.g., *bachelor*) do not have true suffixes – i.e., the *-or* is not derived from the base *\*bachel*. Such pseudo-suffixes will be labeled when used.

<sup>74</sup> “While it’s not abundantly clear why a noun like *Gast* or *Star* doesn’t have a feminine counterpart (*\*Gästin*, *\*Stärin*), there is probably a phonological motivation for the lack of forms such as *\*Prüflingin*, *\*Lehrlerin*” – specifically, “that the resultant forms contain three stressed syllables, including two derivational suffixes with secondary stress” (Thomas Shannon, personal correspondence).

## 4.1.2 TYPE 2: SUBSTANTIVIZED ADJECTIVE

Noun type two comprises German substantivized adjectives – i.e., adjectives used as nouns (Table 4.3). Category two nouns are lexically male and have conceptual GG, i.e., grammatical gender can refer to gender identity.

Table 4.3 German type 2 nouns: Substantivized adjective

	Grammatical Gender	Male-Specific	Male-Specific Morpheme	Gender-Unspecified Hypernym
German	yes	yes	no <sup>a</sup>	no
<i>Deutsche(r)</i> <sub>MASC</sub> ‘male German’				
<i>Angestellte(r)</i> <sub>MASC</sub> ‘male employee’				
<i>Bekannte(r)</i> <sub>MASC</sub> ‘male acquaintance’				

<sup>a</sup> Only one singular noun form shows gender-marking that is uniquely male-specific (*Deutchem*): the masculine dative in a bare NP (Table 4.4).

These nouns cannot be feminized with *-in*,<sup>75</sup> meaning that, unlike most gender-specific noun pairs, the feminine form “is neither morphologically dependent on nor more complex than the masculine” (Kremer 1997:99). As a result, female and male forms are often identical (Table 4.4), with disambiguation occurring due to the NP’s article, or agreement with an attributive adjective. The presence of a male-specific morpheme is dependent on case and the noun phrase. In the singular, there are four distinct noun forms built from an adjective.

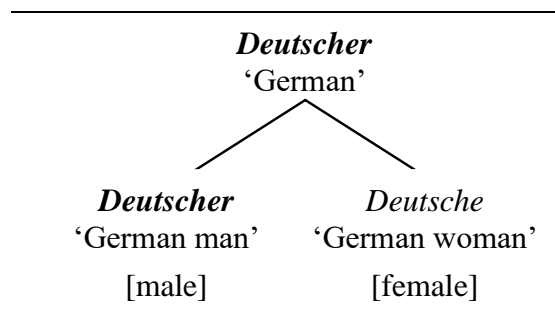
Table 4.4 Singular forms of *Deutsche* ‘German’

	DEFINITE NP		INDEFINITE NP		BARE NP
	MASCULINE				
NOM	der	Deutsche	<b>ein</b>	<b>Deutscher</b>	<b>Deutscher</b>
ACC	den	Deutschen	einen	Deutschen	Deutschen
DAT	dem	Deutschen	einem	Deutschen	<u>Deutchem</u>
GEN	des	Deutschen	eines	Deutschen	Deutschen
	FEMININE				
NOM	die	Deutsche	eine	Deutsche	Deutsche
ACC	die	Deutsche	eine	Deutsche	Deutsche
DAT	der	Deutschen	einer	Deutschen	<b>Deutscher</b>
GEN	den	Deutschen	einer	Deutschen	Deutschen

<sup>75</sup> *der Beamte / die Beamtin* ‘male official / female official, civil servant’ being an exception (Kremer 1997:99).

Additionally, type-two nouns are in an autohyponomous relationship, in that the male-specific hyponym is also the hypernym (Figure 4.1).

Figure 4.1 Hypernym and hyponym relationships of type 2 nouns



#### 4.1.3 TYPE 3: MALE-SPECIFIC MONOMORPHEMIC

The third category comprises male-specific mono-morphemic nouns (Table 4.5).

Table 4.5 English and German type 3 nouns: Male-specific monomorphemic

	Grammatical Gender	Male- Specific	Male-Specific Morpheme	Gender- Unspecified Hypernym
English <i>man</i> <i>father</i> <i>king</i>	no	yes	no	yes <sup>a</sup>
German <i>Arzt</i> <sub>MASC</sub> 'male doctor' <i>Chef</i> <sub>MASC</sub> 'male boss' <i>Mann</i> <sub>MASC</sub> 'man'	yes	yes	no	no <sup>b</sup>

<sup>a</sup> Most, but not all nouns in this category have a gender-unspecified hypernym.

<sup>b</sup> Only a few nouns in this category have a gender-unspecified hypernym.

In English, the small type-3 category is dominated by basic gendered vocabulary and kinship terms, such as *man* and *father*, respectively. In addition to those terms, German has many other category-3 role nouns, most of which are monosyllabic, such as *Arzt* [m] 'male doctor', *Chef* [m] 'male boss', and *Koch* [m] 'male cook'. For such German nouns, lexical gender is in alignment with grammatical gender, and the word is in opposition to a feminized form. Nouns in this category feminized with *-in* may include phonological alternations such as umlaut (e.g., *Ärztin* [f] 'female doctor', *Köchin* [f] 'female cook').

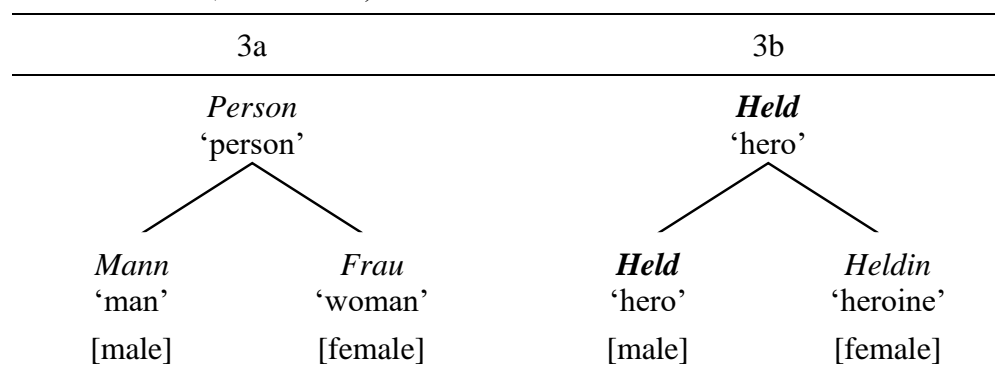
Notably, there are two subtypes within this category (Table 4.6).

Table 4.6 3a and 3b nouns in English and German

Type-3 Noun Types	English		German	
	male-specific	female-specific	male-specific	female-specific
3a non-derived female counterpart	father man	mother woman	<i>Mann</i> ‘man’ <i>Vater</i> ‘father’	<i>Frau</i> ‘woman’ <i>Mutter</i> ‘mother’
3b derived female counterpart	hero host	heroine hostess	<i>Held</i> ‘hero’ <i>Chef</i> ‘boss’	<i>Heldin</i> ‘heroine’ <i>Ärztin</i> ‘doctor’

In both languages, subtype 3a includes high-frequency personal nouns, including core gender-specific vocabulary and kinship terms (e.g., *man*, *father*, respectively). 3a nouns have non-derived feminine counterparts (e.g., *woman*, *mother*) and typically have a gender-unspecified hypernym (e.g., *person*, *parent*) (Figure 4.2a). In contrast, 3b nouns have female forms derived from the male form and use the male form as both hypernym and hyponym – i.e., 3b nouns are in an autohyponomous relationship (Figure 4.2b).

Figure 4.2 Hypernym and hyponym relationships of 3a (*Person* ‘person’) and 3b nouns (*Held* ‘hero’)



In examining 3a and 3b nouns, it is also helpful to turn to Zobel’s (2017:438) distinction between class nouns – e.g., “*man*, *cat*, *human*” – and role nouns, such as “*lawyer*, *passenger*” and student. For Zobel, “an individual is correctly described with a [class noun] based only on the individual’s *intrinsic properties* (i.e., properties that an individual bears independent of any other individual) ... for instance, height, weight, age, [sex], or genetic make-up” (2017:440, emphasis in original). In contrast, role nouns describe an individual, based “not only on...intrinsic properties” but also on “external properties,” that are “based on...participation” (Zobel 2017: 440–1). For example, a student is defined by their participation as a learner in an academic setting. Notably, role nouns typically reflect non-permanent properties – e.g., after graduation, the term *student* no longer applies to the individual (Zobel 2017:441). Significantly, the subcategory 3a comprises a mixture of class and role nouns, whereas 3b tends to fit the narrower definition of role noun – i.e., describing an occupation, trait, or other non-permanent property.

## 4.1.4 TYPE 4: MALE-SPECIFIC POLYMORPHEMIC – SUFFIX

The fourth noun category comprises derived male role nouns ending in a suffix (Table 4.7). Though a small category in English, this is one of the largest categories in German.

Table 4.7 English and German type 4 nouns: Male-specific polymorphemic, suffix

	Grammatical Gender	Male- Specific	Male-Specific Morpheme	Gender- Unspecified Hypernym
English <i>actor</i> <i>waiter</i> <i>widower</i>	no	yes	no	no
German <i>Bauer</i> <sub>MASC</sub> ‘male farmer’ <i>Kellner</i> <sub>MASC</sub> ‘waiter’ <i>Schauspieler</i> <sub>MASC</sub> ‘male actor’	yes	yes	yes	no

Though there are English endings more likely to be found in male-specific words (e.g., *-er*, *-or*, *-ist*), there are no consistently male suffixes in English – i.e., there are no suffixes that reliably indicate maleness in a word. Significantly, it is not the ending of itself that indicates maleness, but whether the word with that suffix is in opposition to a female term.<sup>76</sup> For example, though both *farmer* and *waiter* are derived from verbs with *-er*, the former is an epicene because it has no female counterpart, whereas the latter is a type-4 noun due to its counterpart *waitress*.

In German, however, there are many grammatically masculine suffixes (Table 4.8),<sup>77</sup> all of which can be feminized with the suffix *-in*: *Studentin* [f] ‘female student’, *Vegetarierin* [f] ‘female vegetarian’, etc.<sup>78</sup> As a result, there are many more type-4 nouns in German than in English.

<sup>76</sup> Specifically, a feminine term that is common and in use (see chapter 5). For example, *aviator* was masculine when in opposition to *aviatrix*, which is now outdated. As a result, *aviator* is now epicene, and the suffix *-or* does not indicate gender.

<sup>77</sup> Many of these endings are also found in English, such as *-ant* (*accountant*), *-ent* (*student*), and *-ist* (*artist*), though they do not express gender. Additional endings common to English role nouns include: *-ar* (*beggar*), *-ian* (*comedian*), *-ician* (*politician*), *-arian* (*librarian*), *-ee* (*employee*), and *-eer* (*engineer*). Unless the noun with this ending has a female-specific counterpart, the noun belongs to type 1.

<sup>78</sup> See P. Braun (1997) and Kremer (1997) for in-depth overviews of masculine and feminine role nouns in German, including their suffixes.



Table 4.8 Common German masculine suffixes

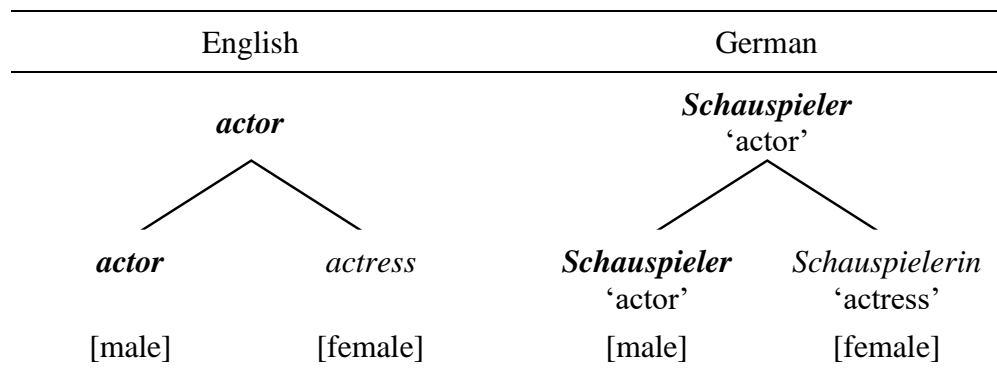
Suffix	Example	Suffix	Example
<i>-and</i>	<i>Doktorand</i> ‘male doctoral student’	<i>-end</i>	<i>Promovend</i> ‘male doctoral candidate’
<i>-ant</i>	<i>Praktikant</i> ‘male intern, apprentice’	<i>-ent</i>	<i>Student</i> ‘male student’
<i>-ar</i>	<i>Bibliothekar</i> ‘male librarian’	<i>-er</i>	<i>Fahrer</i> ‘male driver’
<i>-är</i>	<i>Sekretär</i> ‘male secretary’	<i>-eur</i>	<i>Ingenieur</i> ‘male engineer’
<i>-ast</i>	<i>Phantast</i> ‘male dreamer, visionary’	<i>-ier</i>	<i>Vegetarier</i> ‘male vegetarian’
<i>-ator</i>	<i>Kommentator</i> ‘male commentator’	<i>-ist</i>	<i>Komponist</i> ‘male composer’
<i>-e</i>	<i>Biologe</i> ‘male biologist’	<i>-or</i>	<i>Professor</i> ‘male professor’

To contrast English and German nouns more accurately in this category, this analysis will focus on the suffix *-er*, which is common and productive in both languages (Fleischer et al. 2012, Ryder 1999). This suffix evolved from Latin *-arius*, which designated male persons as having a certain function or occupation (Wilmanns 1899:263). In modern German and English, *-er* still serves this person-marking and agentive function (Scheutz & Eberhard 2004:563), along with a few other purposes, such as marking an inhabitant (e.g., *Engländer* [m] ‘Englishman’). This analysis of *-er* includes its alternative forms: *-or* and *-ar* in English – e.g., *actor*, *liar* – (Panther & Thornburg 2001:150), and *-ler*, and *-ner* in German (Fleischer et al. 2012) – e.g., *Künstler* [m] ‘artist’, *Redner* [m] ‘speaker’. Notably *-er* nominals have a wide range of possible denotations outside of personal reference, including “animals, plants, objects [and] events” (Panther & Thornburg 2001:150–151). In both English and German, the suffix *-er* can also be used with inanimate objects that perform a function. As with role nouns, these nouns are derived from verbs or other nouns (e.g., *Bohrer* [m] ‘drill’, from *bohren* ‘to drill, bore’). For some nouns, the object and person who perform the role are marked with the same form (e.g., *Drucker* [m] ‘printer’ can be the machine itself, or the person who works a press, from *drucken* ‘to press, print’).<sup>79</sup> Furthermore, though *-er* often derives nouns from verbs in English and German (e.g., *Arbeiter* [m] ‘male worker’ from *arbeiten* ‘to work’), *-er* nominals can also be built from nouns, adjectives, and other elements.<sup>80</sup> Additionally, type-four nouns are in an autohyponymous relationship (Figure 4.3), in that the male-specific hyponym is also the hypernym.

<sup>79</sup> Additionally, some inanimate German words end in *-er*, but it is not the masculine derivational morpheme – e.g., *Butter* [f] ‘butter,’ *Fenster* [n] ‘window,’ *Kammer* [f] ‘chamber,’ *Koffer* [m] ‘suitcase,’ *Muster* [n] ‘pattern,’ *Zimmer* [n] ‘room,’ *Zucker* [m] ‘sugar’).

<sup>80</sup> For English, see Ryder 1991, 1999, and Panther & Thornburg 2001. For German, see Fleischer et al. 2012:201–207.

Figure 4.3 Hypernym and hyponym relationships of type 4 nouns in English (*actor*) and German (*Schauspieler* ‘actor’)



#### 4.1.5 TYPE 5: MALE-SPECIFIC POLYMORPHEMIC – COMPOUND

Type-5 nouns are compound role nouns ending with a male morpheme (Table 4.9).

Table 4.9 English and German type 5 nouns: Male-specific polymorphemic, compound

	Grammatical Gender	Male- Specific	Male-Specific Morpheme	Gender- Unspecified Hypernym
English <i>businessman</i> <i>salesman</i> <i>spokesman</i>	no	yes	yes	yes
German <i>Geschäftsmann</i> <sub>MASC</sub> ‘businessman’ <i>Kameramann</i> <sub>MASC</sub> ‘cameraman’ <i>Kaufmann</i> <sub>MASC</sub> ‘male merchant’	yes	yes	yes	no

Male-specific compound elements include *-man*, *-lord*, and *-boy*<sup>81</sup> in English, and German *-herr* ‘-man,’ *-junge* ‘-boy,’ and *-mann*<sup>82</sup> ‘-man.’ Rather than having a female form derived from the masculine (e.g., *Lehrerin* ‘female teacher’ from *Lehrer* ‘male teacher’ from *lehren* ‘to teach’), nouns in this category often have a feminine counterpart made from *-woman* in English (e.g., *congressman-congresswoman*), and, in German, *-frau* ‘-woman’, or a less productive form such as *-dame* or *-mädchen* (e.g., *Kauffrau* ‘female merchant’ / *Kaufmann* ‘male merchant’ from *kaufen* ‘to sell’). This analysis will focus on the German morpheme *-mann* and its English counterpart *-man*, as they are the most productive male role noun compound elements

<sup>81</sup> E.g., *businessman*, *caveman*, *chairman*, *congressman*, *salesman*, *spokesman*; *landlord*; *batboy*, *busboy*, *cowboy*, *paperboy*, *schoolboy*.

<sup>82</sup> E.g., *Bauherr* [m] ‘male owner, builder’, *Ratsherr* [m] ‘male councilor’; *Balljunge* [m] ‘ballboy’, *Laufjunge* [m] ‘errand boy’; e.g., *Fachmann* [m] ‘male expert, specialist’, *Geschäftsmann* [m] ‘businessman’, *Kaufmann* [m] ‘male merchant’.

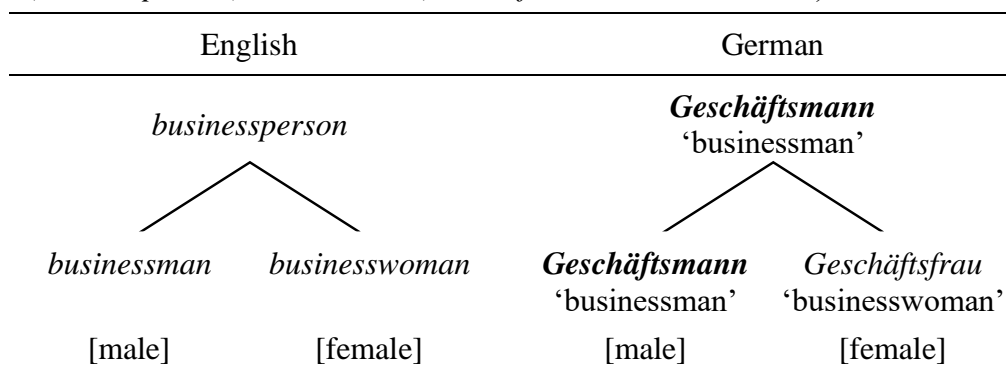
common in both languages. As with type-four nouns, there is no English morpheme that makes a noun male-specific, instead a noun is male if it has a female-specific counterpart. For example, though both *freshman* and *congressman* end in *-man*, the former is an epicene, and the latter is a type-5 noun because it has *congresswoman* as a counterpart, whereas there is no *\*freshwoman*. This can result in seemingly mis-matched phrases such as “freshman congresswoman” (4.1).

- (4.1) If you’re a fan of Alexandria Ocasio-Cortez (AOC, for super-fans), you may already view the **freshman congresswoman** as a superhero. But if you need a little help with that, the team at the independent comic book publisher Devil’s Due Comics has got you covered.

(Grothaus 2019)

English type 5 nouns have a gender-unspecified hypernym due to the productivity of *-person* (e.g., *businessperson*). In German type five nouns, however, the male-specific hyponym is also the hypernym (Figure 4.4).

Figure 4.4 Hyponym and hyponym relationships of type 5 nouns in English (*businessperson*) and German (*Geschäftsmann* ‘businessman’)



## 4.2 SAME-TYPE ANALYSIS

The following analysis contrasts English and German nouns within their type (a same-type analysis) – i.e., English type-1 versus German type-1. For each noun type – and subtypes 3a and 3b – German role nouns are argued to evoke more male-biased representations than English nouns of the same type or subtype.

### 4.2.1 TYPE 1: EPICENE

As discussed in chapter three, epicenes often evoke a male bias in both English (Bailey & LaFrance 2017, Banaji & Hardin 1996) and German (Irmen & Roßberg 2004, Kollmayer et al. 2018, Scheele & Gauler 1993). Even seemingly neutral words are more associated with male exemplars than female exemplars, including *person* in English (Bailey et al. 2022, Hamilton 1991), and *Mensch* [m] ‘human being’ and *Individuum* [n] ‘individual’ (Scheele & Gauler 1993) in German. However, of the five noun types discussed here, epicenes are the least likely to engender a male exemplar in both English and German for several reasons. First, that these

nouns cannot be feminized means that speakers have only one form to choose – unlike in masculine-feminine word pairs – which likely lowers gender salience. In other words, when using an epicene, speakers are not choosing between a [female] or [male] form, simply the form meaning ‘person’. As a result, it is likely that speakers have more real-world examples in which generically used epicenes – whether grammatically masculine or not – had female referents in comparison to generically used male lexemes. However, should factors like stereotype and context be the same, a German epicene is more likely to engender a male bias than an English epicene counterpart due to the additional layer of grammatical gender information, especially if masculine or neuter.

#### 4.2.2 TYPE 2: SUBSTANTIVIZED ADJECTIVE

Studies of plural type-two nouns reveal a decreased male bias relative to plural nouns in categories three through five (Irmen & Roßberg 2004, Sato, Gabriel, and Gygas 2016, Steiger-Loerbroks & von Stockhausen 2014). In their comparison of substantivized adjectives and *-er* nouns (type 2 and four, respectively), Sato, Gabriel, and Gygas (2016) argued that the *-er* suffix (e.g., *die Lehrer* [pl, male] ‘the male teachers’) provided gender information that the type-2 neutralizing *-en* ending did not (e.g., *die Lehrenden* [pl, neutral] ‘the teachers’), thereby increasing the saliency of maleness for type-4 nouns. The results from Sato, Gabriel, and Gygas (2016) likely apply to the singular as well, because type-4 nouns end in *-er* in the singular and plural, and most singular type-2 nouns end in *-en*. Notably, type-2 nouns have a considerable amount of polysemy – e.g., there are only four distinct singular noun forms and many of them are used as both masculine and feminine nouns (Table 4.10).

Table 4.10 Singular nouns derived from *deutsch* ‘German’ by frequency

		Frequency of Form in Paradigm	
		By Gender	
Type-2 singular noun forms from <i>deutsch</i> ‘German’	Total	M	F
<i>Deutsche</i>	7	1	6
<i>Deutschem</i>	1	1	0
<i>Deutschen</i>	13	8	5
<i>Deutscher</i>	3	2	1

*Note:* This is a different representation of the information in Table 4.4, which shows the 24 singular nominal forms derived from *deutsch* ‘German’. Of the four distinct forms, only one – *Deutschem* – occurs only once, and it is also the only form that is uniquely male-specific.

Therefore, unlike nouns in categories three through five, type-2 female and male forms are often identical and only differentiated by other elements in the NP – e.g., an article, inflection on a preceding adjective – or in anaphor. As a result, these nouns likely carry less overt maleness than other lexically male role nouns, even in the singular. Among this class, masculine nouns appearing in the nominative are the most marked – whether nominally or through other NP elements – and likely have the strongest effect. Further, because these forms “do not originate

from nouns that carry grammatical gender but from gender-unmarked adjectives and participles”, they may be less likely to “activate any gender connotations” compared to other lexically male nouns (Sato, Gabriel, and Gyax 2016:670). Additionally, a study by Lindqvist et al. 2019 found that novel forms – specifically, the third-person singular neutral pronouns *hen* in Swedish and *ze* in English – were more likely to decrease male bias than forms with which participants had more experience, suggesting that the novelty of singular type-2 nouns may engender a lower-male bias than other noun types.

#### 4.2.3 TYPE 3: MALE-SPECIFIC MONOMORPHEMIC

To analyze the male bias of type-3 nouns, it is helpful to contrast the sub-categories: 3a and 3b nouns – i.e., those without and with derived feminine counterparts, respectively. In a same-subtype comparison, this section argues that German 3a and 3b nouns express more male-specific information than their English 3a and 3b counterparts, respectively (e.g., *Mann* ‘man’ vs. ‘man’, *Held* ‘hero’ vs. ‘hero’), due to referential grammatical gender. However, in a cross-subtype comparison, 3a nouns likely express more male gender information than German 3b nouns (e.g., *father* vs. *Held* ‘hero’). Though German 3b nouns have the benefit of conceptual grammatical gender, it is likely that German 3b nouns are more often used generically than English 3a nouns, potentially lowering their salience. As a result, a speaker will likely have more experience of 3a nouns being used for explicit male reference, in comparison to 3b nouns, which may have a more even distribution of generic vs. specific use. An additional factor in placing 3a above same-language 3b nouns is that the 3a subcategory includes class nouns, which describe a referent’s “intrinsic properties” (Zobel 2017:440), such as sex (e.g., *Mann* ‘man’). In contrast, 3b is solely composed of role nouns, which describe non-permanent intrinsic and extrinsic properties such as occupation, trait, or hobby (e.g., a student is no longer a student after graduation) (Zobel 2017:440-1). It is probable that the male-specific class nouns evoke a greater male bias than male-specific role nouns, given that the former is more likely to be linked to the innate characteristic of sex, rather than occupations which could be filled with any gender.

#### 4.2.4 TYPE 4: MALE-SPECIFIC POLYMORPHEMIC – SUFFIX

Though *-er* in type-4 nouns is productive in both languages, the German suffix likely conveys male conceptual gender more strongly, ultimately increasing the likelihood of male bias. This claim is supported by a Scheutz and Eberhard study (2004), which compared the effects of *-er* on German-English bilinguals and English-speaking monolinguals. Notably, the bilingual speakers were more likely to interpret *-er* nouns as male compared to English monolinguals (Scheutz & Eberhard 2004:559), even though the testing was performed in English. This male-biased interpretation by German speakers (compared to English monolinguals) demonstrates that the *-er* suffix is interpreted as a marker of male gender by German language users, even when there is no overt reason to do so (it is not grammatically masculine as in German). Furthermore, the male bias of *-er* is also likely impacted by the productivity and frequency of feminizing suffixes which derive from it. In English, *-er* and its alternatives (*-or*) are not reliable indicators of male gender on their own (e.g., *waiter*, *aviator*) – instead, male-specific words in English are often defined against female-specific words (*waitress*, *aviatrix*). However, German *-er* more consistently carries the concept [male] due, in part, to the high productivity of the feminizing suffix *-in*, which can be added to any category-four role noun (e.g., *Diabetiker* ‘male diabetic’,

*Diabetikerin* ‘female diabetic’). Though *-er* is the most prominent suffix in this category, it is likely that other German category-four suffixes engender similar results, due to the productivity of *-in* – though perhaps to a lesser extent.

#### 4.2.5 TYPE 5: MALE-SPECIFIC POLYMORPHEMIC – COMPOUND

In English and German, type-5 nouns likely engender a considerable amount of male bias. In English, this is likely the most male-biasing category of the noun types, and in German, it is tied with category four in expressing the most male gender (e.g., grammatically masculine, lexically male, with male-specific morphology, autohyponomous). Notably, type-4 noun endings in the derivational *-er* are also common in English and German non-role nouns (e.g., *Staubsauger* [m] ‘vacuum’ from *staubsaugen* lit. ‘dust-sucker’, *Trockner* [m] ‘dryer’ from *trocknen* ‘to dry’, *Verdampfer* [m] ‘vaporizer, evaporator’ from *verdampfen* ‘to vaporize, evaporate’), potentially lowering the salience of maleness compared to category five endings, which are used almost exclusively for human referents. In contrast, the morphemes *-mann* and its translation ‘-man’ are highly transparent as gender-specific and are almost exclusively found in role nouns. In English, this category bears many similarities with 3a nouns, from which type-5 nouns are built. For example, like 3a nouns, English type-5 nouns often have a gender-neutral hypernym (*congressperson*, *businessperson*, *chair*, *chairperson*, etc.), meaning that it may be more likely that a person will assume that a gender-specific form was chosen to communicate gender, given that there is a neutral option. This is not the case in German, – i.e., *-mann* nouns are often in an androcentric autohyponomous relationship.<sup>83</sup>

English *-man* compounds (e.g., *chairman*) are associated with increased perceptions of maleness for the referent compared to neutral forms such as *chair* and *chairperson* (Archer & Kam 2022, Banaji & Hardin 1996, Khan & Daneman 2011, McConnell & Fazio 1996). Notably, the male-specific *chairman* “heightens the accuracy of recall for male leaders and dampens the accuracy of recall for female leaders” compared to the neutral *chair* (Archer & Kam 2022:7). In other words, even when a chair has been clearly defined as a woman, the use of the masculine title *chairman* to describe her “undermines the accuracy of recollections when applied to female versus male leaders... [leaving] respondents with a greater (mistaken) recollection that the leader is male, erasing the imprint of women’s leadership among some respondents” (Archer & Kam 2022:7).

#### 4.2.6 SAME-TYPE SUMMARY

Ultimately, when same-type role nouns exist in the two languages, this dissertation hypothesizes that German nouns express more male gender than their English counterparts (Table 4.11) – except for type 5, which are equivalent in English and German (Figure 4.5).

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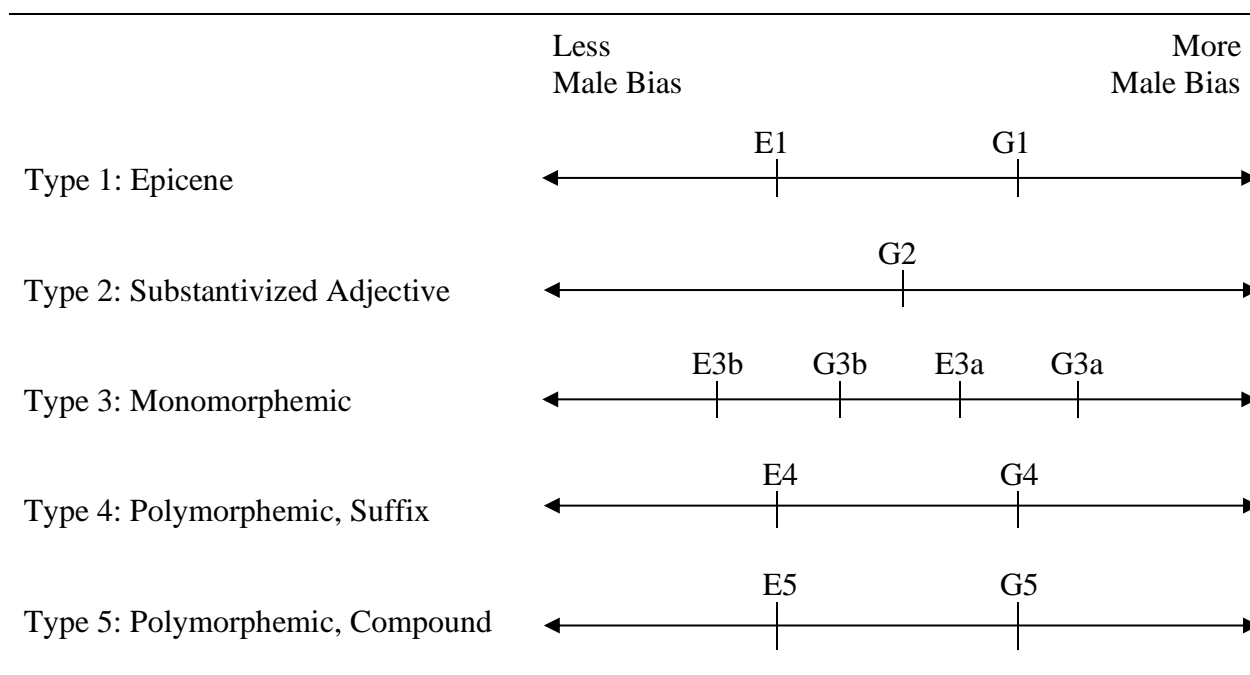
<sup>83</sup> Though the gender-neutral ending *-leute* ‘-people’ exists, it is only for the plural. There is no consistent German singular neutral compound element with the productivity of English *-person*.

Table 4.11 Same-type comparison of English and German noun types used generically

Type, Language	# of yes	Grammatical Gender	Male- Specific	Male- Specific Morpheme	Gender- Unspecified Hypernym
1 Epicene	E 0	no	no	no	no
	G 1	yes	no	no	no
2 Male-Specific Substantivized Adjective	G 2	yes	yes	no <sup>a</sup>	no
3a Male-Specific Monomorphemic: Non-Autohyponomous	E 2	no	yes	no	yes
	G 3	yes	yes	no	yes
3b Male-Specific Monomorphemic: Autohyponomous	E 1	no	yes	no	no
	G 2	yes	yes	no	no
4 Male-Specific Polymorphemic, Suffix	E 1	no	yes	no	no
	G 3	yes	yes	yes	no
5 Male-Specific Polymorphemic, Compound	E 3	no	yes	yes	yes
	G 3	yes	yes	yes	no

<sup>a</sup> Only one singular noun form shows gender-marking that is uniquely male-specific (*Deutschem*): the masculine dative in a bare NP (Table 4.10).

Figure 4.5 Same-type comparison of English and German nouns



*Note:* This scale presents hypothetical male bias relativities – i.e., whether an element is to the right or left of its neighboring elements. This scale does not attempt to quantify the male bias in a word, only to show when a form is more or less likely to engender male bias compared to other forms. E = English nouns of that class; G = German nouns of that class.

### 4.3 CROSS-TYPE ANALYSIS

The previous analysis contrasted English and German nouns within their type (a same-type analysis) – i.e., English type-1 versus German type-1. The following analyses contrast the noun types within a language (e.g., English type-1 versus English type-3, etc.), and between languages (e.g., English type-1 versus German type-2). Notably, in the two languages, the noun types likely appear in different orders on a scale from less to more male bias. It is argued here that grammatical gender and morphology play a significant role in the amount of male bias in a German noun. In contrast, male bias in English is more likely to be determined by whether the word has a female-specific counterpart. Ultimately, German nouns tend to express more gender information than English nouns, in part because most English role nouns are epicene.

#### 4.3.1 ENGLISH NOUNS

The majority of English nouns used generically are epicenes, which linguistically engender the least amount of male bias (Table 4.12).

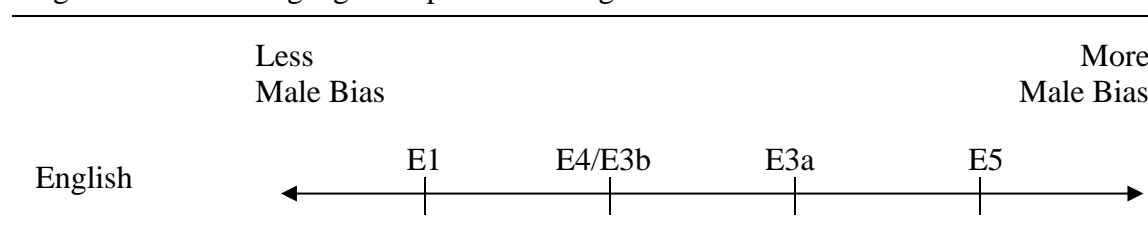


Table 4.12 English noun types used generically

Type, Example	# of yes	Grammatical Gender	Male-Specific	Male-Specific Morpheme	Gender-Unspecified Hypernym
1 <i>boss</i>	0	no	no	no	no
2					
3a <i>man</i>	2	no	yes	no	yes
3b <i>hero</i>	1	no	yes	no	no
4 <i>actor</i>	1	no	yes	no	no
5 <i>businessman</i>	3	no	yes	yes	yes

In order of increasing male bias (Figure 4.6), epicenes are likely followed by noun types 4 and 3b.

Figure 4.6 Same-language comparison of English nouns



*Note:* This scale hypothesizes whether a form is more or less likely to engender male bias compared to other forms. E = English nouns of that class; G = German nouns of that class.

Category 3a nouns likely express the second-most maleness among the English noun types due to their large proportion of high-saliency gender terms that are often chosen for their gender (i.e., they have a gender-neutral hypernym). Type-5 nouns are likely highly salient for male gender, and studies indicate that these nouns engender a higher male bias than type-1 nouns (Archer & Kam 2022, Khan & Daneman 2011). Further, nouns suffixed with *-man* (e.g., *chairman*) “led perceivers to interpret a social target’s personality as more masculine” compared to neutral forms (e.g., *chair* and *chairperson*) (McConnell & Fazio 1996). Notably, there are no genuinely male suffixes in English (type 4). Instead, type-4 endings are found in many words with a female counterpart, and their male-bias may be carried over by analogy to the interpretation of *-er* forms that do not have female counterparts. As a result, English epicenes ending in *-er* and its alternatives may be more likely to be interpreted as male than other epicenes. This increased male bias is likely also the case for epicenes ending in *-man* – which is highly salient for maleness – like *freshman*.

## 4.3.2 GERMAN NOUNS

In German, “grammatical and stereotypical gender seem to have a similarly strong influence” on influencing gender in exemplars when grammatical gender “potentially carries biological information” and “is unambiguous” (Irmen & Roßberg 2004:298). However, when gender is non-referential, as is the case with epicenes, “stereotypical gender becomes the main influence” (Irmen & Roßberg 2004:298). This finding suggests that grammatical gender plays a smaller role in interpretation when purely formal, compared to when it is also potentially referential. Therefore, epicenes carry the least male gender information (Table 4.13) and are furthest to the left (Figure 4.7) – i.e., they are the least likely for linguistic reasons to engender male bias.

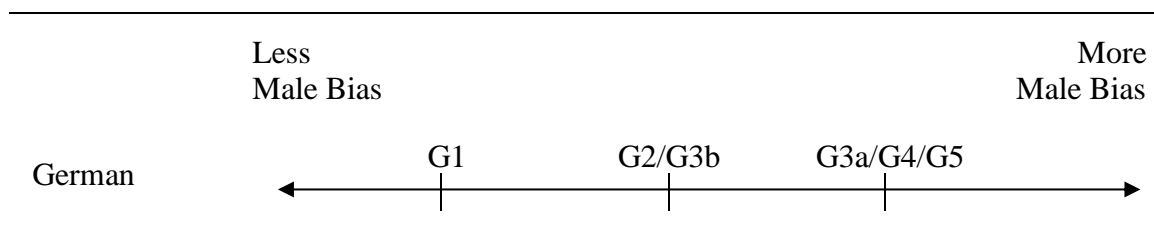
Table 4.13 Same-language comparison of German noun types used generically

Type, Example	# of yes	Grammatical Gender	Male-Specific	Male-Specific Morpheme	Gender-Unspecified Hypernym
1 <i>Genie</i> <sub>NEUT</sub> ‘genius’	1	yes	no	no	no
2 <i>Fremde(r)</i> <sub>MASC</sub> ‘male stranger’	2	yes	yes	no <sup>a</sup>	no
3a <i>Mann</i> <sub>MASC</sub> ‘man’	3	yes	yes	no	yes
3b <i>Freund</i> <sub>MASC</sub> ‘male friend’	2	yes	yes	no	no
4 <i>Verkäufer</i> <sub>MASC</sub> ‘salesman’	3	yes	yes	yes	no
5 <i>Fachmann</i> <sub>MASC</sub> ‘male expert’	3	yes	yes	yes	no

<sup>a</sup> Only one form shows gender-marking that is uniquely male-specific (see Table 4.10).

Following epicenes are substantivized adjectives, which have referential gender, but potentially ambiguous noun forms. The wide-spread use of substantivized adjectives as role nouns is a more-recent development, compared to the use of other noun types. As a result of their novelty, type-2 nouns may have fewer established gender associations than more widely used counterparts (e.g., *Lehrende* vs. *Lehrer*). In the middle of the German scale are type-3 nouns, followed by nouns with male-connoting morphology. As with English, 3a nouns are to the right of 3b nouns, in part due to the frequency of core gender-specific vocabulary, and the gender-unspecified hypernym. For type-4 nouns, these endings are often, but not always, segmentable, and the ending may be shared with inanimate objects, which may decrease conceptual gender salience. Category five nouns however are exclusively role nouns, and the ending *-mann* is more salient than endings like *-er* or *-ist*. Therefore, a type-5 noun like *Geschäftsmann* ‘businessman, salesman’ likely generates a stronger male bias than *Verkäufer* ‘salesman’, a type-4 noun.

Figure 4.7 Same-language comparison of German nouns

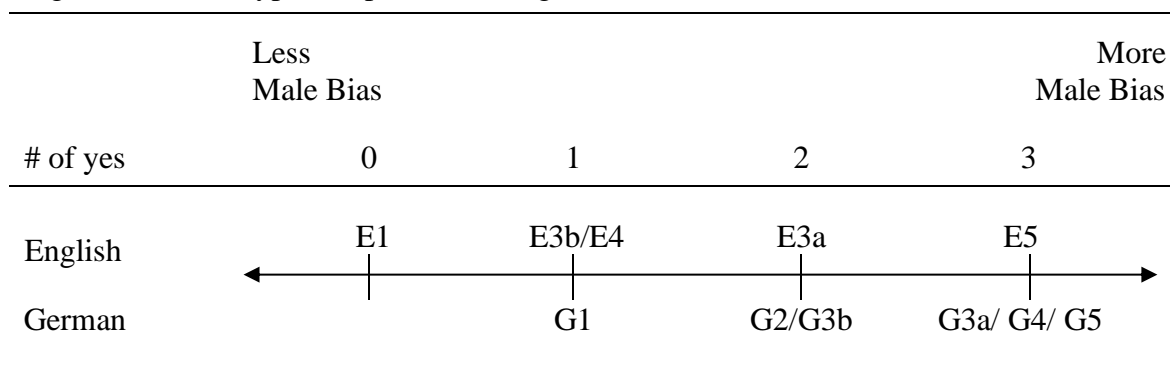


This scale hypothesizes whether a form is more or less likely to engender male bias compared to other forms. E = English nouns of that class; G = German nouns of that class.

#### 4.3.3 COMPARING ENGLISH AND GERMAN

Using the hypotheses presented in this and previous chapters, it is possible to estimate a scale with the noun types in both languages (Figure 4.8).

Figure 4.8 Cross-type comparison of English and German nouns



This scale hypothesizes whether a form is more or less likely to engender male bias compared to other forms. E = English nouns of that class; G = German nouns of that class.

Notably, the majority of English-German nominal counterparts do not belong to the same type, because German nouns are spread throughout categories one through five, whereas English role nouns are overwhelmingly in category one. For example, the German *Deutsche(r)* ‘German’ is a type-2 noun because it is a substantivized adjective, whereas its English counterpart *German* is an epicene and, therefore in category one (Table 4.14).

Table 4.14 Cross-type analysis: English type 1 (*German*) and German type 2 (*Deutsche* ‘German’)

Type, Example	# of yes	Grammatical Gender	Male-Specific	Male-Specific Morpheme	Gender-Unspecified Hypernym
E1 <i>German</i>	0	no	no	no	no
G2 <i>Deutsche(r)</i> <sub>MASC</sub> ‘male German’	2	yes	yes	no <sup>a</sup>	no

<sup>a</sup> Only one form shows gender-marking that is uniquely male-specific (see Table 4.10).

As a result, a statement about the average German is likely to engender a stronger male bias in German (4.2b) than in English (4.2a) – should stereotypical and other contextual information remain constant – due both to grammatical gender and lexical gender.

(4.2) a. A European Central Bank (ECB) survey published in November 2017 found that at any one time, **the average German** has €103 in their wallet, far more than the citizens of any other EU country.  
(Sullivan 2018)

b. 28 Urlaubstage hat **der durchschnittliche Deutsche**<sub>MASC</sub> im Jahr.  
‘**The average German**<sub>GN/MALE</sub> has 28 vacation days a year.’  
(Gontek 2022)

Similarly, this means that a statement using a word like *boss* (Table 4.15) likely engenders more male bias in German versus English (4.3a and b, respectively).

Table 4.15 Cross-type analysis: English type 1 (*boss*) and German type 3b (*Chef* ‘boss’)

Type, Example	# of yes	Grammatical Gender	Male-Specific	Male-Specific Morpheme	Gender-Unspecified Hypernym
E1 <i>boss</i>	0	no	no	no	no
G3b <i>Chef</i> <sub>MASC</sub> ‘male boss’	2	yes	yes	no	no

(4.3) a. **A good boss** can help by honestly communicating...  
(Constantino 2022)

b. **Ein guter Chef**<sub>MASC</sub> braucht angeblich Charisma.  
‘**A good boss**<sub>GN/MALE</sub> supposedly needs charisma.’  
(Pennekamp 2022)

To examine cross-type comparisons in depth, this section will analyze news stories that appeared in American and German media to illustrate how reporting on the same news subject likely engenders more male bias in German. These news stories focused on anonymous subjects whose gender was initially unknown. Whereas American media tended to use gender-neutral language in their reports (e.g., epicene nouns, singular *they*, feminized forms like *he or she*) – whether to protect the subject’s identity or due to their lack of knowledge of the person’s gender – many German news outlets used lexically male role terms, leaving it unclear whether the terms were used generically or specifically – i.e., reporting that the subject was male. For example, in 2018, an official in the administration of then US president Donald Trump wrote an anonymous op-ed in which the official claimed to be acting – along with other high-level administrators – as an adult in the room of the child-like president. In publishing the op-ed, the New York Times provided no details concerning the author’s identity, except to name the author as a “senior official in the Trump administration” in reports about the op-ed author (4.4a), and other media sources used feminized pair forms (4.4b) or gender-neutral pronouns (4.4c). Notably, anaphoric reference such as relative pronouns *who* and possessive pronoun *whose* (both in italic) are not specified for gender in English.

- (4.4) a. The Times is taking the rare step of publishing an anonymous Op-Ed essay. We have done so at the request of the **author, a senior official** in the Trump administration *whose* identity is known to us and *whose* job would be jeopardized by its disclosure.

(I Am Part of the Resistance Inside the Trump Administration 2018)

- b. In an unsigned note attached to the column, the Times said it took “the rare step” of publishing the essay at the **author’s** request. It said **his** or **her** identity is known to the editors, but that the **writer’s** job would be jeopardized by its disclosure.

(Farhi 2018)

- c. The op-ed is written by a **senior Trump administration official** *who* says **they** are part of an internal “resistance” working to thwart parts of Trump’s agenda and block his worst impulses, and was published amid questions of President Donald Trump’s fitness and his control over his administration.

(Stracqualursi et al. 2018)

However, the German reports (4.5a-c) add a considerable amount of gender information by using male-specific forms (without clarifying that they are being used generically). Furthermore, though elements such as pronouns and possessive determiners may be purely chosen to grammatically agree with masculine nouns, these forms may be interpreted lexically – e.g., as semantic indicators of gender-identity information –, especially the further away from nouns to which they refer.

- (4.5) a. Die “New York Times” hat in einem ungewöhnlichen Schritt einen Gastbeitrag veröffentlicht, der laut der Zeitung von **einem hochrangigen Mitarbeiter<sub>MASC</sub> der US-Regierung** verfasst wurde.  
 ‘In an unusual move, The New York Times published a guest article that the newspaper said was written by a **senior US government official<sub>GN/MALE</sub>**.’  
 (Trump-Mitarbeiter berichtet von ‘Widerstand’ gegen US-Präsidenten 2018)
- b. **Ein US-Regierungsmitarbeiter<sub>MASC</sub>** beschreibt anonym in einem Gastbeitrag in der New York Times, wie **er<sub>MASC</sub>** und andere in der Verwaltung aktiv Widerstand gegen Präsident Donald Trump leisten – um Schlimmeres zu verhindern.  
 ‘**A US government official<sub>GN/MALE</sub>** anonymously wrote a guest post in The New York Times describing how **they<sub>GN</sub> / he<sub>MALE</sub>** and others in the administration are actively opposing President Donald Trump – to prevent something worse.’  
 (Engler 2018)
- c. Die “New York Times” berichtete, ihr sei der Name **des Autors<sub>MASC</sub>** bekannt. **Seine<sub>MASC</sub>** Anonymität werde auf **seine<sub>MASC</sub>** Bitte hin gewährt, weil **sein<sub>MASC</sub>** Job sonst in Gefahr sei.  
 ‘The “New York Times” reported that it knew the **author’s<sub>GN/MALE</sub>** name. **Their<sub>GN</sub> / His<sub>MALE</sub>** anonymity at **their<sub>GN</sub> / his<sub>MALE</sub>** request, otherwise **their<sub>GN</sub> / his<sub>MALE</sub>** job is in jeopardy.’  
 (Merey 2018)

A year later, in September 2019, global news organizations reported of an anonymous whistleblower in the United States government who had raised alarm about a phone call between then US President Trump and Ukraine’s President Zelensky. Again, many German news outlets used male terms for the whistleblower, often leaving it unclear as to whether the nouns were being used generically or specifically – i.e., that these news outlets had information about the person’s gender. One article about the whistleblower even used a male form of address in the title: “Donald Trump und Mister X: Whistleblower setzt dem Präsidenten zu” ‘Donald Trump and Mister X: Whistleblower Pestors the President’ (Jacke, Klimkeit, and Bätz 2019). The main role noun for these reports was the English borrowing *Whistleblower* [m] ‘male whistleblower’, which, while a type-1 noun in English, is a type-4 noun in German due to *Whistleblowerin* [f] ‘female whistleblower’ (Table 4.16).

Table 4.16 Cross-type analysis: English type 1 (whistleblower) and German type 4 (*Whistleblower* ‘whistleblower’)

Type, Example	# of yes	Grammatical Gender	Male-Specific	Male-Specific Morpheme	Gender-Unspecified Hypernym
E1 <i>whistleblower</i>	1	no	no	no	no
G4 <i>Whistleblower<sub>MASC</sub></i> ‘male whistleblower’	3	yes	yes	yes	no

Therefore, the German *Whistleblower* adds gender information not found in the original. As a result, the German word is more likely to evoke a masculine exemplar than the English when used in reporting (4.6).

- (4.6) Auf mehreren Seiten beschreibt **der Whistleblower**<sub>MASC</sub> darin, **er**<sub>MASC</sub> habe über Monate Informationen von diversen Regierungsmitarbeitern bekommen, wonach der US-Präsident «die Macht seines Amtes nutzt», um die Einmischung eines anderen Landes in die US-Wahlen 2020 zu erreichen.

‘Over several pages, the **whistleblower**<sub>GN/MALE</sub> describes that **they**<sub>GN</sub> / **he**<sub>MALE</sub> have / has received information from various government employees for months, according to which the US President is “using the power of his office” to get another country to interfere in the 2020 US elections.’

(Jacke, Klimkeit, and Bätz 2019)

An additional example concerns an act of generosity that made English and German-speaking media in late 2019. After a homeless encampment experienced a fire that displaced its residents during fatally cold weather, a Chicago resident booked hotel rooms for roughly 70 people (Brito 2019). Significantly English and German reports used different noun types in their descriptions (Table 4.17).

Table 4.17 English and German nouns used in reference to an anonymous Chicago donor

Type, Example	# of yes	Grammatical Gender	Male-Specific	Male-Specific Morpheme	Gender-Unspecified Hypernym
E1 <i>angel</i> <sup>2</sup> , <i>benefactor</i> <sup>3</sup> , <i>citizen</i> <sup>1,3</sup> <i>donor</i> <sup>1,2,3</sup> , <i>person</i> <sup>2</sup>	0	no	no	no	no
E3b <i>hero</i> <sup>2</sup>	1	no	yes	no	no
G4 <i>Bürger</i> <sup>4</sup> ‘male citizen’ <i>Wohltäter</i> <sup>4</sup> ‘male benefactor’	3	yes	yes	yes	no

Sources: <sup>1</sup>Brito 2019, <sup>2</sup>Chiu 2019, <sup>3</sup>Lifschutz 2019, <sup>4</sup>Kälte in den USA 2019

In English, the report’s subject is overwhelmingly described with type-1 nouns, such as *benefactor* (Lifschutz 2019), *donor* (Brito 2019, Chiu 2019, Lifschutz 2019), *angel* and *unnamed person* (Chiu 2019) and one type-3 noun: *hero* (Chiu 2019).<sup>84</sup> In the German report, two type-4 nouns are used: *Wohltäter* [m] ‘male benefactor’ (Kälte in den USA 2019). In one example, a direct quote about the “wonderful citizen” – using a gender-neutral noun – is translated into German with a male-specific noun “ein wundervoller Bürger” (4.7). This distinction between a gender-neutral and male-specific noun likely considerably increased the probability that a German reader would interpret the referent as male compared to an English reader of the article.

<sup>84</sup> In multiple articles, the donor is likened to a “good Samaritan” (Brito 2019, Chiu 2019, Lifschutz 2019), a kind figure who is male in the parable (“The Parable of the Good Samaritan” (Luke 10:30–37 [KJ21])). This type of reference is interesting, though beyond the scope of noun types discussed here.

- (4.7) a. All the folks there, some wonderful citizen is going to put all of them up at a hotel for the rest of the week.  
(Brito 2019)
- b. Für den Rest der Woche hat **ein wundervoller Bürger**<sub>MASC</sub> die ganzen Menschen hier in einem Hotel untergebracht.  
“For the rest of the week, **a wonderful citizen**<sub>GN/MALE</sub> put all the people here in one hotel.”  
(Kälte in den USA 2019)

Another example of anonymous charity comes from Blackhall Colliery in the UK (4.8), where residents have been finding mysterious bundles of money for years (Mystery £2k cash bundles left on pavements in Blackhall Colliery). In English, the subject is referred to with type-1 nouns such as *benefactor* (Halliday 2019), whereas German media used type-2 and type-4 nouns: *Unbekannter* and *Wohltäter*, respectively (Mysteriöse Geldfunde beschäftigenritisches Dorf 2019).

- (4.8) Ein einstiges Bergbau-Dorf in Nordostengland sucht nach **einem anonymen Wohltäter**<sub>MASC</sub> In den vergangenen fünf Jahren legte **ein Unbekannter**<sub>MASC</sub> immer wieder Geldbündel auf den Straßen von Blackhall Colliery ab...  
‘A former mining village in north-east England is looking for **an anonymous benefactor**<sub>GN/MALE</sub>. For the past five years, **a stranger**<sub>GN/MALE</sub> has been dropping cash on the streets of Blackhall Colliery...’  
(Mysteriöse Geldfunde beschäftigenritisches Dorf 2019)

While many male-specific forms are never clarified as to their generic or explicitly male reference, some male-specific forms are disambiguated as generic, as in example 4.9.

- (4.9) Wer ist **dieser Whistleblower**<sub>MASC</sub>, **der**<sub>MASC</sub> den Präsidenten derart in Bedrängnis bringt? Die Identität ist unbekannt. Nur die Geheimdienstkontrollbehörde, an die die Beschwerde ging, weiß, ob es sich um einen Mann<sub>MASC</sub> oder eine Frau<sub>FEM</sub> handelt, wo genau der **Hinweisgeber**<sub>MASC</sub> arbeitet.  
‘Who is **this whistleblower**<sub>GN/MALE</sub>, **who**<sub>GN/MALE</sub> is putting the President in such distress? The identity is unknown. Only the secret service control authority to which the complaint went knows whether it is a man or a woman and where exactly the **whistleblower**<sub>GN</sub> works.’  
(Jacke, Klimkeit, and Bätz 2019)

In terms of disambiguation, it is not uncommon to see a difference in gender information between an article’s title and its contents. While all print media are pressed for space, headlines and bylines are especially short and, therefore, don’t have room for disambiguating pair forms. For example, the article in 4.10 uses male forms in the headline (4.10a) and byline (4.10b), before introducing a paired form in the text’s opening line (4.10c) – thereby clarifying the previous male-specific forms as generic. The article then returns to generically used male forms. A reader who only scans the headlines rather than reading the entire article may, as a result, have a more male-biased impression of the news subjects.



(4.10)

- a) **Headline** **Gewinner**<sub>MASC</sub> von 184 Millionen Pfund offenbar gefunden.  
‘£184m **winner**<sub>GN/MALE</sub> apparently found.’
- b) **Byline** Fünf Richtige und zwei korrekte Zusatzzahlen könnten **einem**  
**Lottospieler**<sub>MASC</sub> aus Großbritannien zu enormem Reichtum verhelfen.  
‘Five correct numbers and two correct additional numbers could  
make **a lottery player**<sub>GN/MALE</sub> from Great Britain enormously rich.’
- c) **1<sup>st</sup> line** 3, 25, 27, 28, 29, dazu noch die »Lucky Star«-Nummern 4 und 9: Diese  
Zahlenfolge könnte für eine Lottospielerin<sub>FEM</sub> oder **einen**  
**Lottospieler**<sub>MASC</sub> aus Großbritannien ein Leben ohne finanzielle Sorgen  
bedeuten.  
‘3, 25, 27, 28, 29, plus the “Lucky Star” numbers 4 and 9: This  
sequence of numbers could mean a life without financial worries for  
a lottery player<sub>FEMALE</sub> or **a lottery player**<sub>MALE</sub> from Great Britain.’  
(Gewinner von 184 Millionen Pfund offenbar gefunden 2022)

Significantly, if disambiguating information does appear in a news source, it may appear very late in the text. For example, in the article “Trump will Informanten in Ukraine Affäre” ‘Trump Wants Informant in Ukraine Affaire’ (Appendix B), the authors indicate that the person denoted with the male *Informant* could also be female by using a pair form (4.11). This disambiguation of previous masculine forms occurs at the start of the 6<sup>th</sup> paragraph – after eleven masculine NPs,<sup>85</sup> including in the title (Jacke, Klimkeit, Merey, and Mahlberg 2019). After this singular use of the gender-fair form, the article returns to male-specific forms.

- (4.11) Die Identität **des Hinweisgebers**<sub>MASC</sub> – oder **der Hinweisgeberin**<sub>FEM</sub> – ist nicht öffentlich bekannt.  
‘The identity **of the whistleblower**<sub>MALE</sub> – or the whistleblower<sub>FEMALE</sub> – is not public knowledge.’  
(Jacke, Klimkeit, Merey, and Mahlberg 2019)

#### 4.3.4 CROSS-TYPE SUMMARY

When English and German news media write about the same individual, the German text often includes overt gender where there is none in English – likely creating alternative gender implications for their readers. For example, news outlets only officially confirmed the male gender of the Trump Op-Ed Author in October 2020 (Itkowitz & Dawsey 2020) – a fact that may have been more surprising to German-reading audiences than English-reading ones.<sup>86</sup> Though falsely-reported gender is likely to be corrected in recurring or particularly newsworthy stories, most articles are never updated if a male term is later found to refer to a woman. For example, while English outlets later identified the Chicago good Samaritan as a woman, Candice Payne

<sup>85</sup> There is also one epicene (*Person* ‘person’), which is in apposition to the masculine noun *Spion* ‘spy’.

<sup>86</sup> As of summer 2023, the identity of the Trump whistleblower has not been confirmed.

(Ihejirika 2019), German papers did not update or correct their stories, likely leaving many readers with the false belief that the humanitarian was male. Further, though the Blackhall Colliery gifts were later revealed to be the efforts of a non-related duo working together, at least one of the two good Samaritans was identified as a woman (Magra 2020). The surplus of male-specific terms due to GM – coupled with the lack of corrections when wrong – obfuscates women’s experiences and contributions and implies that men are more newsworthy.

The possibility that the male-specific forms are a linguistic formality and not referential (i.e., indicating known gender identity) is often not broached. Significantly, German readers of the article about anonymous subjects are unlikely to be sure whether the masculine noun is used because the author is communicating that the subject is male or because the author is using the GM to discuss a person of unknown gender. Said another way, German speakers cannot always be sure whether gender in male-specific words is meaningful, but studies show that they often interpret it as such, resulting in an increased male bias for nouns that may be generically intended.

#### 4.4 DISCUSSION

This chapter has argued that generically used singular role nouns express different amounts of male bias due to grammatical gender, lexical gender, morphology, and autohyponymy. Specifically, this chapter has presented hypotheses concerning how different categories of nouns may compare to each other, both within English and German, and between English and German. Though it may be that the factors chosen here are not equally influential, this hypothetical scale presents a first step in ranking noun types. Overall, there are more male-specific nouns in German than in English, and when same-type role nouns exist in the two languages, German nouns are more likely to engender a greater male bias than their English counterparts. This stronger male bias for German nouns is partly due to grammatical gender as well as gender-specific morphemes that are more prevalent and productive in German. Furthermore, because most English nouns are epicene, German role nouns tend to carry more male bias than English role nouns overall. Ultimately, as a result of increased gender specification and marking, German speakers likely experience increased male bias when reading nouns intended as generic, compared to English speakers. This chapter contributes to previous research by focusing on singular nouns, rather than plural, and by contrasting generically used nouns against each other, rather than against a gender-fair alternative.

## CHAPTER 5

### LANGUAGE CHANGE AND MALE BIAS

The amount of male bias engendered by a given role noun likely does not remain constant over time – instead, it is impacted by factors such as social change and language advocacy. In this chapter, social change refers to gender-based developments such as increased labor participation for women and visibility of women in historically male-dominated roles.<sup>87</sup> An additional potential influence of male bias in generic statements is the prevalence at which speakers experience one of two inclusive language policies: feminization and neutralization. This chapter examines social causes of language change – e.g., changing roles for women and language advocacy – and their effects on male bias in generic statements. This chapter argues that the following two factors result in an increased male bias for terms intended as generic: 1) grammatical gender due to its interaction with stereotypes (§ 5.1); 2) increased exposure to male-specific language – such as with feminization (§ 5.2). Ultimately this chapter argues that generically intended nouns in English likely engender less male bias than in the past, but that this is less likely in German due to grammatical gender and reliance on feminization.

#### 5.1 STEREOTYPES AND LANGUAGE CHANGE

One significant contrast between English and German is the effect of changing stereotypes on the male bias of English and German role nouns. As discussed in § 2.5, the interpretation of generically intended role nouns is influenced by stereotypes (e.g., Banaji & Hardin 1996, Garnham et al. 2012, Oakhill et al. 2005 in English; F. Braun et al. 1998, Irmen & Roßberg 2004, Rothmund & Scheele 2004 in German). Therefore, changes to gender stereotypes – e.g., as a result of social changes – can affect the interpretation of generic role nouns. Notably, stereotype change affects epicene and gender-specific nouns differently, which is significant because they are the dominant noun types of English and German, respectively. Furthermore, German speakers are additionally affected by grammatical gender, which can diminish the effects of stereotype change. This section examines gender stereotypes and their effect on male bias in a language, focusing on the interaction of grammatical gender and stereotype change. Ultimately it argues that English nouns more easily – and more quickly – lose their male bias due than German role nouns due to the absence of grammatical gender, and a greater proportion of epicene nouns.

##### 5.1.1 GENDER STEREOTYPES

Gender stereotypicality “refers to generalized beliefs or expectations about whether a specific (social or occupational) role is more likely to be held” by women, nonbinary people, or men (Misersky et al. 2014:842). This stereotype information is automatically activated when reading or hearing a role noun (e.g., Banaji & Hardin 1996, Duffy & Keir 2004, Kennison & Trofe 2003, Reynolds et al. 2006, Sato, Gygax, and Gabriel 2016) and is “difficult or impossible to suppress” (Oakhill et al. 2005:972, Kollmayer et al. 2018). Gender stereotypicality links women to concepts such as community-based, “compassionate, warm, [and] expressive” (Eagly

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<sup>87</sup> An additional factor – the growing perception of gender as nonbinary and the increasing visibility of nonbinary individuals – is significant, though outside the scope of this dissertation.

et al. 2020:302), whereas men are perceived as agentic, “independent” (Hodel et al. 2017), “ambitious, assertive, [and] competitive” (Eagly et al. 2020:302). In addition, binary gender stereotypes “have a hierarchical dimension of status inequality,” in which “men are viewed as more status worthy [sic] and competent overall and more competent at the things that ‘count most’” (Ridgeway & Correll 2004:513). In contrast, women are perceived as “less competent in general but ‘nicer’” and “better at communal tasks,” which are “less valued” (Ridgeway & Correll 2004:513).

Significantly, gender stereotypicality is, in part, informed by real-world knowledge of gender representation in a given role or context (F. Braun et al. 2005:17, Hansen et al. 2016, Stahlberg et al. 2007, Verweken et al. 2015:2). Furthermore, a language user’s mental representation for a role noun includes gender stereotype information which may “be encoded as a relative frequency of usage” – i.e., how often the word is used for women or other genders (Kennison & Trofe 2003:366). Therefore, gender stereotypes are subject to change as society changes (Eagly et al. 2020, Ellemers 2018) – i.e., “stereotypes [are] flexibly responsive to changes in group members’ social roles” (Eagly et al. 2020:310). For this discussion on role nouns, relevant social role changes include increased global female labor participation (Ortiz-Ospina & Tzvetkova 2017), as well as more women in roles that are high-prestige or were traditionally male-dominated (Lippa et al. 2014).

### 5.1.2 STEREOTYPES AND SOCIAL CHANGE

The absence or presence of grammatical gender (e.g., in English and German, respectively) likely has two considerable consequences on male bias in generically used role nouns. The first consequence concerns the additional source of information available to German speakers when interpreting a role noun. Though both English and German speakers rely on stereotype information (Garnham et al. 2012, Gygas et al. 2009, Irmen & Roßberg 2004), German speakers are additionally influenced by the role noun’s grammatical gender (e.g., Gygas et al. 2008, Irmen 2007, Irmen et al. 2010, Sato, Gygas, and Gabriel 2016). Significantly, whereas gender stereotypes can change over time (Eagly et al. 2020), grammatical gender remains “stable over very long periods of time” (Mavisakalyan 2015:406). As a result, the male bias of English role nouns likely changes more quickly in response to stereotype changes than do German nouns. Specifically, it is likely that in response to increased female visibility and labor participation, English nouns with male bias more easily and quickly become neutral – i.e., their male bias lessens.

An additional consequence of grammatical gender is that German has considerable gender specification – i.e., many of its role nouns are gender specific – compared to English, which has epicenes as its dominant role noun type. Significantly, the male bias of a noun is impacted by whom it is used to refer to, which affects epicene and gender-specific nouns differently. For example, when an epicene like *pilot* “is used more frequently to refer to female persons, this is likely to lead to a decrease in the strength of its male social gender bias,” “especially when this is done in higher frequencies and by more and more language users” (Motschenbacher 2016:84). However, because most German role nouns occur in gender-specific pairs, as, e.g., more women become doctors, the feminine term will likely become more prevalent. This increased use of feminine forms may lead language users to assume that grammatical gender is being used referentially elsewhere (and therefore to interpret *der Arzt* as specifically male).

The absence of grammatical gender leads to two related yet distinct consequences for interpreting generic forms. First, it is easier for English nouns to become more neutral because only the stereotypes need to change. In contrast, the male bias of a German role noun like *Arzt* is somewhat anchored by its grammatical gender, regardless of how many women join the profession. Secondly, the predominance of epicene role nouns in English makes it likely that changes in stereotype and language use more quickly affect the male bias of the English role noun compared to gender-specific nouns in German. Ultimately, grammatical gender is likely to slow the decrease in male bias in a generically intended noun. Therefore, it is likely that if an English and German speaker were to encounter the word *Chef* ‘male boss’ in similar contexts (5.1), with similar assumptions about how many women or men are in that role,<sup>88</sup> the word is more likely to evoke a male exemplar in German.

- (5.1) Der Bremsenhersteller Knorr-Bremse muss sich **einen neuen Chef**<sub>MASC</sub> suchen.  
 ‘The brake manufacturer Knorr Brake has to look for **a new boss**<sub>SGN/MALE</sub>.’  
 (Knorr-Bremse sucht Chef 2022)

This claim is supported in part by research by Schunack and Binanzer (2022), who replicated a GM study by Stahlberg and Sczesny (2001, study 3). In the 2001 study, Stahlberg and Sczesny asked participants to name three exemplars of given categories – e.g., athlete, singer, and politician. The cues were presented in the plural, either in the generic masculine (*Sportler, Sänger, Politiker*, respectively), in word pairs (e.g., *Sportlerinnen und Sportler*), or with the capital-I form (e.g., *SportlerInnen*). Among the tested forms, the authors found that GM spurred the lowest mental inclusion of women (Stahlberg & Sczesny 2001). Notably, the Schunack and Binanzer 2022 replication of this study found that, while GM still evoked the most male bias of the tested forms, the bias had lessened slightly compared to the 2001 study – i.e., more female exemplars were selected. Schunack and Binanzer (2022) interpret this finding as “potentially related to a greater societal visibility of women compared to 20 years ago” (334). Furthermore, the authors note that the term *politician* – though expected to have a male bias based on norming data by Misersky et al. 2014 – evoked roughly equal numbers of named female and male exemplars (Schunack & Binanzer 2022). The authors link this finding to the fact that the Angela Merkel had been chancellor for 15 years at the time of the study (2019), “suggest[ing] that a comparatively strong gender stereotype can be overruled by a strong exemplar of the non-stereotypical gender, given sufficient exposure” (Schunack & Binanzer 2022:333). However, a different replication of study 3 from Stahlberg and Sczesny (2001) found no statistical change in the number of female exemplars proposed by participants in the GM condition (Keith et al. 2022:10), which the authors argue “indicates that the changes regarding the visibility and increased power of women in society did not lead to an overall increased cognitive accessibility of women.”

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<sup>88</sup> A study by Misersky and colleagues (2014) asked participants to rate a set of over 400 nouns by how many women and men were believed to be in a given role or occupation. Notably, the authors found that role nouns were similarly ranked between English and German – i.e., English and German speakers had statistically similar judgments for how many women or men were in a role such as *artist, chef, explorer, or pilot*.

## 5.2 LANGUAGE POLICY AND CHANGE

In addition to social change, language policy can also influence interpretation of male bias in generic statements. As discussed in § 2.4, the generic use of male-specific nouns and pronouns has been criticized as sexist and discriminatory since the 1970s, both in English (Martyna 1978, Schneider & Hacker 1973, Spender 1980) and German (Pusch 1984, 1999, Trömel-Plötz 1978, 1993). In response, many language communities have striven over the past 50 years to become more inclusive – a term initially referring to the inclusion of women, but which has come to also refer to the inclusion of genders outside the gender binary (Günthner 2018). However, due to these language change policies and developments, the implication of maleness for generically used role nouns has changed over time – e.g., has increased or decreased. Specifically, feminization and neutralization strategies have likely had different impacts on male bias in a generically used noun. This section examines the impacts of feminization on male bias in generic statements for English and German speakers. Ultimately it argues that feminization as an inclusive-language strategy leads to increased male bias for role nouns, compared to neutralization.

### 5.2.1 LANGUAGE POLICY IN ENGLISH AND GERMAN

As part of their advocacy, English and German-speaking linguistic activists highlighted inequitable language practices (Günthner 2018:2),<sup>89</sup> developed guidelines for gender-inclusive language (Hellinger 2006),<sup>90</sup> and pressured key institutions and agencies – e.g., academic, publishing, media, legal – to adopt these guidelines (Pauwels 2003:560). Recommendations for alternatives to GM were often met with negative reactions (Günthner 2018, Sczesny et al. 2016, Schneider & Hacker 1973), and feminists who argued for new forms or practices were ridiculed and accused of “tampering” with (Spender 1998:150) or “committing violence against” the language (Pusch 2017:78).<sup>91</sup> Arguments against language reform were diverse (Blaubergs 1980, Vergoossen et al. 2020), including that inclusive language practices infringed on free speech, “[destroyed] the linguistic and literary traditions” of the language, were trivial, impractical, unaesthetic, and difficult to implement (Hellinger & Pauwels 2007:654).<sup>92</sup> Additional arguments against equitable language denied that “women could be discriminated against through language” at all (Sarrasin et al. 2012:114).<sup>93</sup> Because feminist language activists had “limited (if any) access to, and cooperation from, the main channels for the implementation of language change” such as education, media, legislation, or linguistic authorities, language planners

<sup>89</sup> Early documentations of sexist linguistic practices include Bodine 1975, Lakoff 1973, Martyna 1980, Moulton et al. 1978, Schulz 1975, Silveira 1980, and Spender 1980 in English and Grabrucker 1993, Pusch 1979, 1984, 1990, and Trömel-Plötz 1978, 1982, 1984 in German.

<sup>90</sup> Notable early guidelines include Frank & Treichler 1989, Miller & Swift 1980, Persing 1978 in English; F. Braun 2000, Guentherodt et al. 1980, Häberlin et al. 1988, 1992, Hellinger & Bierbach 1993, Kargl et al. 1997, and Wodak et al. 1987, in German.

<sup>91</sup> As Spender (1998:150–1) notes, such accusations are only valid if “language is the property of males.”

<sup>92</sup> While novel forms initially take longer to process, the delay is mediated as readers and listeners become accustomed to them (Gygax & Gesto 2007, Steiger-Loerbroks & von Stockhausen 2014). For pair forms, capital-I forms and neutralizations, gender-equitable language does not “impair the comprehensibility of texts” in the plural (Friedrich & Heise 2019:51, Blake & Klimmt 2010, Steiger & Irmen 2011). However, symbol-based methods, such as / and \* were found to create difficulty in the singular (Friedrich et al. 2021).

<sup>93</sup> Modern versions of this argument deny nonbinary gender identities or intersex individuals or deny that they need linguistic representation.

promoted equitable language “through personal use, ... role models, and pressure on key agencies to adopt guidelines” (Pauwels 2003:560). Over time, these guidelines were adopted by “publishing houses, professional organizations, academic institutions, [and] print media” (Hellinger 2006:269) and now, gender-equitable practices “[have] made progress in administrative legal language” (Hellinger & Pauwels 2007:665) and “language policies have become part of the organizational culture of various institutions such as universities and administrations” (Sczesny et al. 2016:5).<sup>94</sup>

Guideline recommendations for language change utilize two main strategies: feminization and neutralization. Feminization “renders the inclusion of women explicit” (F. Braun et al. 2005:3) by adding female-specific terms alongside male-specific terms (e.g., *congresswomen and congressmen* in English; *Lehrer und Lehrerin* ‘male and female teacher’ in German). In contrast, neutralization removes references to conceptual gender in generic contexts by replacing male and masculine terms with conceptually gender-neutral ones (e.g., *congress member* in English; *Lehrkraft* ‘teacher’ in German). English and German have both employed a mixture of these strategies, based on factors such as part of speech (e.g., noun, pronoun, forms of address) and grammatical gender.<sup>95</sup> For nouns, English has overwhelmingly relied on neutralization, whereas German has typically used feminization (Pauwels 2003:559). Among Germans, the production and use of feminized *-in* forms was more prevalent in former West Germany than East Germany (e.g., Becker 2008:72, Irmen & Steiger 2005:228, Lutjeharms 2004:195).<sup>96</sup> Overall, however, German speakers have experienced feminization more than English speakers.

### 5.2.2 EFFECTS OF EXPLICITLY MALE LANGUAGE

The male bias of a generically intended noun is also likely to be influenced by the type of language around it – e.g., whether the surrounding language includes specifically-male terms (Becker 2008, Gygas & Gabriel 2008:144, Motschenbacher 2014, Pusch 1985). Specific use of masculine and male forms occurs both with feminization (e.g., pair forms) and when referring to men (i.e., non-generic use). With feminization, scholars have argued that pair forms make masculine forms explicitly male, rather than gender-neutral (Motschenbacher 2014, Pusch 1985) – i.e., that in pair forms, “the masculine form is disambiguated as male-specific (rather than generic)” (Motschenbacher 2014). In 5.2, the term *hero* – considered gender neutral by many English speakers – is disambiguated as masculine in the presence of the female-specific form *heroine*.

(5.2) The hero(ine) who invented lorem ipsum may never be known.

(Shepherd 2023)

At least one study supports this argument, which found that “exposure to the feminine form exemplars increased the already existing male-biased interpretation ... of the masculine

<sup>94</sup> See Steiger-Loerbroks and von Stockhausen (2014) for an overview of legal standards for gender-equitable language in German.

<sup>95</sup> Feminization is a recommended strategy for languages with grammatical gender, such as German, whereas neutralization is easier to implement in so-called “natural gender” languages like English (Sczesny et al. 2016).

<sup>96</sup> See Sobotta (2002) for an in-depth examination of gendered language in former East Germany.

form” (Gygax & Gabriel 2008:147).<sup>97</sup> Additionally, though German speakers are influenced by both stereotype and formal gender, “grammatical gender overrides the effects of stereotypical gender” for pair forms (Irmen & Roßberg 2004:298), indicating that language users interpret grammatical gender in pair forms as referential. Therefore, pairing male- and female-specific forms may make the male form more likely to be interpreted as referring to a man (5.3) (masculine NP in bold, feminine NP underlined).

- (5.3) Es ist außergewöhnlich, dass **ein Spieler**<sub>MASC</sub> eine weibliche Trainerin<sub>FEM</sub> hat.  
 ‘It’s extraordinary that **a player**<sub>GN/MALE</sub> has a female coach.’  
 (Bußmann & Hellinger 2003:160)

Another context where feminization may impact male bias is in the extenuation of example 4.7, which concerned Candice Payne – an initially anonymous donor of hotel rooms (Ihejirika 2019). As previously noted, Payne was described in English with gender-neutral terms like *citizen* (5.4a), which was translated into German with a male-specific noun *Bürger* ‘male citizen’ (5.4b). However, an additional factor that may increase interpretation of *Bürger* is that the previous sentence uses feminine gender referentially to refer to Salvation Army spokeswoman, Jacqueline Rachev: *Mitarbeiterin* [f] ‘female employee’ and personal pronoun *sie* ‘she’. As these feminine forms are clearly referential, readers may be more likely to interpret the generically used masculine forms as referring to a man.

- (5.4) a. According to Rachev, she was notified to set up for the group at the Salvation Army’s warming center, but then she got word about the anonymous donor’s act of kindness. “All the folks there, **some wonderful citizen** is going to put all of them up at a hotel for the rest of the week,” she told the Tribune.  
 (Brito 2019)

b. Jacqueline Rachev, eine Mitarbeiterin<sub>FEM</sub> der Heilsarmee, war laut CBS News darüber informiert worden, dass sie<sub>FEM</sub> eine Notunterkunft für die Obdachlosengruppe einrichten sollte, als sie<sub>FEM</sub> von der großzügigen Spende erfuhr. “Für den Rest der Woche hat **ein wundervoller Bürger**<sub>MASC</sub> die ganzen Menschen hier in einem Hotel untergebracht”, sagte Rachev zu CBS News.

‘Jacqueline Rachev, a female Salvation Army worker, had been briefed to set up emergency shelter for the homeless group when she learned of the generous donation, according to CBS News. “For the rest of the week, **a wonderful citizen**<sub>GN/MALE</sub> put all the people here in one hotel,” Rachev told CBS News.’

(Kälte in den USA 2019)

Notably, in a study by Gygax and Gabriel (2008), encountering pair forms in one text impacted participants’ interpretation of masculine forms in later texts, indicating that the effects of specific gender on generic forms can persist over time. Significantly, the authors’ findings demonstrate that “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” (Gygax & Gabriel 2008:149). As a result, a speaker who predominantly experienced

<sup>97</sup> This study was performed in French, a grammatical gender language. The authors theorize that the findings would be relevant to other sex-based GG languages – such as German – but not relevant for non-sex-based GG languages, such as Norwegian (Gygax & Gabriel 2008:150).



feminization may interpret generic role nouns with more male bias than a speaker who overwhelmingly experienced neutralization – e.g., a German and English speaker, respectively (Becker 2008:72).

As with feminization, referential use of male-specific role nouns alongside generic use may make language users more likely to assume that all gender-specific terms are being used referentially. Example 5.5a shows an English-language report of White House press secretary Sarah Sanders’ statement, whereas 5.5b is a German-language report about the statement. While the English statement is devoid of lexical gender for the referents (*individual* and *president* are epicene), the German report includes two masculine role nouns: *Autor* and *Präsident*.<sup>98</sup> As in 5.4a and b, the German report does not clarify that the former is being used generically, and the latter is specific. Because the reader likely knows that the US president at the time was a man, they may assume that the gender of *Autor* is also referential.

- (5.5) a. In a separate statement, White House press secretary Sarah Sanders said “**the individual** behind this piece has chosen to deceive, rather than support, the duly elected President of the United States.”  
(Ewing 2018)
- b. **Der Autor**<sub>MASC</sub> hintergehe den gewählten Präsidenten<sub>MASC</sub>, statt ihn zu unterstützen, kritisierte Sanders.  
‘The **author**<sub>GN/MALE</sub> deceives the elected president<sub>MALE</sub> instead of supporting him, Sanders criticized.’  
(Merey 2018)

The male-biasing effect of nearby feminine terms (underlined) may also be relevant for German epicenes with masculine grammatical gender (bold), especially as pronouns get further away from the controlling noun (5.6).

- (5.6) Die stets freundlichen Kellnerinnen<sub>FEM</sub> servieren mit dem gleichen hinreißenden Lächeln Fleisch und Fisch und sogar Mousse au Chocolat, wenn **der Gast**<sub>MASC</sub> es wünscht.  
‘The always-friendly waitresses serve meat and fish – and even chocolate mousse if **the guest**<sub>GN</sub> desires it – with the same adorable smile.  
(Campenhausen 2017)

Notably, the increased male bias of male-specific terms due to surrounding language is more likely to occur in German than English, as English has fewer gender-specific nouns.

### 5.3 DISCUSSION

The amount of male bias engendered by a generically used role noun has changed over time in English and German – and has changed differently in the two languages – due to factors such as increased female labor participation and language policies that use male-specific language generically. For example, as women become more visible in the labor force and take on more formally male-dominated roles, the stereotypes for that role noun become more neutral –

<sup>98</sup> In example 5.5b, *Präsident* ‘president’ is shown in the accusative singular: *Präsidenten*.

i.e., the male bias decreases. Notably, this effect is likely more substantial in epicenes, the dominant noun type in English. Furthermore, whereas stereotypes influence English and German speakers, German speakers are additionally impacted by grammatical gender, which is stable over time. As a result of these factors, the male bias of English role nouns changes more quickly in response to societal changes compared with German role nouns.

Additionally, the English-German distinction between GM alternatives neutralization and feminization means that, while English has been decreasing references to gender over the past half-century, German has been increasing references, and, in doing so, highlighting binary gender distinctions (Motschenbacher 2014, 2016), and making conceptual gender highly salient (Bigler & Leaper 2015, Gabriel et al. 2018). Feminization also means that the relationship between grammatical and conceptual gender becomes more in alignment (Bußmann & Hellinger 2003:164), which may make it more difficult to activate the gender-neutral interpretation for grammatically masculine or lexically male nouns (Gygax & Gabriel 2008, Irmen & Roßberg 2004). This male-biased interpretation – built up over long-term experience with feminization – can likely carry over to interpretations of other masculine terms used generically (Gygax & Gabriel 2008). Furthermore, it is likely that the combination of GM forms with specifically male forms may also spur readers or listeners to assume that all male-specific terms refer to men. Ultimately, this chapter has argued that grammatical gender and increased exposure to male-specific terms are likely to heighten male bias for generically intended role nouns. As a result, whereas generically used role nouns in English are likely more gender-neutral than 50 years ago, this is less likely to be the case in German.

## CHAPTER 6

### CONCLUSION

By analyzing English and German role nouns, this dissertation has offered hypotheses concerning how grammatical and sociocultural features affect male bias in a generically intended noun's interpretation. The central questions for this research were as follows:

1. Are English and German speakers equally likely to interpret a generically intended noun as referring to men?
2. If not,
  - a. in what language are speakers more likely to read generically intended nouns as male – i.e., in which language is the male bias higher?
  - b. within a language, are some generically intended nouns more likely to evoke predominantly male exemplars?
  - c. what factors could contribute to the disparity in the strength of the male bias?

I have argued throughout this work that role nouns carry more gender information in German due to inherent properties – such as grammatical and lexical gender – and social practices, including the adoption of feminization as a gender-neutral alternative. My research argues that German speakers are more likely to interpret generically intended role nouns as male than English speakers due to increased gender information in nouns and increased activation of gender stereotypes during reading and listening.

The three core chapters of this dissertation explored potential variables concerning male bias in generic role nouns. In Chapter 3, I focused on the cognitive and social effects of grammatical gender, a noun class system found in German but absent in English. Research concerning GG was then linked to the interpretation of the generic masculine, with a focus on role nouns, their NPs, and anaphors. Chapter 3 argued that increased activation and salience of conceptual gender due to GG increases a role noun's male bias. As a result, German role nouns are more likely to prompt a male-biased mental representation than English role nouns. Chapter 4 hypothesized the male bias impact of different nominal features, including grammatical gender, male-specific lexemes, male-specific morphemes, and gender-unspecified hypernyms. Specifically, the chapter argued that the more of these features a role noun has, the likelier it is to generate a male bias. Ultimately, German nouns have more of these features than their English counterparts, likely resulting in increased male bias for generically intended nouns. Chapter 5 focused on male bias and social change, including language practices. In particular, the chapter examined how increased female labor participation could affect the male bias of a role noun in English and German. This chapter argued that the male bias of English and German role nouns likely responds differently to increased numbers of women in the workforce, due to grammatical gender in German. Specifically, English nouns can more quickly lose male bias than German nouns, as stereotypes become less male. Secondly, Chapter 5 analyzed the consequences of combining explicit and generic use of male-specific nouns in a text – as occurs with feminization. This chapter argued that experience with feminization – versus neutralization – has increased the salience of gender and stereotypes and made GM more likely to be interpreted as male in German compared to English.

The hypotheses presented here represent a first step in the research on male bias in English and German role nouns in the singular. Notably, this analysis should be treated with

caution due to the extensive use of studies to form conclusions – studies which vary in their methodologies, findings, and rely predominantly on plural nouns. Further research is needed on male bias in singular English and German role nouns, including experimental testing of hypotheses presented herein. To better understand the role of grammatical gender on male bias, for example, future studies could test German epicene nouns – in three grammatical genders – against English epicene counterparts with similar stereotype rating. Follow-up could include testing nouns introduced by definite and indefinite articles to ascertain the effect of overt versus covert gender marking in German. Concerning language change, future studies could address the long-term effects of feminization and whether it affects male bias for role nouns. To do so, researchers could contrast English speakers with German speakers who predominantly grew up in East Germany and West Germany (the former having used more generic masculine, and the latter having turned to feminization). Beyond testing presented hypotheses, future research could include replicating plural noun male bias studies using singular role nouns.

Specific to the surgeon / specialist riddle presented in the introduction, future studies could test the epicene *Koryphäe* [f] ‘luminary’ against a generic masculine form, such as *Chef-Chirurg* [m] ‘male chief surgeon’, as is in the Wolter 2019 example (Appendix A), or one of the following: *Chirurg* [m] ‘male surgeon,’ *Arzt* [m] ‘male doctor,’ or *Facharzt* [m] ‘male medical specialist’. Further, a German riddle using a male-specific form could be tested against the English riddle. *Chirurg* ‘surgeon’ [m] and *Neurochirurg* [m] ‘neurosurgeon’ would be good places for initial inquiry, as they have similar female-male representation estimates in English and German speakers (Misersky et al. 2014).

Male bias in generic language has resulted in significant social, legal, and economic consequences for women and non-binary individuals (e.g., Grabrucker 1993, Spender 1980, Stout & Dasgupta 2011, Vervecken et al. 2013). This dissertation contributes to a better understanding of the sources of this bias and the factors that affect its strength in English and German role nouns. In doing so, this study argues that a language’s properties (e.g., grammatical gender, gender-specific morphology) and practices (e.g., generic masculine, feminization) can influence the male bias of role nouns.

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## APPENDIX A

### Versions of the surgeon / luminary riddle in English and German

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#### English

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Belle et al. 2021

A father and his son are out driving and are involved in a terrible accident. The father is killed instantly, and the son is in critical condition. The son is rushed to the hospital and prepared for an operation that could save his life. **The surgeon** comes in, sees the patient, and exclaims, “I can't operate, that boy is my son!’ How can this be?”

Morehouse et al. 2022

“A father and his son are in a car accident. The father dies on the spot. The son is rushed to the ER. **The attending surgeon** looks at the boy and says, ‘I can not operate on this boy. He’s my son!’ How can this be?”

Reynolds et al. 2006:59

This morning a father and his son were driving along the motorway to work, when they were involved in a horrible accident. The father was killed and the son was quickly driven to the hospital severely injured. When the boy was taken into the hospital **a passing surgeon** exclaimed: “Oh my god, that is my son!”

Sanford 1985: 311

A man and his son were away for a trip. They were driving along the highway when they had a terrible accident. The man was killed outright but the son was alive, although badly injured. The son was rushed to the hospital and was to have an emergency operation. On entering the operating theatre, **the surgeon** looked at the boy, and said, “I can’t do this operation. This boy is my son.” How can this be?

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#### German

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Kollmayer et al. 2018

Ein Vater und sein Sohn fahren gemeinsam im Auto und haben einen grässlichen Autounfall. Der Vater ist sofort tot. Der Sohn wird mit Blaulicht ins Krankenhaus gefahren und sofort in den Operationssaal gebracht. Der Arzt besieht ihn sich kurz und meint, man müsse **eine Koryphäe** zu Rate ziehen. Diese kommt, sieht den jungen Mann auf dem Operationstisch und meint: “Ich kann ihn nicht operieren, er ist mein Sohn.” Wie ist das möglich?

Wolter 2019

Vater und Sohn fahren im Auto. Sie haben einen schweren Unfall, bei dem der Vater sofort stirbt. Der Junge wird mit schweren Kopfverletzungen in ein Krankenhaus gebracht, in dem ein Chef-Chirurg arbeitet, der eine bekannte Kapazität für Kopfverletzungen ist. Die Operation wird vorbereitet, alles ist fertig, als **der Chef-Chirurg** erscheint, blass wird und sagt: “Ich kann nicht operieren, das ist mein Sohn!”

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*Note:* Stoeger et al. 2004 does not provide German text, though authors clarify that the noun tested is *Koryphäe* ‘luminary’ (519, footnote 6).

## APPENDIX B

In the following article – “Trump will Informanten in Ukraine-Affäre zur Rechenschaft ziehen” (Jacke, Klimkeit, Merey, and Mahlberg 2019) – NPs referencing the whistleblower are in bold and numbered with a subscript. The sole disambiguating form is bold and underlined. English translation below.

“Trump will **Informanten**<sub>1</sub> in Ukraine-Affäre zur Rechenschaft ziehen”

In der Ukraine-Affäre um möglichen Machtmissbrauch des US-Präsidenten will Donald Trump undichte Stellen im Weißen Haus finden und die Verantwortlichen zur Rechenschaft ziehen. «Ich will wissen, wer **dem Whistleblower**<sub>2</sub> die Informationen gegeben hat», sagte Trump laut Berichten der «New York Times» und der «Los Angeles Times» am Donnerstag vor Mitarbeitern der US-Gesandtschaft bei den Vereinten Nationen in New York. **Die betroffene Person**<sub>3</sub> sei fast «**ein Spion**»<sub>4</sub> und mit solchen sei man in der Vergangenheit «ein bisschen anders» umgegangen als heute. Führende Demokraten warnten Trump davor, **den Informanten**<sub>5</sub> oder andere Zeugen zu drangsalieren.

Der US-Geheimdienstkoordinator Joseph Maguire verteidigte **den Hinweisgeber**<sub>6</sub>. **Der Whistleblower**<sub>7</sub> habe «das Richtige getan», seiner Überzeugung nach «durchweg in gutem Glauben» gehandelt und stets die Gesetze befolgt, sagte Maguire bei einer Anhörung im Geheimdienstausschuss des Repräsentantenhauses.

Trumps Gegner sehen sich auf dem Weg zu einem möglichen Amtsenthebungsverfahren gegen den Republikaner bestärkt. Die von **dem anonymen Hinweisgeber**<sub>8</sub> eingereichte Beschwerde über Trump und dessen umstrittenes Telefonat mit dem ukrainischen Präsidenten berge wichtige Anhaltspunkte für Ermittlungen gegen den Präsidenten. «**Der Whistleblower**<sub>9</sub> hat uns einen Fahrplan für unsere Untersuchung gegeben», sagte der Chef des Geheimdienstausschusses im Repräsentantenhaus, Adam Schiff.

Die Demokraten im Repräsentantenhaus hatten am Dienstag Vorbereitungen für ein Amtsenthebungsverfahren angekündigt. Ihre Vorwürfe werden durch die zwei Tage später publik gemachte schriftliche Beschwerde eines Geheimdienstmitarbeiters gestützt, der schwere Anschuldigungen gegen Trump und dessen Regierungszentrale erhebt.

Im Rahmen **seiner**<sub>10</sub> Arbeit will **der Whistleblower**<sub>11</sub> Informationen mehrerer Regierungsmitarbeiter erhalten haben, wonach der US-Präsident «die Macht seines Amtes nutzt», um zu erreichen, dass sich ein anderes Land zu seinen Gunsten in die US-Wahl 2020 einmischte. Zudem hätten sich führende Regierungsmitarbeiter intensiv bemüht, nach dem strittigen Telefonat Trumps mit dem ukrainischen Präsidenten Wolodymyr Selenskyj Ende Juli die genaue Wortlautfassung des Gesprächs unter der Decke zu halten. So meldete es **der Informant**<sub>12</sub> Mitte August an ein internes Kontrollgremium der US-Geheimdienste.

Die Identität **des Hinweisgebers - oder der Hinweisgeberin** - ist nicht öffentlich bekannt. Die «New York Times» hatte berichtet, es solle sich um **einen Mitarbeiter des Auslandsgeheimdienstes CIA**<sub>13</sub> handeln. **Seine**<sub>14</sub> Anwälte hätten davor gewarnt, Informationen über **den Whistleblower**<sub>15</sub> zu veröffentlichen und **ihn**<sub>16</sub> so zu gefährden, schrieb die Zeitung. Chefredakteur Dean Baquet verteidigte den Schritt seines Blattes jedoch. Die «New York Times» habe ihren Lesern diese Informationen geben wollen, damit diese die Glaubwürdigkeit **des Whistleblowers**<sub>17</sub> selbst beurteilen könnten.

Trump selbst sieht sich einmal mehr als Opfer einer Hexenjagd und äußert Zweifel an der Glaubwürdigkeit **des Whistleblowers**<sup>18</sup>. **Dieser**<sup>19</sup> hatte angegeben, bei den meisten von **ihm**<sup>20</sup> beanstandeten Vorgängen **kein direkter Zeuge**<sup>21</sup> gewesen zu sein, aber übereinstimmende und glaubwürdige Informationen verschiedener Regierungsmitarbeiter dazu bekommen zu haben. «**Ein Whistleblower**<sup>22</sup> mit Informationen aus zweiter Hand?», twitterte Trump höhnisch.

Der exakte Ablauf des Telefonats im Zentrum der Affäre ist noch immer nicht zweifelsfrei geklärt. Ein am Mittwoch vom Weißen Haus veröffentlichtes Gesprächsprotokoll zwischen Trump und Selenskyj zeigt, dass Trump seinen ukrainischen Kollegen zu Ermittlungen ermunterte, die seinem Rivalen Joe Biden schaden könnten. Dabei geht es um frühere Geschäfte von Bidens Sohn Hunter in der Ukraine und angebliche Bemühungen, seinen Sprössling vor der ukrainischen Justiz zu schützen. Biden liegt im Rennen um die demokratische Präsidentschaftskandidatur für die Wahl 2020 vorne.

Für das von den Demokraten angestrebte Amtsenthebungsverfahren gibt es keinen genauen Zeitplan. Mit ihrer Mehrheit im Repräsentantenhaus könnten sie ein sogenanntes Impeachment anstrengen. Die Entscheidung über eine tatsächliche Amtsenthebung fiele aber im Senat, wo Trumps Republikaner die Mehrheit haben. Die Aussichten auf Erfolg eines solchen Verfahrens sind daher gering. Bisher wurde noch kein US-Präsident durch ein Impeachment-Verfahren des Amtes enthoben.

Translation: “Trump Wants to Hold **Whistleblower**<sub>1</sub> Accountable in Ukraine Affair”

In the Ukraine affair about possible abuse of power by the US President, Donald Trump wants to find leaks in the White House and hold those responsible accountable. “I want to know who gave the **whistleblower**<sub>2</sub> the information,” Trump said on Thursday, according to reports in the New York Times and the Los Angeles Times, in front of staff at the US legation to the United Nations in New York. **The person concerned**<sub>3</sub> is almost «**a spy**»<sub>4</sub> and in the past people dealt with such people «a bit differently» than today. Leading Democrats warned Trump not to harass the **whistleblower**<sub>5</sub> or other witnesses.

US Intelligence Coordinator Joseph Maguire defended the **whistleblower**<sub>6</sub>. The **whistleblower**<sub>7</sub> “did the right thing,” he believed, “acted in good faith throughout,” and always obeyed the law, Maguire said at a House Intelligence Committee hearing.

Trump's opponents feel encouraged on the way to a possible impeachment process against the Republican. The complaint filed by the **anonymous whistleblower**<sub>8</sub> about Trump and his controversial phone call with the President of Ukraine contains important leads for investigations against the President. “**The whistleblower**<sub>9</sub> gave us a roadmap for our investigation,” said House Intelligence Committee chief Adam Schiff.

The Democrats in the House of Representatives announced preparations for an impeachment trial on Tuesday. Their allegations are supported by a written complaint published two days later by a secret service official who makes serious allegations against Trump and his government headquarters.

As part of **his**<sub>10</sub> work, **the whistleblower**<sub>11</sub> claims to have received information from several government officials that the US President was “using the power of his office” to get another country to interfere in the 2020 US election on his behalf. In addition, leading government officials had made intensive efforts to keep the exact wording of the conversation under the covers after Trump's controversial telephone call with Ukrainian President Volodymyr

Zelenskyy at the end of July. This is what **the whistleblower**<sup>12</sup> reported to an internal control committee of the US secret services in mid-August.

The identity of **the male whistleblower - or the female whistleblower** - is not publicly known. The “New York Times” had reported that [the author] was **an employee**<sup>13</sup> of the foreign intelligence service CIA. The newspaper wrote that **his**<sup>14</sup> lawyers had warned against publishing information about **the whistleblower**<sup>15</sup> and thus endangering **him**<sup>16</sup>. Editor-in-chief Dean Baquet defended his paper's move. The “New York Times” wanted to give its readers this information so that they could judge the credibility of **the whistleblower**<sup>17</sup> for themselves.

Trump once again sees himself as a victim of a witch hunt and expresses doubts about the credibility of **the whistleblower**<sup>18</sup>. **He**<sup>19</sup> had stated that he was not a direct witness to most of the events **he**<sup>20</sup> had complained about, but that he had received consistent and credible information from various government employees. “**A whistleblower**<sup>21</sup> with second-hand information?” Trump sneered.

The exact course of the phone call at the center of the affair has still not been clarified beyond doubt. A transcript of the conversation between Trump and Zelenskyy released by the White House on Wednesday shows that Trump encouraged his Ukrainian colleague to investigate that could harm his rival, Joe Biden. The call concerns Biden’s son Hunter’s previous dealings in Ukraine and alleged efforts to protect his offspring from the Ukrainian judiciary. Biden is ahead in the race for the Democratic presidential nomination for the 2020 election. There is no precise timetable for the impeachment process the Democrats are seeking. With their majority in the House of Representatives, they could seek impeachment. However, the decision on an actual impeachment would be made in the Senate, where Trump’s Republicans have the majority. The prospects of success of such a procedure are therefore low. So far, no US president has been removed from office through an impeachment process.