Gender mismatches in partitive constructions in French and German

How society shapes language

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Partitive constructions involving human referents (e.g. *one of the students*) may give rise to gender agreement mismatches between set and subset in some languages. Native speakers have intuitions about whether such mismatches are acceptable or not. Gender mismatches in partitive constructions have not received much attention in the literature yet, but are particularly interesting in the light of the ongoing discussions on gender equal language, which challenge the existing gender systems in many languages. This dissertation investigates which factors influence the acceptance of gender mismatches by speakers of French and German and discusses those factors in the light of the ongoing discussions on gender equal language. Furthermore, it proposes a novel theoretical explanation for the observed facts within the framework of Generative Grammar. As such, this dissertation does not only give insight into an understudied phenomenon, gender agreement in partitive constructions, but also contributes to our understanding of how social factors may influence language and eventually could cause language change.

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How society shapes language

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Author contributions

Chapter 1 – Introduction

This chapter was written by Thom Westveer. He revised the chapter based on detailed feedback from Petra Sleeman and Enoch Aboh. The chapter has not been submitted for publication elsewhere.

Chapter 2 – Setting the scene: the sociolinguistic background

An earlier version of this chapter was published as: Westveer, Thom; Petra Sleeman & Enoch O. Aboh. 2018. Discriminating dictionaries? Feminine forms of profession nouns in dictionaries of French and German. *International Journal of Lexicography* 31 (4), 371-393.

Thom Westveer conducted the research and wrote the original paper, with valuable feedback from Petra Sleeman and Enoch Aboh, as well as from two anonymous reviewers. For the purpose of this dissertation, the original paper was revised to fit into the dissertation, as well as to accommodate new findings that occurred to the author since publication of the original paper.

Chapter 3 – Gender agreement in French partitive constructions

An earlier version of this chapter was published as: Westveer, Thom; Petra Sleeman & Enoch O. Aboh. 2021. Competing genders: French partitive constructions between grammatical and semantic gender. In Marc-Olivier Hinzelin, Natascha Pomino & Eva-Maria Remberger (eds.), *Formal approaches to Romance morphosyntax*, 49-87. Berlin: De Gruyter.

Thom Westveer designed and carried out the grammaticality judgement task and wrote the original paper, with valuable feedback from Petra Sleeman and Enoch Aboh, from Tabea Ihsane, as well as from two anonymous reviewers. For the purpose of this dissertation, the original paper was revised to fit into the dissertation.

Chapter 4 – Gender agreement in German partitive constructions

Thom Westveer designed and carried out the grammaticality judgement task and wrote the chapter. He revised the chapter based on detailed feedback from Petra Sleeman and Enoch Aboh, as well as from Roland Pfau. The chapter has not been submitted for publication elsewhere yet.

Chapter 5 – Explanandum, or factors influencing agreement in partitives

This chapter was specifically written for the purpose of the present dissertation by Thom Westveer, with valuable feedback from Petra Sleeman and Enoch Aboh. It has not been submitted for publication elsewhere.

Chapter 6 – The syntactic structure of partitive constructions

This chapter was specifically written for the purpose of the present dissertation by Thom Westveer, with valuable feedback from Petra Sleeman and Enoch Aboh. It has not been submitted for publication elsewhere.

Chapter 7 – Explanans, or accounting for semantic agreement in partitives

This chapter was specifically written for the purpose of the present dissertation by Thom Westveer, with valuable feedback from Petra Sleeman and Enoch Aboh. As a whole, it has not been submitted for publication, but section 7.3.1 recapitulates a proposal made in an accepted paper: Westveer, Thom; Petra Sleeman & Enoch. O. Aboh. Forthcoming. La lutte des genres : l'accord de genre dans les phrases partitives superlatives en français. Submitted to Benjamin Fagard & Gabrielle Le Tallec (eds.), *Entre masculin et féminin… Approche contrastive : français et langues romanes*.

Chapter 8 – Final discussion: how society shapes language

This chapter was written by Thom Westveer. He revised the chapter based on detailed feedback from Petra Sleeman and Enoch Aboh. The chapter has not been submitted for publication elsewhere.

On passe nos vies à compter
Tout ce que l'on n'a pas
En mettant parfois nos foies
Dans le plus gris des états
On oublie qu'on n'est bien
Que de l'intérieur
Ça n'enlève pas les pleurs
Mais moi

Je fais comme Dumbo
Je ne fais que voler
Au-dessus de mes défauts
Je fais comme Dumbo
Je ne fais que voler

Un éléphant roi
Se trompe parfois
Et danse aussi mal que vous et moi
En éléphant moi
Je ne me trompe pas
Quand je me dis qu'il faut qu'on s'aime
Soi

Vianney, *Dumbo* (2016)

Chapter 1

Introduction

In the song *Nathalie*, dating from 1964, the French artist Gilbert Bécaud sings about his rendezvous with the Russian girl Nathalie. Bécaud explains how she guides him through the city of Moscow and describes her in the following way:[1]

> La place rouge était vide
> J'ai pris son bras, elle a souri
> Il avait des cheveux blonds, mon guide
> Nathalie, Nathalie
>
> 'The Red Square was abandoned
> I took her arm, she smiled
> He had blond hair, my guide
> Nathalie, Nathalie'

Surprisingly, Bécaud uses the masculine form *mon guide* 'my.M guide' to refer to Nathalie, which also causes a discrepancy between the forms of the personal pronouns in the fragment. In the second line, the feminine pronoun *elle* is used, in correspondence with the biological sex of the referent, Nathalie. By contrast, the third line contains the masculine pronoun *il* to refer to the same person. This sudden shift to the masculine pronoun results from agreement with the gender of the masculine noun *guide*. As such, the latter case illustrates a situation in which for a human referent, grammatical gender does not match biological sex (cf. Corbett, 1991).

In the last decades, such discrepancies between grammatical gender and biological sex have increasingly received attention in light of the debates on inclusivity in language, which started as part of the feminisation movements in the 1970s (cf. Arbour & de Nayves, 2014). Originally, the goal was to enhance women's visibility in language, for example by using feminine instead of masculine forms of profession nouns, (e.g. *la ministre* 'the.F minister' instead of *le ministre* 'the.M minister'). In recent years, we have

[1] The original French lyrics were written by Pierre Delanoë; English translation by the author.

witnessed a shift to a more general concept of linguistic inclusivity, following the ongoing discussions on non-binary gender (cf. Hergenhan, 2015). A consequence of these discussions is the problematisation of the generic masculine, the use of a masculine noun as a gender neutral option, as illustrated by the use of the masculine form *mon guide* to refer to a female in Bécaud's song.[2]

The feminisation of profession nouns can be considered a direct consequence of the developments in society. However, we may wonder whether the social context could have broader repercussions on language, for instance on gender agreement. It is this indirect influence of social factors on gender agreement that I address in this dissertation. Since investigating all possible manifestations of gender agreement falls beyond the scope of my study, I will focus on one specific agreement context, partitive constructions (e.g. *one of the students*).

In these constructions, in which a person (or object) is selected from a larger group, an intricate case of agreement mismatch may arise. Imagine that you are a French high school teacher and that you want to tell a colleague that the most intelligent of your students — a mixed group of female and male students — is a girl named Marie. Usually, a masculine plural form is used to refer to such a heterogeneous group in French, in this case *étudiants*.[3] How should we now designate the girl selected from this group? Initially, the feminine superlative form *la plus intelligente* (1a) seems a logical option:

(1) a. *La plus intelligent-e des étudiant-s est Marie.*
the.F SUP intelligent-F of.the.PL student.M-PL is Marie
b. *Le plus intelligent des étudiant-s est Marie.*
the.M SUP intelligent.M of.the.PL student.M-PL is Marie
'The most intelligent of the students is Marie.'

However, the use of the feminine superlative *la plus intelligente* in (1a) results in a mismatch between the masculine group noun *étudiants* and the feminine superlative. Alternatively, the masculine superlative *le plus intelligent* could be adopted, as in (1b). This choice avoids a mismatch between the masculine

[2] Several psycholinguistic studies show that the masculine form is not perceived as gender neutral (cf. Brauer & Landry, 2008; Stahlberg & Sczesny, 2001; Gabriel et al., 2008).

[3] In light of the current debates on inclusivity that I mentioned, the use of a masculine plural to refer to a mixed group could be contested. As an alternative, inclusive forms could be used, such as, double call (e.g. *étudiantes et étudiants* 'students.F and students.M'), or typographical marking (e.g. *étudiant·e·s* 'students.M.F.PL'). Nonetheless, I stick to the masculine plural forms in this dissertation.

noun *étudiants* and the superlative, but can also be questioned, as it would imply the use of a masculine superlative to refer to a female. A study by Sleeman & Ihsane (2016) showed that native speakers have intuitions about the acceptability of the mismatches exemplified in (1).

Such agreement mismatches in partitive constructions are not limited to French only, but may arise in all languages that mark different linguistic genders through overt gender morphology. In this dissertation, I will focus on two such languages, French and German. While both belong to the Indo-European language family, they represent different subbranches. French is a Romance language; German a Germanic language. Yet, in terms of agreement in partitive constructions, they face similar challenges, as illustrated by the German sentences in (2), equivalents of the French examples in (1):

(2) a. *Die intelligent-este der Student-en ist Marie.*
the.F intelligent-SUP the.GEN.PL student.M-PL is Marie
b. *Der intelligent-este der Student-en ist Marie.*
the.M intelligent-SUP the.GEN.PL student.M-PL is Marie
'The most intelligent of the students is Marie.'

Theoretically, the superlative could either take the feminine form *die intelligenteste* (2a), in correspondence with the biological sex of the referent *Marie*, or the masculine form *der intelligenteste* (2b), showing agreement with the masculine gender of the group noun *Studenten*.

The agreement situation in partitive constructions may be particularly insightful to investigate the influence of society on language, as prescriptive grammars of French and German do not discuss whether a mismatch between the group noun and the superlative is allowed in these constructions. Nevertheless, native speakers have intuitions about the acceptability of such mismatches. The main goal of this dissertation is to explore these intuitions and discover more about the factors that underlie gender agreement in partitives. This translates into my main research question:

> Do speakers of French and German accept mismatches in partitive constructions with human referents, and if so, what factors influence their choices?

Although the main focus will be on the linguistic aspects that mediate agreement in partitives, I will also take into account the influence of the social developments sketched earlier, in line with the subtitle of this dissertation: *How society shapes language*.

In the remainder of this chapter, I further introduce the topic of gender agreement in partitives and unfold how I will proceed to answer my main research question. In section 1.1, I start by discussing some relevant terminology concerning partitive constructions and gender agreement. I turn to the issue of agreement mismatches in section 1.2 and introduce the existing studies on agreement in partitives. In section 1.3, I present my specific research questions and methodology and provide an outline of the dissertation.

1.1 Terminology: partitives meet gender agreement

The topic of investigation comprises two key notions: *partitive construction* and *gender agreement*. In what follows, I introduce the relevant terminology considering these notions, starting with the specific syntactic constructions that will be studied: partitives.

1.1.1 Partitive construction

Canonical partitive constructions of the type Y *of the* X consist of two parts. The first part refers to a subset Y and the second part represents a set X, from which the subset Y is selected. I refer to the first part as *subset phrase* and to the second part as *set phrase*. A partitive's subset phrase may be introduced by different kinds of elements (cf. Hoeksema, 1996), but I focus on two common subtypes in this dissertation: *quantified partitives* and *superlative partitives*.

In a quantified partitive, the subset is introduced by means of a quantifier, such as the numeral *zwei* 'two' in German or *deux* in French. Examples are given in (3); square brackets mark the set phrase:

(3) a. *zwei* [*dies-er* *Student-en*] **German**
two DEM-GEN.PL student.M-PL
b. *deux* [*de* *ces* *étudiant-s*] **French**
two of DEM.PL student.M-PL
'two of these students'

As a comparison between (3a) and (3b) reveals, French differs from German in terms of the element that links set and subset phrase: French uses the preposition *de* (3b), whereas in German, the set phrase bears genitive case marking (3a).

In a superlative partitive, the subset is designated by a combination of a definite determiner and a superlative adjective. The examples below illustrate this for German (4a) and French (4b) (again, square brackets mark the set phrase):

(4) a. *der jüng-ste* [*dies-er* *Student-en*] **German**
the.M young-SUP DEM-GEN.PL student.M-PL
b. *le plus jeune* [*de ces* *étudiant-s*] **French**
the.M SUP young of DEM.PL student.M-PL
'the youngest of these students'

As the examples in (3-4) show, both quantified and superlative partitives involve only one overt noun, usually the noun of the set phrase (cf. Cardinaletti & Giusti, 2017). The subset phrase may be considered an instance of nominal ellipsis.[4] While this is the canonical situation, the set noun can be covert in some cases too, but in this dissertation, I focus on the canonical examples of partitives, which involve an overt set noun.[5]

The syntactic derivation of partitive constructions has received considerable attention in the literature (for an overview, see e.g. Sleeman & Kester, 2002; Falco & Zamparelli, 2019). However, most studies focussed on the structure of quantified partitives; superlative partitives have largely been ignored, except for a study by Sleeman & Ihsane (2016), which I introduce in section 1.2. Therefore, one of the goals of my dissertation is to fill this gap.

1.1.2 Gender agreement

Next to *partitive construction*, the second crucial term is *gender agreement*. The general notion of *agreement* can be defined in various ways, but I adopt the following definition, proposed by Steele (1978: 610):

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[4] Actually, whether partitives involve ellipsis or not depends on the syntactic derivation adopted (cf. Sleeman & Kester, 2002). I return to this issue in Chapter 6, where I discuss the syntactic structure of partitives.

[5] A French example of a partitive with both a covert set and subset noun is provided in (i):

(i) *le plus jeune de ceux qui sont venus*
the.M SUP young of DEM.M.PL REL.SUBJ are come.PST.PTCP.M.PL
'the youngest of those who came'

Please note that the presence of the relative clause *qui sont venus* is necessary to license the use of the demonstrative *ceux* in (i) (cf. Sleeman, 2006).

> The term *agreement* commonly refers to some systematic covariance between a semantic or formal property of one element and a formal property of another. For example, adjectives may take some formal indication of the number and gender of the noun they modify.

In this dissertation, I specifically focus on gender agreement between nouns and related elements, such as pronouns, adjectives, or determiners. As Steele's (1978) definition indicates, agreement may not only involve formal properties of a noun, but also semantic properties, which relate to the noun's referent. Dahl (2000) uses the term *referential gender* in this respect; he addresses gender based on formal criteria by the term *lexical gender*. With human denoting nouns, lexical and referential gender often correspond, since in many languages, linguistic gender is related to biological sex for such nouns.[6] For instance, nouns that refer to male humans often bear masculine gender (e.g. French *un frère* 'a.M brother.M'), while nouns that refer to female humans exhibit feminine gender (e.g. French *une soeur* 'a.F sister.F').

By contrast, some human denoting nouns challenge the link between sex and gender, as their gender is not based on semantic, but instead on formal criteria. A famous German example is the noun *Mädchen* 'girl'. Although this noun refers to a person of female sex, the lexical gender of the noun is neuter, which derives from formal criteria: all German nouns ending in the diminutive suffix *-chen* belong to the class of neuter nouns. The noun *sentinelle* 'guard' constitutes a comparable example from French. Although it usually refers to males, *sentinelle* is feminine. Again, the noun's lexical gender is invariable and does not always match referential gender.

Corbett (1991) labels such nouns *hybrid nouns* because gender agreement with these nouns may either be based on their lexical or on their referential gender. For instance, the German neuter noun *Mädchen* may trigger either neuter or feminine agreement on the personal pronoun in (5):[7]

(5)	*Ich*	*sehe*	*das/*die*	*Mäd-chen.*	*Sie/Es*	*liest*	*ein*	*Buch.*
	I	see	the.N/the.F	girl-N	she.F/it.N	reads	a	book
	'I see the girl. She reads a book.'							

Although the referent of the noun *Mädchen* in (5) is necessarily female, the determiner *das* can only agree with the noun's lexical gender, which is neuter.

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[6] Dahl (2000), following up on Corbett (1991), assumes that all gender systems are at least partially based on semantic criteria, of which biological sex is the most common one.

[7] Throughout this dissertation, I use the symbol * to indicate that an example is ungrammatical.

This is an instance of *grammatical agreement*. In contrast, the personal pronoun in the second sentence can either take the feminine form *sie* or the neuter form *es.* In the latter case, the form of the pronoun corresponds to the lexical neuter gender of the noun *Mädchen,* resulting again in grammatical agreement. The former case, in which the pronoun's form matches the noun's referential gender (that is, the biological sex of its referent) is labelled *semantic agreement* (cf. Corbett, 1991). Thus, the noun *Mädchen* may trigger either grammatical or semantic agreement on the personal pronoun (cf. Braun & Haig, 2010).[8] Semantic agreement results in a mismatch between the lexical gender value of the noun and the formal agreement realisation on the pronoun.

The competition between grammatical and semantic agreement is not restricted to personal pronouns, but surfaces for different agreement contexts. Yet, the likelihood of semantic agreement varies; the example in (5) illustrates the contrast in acceptability of semantic agreement between DP-internal agreement on the determiner and DP-external agreement on the pronoun. Many languages display a similar contrast. Based on a cross-linguistic comparison, Corbett (1979, 1991) formulated the Agreement Hierarchy in (6) to capture the likelihood of semantic agreement in different agreement contexts:

(6) attributive – predicate – relative pronoun – personal pronoun

The more to the right an element is located on the Agreement Hierarchy in (6), the likelier it is to display semantic agreement. Thus, personal pronouns more often exhibit semantic agreement than relative pronouns, which, in turn, more often show semantic agreement than predicative or attributive adjectives.

Theoretically, partitive constructions with human referents may also give rise to a competition between grammatical and semantic agreement. The French example in (7) illustrates this; the masculine plural set phrase *des nouveaux écrivains* refers to a heterogeneous group of female and male writers:

(7) a. *Un* *des* *nouveau-x* *écrivain-s* *est* *Leila* *Slimane.*
one.M of.the.PL new.M-PL writer.M-PL is Leila Slimane

[8] The same is true for the Dutch equivalent noun *het meisje* 'the.N girl.N', which is also lexically neuter, but may trigger either feminine or neuter agreement on the personal pronoun (cf. Kraaikamp, 2017).

b. *Une des nouveau-x écrivain-s est Leila Slimane.*
one.F of.the.PL new.M-PL writer.M-PL is Leila Slimane
'One of the new writers is Leila Slimane.'

In both (7a) and (7b), the person selected from the mixed group is a female. Still, the quantifier that refers to this female could agree with the lexical gender of the set noun *écrivains* and take the masculine form *un*, as in (7a), a case of grammatical agreement. By contrast, the quantifier could also take the feminine form *une* in correspondence with the biological sex of its referent, as in (7b). This is an example of semantic agreement, which would cause a mismatch between the masculine gender on the set noun and the feminine gender on the quantifier.

In the literature, the terms *grammatical* and *semantic agreement* are sometimes used in a technical sense, describing distinct agreement processes.[9] This is, however, not the case in this dissertation. By *grammatical agreement*, I simply refer to a situation in which the gender values on two agreeing elements match, as predicted by their formal grammatical properties. Example (7a) illustrates this. I label *semantic agreement* cases that display a mismatch in gender values between two agreeing elements because the target receives a value based on the referent's sex, as in example (7b).

Several studies have addressed the competition between grammatical and semantic agreement, focusing, for instance, on pronominal agreement (e.g. Audring, 2009, on Dutch; Braun & Haig, 2010, on German) or on agreement on attributive and predicative adjectives (e.g. Matushansky, 2013, on Russian; Merchant, 2014, on Greek; Landau, 2016, on Hebrew). However, only very few studies considered semantic agreement in partitive constructions. Sleeman & Ihsane (2016), building on Ihsane & Sleeman (2016), investigated gender agreement in French partitives. Following up on Sleeman & Ihsane (2016), I explored gender agreement in German partitives in my Research MA thesis (Westveer, 2016). In the next section, I briefly discuss the main findings of these studies.

[9] When used in a technical sense, the term *grammatical agreement* (also labelled *syntactic agreement*, cf. Corbett, 1991) refers to formal feature sharing between two agreeing elements. Instead, *semantic agreement* denotes feature valuation from the non-linguistic context.

1.2 Previous studies on agreement in partitives

Sleeman & Ihsane (2016) (see also Ihsane & Sleeman, 2016) were the first to investigate gender agreement in partitive constructions. Based on acceptability judgements from a limited number of (Swiss) French informants, they investigated what factors may influence the acceptance of semantic agreement in French partitives. Their results suggest that the acceptance of semantic agreement depends on at least two factors: (i) the type of partitive construction and (ii) the type of animate noun.

The influence of the type of partitive relates to the distinction between quantified and superlative partitives. Sleeman & Ihsane's (2016) results indicate that speakers of French did not accept semantic agreement in quantified partitives, as shown in (8):[10]

(8) *?Une/Un des nouveau-x étudiant-s est Hélène.*
one.F/one.M of.the.PL new.M-PL student.M-PL is Hélène
'One of the new students is Hélène.'

In (8), the set phrase *des nouveaux étudiants* exhibits the masculine form because it refers to a mixed group of students. The person selected from this group, *Hélène*, is a female. Nevertheless, the quantifier referring to this female can only take the masculine form *un*, showing grammatical agreement with the masculine set noun. Sleeman & Ihsane's (2016) informants did not allow the quantifier to display semantic agreement.

Instead, they accepted semantic agreement in superlative partitives, but this was shown to depend on the type of animate noun involved. For instance, the informants accepted semantic agreement with the noun *ministre* 'minister' in (9):

(9) *La/?Le plus jeune des nouveau-x ministre-s est Marie.*
the.F/the.M SUP young of.the.PL new.M-PL minister-PL is Marie
'The youngest of the new ministers is Marie.'

In (9), the set phrase *des nouveaux ministres* takes the masculine form, since it refers to a heterogenous group of females and males. The superlative

[10] Throughout this dissertation, I use the symbol ? to indicate that an example is downgraded based on native speakers' judgements.

referring to *Marie* may show semantic agreement, resulting in the feminine form *la plus jeune*.

While their informants were shown to accept semantic agreement in a superlative partitive with the noun *ministre* (9), Sleeman & Ihsane (2016) assumed that grammatical agreement would be preferred with a noun like *sentinelle* 'guard'. The example in (10) illustrates this. Crucially, as I mentioned earlier, the noun *sentinelle* is lexically feminine, even when referring to a male:

(10) *La/*Le plus jeune des nouvelle-s sentinelle-s est*
the.F/the.M SUP young of.the.PL new.F-PL guard.F-PL is
Henri.
Henri
'The youngest of the new guards is Henri.'

Although the referent of the superlative in (10) is male, according to Sleeman & Ihsane (2016), the superlative should grammatically agree with the gender of the set noun *sentinelles*. Thus, the superlative should take the feminine form *la plus jeune*.

Sleeman & Ihsane (2016) propose a theoretical analysis to account for the agreement differences they observed, building on earlier accounts by Sleeman & Kester (2002) and Ihsane & Sleeman (2016). They explain the contrast between quantified and superlative partitives by adopting slightly different syntactic analyses for both partitive types. In turn, the distinctive agreement behaviour of different animate nouns is attributed to differences in gender marking in the lexicon.[11]

In my Research MA thesis (Westveer, 2016), I investigated agreement in German partitives by carrying out a grammaticality judgement task with a relatively limited number of native speakers. I observed that, in principle, the acceptability of semantic agreement in German depends on the same factors as in French, that is, (i) the type of partitive and (ii) the type of animate noun. However, the results suggest that in German, semantic agreement is accepted with more types of animate nouns than in French.[12] Furthermore, German differs from French in the presence of nouns with neuter gender, some of

[11] I provide a detailed description of Sleeman & Ihsane's (2016) analysis in Chapter 3, section 3.1.2.

[12] More specifically, speakers of German seem to accept semantic agreement with equivalent nouns of the French *sentinelle*-type, for instance, *die Waise* 'the orphan', which only exists in a feminine form.

which refer to humans, such as *Kind* 'child'. In principle, these nouns could also give rise to a mismatch in partitives, as exemplified in (11):[13]

(11) *¿Das/¿Die jüng-ste mein-er Kind-er, mein-e Tochter*
the.N/the.F young-SUP my-GEN.PL child.N-PL my-F daughter
Anna, spielt Klavier.
Anna plays piano
'The youngest of my children, my daughter Anna, plays the piano.'

From the results of Westveer (2016), it is not clear whether speakers prefer grammatical or semantic agreement with these neuter animate nouns.

In sum, the existing studies on agreement in French partitives (Ihsane & Sleeman, 2016; Sleeman & Ihsane, 2016) show that two factors, partitive type and noun class, influence the acceptability of semantic agreement. Yet, Sleeman & Ihsane's (2016) study was based on a limited number of informants' judgements on a limited number of test sentences. For German, the results of Westveer (2016) suggest that the acceptability of semantic agreement in partitives could depend on the same factors as in French. However, this study was highly exploratory in both its extent and approach, and it only involved a limited number of participants. In addition, the grammaticality judgement task was designed in a less systematic manner and included many additional factors.

Finally, the results of both Sleeman & Ihsane (2016) and Westveer (2016) did not allow a systematic comparison of French and German, due to their distinct methodological approaches. Nevertheless, these studies suggest that gender mismatches may appear in partitive constructions in the two languages and that their acceptability depends on multiple factors, which require further investigation. This dissertation seeks to fill this gap by conducting a comparative study on both French and German. I elaborate on the structure of the dissertation in the next section.

1.3 Research questions, approach, and outline

As we saw in the preceding sections, gender agreement in partitive constructions constitutes an intriguing research topic, both from a formal, as well as from a sociolinguistic perspective. Since this phenomenon has

[13] Throughout this dissertation, I use the symbol ¿ to indicate that, based on native speakers' judgements, it cannot be determined whether an example is judged acceptable or not.

received surprisingly little attention in the literature, I aim to provide more insight into the different factors that may influence gender agreement in partitives. In this way, I hope to answer the main research question I introduced earlier:

> Do speakers of French and German accept mismatches in partitive constructions with human referents, and if so, what factors influence their choices?

I will address different aspects of gender agreement in partitive constructions. These aspects are captured by five specific research questions, which I discuss in the remainder of this chapter. In addition, I briefly describe the methods that I will adopt to answer them. The following discussion also provides an outline of this dissertation, which, next to the present introductory chapter, consists of seven chapters.

Before I turn to the partitive constructions, I start by exploring the debate on inclusivity in language for French and German, which will give us further insight into the sociolinguistic situation in France and Germany, also from a diachronic perspective. My first research question addresses this aspect:

I. What is the current sociolinguistic situation regarding inclusivity for French and German, and what is its historical development?

In **Chapter 2**, I attempt to answer this question in two ways. On the one hand, I provide a literature-based overview of the historical development of feminisation and inclusivity in French and German. On the other hand, I investigate the integration of feminine forms of profession nouns in two monolingual dictionaries of French and German. At first sight, the choice to investigate dictionaries may seem slightly unorthodox, since dictionaries often have a prescriptive purpose next to a descriptive one.[14] Nevertheless, I believe that the investigation of dictionaries will prove useful in the present context, as dictionaries cover a broader range of language users than, for instance, newspapers or spoken language corpora. As a consequence, investigating dictionaries may give a more comprehensive overview of the status of

[14] The editors of the two monolingual dictionaries that constitute my corpus, the *Petit Robert* for French and the *Duden Universalwörterbuch* for German, clearly state that they intend to base their dictionaries on broad language corpora, representing different registers of language (cf. Le Robert; Duden).

feminisation. Furthermore, to the best of my knowledge, the integration of feminine forms in French and German dictionaries has not systematically been investigated yet.

Next, I turn to the empirical core of this dissertation. My second and third research questions explore gender agreement in partitive constructions for French and German, respectively:

II. Do speakers of French prefer semantic or grammatical agreement in partitive constructions; how does this translate into the findings of Sleeman & Ihsane (2016)?

III. Do speakers of German prefer semantic or grammatical agreement in partitive constructions; what influences this choice?[15]

I use grammaticality judgement tasks to investigate whether native speakers of the two languages prefer grammatical or semantic agreement in partitives. In these tasks, the participants have to judge sentences on their acceptability. A grammaticality judgement task is particularly useful in this context because it does not only give us insight into what speakers accept, but also shows what they believe to be unacceptable (cf. Schütze, 2016). For both languages, the grammaticality judgement tasks are part of larger linguistic experiments, which also contain short gap filling tasks on the use of feminine forms of occupational nouns, as well as background questionnaires.

Chapter 3 discusses gender agreement in French partitive constructions. In the first part of the chapter, I provide a detailed presentation of the existing study on French by Sleeman & Ihsane (2016), also paying attention to their theoretical analysis. In the second part, I discuss the methodology of the grammaticality judgement task and present its results. I end the chapter by comparing the results from the grammaticality judgement task to the findings of Sleeman & Ihsane's (2016) study.

In **Chapter 4**, I turn to agreement in German partitives. I start by a short introduction of the German gender system and present some existing studies on semantic agreement in other contexts in German. In a next step, I present the methodology and the results of the grammaticality judgement task. The chapter ends with a short discussion of the results.

[15] As I mentioned in section 1.2, the study I conducted on agreement in German partitives in the context of my research MA thesis (Westveer, 2016) was highly exploratory. Therefore, I will not compare the findings of the present investigation to that study.

Since I adopt similar testing procedures for French and German, I will be able to compare the two languages. Such comparison may give additional insight into the factors that determine the preference for either grammatical or semantic agreement. My fourth research question covers this aspect:

IV. What do the data on French and German tell us about the factors underlying agreement in partitive constructions?

The comparison will be the topic of **Chapter 5**. At the beginning of the chapter, I recapitulate and compare the findings on French and German from Chapters 3 and 4. In a next step, I return to the issue of inclusivity in language and compare the results of the grammaticality judgement tasks to those of the gap filling tasks on the use of feminine profession nouns. In this way, I investigate whether the preference for either grammatical or semantic agreement in partitives could be influenced by a speaker's attitude towards gender equal language. I conclude by summarising the main factors that underlie agreement in partitives, which paves the way for the theoretical account. As such, the purpose of Chapter 5 is twofold. On the one hand, it summarises and compares the findings from the preceding chapters. On the other hand, the chapter also serves as an introduction to the final part of the dissertation, which focusses on the theoretical account.

This theoretical account of gender agreement in partitive constructions addresses my final research question:

V. Is it possible to provide a principled account for the French and German data that integrates the relevant underlying factors?

Taking into account the findings from the linguistic experiments, I provide an explanation of the observed patterns within the framework of Generative Grammar, comprising both a syntactic derivation of partitive constructions, as well as an account of mixed gender agreement.

In **Chapter 6**, I focus on the syntactic structure of partitives. As I already mentioned in section 1.1.1, the theoretical literature on the syntactic derivation of partitive constructions focussed on quantified partitives and largely ignored the superlative ones. Therefore, I propose a novel syntactic analysis that takes into account both partitive types.

Chapter 7 returns to the issue of gender agreement. Starting from the syntactic derivation proposed in Chapter 6, I develop a novel account of gender agreement, which I show to explain the agreement patterns observed for French and German.

Finally, in **Chapter 8**, I discuss the key findings from a broader perspective, returning to the initial statement expressed in this dissertation's subtitle: *How society shapes language*. There, I also elaborate on what my findings predict in terms of language change and formulate some suggestions for future research. A short conclusion ends the dissertation.

Chapter 2

Setting the scene: the sociolinguistic background[1]

This chapter discusses the phenomenon of inclusive language in France and Germany, both from a diachronic and a synchronic perspective. It addresses the first research question of this dissertation:

I. What is the current sociolinguistic situation regarding inclusivity for French and German, and what is its historical development?

The purpose of the chapter is twofold: (i) It provides an overview of the sociolinguistic background against which agreement in partitives is investigated. (ii) It explores one specific aspect of inclusive language, the feminisation of profession nouns, by investigating the integration of feminine forms of profession nouns in French and German dictionaries.

2.1 The feminisation of profession nouns

In the last decades, social changes have led to more equal job opportunities for women and men by opening traditionally male-dominated professions to women. This change affects language as well, since we need nouns to refer to women practising these professions. In some languages, the creation and use of feminine forms of profession nouns is more complicated than in others. Such complications may relate to language-specific linguistic properties and language policy. Comparing French and German in this respect reveals an interesting contrast: in German, a noun such as *die Feuerwehrfrau* 'the female firefighter' is accepted by most native speakers. In French, deriving the feminine form of *un pompier* 'a fireman' is not so straightforward, since the logical feminine form *une pompière* is generally not accepted by native speakers from France (cf. van Compernolle, 2008), although the situation has changed in the last decade. Other francophone regions, such as Québec,

[1] An earlier version of this chapter was published as: Westveer, Thom; Petra Sleeman & Enoch O. Aboh. 2018. Discriminating dictionaries? Feminine forms of profession nouns in dictionaries of French and German. *International Journal of Lexicography* 31 (4), 371-393.

Belgium, or Switzerland seem to have been more progressive in this respect (cf. Arbour & de Nayves, 2014).

The apparent discrepancy between French and German leads me to wonder whether dictionaries of both languages differ qualitatively in the ways they integrate feminine profession nouns in the lexicon. I believe that dictionaries present an interesting domain to study the lexical integration of such noun forms, since they serve multiple goals. Dictionaries are not only descriptive in representing actual language use as accurately as possible, but they are also prescriptive in serving as guidelines to language users. Related to this latter point, dictionaries are also influenced by the language policies of official institutions. The delicate balance in dictionaries between an accurate description of language use and the language policy of official institutions is particularly intriguing with respect to the topic of this chapter, since language policy plays an important role in the phenomenon of feminisation. Whereas in some countries feminisation is encouraged, in others influential institutions are more conservative towards it — and often towards language change in general.

Although many researchers have discussed issues related to feminisation, most studies focus on the origin and development of the phenomenon (e.g. Fleischmann, 1997, on French; Kastovsky & Dalton-Puffer, 2006, on German); the attitude of language users towards feminine profession nouns (e.g. van Compernolle, 2009, for French of France; Dawes, 2003, for French in Switzerland; Stahlberg et al., 2001, on German); or on the actual use of these forms (e.g. Brick & Wilks, 2002; Dister & Moreau, 2006; Abbou, 2011; Lipovsky, 2014). Since there are few studies investigating the integration of feminine forms in dictionaries, the present study aims at filling this gap.

In this chapter, I will address the following questions: (i) Have feminine forms of profession nouns been listed in dictionaries (and since when)? (ii) Can we observe changes over time when comparing different editions of a dictionary? (iii) What strategies of feminisation exist and how are these strategies represented in the dictionaries? Adopting both a synchronic and a diachronic perspective, I will attempt to answer these questions by comparing different editions of French and German dictionaries. In section 2.2, I describe the historical development of the feminisation debate in France and Germany, as well as the current state of affairs. I will also present the devices used to feminise profession nouns in the two languages. In addition, some studies on feminisation in dictionaries will briefly be discussed. Section 2.3 describes the

methodology of the dictionary search, of which I present and discuss the results in section 2.4. I summarise the main findings in section 2.5.

2.2 Feminisation: the phenomenon

Starting off in the United States, the debate on feminisation of profession nouns reached Europe in the 1980s. The phenomenon is embedded in a more general awareness of non-discriminating language use that has arisen in the last decades, relating not only to the derivation of feminine forms of occupational nouns, but also to gender-inclusive writing, which aims at enhancing women's visibility in language. As I will show, France and Germany show some interesting contrasts, especially considering the historical development of feminisation.

2.2.1 Feminisation in French

In France, the Prime Minister Laurent Fabius set up a commission in 1983 to investigate the feminisation of profession nouns and to propose feminine forms for traditionally male professions (cf. Houdebine, 1987). This commission, headed by the Minister for Women's Rights Yvette Roudy and the writer Benoîte Groult, published its final report in 1986. Although the Prime Minister recommended the use of feminine forms in official documents, the commission's final report received widespread criticism. The *Académie française* judged the commission's work as unnecessary and potentially dangerous for the purity of the French language (cf. Fleischman, 1997; Paveau, 2002). Subject to this severe criticism, the work of the Roudy commission failed to make an impact.

The phenomenon returned to the political agenda in 1997, with some female ministers claiming the title *Madame la ministre* 'Mrs. the.F minister' instead of *Madame le ministre* 'Mrs. the.M minister', bringing about a second investigation of linguistic feminisation by the general commission of terminology and neology. In their final report from 1998, they concluded that the feminisation of profession nouns should not be problematic; an official guideline on the feminisation of profession nouns was published by the French government in 1999 by Becquer et al. (cf. Cerquiglini, 2018). Nevertheless, the *Académie française* still did not accept the majority of propositions of the

official guideline. Only recently, in 2019, the *Académie* changed its position: the use of feminine forms is no longer disapproved (cf. Viennot, 2019).[2]

In other francophone countries, the discussions did not go on for so long, with the Province of Québec being the first to actively stimulate the feminisation of profession nouns. In 1979, 1982 and 1984, the Canadian government published three *Avis de recommandation*, containing proposals for feminine forms, finally resulting in a first official guideline on feminisation in 1986 and a second one in 1991 (cf. de Nayves & Arbour, forthcoming). Comparable guidelines appeared in Belgium in 1991 and in Switzerland in 1994 as well (cf. Dawes, 2003; Elmiger, forthcoming).[3]

How do we refer to a female professional in French? Although for some profession nouns feminine forms were available, these have sometimes acquired a different meaning or a negative connotation over time (e.g. forms ending in *-euse* are sometimes felt to be pejorative). But what about the other nouns? Traditionally, it is assumed that the French masculine gender can also be unmarked and encode neuter gender.[4] Thus, the masculine would be capable of referring to both women and men. Under this logic, the feminine gender appears marked and restrictive, because it refers solely to females. According to the Académie, therefore, the feminine could even be considered the discriminating gender (cf. Fleischman, 1997; Paveau, 2002).

The official guideline *Femme, j'écris ton nom*[5] (Becquer et al., 1999) proposes feminine forms for over 2,000 professions, titles and grades, based on productive derivation strategies in French. In the following I will briefly discuss these strategies.[6] Masculine forms ending in an *-e* combine with a feminine article (1a) and masculine forms ending in *-é* or *-i* usually receive an additional *-e* to refer to females (1b):

(1) a. *un/une architecte* 'an architect', *un/une ministre* 'a minister'
b. *un député* > *une députée* 'a deputy'
un apprenti > *une apprentie* 'an apprentice'

[2] In 2019, the *Académie française* published a report titled *La féminisation des noms de métiers et de fonctions*, in which they explain their position. Notably, they state that they do not want to dictate guidelines on how to feminise (cf. Académie française, 2019).

[3] See, e.g., Matthey (2000) for a more detailed discussion of feminisation in Switzerland and Arbour & de Nayves (2014) for a comparative study on feminization in Canada and Europe. Moron-Puech et al. (2020, forthcoming) present an interesting comparison of France and Québec with respect to the legal situation.

[4] Until 2019 (see footnote 2), the *Académie française* vividly promoted the generic status of the masculine as an alternative to feminisation.

[5] The title of the official guideline literally translates as 'Woman, I write your name'.

[6] Although present in the guideline, I do not discuss loanwords and abbreviations.

Masculine nouns ending in a consonant fall into two groups: nouns ending in *-(t)eur* and those with another ending. The latter usually derive their feminine by the addition of the suffix *-e* (2a-c):[7]

(2) a. *un étudiant* > *une étudiante* 'a student'
b. *un policier* > *une policière* 'a police officer'
c. *un chirurgien* > *une chirurgienne* 'a surgeon'

If a masculine noun ends in *-eur*, either this suffix is replaced by its feminine counterpart *-euse* if the noun is directly derived from a verb (3a), or it is only combined with a feminine article if the verb is no longer directly related to the noun (3b). In the latter case, an *-e* can optionally be added:

(3) a. *un annonceur* > *une annonceuse* 'an announcer'
un coiffeur > *une coiffeuse* 'a hairdresser'
b. *un professeur* > *une professeur(e)* 'a teacher'
un ingénieur > *une ingénieur(e)* 'an engineer'

For nouns ending in *-teur* (the suffix being either *-teur* or *-eur*), two major feminisation strategies exist: *-teuse* if the verb and the noun are directly related, as in (4a), or *-trice* in other cases, as in (4b). In a few cases, there is only a change in the article, optionally combined with the addition of an *-e* (4c):

(4) a. *un chanteur* > *une chanteuse* 'a singer'
un acheteur > *une acheteuse* 'an actor/actress'
b. *un directeur* > *une directrice* 'a director'
un sénateur > *une sénatrice* 'a senator'
c. *un auteur* > *une auteur(e)* 'an author'
un docteur > *une docteur(e)* 'a doctor'

Some of these nouns originally had a feminine form (e.g. *doctoresse*) which is no longer used in modern French. Following the guideline, these nouns should be treated as epicenes, involving only a change of article and optional addition of the suffix *-e*.

The official guideline for French (Becquer et al., 1999) sometimes proposes multiple alternatives for a given noun. Some forms are more frequent

[7] There are a few exceptions to this derivation: with nouns for which the addition of an *-e* is felt to be difficult, as *témoin*, only the article changes (e.g. *un témoin, une témoin*); for other nouns, the addition of an *-e* to derive the feminine form is optional (e.g. *un médecin, une médecin(e)*).

than others, and there are also geographical differences, since some forms are only used in varieties of French outside France. In Quebec, forms like *une auteure* are very common; in European French, epicene forms such as *une auteur* are preferred instead. Parallel to the feminisation strategies described above, another device exists to refer to female professionals, as shown in (5):

(5) *une* *femme* *écrivain*
a.F woman writer.M
'a female writer'

In this case, the female denoting form is derived by compounding the profession noun with the French noun for 'woman', *femme*. This strategy, though disapproved of by the official guideline *Femme, j'écris ton nom* (Becquer et al., 1999), is nevertheless quite frequent in French.

2.2.2 Feminisation in German

In German, as in French, the masculine was traditionally assumed to be the generic gender, capable of referring to both women and men. However, this generic status of the masculine in German has been heavily debated, and several researchers have shown that in fact people's judgments are biased. When participants were asked to indicate whether a noun refers to a male or a female, in most cases, they would select a male referent when they were presented with a generic masculine form (e.g. Irmen & Steiger, 2005; Stahlberg & Sczesny, 2001).

The debate on sexist language started with the works of female linguists such as Senta Trömel-Plötz and Luise F. Pusch, who published several studies on discriminating language use in German, as well as a first guideline on feminisation in 1980 (Guentherodt et al., 1980). The topic then reached a more general public and was discussed in the federal government, raising awareness of non-discriminatory language use and the appearance of linguistic devices to avoid sexism and improve women's visibility in the language. Although, as in French, not all recommendations were followed, non-discriminatory language use had already become very common in the 90s (cf. Epple, 2000; Elmiger, 2008; Hergenhan, 2020). For most occupational nouns, the derivation of the feminine form is straightforward in German, since the feminine form is usually derived by adding the suffix *-in* to the masculine form (6a), possibly combined with some changes (e.g. addition of an umlaut) of the base form (6b):

(6) a. *der Lehrer* > *die Lehrerin* 'the teacher'
der Minister > *die Ministerin* 'the minister'
b. *der Arzt* > *die Ärztin* 'the doctor'
der Beförderer > *die Beförderin* 'the carrier'

Some nouns derive their feminine form by changing the last part of the noun, as shown in (7):

(7) *der Feuerwehrmann* > *die Feuerwehrfrau* 'the firefighter'
der Kaufmann > *die Kauffrau* 'the salesperson'

Substantivized participles, if combined with a masculine or feminine definite article, can be used to refer to males and females (8a). With an indefinite article or without an article, the noun can receive an ending depending on its case (8b):

(8) a. *der/die Abgeordnete* 'the delegate'
der/die Vorgesetzte 'the superior'
b. *ein Vorgesetzter* > *eine Vorgesetzte* 'a superior (nom.)'
einem Abgeordneten > *einer Abgeordneten* 'a delegate (dat.)'

Although a feminine form can easily be derived from most German animate nouns, some problematic cases seem to exist. Schoental (1989) lists the following examples:

(9)

der Kapitän	'the captain'	*der Säugling*	'the new-born'
der Offizier	'the officer'	*der Passagier*	'the passenger'
der Torwart	'the keeper'	*der Laie*	'the layman'
der Lehrling	'the apprentice'	*der Gast*	'the guest'
der Flüchtling	'the refugee'	*der Vormund*	'the guardian'

For most of these nouns, a feminine form could nevertheless be imagined (e.g *die Offizierin*), except for those ending in *-ling*. The dictionary search will inform us whether or not feminine forms of these nouns have been created.

If we compare the feminisation devices in French and German, we can conclude that in French there is considerably more variation than in German, where derivation of the feminine form by means of the suffix *-in* is applicable to the majority of animate nouns, apart from substantivized participles and some irregular forms. In French, in contrast, at least two major strategies exist: Some animate nouns can refer to females when they are used with a feminine

article, possibly in combination with the suffix *-e*. Other animate nouns derive their feminine counterparts by changing their masculine suffix into its feminine form (cf. Khaznadar, 2002). The amount of variation in French may have complicated and, therefore, lengthened the debate on the feminisation of nouns, which was not the case for German. In the next section, I return to this aspect whilst comparing the current state of affairs in France and Germany.

2.2.3 From feminisation to inclusive writing

The feminisation of nouns is only one aspect of *inclusive writing*. In a broader perspective, this term is used to refer to different practices that attempt to enhance women's visibility in language, which may be achieved through, for instance, the use of feminine noun forms, gender neutral formulations, or typographical strategies. With respect to the historical development of the inclusive writing debate, French and German show some interesting contrasts (cf. Hergenhan, 2015).

For German, as I described in the previous section, the feminisation of nouns did not cause too many problems. As a consequence, the debate shifted towards the broader issue of inclusive writing at an early stage (cf. Hergenhan, 2020). To enhance women's visibility, different strategies have been proposed, which include double call (10a), typographical strategies such as the so-called *Binnen-I* (the suffix *-In(nen)* with majuscule) (cf. Scott, 2006) (10b), or gender neutral noun forms (10c):

(10) a. *die* *Studentinnen* *und* *Studenten*
the.PL student.F.PL and student.M.PL
b. *die* *StudentInnen*
the.PL student.M.F.PL
c. *die* *Studierenden*
the.PL student.PL

While the first and third option, double call (10a) and gender neutral forms (10c), can be used in both spoken and written language, typographical strategies are restricted to written language (cf. Scott, 2006). Which strategy should be preferred is still vividly debated (cf. Hergenhan, 2020).

For French, the feminisation of nouns remained a problematic issue for a rather long period — particularly in France — which might partially be due to the aforementioned variation in feminisation strategies. However, we have witnessed a rapid shift of the debate towards inclusive writing in the last decade, especially since 2015, when the *Haut Conseil à l'Égalité entre les*

femmes et les hommes was created to eliminate gender inequality in the French society. In 2017, there even appeared a first school manual written in inclusive language, which caused hot debates, both politically, as well as in society (cf. Moron-Puech et al., 2020, forthcoming).[8] In other francophone regions, especially in Québec, the broader issue of inclusive writing had already entered the discussion in the public domain at an earlier stage, which resulted in the publication of multiple guidelines by the *Office québecois de la langue française* (cf. de Nayves & Arbour, forthcoming). For French too, different strategies of inclusive writing have been introduced: double call (11a), typographical conventions, such as the *point median* · (11b), and gender neutral forms (11c):[9]

(11) a. *les* *enseignantes* *et* *enseignants*
die.PL teacher.F.PL and teacher.M.PL
b. *les* *enseignant·e·s*
the.PL teacher.M.F.PL
c. *le* *personnel* *enseignant*
the.M staff.M teaching.M

Particularly in the last years, the issue of inclusive language is no longer limited to the visibility of women, but also includes non-binary gender, that is, persons who do not identify with either female or male sex. This has led to innovative strategies, for example, the gender gap (*Student_innen* 'students') or the gender star (*Student*innen* 'students') in German (cf. Hergenhan, 2015). Alternatively, novel gender neutral forms have been proposed, such as French *lectaires* 'readers' as an alternative to *lecteurs/lectrices* (cf. Alpheratz, forthcoming).

Similar initiatives appeared in other languages, for instance in Swedish, where a gender neutral third person pronoun *hen* was introduced as an alternative to the existing masculine and feminine forms *han* and *hon*, respectively (cf. Gustafsson Sendén et al., 2015). Likewise, in English texts, singular usage of the pronoun *they* is often adopted to avoid the binary double form *s/he* (cf. Bradley, 2020). For French, comparable proposals have been made, for instance the plural pronoun *illes* 'they', a contraction of masculine *ils* and feminine *elles* (cf. Greco, 2014; Elmiger, 2015). Notwithstanding this

[8] For a study on the integration of inclusive writing in German school manuals, see Ott (2017).

[9] Interestingly, the *Office québecois de la langue française* disfavours the use of the *point median* as shown in (11b). Instead, they favour double call or, alternatively, the use of parentheses, as in *les enseignant(e)s* 'the.PL teacher.M.F.PL', because the latter strategy is more commonly used in writing to express alternating forms (cf. de Nayves & Arbour, forthcoming).

state of affairs, in the remainder of this chapter, I focus on the feminisation of profession nouns, leaving aside other phenomena that fall under the umbrella of inclusive writing. In the next section, I briefly discuss some existing studies that looked at feminisation in dictionaries.

2.2.4 Feminisation in dictionaries: other studies

The phenomenon of feminisation has not only been subject to lively debate in politics, but also among linguists. Since the 1980s, many studies have appeared that discuss feminisation and non-discriminatory language use in different languages and from different perspectives. Surprisingly, few studies focus on the presence of feminine forms in dictionaries. Baider et al. (2007) investigate the definitions in entries for the nouns *homme* 'man' and *femme* 'woman' in the online *EuroWordNet* dictionary. Their comparison reveals that androcentrism still prevails in this online dictionary, since most examples given in the entries refer to males. Darmestädter (2011) compares the 8th and the 9th editions of the French dictionary of the *Académie française* to determine whether the changes between the two editions reflect changes in language use, including the feminisation of profession nouns. She observes that the *Académie française* still disfavours the use of feminine forms, prescribing the use of compound forms with *femme* (e.g. *femme médecin* 'female doctor') when no feminine form exists. Matthey (2000) discusses the history of non-discriminatory language use, the possible feminisation strategies in French and the implementation of them in Swiss French. She also compares the entries for the French noun *ministre* 'minister' in distinct editions of different dictionaries of French (*Larousse* 1901, 1957, 1996 and 2000, *Petit Robert* 1979, 1991, 1994 and 2000, *Robert historique* 1992) and in a dictionary of Swiss French (*Dictionnaire suisse romand* 1997). She concludes that the dictionary of Swiss French is more open to feminisation than the dictionaries of standard French from France. Epple (2000) investigates diachronic changes in the presence of female-denoting nouns in different editions of bilingual translation dictionaries of American English, French, German and Spanish. She finds considerable progress in the visibility of women among the different editions of the dictionaries with respect to the inclusion of female-denoting nouns. However, as she shows, in the examples in the dictionaries' entries of animate nouns, women are often not included.

2.3 Methodology

I set up to determine whether social changes are reflected in dictionaries and whether I can observe changes over time by investigating to what extent feminine forms of profession nouns are included in dictionaries. If feminine forms are present, questions arise with regard to their status or connotation, which I address in this study.

2.3.1 Dictionaries consulted

To investigate the presence of feminine forms in dictionaries, I examined the entries for a number of profession nouns in the French *Petit Robert* dictionary and in the German *Duden Universalwörterbuch*. The same nouns were also checked in the *Petit Robert Électronique* and the *Duden-Online* digital dictionaries. Potential developments in the inclusion of feminine forms in the dictionaries were investigated by consulting different editions of both dictionaries. Details are listed in Tables 1 and 2:

Table 1 – Dictionary editions *Petit Robert* French

Dictionary name	**Editions**
Le Petit Robert	1967, 1977, 1984, 1994, 1996, 2003, 2012, 2016
Le Petit Robert Électronique (www.lerobert.fr)	

Table 2 – Dictionary editions *Duden Universalwörterbuch* German

Dictionary name	**Editions**
Duden Universalwörterbuch	1983, 1996, 2001, 2011
Duden Online-Wörterbuch (www.duden.de)	

For both languages, I started with the first editions of the dictionary series: the first edition of the *Petit Robert* from 1967, and the first edition of the *Duden Universalwörterbuch*, dating from 1983. The other editions were chosen in such a way that roughly for each decade I had at least one edition to investigate. The online versions of the dictionaries were chosen as representations of the current situation.

2.3.2 The sample

I composed a list of profession nouns for French, based on the different feminisation strategies indicated in the guideline *Femme, j'écris ton nom* (Becquer et al., 1999). In this way, I tried to include feminine forms derived by different feminisation devices. Details and examples are listed in Table 3:[10]

Table 3 – Feminisation strategies French

Class	Type of noun	Examples	Number
A.	Masculine in *-e* (epicene forms)	*un/une architecte, un/une guide*	8
B.	Masculine in *-é/-i*	*un députée/une députée, un apprenti/une apprentie*	4
C.	Masculine in consonant (not *-(t)eur*)	*un chirurgien/ une chirurgienne, un policier/une policière*	13
D.	Masculine in *-eur*	*un programmeur/ une programmeuse, un professeur/ une professeur*	11
E.	Masculine in *-teur*	*un lecteur/une lectrice, un chanteur/une chanteuse*	15
Total			51

The list of profession nouns for German is based on the list for French, whilst ensuring the presence of examples of different feminisation strategies. Since most German feminine forms are derived by means of the suffix *-in*, these nouns constitute the majority of the German sample. Details can be found in Table 4:

Table 4 – Feminisation strategies German

Class	Type of noun	Examples	Number
A.	Feminine = masculine + *-in*	*ein Lehrer/eine Lehrerin, ein Arzt/eine Ärztin*	51
B.	Substantivized adjectives and participles	*ein Abgeordenter/ eine Abgeordnete, ein Vorgesetzter/ eine Vorgesetzte*	4

[10] English translation of the nouns can be found in Appendix A.

C.	Change of part of the noun	*ein Feuerwehrmann/ eine Feuerwehrfrau, ein Seemann/eine Seefrau*	2
Total			57

In addition to the nouns presented above, I also included the ten nouns that according to Schoental (1989) should be difficult to feminise (see the list in 9) in order to determine whether these nouns still do not have any feminine form attested. The results of these additional nouns are presented separately in the discussion. The complete samples of nouns for French and German can be found in Appendix A; for each noun, the lists indicate the first dictionary edition of the sample in which the feminine form is included.

I searched for all the nouns in the lists above in the dictionaries in my sample. All data were collected in an Excel file so as to be able to compare the different dictionary editions. For each noun, I indicated whether the feminine form was present, how the noun was classified, and whether any remarks were made concerning the use of this feminine form. These remarks indicate, for instance, that a specific feminine form has a pejorative connotation, or is only used in a specific context, or in certain regions or countries.

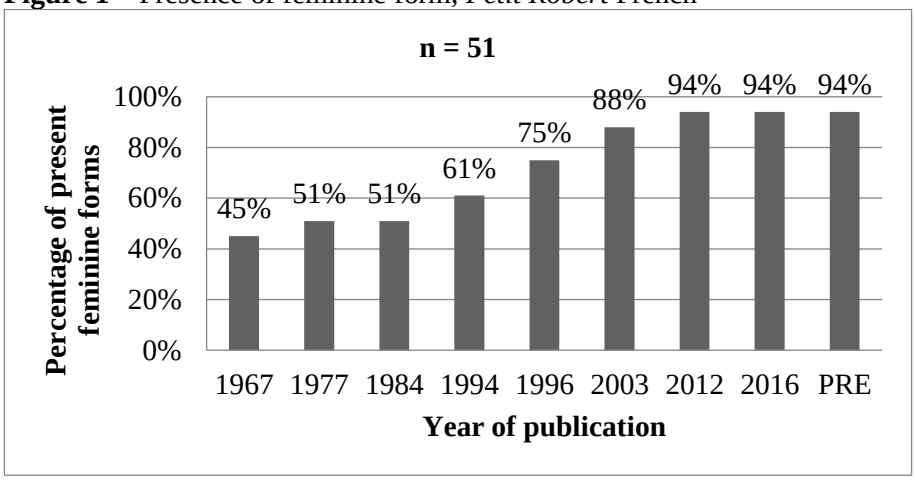
2.4 Results and discussion

As I mentioned in the introduction, this chapter addresses the following issues: (i) Have feminine forms of profession nouns been listed in dictionaries (and since when)? (ii) Can we observe changes over time when comparing different editions of a dictionary? (iii) What strategies of feminisation exist and how are these strategies represented in the dictionaries? First, I will investigate the presence of feminine forms of profession nouns in the dictionaries and see whether a development over time prevails. Second, I will focus on feminisation strategies and their integration in the dictionaries.

2.4.1 Presence of the feminine form

For both languages, the percentages of feminine forms included or not included were individually calculated for each dictionary edition. The percentages of the French dictionary are presented graphically in Figure 1:

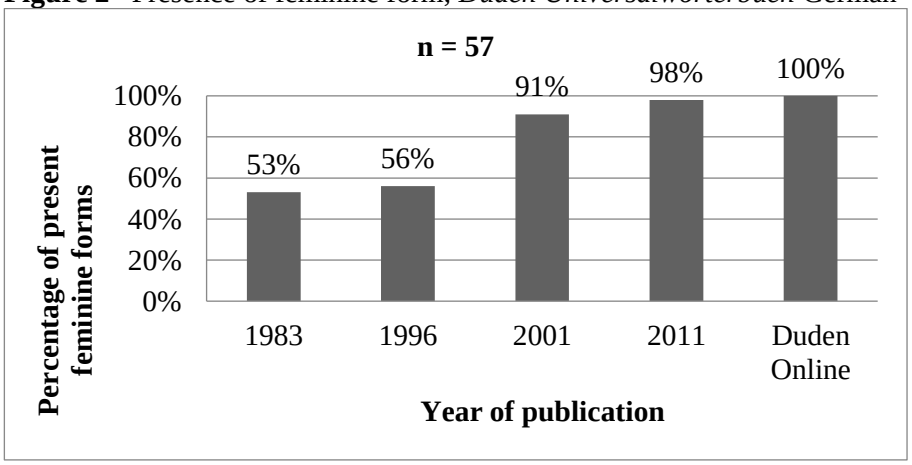
Figure 1 – Presence of feminine form, *Petit Robert* French



The results show a clear rise in the inclusion of feminine forms. The percentage of present feminine forms has increased considerably, notably between the 1996 and 2003 editions, as well as between the 2003 and 2012 editions.[11] Even in the latest editions, the percentage of inclusion does not reach 100%, indicating that feminine forms are still absent for some nouns. I will discuss these nouns in the following section.

The results for German show roughly the same pattern, as can be observed in Figure 2:

Figure 2– Presence of feminine form, *Duden Universalwörterbuch* German

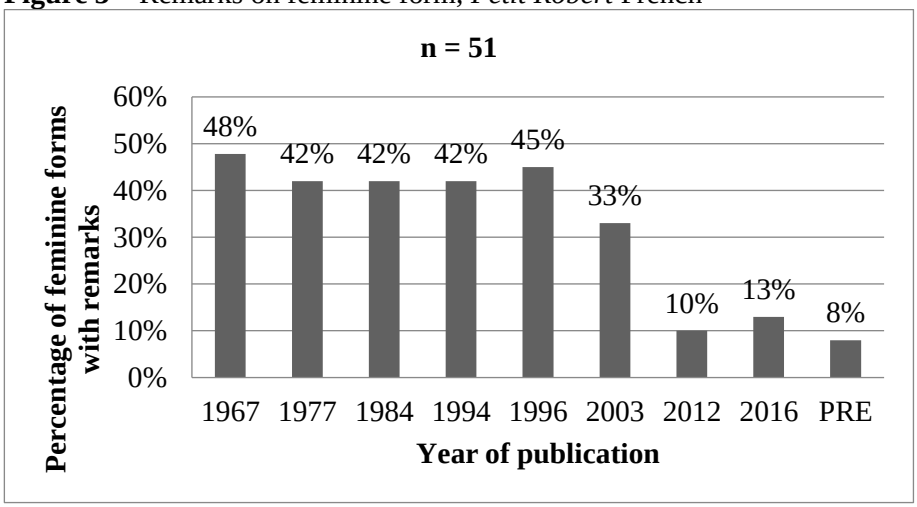


[11] A Paired-Samples T-test in SPSS shows that both changes are significant, with $p < 0.05$.

The results for German show an increase in the inclusion of feminine forms over time, the most considerable change occurring between the 1996 and 2001 editions.[12] This corresponds with the results from French, also indicating a considerable increase over the same period. In contrast to the results for French, in the latest edition consulted (the online version), a feminine form is included for all nouns, the percentage of inclusion thus reaching 100%.

However, just paying attention to the presence or absence of a noun's feminine form does not provide a complete picture, since some feminine forms, despite being included in the dictionary, might not be used without any restrictions. For this reason, I have also investigated whether the dictionaries include any remarks on the use of the feminine forms. For French, Figure 3 displays the percentages of feminine forms for which remarks commenting on their usage are indicated:

Figure 3 – Remarks on feminine form, *Petit Robert* French



Up until the 1996 edition the increase of feminine forms included seems to go hand in hand with an increase of remarks on these forms. In more recent editions, the percentage of feminine forms with remarks decreases, the use of these forms being less subject to restrictions. In comparison, the results for German show a different pattern, since only the first two editions examined (1983 and 1996) contain remarks on some feminine forms, and this only to a very limited extent. Remarks are only made with regard to the feminine forms *die Sekretärin* 'the secretary.F' and *die Chefin* 'the chief.F'. Neither in the

[12] A Paired-Samples T-test in SPSS shows that this change is significant, with $p < 0.05$.

newer editions nor in the online version are remarks included on the feminine forms in the nouns of the list.

In a dictionary, words are specified for category (noun, verb, adjective, etc.). Nouns may be specified for gender (e.g. as *n.m.* 'masculine noun' or *n.f.* 'feminine noun') as well. Although all French nouns are either masculine or feminine, for some animate nouns the gender is not specified in the dictionary, the noun being marked by the abbreviation *n*. This represents an instance of underspecification, which suggests that the noun may combine both with a feminine article to refer to a female, as well as with a masculine article when denoting a male. Instead, if a dictionary lists a noun as *n.m.* rather than as *n.*, according to the dictionary, this noun only has a masculine form, which should denote both females and males alike.

If we compare the noun specifications in the second (1977) and latest (2016) editions of the *Petit Robert* in the sample, we observe the distribution presented in Table 5:

Table 5 – Noun specification in two editions of the *Petit Robert*

Noun specification	***Petit Robert 1977***	***Petit Robert 2016***
n.m.	37 (68%)	10 (18%)
n.m. et n.f.	2 (4%)	1 (2%)
n.	16 (29%)	44 (80%)

The percentage of nouns in the sample for which the gender is not specified in the dictionary has increased from 29% in 1977 to 80% in 2016, enabling the use of these underspecified nouns with both masculine and feminine articles — and thus as masculine and feminine nouns. In contrast, the *Duden Universalwörterbuch* does not present such a change. All profession nouns are specified as masculine nouns, and their feminine forms as feminine nouns. There are no underspecified nouns. This difference could be related to morphological differences between French and German, since in German the majority of animate nouns take the suffix *-in* to derive their feminine form. Nouns that can take both genders in German, such as substantivized participles or adjectives (e.g. *der/die Abgeordnete* 'the delegate'), are specified as masculine and feminine nouns.

2.4.2 Dictionaries and feminisation strategies

As I discussed in section 2.2, both French and German use multiple devices to derive feminine forms of a profession noun, and guidelines have been published to suggest possible forms. French in particular exhibits an elaborate

array of feminisation strategies. For both languages, my sample contains nouns that use different methods to derive their feminine forms. I have checked in the dictionaries whether the feminisation strategies that are proposed in the guidelines are also present in them.

Table 6 shows the number of nouns for each of the feminisation strategies of French in the sample, as well as the occurrences of feminine forms derived using these respective strategies in the dictionaries:[13]

Table 6 – Feminisation strategies French

Type of feminine form formation	**Total number in sample**	**Number of listed forms**[14]								
		1967	**1977**	**1984**	**1994**	**1996**	**2003**	**2012**	**2016**	**PRE**
A. epicene nouns *le/la guide*	*8*	3	4	4	5	6	*8*	*8*	*8*	*8*
B. *-e/-i* + *-e* *chargé, chargée*	*4*	3	3	3	*4*	*4*	*4*	*4*	*4*	*4*
C. consonant + *-e* *policier, policière*	*13*	3	3	3	4	5	11	11	11	11
D1. + *-euse* *sauveur, sauveuse*	*5*	2	4	4	4	4	4	*5*	*5*	*5*
D2. epicene or + *-e* *censeur, censeur(e)*	*6*	1	1	1	1	2	4	*6*	*6*	*6*
E1. + *-trice* *recteur, rectrice*	*9*	5	5	5	7	*9*	*9*	*9*	*9*	*9*
E2. + *-teuse* *chanteur, chanteuse*	*4*	3	3	3	3	3	3	3	3	3
E3. epicene or + *-e* *auteur, auteur(e)*	*2*	0	0	0	0	0	0	*2*	*2*	*2*

All feminisation strategies appear in the different editions of the *Petit Robert*, but we can observe differences between the strategies in their presence over

[13] The type labels used in Table 6 correspond to those used in Table 3. Since types D and E (nouns ending in *-eur*) contain nouns that correspond to different feminisation strategies, I further subdivided types D and E according to these distinct feminisation strategies.

[14] The numbers in italics indicate that of all nouns searched for, the feminine form is included in the dictionary.

time, suggesting that not all strategies are equally acceptable. Some strategies take more time to integrate the lexicon.

The nouns of which the masculine ends in a vowel (types A and B) are not particularly problematic, as the results suggest. In the first editions, the feminine form is indicated for 50% (type A) or even 75% (type B) of the nouns. In the most recent editions, feminine forms of all nouns of these classes are included. Depending on the feminisation strategy, nouns ending in a consonant (types C, D, and E) show different patterns. Feminine forms derived by a suffix change from *-(t)eur* to *-(t)euse* or to *-trice* seem to be generally accepted, correlating with the fact that the suffixes *-(t)euse* and *-(t)rice* belong to the traditional inventory of French. In contrast, the integration of feminine forms that do not involve these suffixes takes more time. The integration of feminine forms derived by the suffixing of *-e* appears to be more problematic, too. In fact, the two latter categories comprise many exceptions to the 'traditional' feminisation devices, including nouns such as *professeur* 'teacher' or *écrivain* 'writer'. The proposed feminine forms for these nouns, *la professeur(e)* and *l'écrivain(e)*, are quite recent and involve rather innovative feminisation strategies.

As can be concluded from Table 6, only for three nouns is no feminine form included in the most recent edition of the dictionary. These are the nouns *pompier* 'firefighter', *marin* 'seaman' and *transporteur* 'transporter'. The absence of the feminine form of *transporteur* — although its feminine form, *transporteuse*, is morphologically uncontroversial — might either be due to the low proportion of women in this profession or to a negative connotation of the suffix *-teuse*. The absence of feminine forms for the other two nouns, *pompier* and *marin*, could also be related to the relatively low percentage of women in these professions. The use of the proposed feminine form of the noun *marin*, which would be *marine*, might also be blocked by the presence of a polysemous feminine form *marine* referring to the navy. The feminine form *pompière* is also discussed by Van Compernolle (2008), who asked native speakers of French to indicate the official feminine forms of masculine profession nouns and to give their opinion on these forms. As Van Compernolle (2008) reports, one of his participants argued that the form *pompière* is awful, because 'it sounds weird' (van Compernolle, 2008: 17).

In addition, an alternative feminisation device is available in French, which involves the compounding of a (masculine) profession noun with the noun *femme* 'woman', giving rise to forms such as *femme écrivain* or *femme médecin*. Although this feminisation strategy is rejected by the official guideline, it is nevertheless present in the *Petit Robert*, as Table 7 shows:

Table 7 – Presence of compound form *femme* + noun

Dictionary edition	**Number of occurrences**	**Nouns**
1967–1994	3	*ingénieur, médecin, orateur*
1996–2003	4	*écrivain, ingénieur, médecin, orateur*
2012	3	*écrivain, ingénieur, médecin*
2016	4	*écrivain, ingénieur, médecin, orateur*
PRE	3	*écrivain, ingénieur, médecin*

However, it should be noted that for all these nouns, alternative feminine forms are also included in the more recent dictionary editions.

In contrast to French, German uses fewer distinct feminisation devices, as can be observed in Table 8:

Table 8 – Feminisation strategies German

Type of feminine form formation	**Total number in sample**	**Number of forms present**				
		1983	**1996**	**2001**	**2011**	**Online**
A. masculine + *-in* *Lehrer, Lehrerin*	51	26	28	47	*51*	*51*
B. substantivized adjectives and participles *der/die Abgeordnete*	4	*4*	*4*	*4*	*4*	*4*
C. change of part of noun *Seemann, Seefrau*	2	0	0	1	1	*2*

Most nouns derive their feminine form by adding the suffix -in to the masculine form. All feminine forms derived by means of this strategy are included in the most recent edition of the dictionary. This is also true for the substantivized participles and adjectives that can take both a feminine and a masculine article. More problematic appear to be compound nouns that require the change of a part of the noun, as *Feuerwehrmann* 'firefighter', whose feminine form is *Feuerwehrfrau*. The other example of this type is *Seemann* 'seaman', whose feminine form would be *Seefrau*. As Table 8 shows, whereas in the first two editions examined the feminine forms are not listed for either of these nouns, *Feuerwehrfrau* is included in the two latest editions, as well as in the online version. The form *Seefrau*, on the other hand, does not appear in the print editions, only in the online version.

As I discussed in section 2.2.2, Schoental (1989) lists some animate nouns that are difficult to feminise. In addition to the nouns of my sample, I checked in the German dictionary editions whether feminine forms of these resistant nouns are present. The results are listed in Table 9:

Table 9 – Apparent problematic forms according to Schoental (1989)

Masculine noun	**Duden 1983**	**Duden 1996**	**Duden 2001**	**Duden 2011**	**Duden online**
Kapitän	-	-	*Kapitänin*	*Kapitänin*	*Kapitänin*
Offizier	-	-	*Offizierin*	*Offizierin*	*Offizierin*
Torwart	-	-	*Torwartin*	*Torwartin*	*Torwartin*
Lehrling	-	-	-	-	-
Flüchtling	-	-	-	-	-
Säugling	-	-	-	-	-
Passagier	-	*Passagierin*	*Passagierin*	*Passagierin*	*Passagierin*
Laie	-	-	-	*Laiin*	*Laiin*
Gast	-	-	-	-	*Gästin*
Vormund	-	-	*Vormundin*	*Vormundin*	*Vormundin*

For most of the problematic cases listed in Schoental (1989), feminine forms are now included in the German dictionary, although the feminine form *Gästin* 'female guest' is only present in the online version. The nouns with the *-ling* suffix seem to be an exception, since no feminine forms are listed, presumably due to morphological difficulties, as it is not clear what the feminine form of such a noun should be.

2.4.3 Further discussion

With all the results of the dictionary search in mind, I can now answer the research questions that guided this study. Primarily, I wondered whether feminine forms of profession nouns would be present in dictionaries of French and German and whether I could observe a development in their inclusion over time. When we compare the results of French and German, we see an increase in the inclusion of feminine forms in both languages. Surprisingly, even in German, feminine forms appear to be absent in older dictionary editions, yet German has a relatively longstanding tradition in the feminisation of profession nouns compared to French. Comparing the increase in inclusion of feminine forms shows that the most prominent changes are located in the same period in both languages, following changes in society in recent decades. Although both languages display an increase in the presence of feminine

forms, in the French dictionaries some gaps prevail, whereas in the German ones, at least in the online version, a feminine form is listed for virtually all nouns of the investigated sample, except for the forms ending in *-ling*.

When we compare the ways in which feminine forms are presented in the dictionaries, we observe a clear difference between French and German. In French, many nouns are marked in the dictionaries as *n.*, indicating a tendency towards underspecification of gender on nouns, which means that a noun's gender can vary in correspondence with the sex of its referent in discourse. In German, on the other hand, the dictionaries show a preference for explicit marking of both the feminine and the masculine gender by including the masculine and feminine forms as separate entries. Differences appear as well with respect to the percentages of feminine forms which include remarks on their usage. Whereas in the French dictionaries the entries of many feminine forms indicate restrictions on their use, no such restrictions are included in the German dictionaries, suggesting that in a language like French, feminine forms first appear in non-standard varieties of the language before they are eventually adopted in the standard language.

A factor that might influence the inclusion and use of a feminine form is the status of the corresponding profession, which is also suggested by some studies (cf. Cacouault-Bitaud, 2001 for French; Horvath et al., 2016 for German). The relevance of a profession's status for the use of the feminine form is also reflected by polysemous nouns, such as *secrétaire* 'secretary', which can refer to both a high-ranking profession, *secrétaire d'État* 'secretary of state', as well as to a low-ranking position, i.e. someone who assists a person in answering the telephone, writing letters, and so forth. In fact, whereas for the latter use the feminine form is indicated in the 1977 edition of the *Petit Robert*, for the former use the feminine form is not accepted. Thus, according to this dictionary, one can say *la secrétaire du directeur* 'the female secretary of the director', but not *la secrétaire d'État* 'the female secretary of state'. In the most recent dictionary editions this has changed, enabling us to say *la secrétaire d'État*. This change suggests that the feminisation of profession nouns, starting off with less prestigious professions, eventually reaches high-ranking professions too, although factors such as social status and prestige might influence the actual use of feminine forms by female professionals themselves (cf. Paveau, 2002). In the earliest German edition (1983), on the other hand, alongside the masculine *der Staatssekretär* 'the secretary of state' we also find the feminine form *die Staatssekretärin*.

Another factor that might contribute to the use of a feminine profession noun is the presence of women in a profession. In the German dictionaries,

feminine forms such as *Ministerin* ‘female minister’ or *Richterin* ‘female judge’ are present in the oldest dictionary edition consulted. The feminine form of the noun *Kanzler* ‘chancellor’, *Kanzlerin*, on the other hand, appears for the first time in the 2001 edition, probably due to the absence or limited number of female chancellors. However, since 2005 Germany has a female federal chancellor in the person of Angela Merkel, and so the feminine form *Bundeskanzlerin* is frequently used now.

A final question I raised is to what extent the different feminisation strategies proposed in official guidelines are represented in the dictionaries, which indirectly relates to the effectiveness of language policy too, an aspect I have briefly touched upon in the introduction. Comparing French and German reveals that there is considerably more variation in feminisation devices in French than in German, in some cases confronting a language user of French with multiple options for one single noun. Although feminine forms derived by all different strategies are included in the French dictionary, some strategies appear to be more problematic than others, depending on various linguistic or social factors, and the integration into the lexicon of feminine forms involving these strategies takes more time. Furthermore, forms that are not proposed or even disfavoured by the official guidelines are sometimes listed as well. German has one major feminisation strategy involving the addition of the suffix *-in* to the masculine noun, and examples of this strategy are included in the dictionaries, as well as feminine forms derived by means of other devices.

Considering the effectiveness of language policy, the results for French suggest that language change imposed from above, in this case feminisation strategies, is not always effective. In some cases, dictionaries seem to follow language users rather than language authorities. This can be related to the different functions of a dictionary. As I already mentioned in the introduction, a dictionary has two conflicting functions: description and prescription. On the one hand, the dictionaries try to represent actual language use — with some delay — and include feminine forms that language users actually use. This is certainly true for the dictionaries investigated here, the *Petit Robert* and the *Duden*, both being largely based on corpora (cf. *Le Robert*; *Duden*). On the other hand, dictionaries are also taken to indicate ‘correct’ language use and give language users clues as to what forms should be used in a specific context. Given the observation that feminine forms are largely present in the latest dictionary editions and that the number and nature of remarks on these feminine forms has considerably decreased too, the dictionaries show an increasing equality between masculine and feminine forms. Following their

prescriptive function, they seem to encourage the use of feminine forms for most profession nouns.

In sum, I conclude that dictionaries reflect changes in society related to the increased presence of women in all professions, since both dictionaries of French and German demonstrate a rise in the number of feminine noun forms over time. There are few nouns for which no feminine form is yet included in the dictionary in either language. However, we should keep in mind that dictionaries generally show a delay in the integration of new words in the lexicon, although some nouns may continue to resist to feminisation, for instance German nouns ending in *-ling*.

Of course, we need to be cautious in drawing conclusions from the results of this dictionary study, since it only involved a limited number of nouns and dictionaries. In addition, although the results show that dictionaries reflect ongoing changes in society, the study does not address the actual use of feminine forms. Can we observe changes in the production of feminine forms by language users as well? Although an in-depth investigation of the use of feminine forms exceeds the scope of this dissertation, I will briefly touch upon this issue in Chapter 5, in relation to the results of two gap filling tasks on the feminisation of profession nouns in French and German.

2.5 Conclusion

The results of this study suggest that in both French and German the inclusion of feminine forms in dictionaries has developed over time. Language use — as far as reflected by dictionaries — thus seems to follow ongoing changes in society related to the increased presence of women in all professions. The results suggest that the feminisation of nouns proceeded slightly slower in French than in German, which corresponds to the historical developments of the feminisation debates in France and Germany. Particularly for French, the feminisation strategy for a specific noun was shown to be a contributing factor in the integration of feminine noun forms too, which suggests that morphology plays a role.

In sum, the results suggest that, at present, the feminisation of profession nouns is rather well-represented in both languages, which answers the first research question of my dissertation. As I mentioned at the start of this chapter, this answer sets the scene for the topic I will address in the following chapters, gender agreement in partitive constructions. In Chapter 3, I start by discussing agreement in partitives for French; I turn to German in

Chapter 4. In Chapter 5, I return to the issue of feminisation in relation to agreement in partitive constructions.

Chapter 3

Gender agreement in partitives in French[1]

Chapter 2 set the scene by providing insight into feminisation of profession nouns. Now, it is time to turn to gender agreement in partitive constructions. I start off my investigation with French, since the existing study on agreement in partitives (Sleeman & Ihsane, 2016) focusses on this language. This relates to the second research question of this dissertation:

II. Do speakers of French prefer semantic or grammatical agreement in partitive constructions; how does this translate into the findings of Sleeman & Ihsane (2016)?

As I showed in Chapter 1, partitive constructions with human referents can present a gender mismatch when they refer to a mixed group of females and males. This is illustrated in (1) with the masculine plural noun *étudiants* 'students':

(1) a. *La plus jeune des ancien-s étudiant-s*
the.F SUP young of.the.PL former.M-PL student.M-PL
s'=appelle Hélène.
REFL.3SG=call Hélène

b. *Le plus jeune des ancien-s étudiant-s*
the.M SUP young of.the.PL former.M-PL student.M-PL
s'=appelle Hélène.
REFL.3SG=call Hélène
'The youngest of the former students is called Hélène.'

In (1a), the superlative *la plus jeune* is feminine, while the set phrase *des anciens étudiants*, referring to a mixed group of females and males, exhibits the masculine plural form.[2] This results in a gender mismatch between set and

[1] An earlier version of this chapter was published as: Westveer, Thom; Petra Sleeman & Enoch O. Aboh. 2021. Competing genders: French partitive constructions between grammatical and semantic gender. In Marc-Olivier Hinzelin, Natascha Pomino & Eva-Maria Remberger (eds.), *Formal approaches to Romance morphosyntax*, 49-87. Berlin: De Gruyter.

[2] In French, masculine gender serves as default gender for animate nouns if the referent's sex is unknown or irrelevant or if a noun refers to a mixed group of females and males.

subset phrase. In example (1b), instead, the superlative *le plus jeune* and the set phrase *des anciens étudiants* match and both take the masculine form, even though the superlative refers to a female.

Although these constructions are not specifically taught in school or discussed in grammar books, native speakers have intuitions about when a gender mismatch is acceptable or not. Sleeman & Ihsane (2016) investigated these intuitions with a limited number of informants and showed that the acceptability of gender mismatches depends on the type of partitive construction and on the type of noun. Based on their results, they proposed a theoretical analysis of gender agreement in partitives.

The aim of the present study is to further explore agreement in partitive constructions in a more systematic way and with a larger sample of speakers and test sentences. I submitted a questionnaire to 62 native speakers of French, allowing me to perform statistical analyses on the data, which was not possible in Sleeman & Ihsane's (2016) study, given the limited size of their sample. The larger sample also enables me to check for influence of the factors sex and age of the participants, as the acceptability of gender mismatches may be influenced by the ongoing debate on feminisation and inclusive language use in French. Thus, younger speakers may accept gender mismatches more often than older speakers. Besides, some studies (e.g. van Compernolle, 2009) suggest a difference between female and male speakers when it comes to feminisation and inclusive language use, which may also impact the acceptance of gender mismatches. In addition, my more systematic test design, including a larger number of test sentences, allows me to investigate noun type differences.

This chapter is structured as follows. In section 3.1, I start with a short overview of gender agreement in French, followed by a discussion of Sleeman & Ihsane's (2016) study. I also describe the theoretical analysis they propose. The section ends with the research questions that guide the present study. I discuss the methodology in section 3.2 and provide a detailed presentation of the results in section 3.3. Section 3.4 further discusses the results and compares them to those of Sleeman & Ihsane's (2016) study. I present some conclusions in section 3.5.

3.1 Gender agreement in French

In French, all nouns are assigned a lexical gender, which can be masculine or feminine. Nominal elements, such as pronouns, determiners, or adjectives, all

agree in gender with the noun they combine with or refer to. For instance, the indefinite determiner and the adjective show masculine agreement with the masculine noun *chanteur* 'singer' in (2a) and feminine agreement with the feminine noun *chanteuse* 'female singer' in (2b):

(2) a. *Julien Clerc est un/*une chant-eur merveill-eux/*-euse.*
Julien Clerc is a.M/a.F singer-M marvel-ous.M/.F
'Julien Clerc is a marvelous singer.'
b. *Françoise Hardy est une/*un chant-euse*
Françoise Hardy is a.F/a.M singer-F
merveill-euse/-eux.*
marvel-ous.F/.M
'Françoise Hardy is a marvelous singer.'

With inanimate nouns, gender assignment is not semantically motivated and therefore arbitrary, even though a noun's lexical gender is often predictable from its ending (cf. Lyster, 2006): nouns that end in a vowel in spoken language tend to be masculine (e.g. *un palet* [pɑlɛ] 'a.M puck.M'); those that end in a consonant tend to be feminine (*une palette* [pɑlɛt] 'a.F palette.F').[3] The lexical gender of animate nouns usually matches with the biological sex of the noun's referent. Therefore, in (2a), *chanteur*.M refers to a male singer, while *chanteuse*.F (2b) designates a female.[4]

However, some animate nouns have a fixed lexical gender, which does not always correspond to the referent's sex. For instance, the noun *victime* 'victim' is formally feminine, but may refer to both females and males alike. Agreement with such nouns can be challenging, as exemplified in (3), where *victime* refers to a male:

(3) a. *Pierre était la seul-e/ *le seul victime.*
Pierre was the.F only-F/ the.M only.M victim.F
'Peter was the only victime.'

[3] Please note that in spoken French, final consonants of nouns are not pronounced, except when followed by a vowel; in written French, masculine and feminine nouns present the opposite image: masculine nouns tend to end in a consonant, feminine nouns in a vowel.

[4] I leave aside the long-standing debate whether both the masculine form *chanteur* and the feminine form *chanteuse* are stored separately in the lexicon (full storage approach), or, instead, only the separate morphemes, that is, the stem *chant-* and the suffixes *-eur* and *-euse* (decomposition approach) (cf. Haspelmath & Sims, 2010, and references therein). See Labbé Grunberg (2020) for a detailed investigation of cognitive processing of complex and non-complex words by native speakers of Dutch.

b. *Elle/Il a survécu.*
She/He has survived
'He survived.'

The definite determiner *la* and the adjective *seule* in (3a) agree with the feminine lexical gender of the noun *victime*. For the pronoun in (3b), instead, there are two possible sources of gender agreement: the noun's feminine lexical gender or the referential gender based on the sex of the referent, a male. If the pronoun shows agreement with the gender of the noun, it takes the feminine form *elle*. Recall from Chapter 1 that I refer to this type of agreement as *grammatical agreement*. If, on the other hand, the pronoun agrees with the biological sex of the referent, it will take the masculine form *il*, an instance of *semantic agreement*.

Throughout this dissertation, I do not use the terms *grammatical* and *semantic agreement* in a technical sense. Accordingly, these terms do not distinguish between valuation via a syntactic relationship between a valued and an unvalued feature, and semantic feature valuation from the non-linguistic context (following, e.g. Corbett, 1991; Audring, 2013; Kučerová, 2018). I use the term *grammatical agreement* merely to indicate that two elements share the same gender value; the term *semantic agreement* is used when the gender values of two elements present a mismatch (see Chapter 1, section 1.1.2). Furthermore, I use the term *agreement* for sharing of gender features on all types of syntactic configurations. This way, I do not distinguish between different syntactic configurations by using additional notions, such as concord or matching.

According to the *Arrêté Haby*, released by the French government in 1976, semantic agreement on pronouns is tolerated in French. Consider the example in (4) (listed in the official *Arrêté*, cf. Haby, 1976):

(4) a. *Le français nous est enseigné par **une dame**.*
the.M French to.us is taught by a.F lady.F
b. *Nous aimons beaucoup **ce professeur**.*
we love much DEM.M teacher.M
c. *Mais **il (elle)** va nous quitter.*
but he (she) will us leave
'French is taught to us by a lady. We really love this teacher. But he (she) will leave us.'

As the example in (4c) illustrates, the use of the feminine pronoun *elle* is allowed as an alternative to the masculine form *il* to refer back to the

masculine noun *professeur* (4b), whose referent is a female, as can be concluded from the feminine noun *dame* in (4a).

3.1.1 Gender agreement in partitive constructions

Just as the pronoun *elle* in (4c), superlative partitives may also display competition between grammatical and semantic gender agreement, as is illustrated in (5). The agreement target in the subset phrase in (5a-b) has two possible controllers: (i) the set phrase *des nouveaux professeurs* in the default masculine form or (ii) the NP *Hélène Manier*, referring to a female. In (5a), the default masculine form *le plus gentil* grammatically agrees with the default masculine gender of the noun *professeur*. In (5b), however, the feminine form *la plus gentille* agrees with its female referent, *Hélène Manier*, hence a case of semantic agreement:

(5) a. *Le plus gentil des nouveau-x professeur-s*
the.M SUP kind.M of.the.PL new.M-PL teacher.M-PL
s'=appelle Hélène Manier.
REFL.3SG=call Hélène Manier

b. *La plus gentil-le des nouveau-x professeur-s*
the.F SUP kind-F of.the.PL new.M-PL teacher.M-PL
s'=appelle Hélène Manier.
REFL.3SG=call Hélène Manier
'The kindest of the new teachers is called Hélène Manier.'

Sleeman & Ihsane (2016) establish that the acceptance of semantic agreement depends on multiple factors. One such factor is the type of partitive construction: semantic agreement is accepted in superlative partitives, as in (5), but not in quantified partitives (6):

(6) **Une/Un de mes nouv-eau-x collègue-s s'=appelle*
one.F/one.M of my.PL new-M-PL colleague.M-PL REFL.3SG=call
Antoinette.
Antoinette
'One of my new colleagues is called Antoinette.'

A quantifier, such as *un* 'one' in (6), heads the subset phrase in a quantified partitive.[5] In the superlative partitive in (5), the subset phrase is headed by a definite determiner combined with a superlative adjective.

Another factor that appears to affect the acceptance of semantic agreement — only in superlative partitive constructions — is the type of (animate) noun involved in the sentence. Sleeman & Ihsane (2016) (following Ihsane & Sleeman, 2016) distinguish four types of animate nouns in French, based on their form-meaning mapping:[6]

Table 1 – Classification of animate nouns Sleeman & Ihsane (2016)

Class A	**different lexemes**: two unrelated forms for masculine and feminine	*un frère – une soeur* 'a brother – a sister' *un garçon – une fille* 'a boy – a girl'
Class B	**one lexeme, two word forms**: masculine and feminine forms derived from the same lexeme by suffix alternation or affixation	*un étudiant – une étudiante* 'a student' (affixation) *un policier – une policière*[7] 'a police officer' (affixation) *un directeur – une directrice* 'a director' (suffix alternation)
Class C	**one lexeme, one word form, two genders**: one stem for female and male referents	*un ministre – une ministre* 'a minister' *un élève – une élève* 'a pupil'
Class D	**one lexeme, one word form, one gender**: one stem for female and male referents (also called *epicene forms*)	*un personnage* 'a character' *une sentinelle* 'a guard'

Sleeman & Ihsane's (2016) noun class B further splits in two distinct groups, based on the relation between the feminine and masculine forms of these

[5] In a quantified partitive, the subset may also be introduced by another quantifier than *un(e)* 'one', for instance *plusieurs* 'numerous', or other cardinal numerals (e.g. *deux* 'two'). However, in this dissertation, I only investigate quantified partitives with the numeral *un(e)*, as in (6).

[6] Sleeman & Ihsane (2016) use a slightly different terminology to label the four noun classes (class A = suppletive forms, class B = stem change, class C = fixed forms with article change, class D = forms with a fixed article) (cf. Sleeman & Ihsane, 2016: 3-4). The terminology I use is based on the notions of *lexeme* (the overarching abstract concept) and *word form* (specific morphological realisation(s) of a lexeme). See Haspelmath & Sims (2010) for more details.

[7] I leave aside here the question whether the feminine form *policière* derives from the masculine form *policier* by affixation, or, instead, whether the masculine form derives from the feminine form by a deletion operation.

nouns: (i) nouns for which the feminine form is derived from the masculine one by adding a suffix (e.g. *étudiant* > *étudiante*), labelled *affixation class B*, and (ii) nouns for which there is a suffix alternation (e.g. *chanteur* – *chanteuse*), called *suffix alternation class B*.

At first sight, classes C and D seem to be similar, since nouns of both classes only have one morphological form. Yet, they differ in terms of gender assignment. Class D nouns are assigned one specific gender, either masculine (e.g. *un personnage*) or feminine (e.g. *une sentinelle*), even though they may refer to females and males alike. Instead, class C nouns are assigned both masculine and feminine gender (e.g. *un/une ministre*); usually, their grammatical gender corresponds to their referent's biological sex.

According to Sleeman & Ihsane (2016), gender mismatches should not be possible with class A and class D nouns. Therefore, they did not include these nouns in their study, since class A and class D nouns should always trigger grammatical agreement. Examples are given in (7) for class A and (8) for class D:

(7) *Le/*La plus jeune des gentil-s garçon-s*
the.M/the.F SUP young of.the.PL kind.M-PL boy.M-PL
s'=appelle Jean-Luc.
REFL.3SG=call Jean-Luc
'The youngest of the kind boys is called Jean-Luc.'

(8) *La/*Le plus jeune des nouvelle-s sentinelle-s*
the.F/the.M SUP young of.the.PL new.F-PL guard.F-PL
a une long-ue barbe.
has a.F long-F beard.F
'The youngest of the new guards has a long beard.'

With the class C noun in (9), on the other hand, gender mismatches in superlative partitives seem to be possible, as the judgements of Sleeman & Ihsane's (2016) informants suggest:

(9) *La/Le plus jeune des nouveau-x ministre-s est*
the.F/the.M SUP young of.the.PL new.M-PL minister-PL is
Madame Garnier.
Mrs. Garnier
'The youngest of the new ministers is called Mrs. Garnier.'

With class B nouns (10), the picture is somewhat more complicated. Some informants accept gender mismatches in superlative partitives with these nouns, whereas others reject them:[8]

(10) *%La/Le plus jeune des nouveau-x directeur-s*
the.F/the.M SUP young of.the.PL new.M-PL director.M-PL
s'=appelle Madame Héloïse.
REFL.3SG=call Mrs. Héloïse
'The youngest of the new directors is called Mrs. Héloïse.'

To account for the differences between quantified and superlative partitives, as well as between different types of animate nouns, Sleeman & Ihsane (2016) propose a theoretical account of gender agreement in partitives, which I introduce in the next section.

3.1.2 Sleeman & Ihsane's (2016) analysis of agreement in partitives

In an earlier paper, Ihsane & Sleeman (2016) show that some recent theoretical analyses on gender agreement by Kramer (2009) and Atkinson (2015) fail to account for differences between partitive constructions and other agreement contexts. Partitives can display semantic agreement, whereas agreement in more local environments, for example on attributive adjectives, only allows for grammatical agreement. Therefore, they propose an alternative theoretical analysis, which they further develop in Sleeman & Ihsane (2016) and show to account for their observations. Their analysis consists of two parts, corresponding to the two parts of a partitive construction: (i) the inner DP, referring to the superset, and (ii) the outer DP, referring to the subset.

I will start with the analysis of the inner DP. Sleeman & Ihsane (2016) argue that grammatical and semantic gender should be separated. In French, in principle, nouns come with a lexically fixed grammatical gender, which is assumed to be uninterpretable (cf. Pesetsky & Torrego, 2007).[9] Semantic gender, on the other hand, is encoded on a specific functional projection,

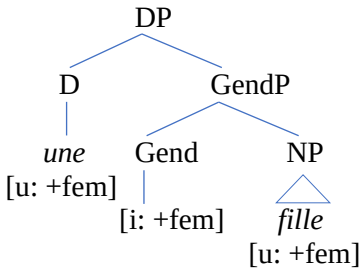
[8] The sign % indicates that the acceptability of a sentence varies between speakers.

[9] Under standard Minimalist assumptions (cf. Chomsky, 2000, 2001), valued features can only be interpretable. Uninterpretable features are always unvalued and need to be checked by a valued interpretable feature. Sleeman & Ihsane (2016) propose that grammatical gender is always uninterpretable and valued, which would cause the derivation to crash according to the standard framework. Therefore, they build on Legate (2002) and Pesetsky & Torrego (2007) in arguing for a view that dissociates Agree from interpretability, which may derive from other (formal) operations. I further discuss this issue in Chapter 7, section 7.1.1.

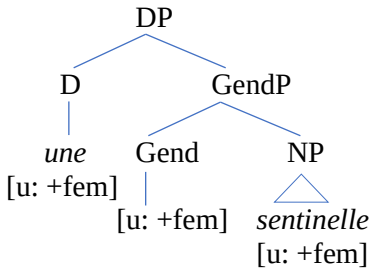
Gender Phrase (GendP[10]) in Sleeman & Ihsane's (2016) analysis, only present in the structure of animate nouns. Semantic gender is interpretable with class A, class B and class C nouns, but uninterpretable with class D nouns because with these nouns, the referent's biological sex does not always match the noun's grammatical gender.

As Sleeman & Ihsane (2016) report, semantic gender agreement seems to be possible with class C and to a lesser extent with class B nouns, but not with class A and class D nouns. They argue that the differences between these noun classes derive from distinct specifications in the lexicon. Class A and class D nouns are stored in the lexicon with a specific grammatical gender feature. The structures in (11a-b) for the feminine class A noun *fille* 'girl' and the feminine class D noun *sentinelle* 'guard' illustrate this: these nouns bear a feminine-valued uninterpretable feature on the lexical noun, whose value is then transferred from the noun onto the head (Gend) of the functional projection GendP inside the DP:[11]

(11) a. 'a girl'



b. 'a guard'



Since with class A nouns (11a), the gender feature on Gend is interpretable, it can be interpreted as a biological sex feature and the noun's referent has to be a female, whereas in (11b), with the class D noun *sentinelle*, the gender feature on Gend is uninterpretable and cannot be interpreted as a biological sex feature — the referent of *sentinelle* can either be female or male.

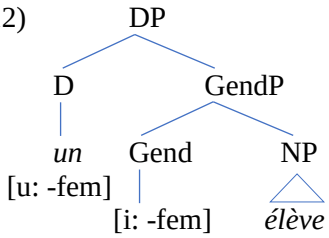
With class C nouns, there is no grammatical gender stored in the lexicon and these nouns enter the derivation unvalued, as the absence of an uninterpretable gender feature on the class C noun *élève* 'pupil' in (12) shows. Gender specification of these nouns takes place through valuation of the

[10] Sleeman & Ihsane (2016) abbreviate this functional projection as GenP, but I use the notion GendP instead, to avoid potential confusion with 'Genitive'.

[11] Sleeman & Ihsane (2016) code gender as either [+fem], [-fem] or [_fem], representing feminine, masculine and unspecified gender, respectively, following Kramer (2009) and Atkinson (2015).

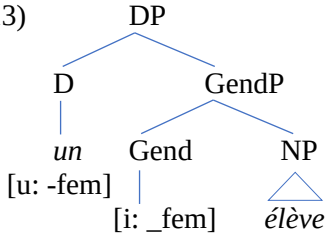
semantic gender feature on Gend. In (12), the noun *élève* receives a gender value from the noun's referent in the non-linguistic context.[12] If the referent is a male, the semantic gender feature on Gend is valued as masculine, consequently triggering masculine agreement on the determiner *un*. As the feature on Gend is interpretable, it can be interpreted as referring to the biological sex of the noun's referent:

(12)



It is also possible that the semantic gender feature on Gend does not receive a gender value. Under traditional generative accounts, such a derivation would be assumed to crash. However, Sleeman & Ihsane (2016), following Preminger (2009, 2011), argue that this does not happen because the absence of a gender value results in the spell-out of default gender, which is the masculine form in French. This is what Preminger (2009, 2011) calls *Failed Agree*, exemplified in (13):

(13)



The interpretable semantic gender feature on the head Gend in (13) does not receive a value from the non-linguistic context, as marked by the absence of a feature value [i: _fem]. Still, the derivation does not crash, as Failed Agree (Preminger 2009, 2011) applies, resulting in default masculine agreement on

[12] The assumption that features may also receive their value from the non-linguistic context is defended by studies in multiple domains. With respect to gender, Matushanksy (2013) shows that in Russian, agreement with some animate nouns may not only depend on the noun's grammatical gender, but also on semantic information from the non-linguistic context. Cartographic approaches to syntax also assume valuation from the non-linguistic context (cf. Rizzi, 1997).

the determiner *un*. Only in this case may a gender mismatch occur, as we will see below.

The second part of Sleeman & Ihsane's (2016) analysis concerns the outer DP, referring to the subset. Building on Sleeman & Kester (2002), they argue for a two-noun analysis of partitives. The noun of the outer DP is a copy of the noun of the inner DP, but remains unpronounced. Importantly, in a superlative partitive — but not in a quantified partitive, as we will see — both DPs are headed by a Gender Phrase. The gender value of the inner DP's Gender Phrase is copied together with the noun into the outer DP. The outer DP's Gender Phrase receives its value from the gender feature on the copy of the noun, as is shown in (14-15):

(14) No mismatch – masculine agreement
[$_{DP}$ *le* [$_{DegP}$ *plus jeune* [$_{GendP}$ M [$_{FP}$ ~~*juge*~~ [$_{PP}$ *des* [$_{GendP}$ M [$_{NP}$ *juges français*]]]]]]]

(15) No mismatch – feminine agreement
[$_{DP}$ *la* [$_{DegP}$ *plus jeune* [$_{GendP}$ F [$_{FP}$ ~~*juge*~~ [$_{PP}$ *des* [$_{GendP}$ F [$_{NP}$ *juges françaises*]]]]]]]

However, if Failed Agree has taken place in the inner DP (as in 13) and no gender value is present on the inner DP's Gender Phrase, there is no gender value to be transferred to the outer DP's Gender Phrase either. In this case, the outer DP's Gender Phrase presents a second opportunity for later insertion of semantic gender, as indicated by the arrows in the example in (16):

(16) Mismatch – feminine agreement
[$_{DP}$ *la* [$_{DegP}$ *plus jeune* [$_{GendP}$ F [$_{FP}$ ~~*juge*~~ [$_{PP}$ des [$_{GendP}$ _ [$_{NP}$ *juges français*]]]]]]]

In (16), there is no gender value on the inner DP's Gender Phrase and Failed Agree has taken place, leading to the spell-out of default masculine gender in the inner DP. By contrast, the Gender Phrase of the outer DP is valued as feminine, which triggers feminine agreement on the outer DP's determiner *la*.

For quantified partitives, Sleeman & Ihsane (2016) assume that the outer DP is not headed by a second Gender Phrase. In this way, they explain why gender mismatches seem not to be possible in quantified partitives, since there is no second opportunity to insert a semantic gender value in the outer DP after Failed Agree has taken place in the inner DP. Instead, the outer DP has to agree with the inner DP's default masculine gender:

(17) [$_{NumP}$ *un* [$_{FP}$ ~~*collègue*~~ [$_{PP}$ *de* [$_{DP}$ *mes* [$_{GendP}$ _ *anciens collègues*]]]]]

Until now, I have not addressed class B nouns. As Sleeman & Ihsane's (2016) results suggest, some speakers of French seem to accept gender mismatches with class B nouns, whereas others appear not to do so. Sleeman & Ihsane (2016) argue that for speakers that accept gender mismatches with class B nouns, these nouns behave like class C nouns and are thus unmarked for grammatical gender in the lexicon. If valuation of the semantic gender feature on the head Gend through the non-linguistic context does not take place, Failed Agree applies, resulting in default masculine gender in the inner DP. Through valuation of the semantic gender feature on Gend in the outer DP, a gender mismatch may arise, as in (18a). In contrast, some speakers do not accept a mismatch with class B nouns, but prefer sentences as the one illustrated by (18b):

(18) a. *%La plus jeune de mes ancien-s étudiant-s*
the.F SUP young of my.PL former.M-PL student.M-PL
s'=appelle Hélène.
REFL.3SG=call Hélène

b. *Le plus jeune de mes ancien-s étudiant-s*
the.M SUP young of my.PL former.M-PL student.M-PL
s'=appelle Hélène.
REFL.3SG=call Hélène
'The youngest of my former students is called Hélène.'

Sleeman & Ihsane (2016) do not present an analysis for speakers that do not accept a mismatch with class B nouns. Ihsane & Sleeman (2016), in turn, propose a lexical analysis to explain speaker differences. For speakers that do not accept a gender mismatch, class B (and class C) nouns bear a grammatical gender feature in the lexicon, which values the feature on the head Gend too, leaving no room for valuation from the non-linguistic context. For speakers that accept a mismatch, class B (and class C) nouns are unmarked for grammatical gender. Thus, in (18b), the class B noun *étudiant* 'student' is stored as a masculine noun in the lexicon. The masculine gender of the group noun *étudiants* in the inner DP is transferred onto the outer DP and triggers masculine agreement. Feminine agreement in the outer DP, which would give rise to a gender mismatch between inner and outer DP, is not accepted by these speakers. Variation between individual speakers could thus be related to differences in the way nouns are stored in a speaker's mental lexicon.

As Sleeman & Ihsane (2016) report, with class B nouns, most of their informants prefer the use of a feminine plural group noun if the subset is a

female, as in (19), instead of a sentence potentially presenting a gender mismatch between the inner and the outer DP (18a):

(19) *La plus jeune de mes ancien-ne-s étudiant-e-s*
the.F SUP young of my.PL former-F-PL student-F-PL
s'=appelle Hélène.
REFL.3SG=call Hélène
'The youngest of my former students is called Hélène.'

As opposed to (18a), no gender mismatch can arise in (19), since both the inner and the outer DP display feminine gender. However, in (19), the feminine plural group noun *étudiantes* only refers to a group of female students, and not to a mixed group of female and male students. In (18a-b), on the other hand, the (default) masculine group noun *étudiants* may refer to a group of females and males.

3.1.3 Research questions and hypotheses

Sleeman & Ihsane's (2016) study involved only 10 (Swiss) French participants and it is not clear to what extent the results and analysis can be generalised to other speakers of French. Due to the limited number of participants, the authors could not report any statistics. In addition, the participants were only exposed to a small set of sentences which did not include all possible agreement conditions. For instance, their test sentences did not include contexts with grammatical agreement. Likewise, the investigated sentences did not involve many different nouns for each of the noun classes.

The present study aims at further exploring the phenomenon of gender agreement in French partitives, taking into account the limitations of Sleeman & Ihsane's (2016) approach. I start from the following questions:

i. Do superlative and quantified partitives significantly differ with respect to the acceptance of semantic agreement, as Sleeman & Ihsane's (2016) results suggest?
ii. Do classes B, C, and D nouns significantly differ with respect to the acceptance of semantic agreement in superlative partitives?

Since I collected grammaticality judgements from a larger number of speakers, I can perform statistical analyses on the data. Based on the

informants' judgements reported by Sleeman & Ihsane (2016), I formulate the following hypotheses that need to be tested:

a. In superlative partitives, semantic agreement is judged to be significantly more acceptable than in quantified partitives.
b. In superlative partitives, the acceptance of semantic agreement depends on the type of animate noun: semantic agreement is judged significantly more acceptable with class C and then with class B nouns, whereas grammatical agreement is judged significantly more acceptable with class D nouns.

I will discuss the results in relation to these hypotheses in section 3.4.1.

The classification of animate nouns over four classes — of which I include three in the experiment — may prove to be too general, as differences between nouns may not solely depend on form-meaning mapping. Therefore, I want to check for differences between individual nouns of the three noun classes under scrutiny too. This translates into my third question, for which I cannot formulate any hypothesis:

iii. Is there a significant difference in the acceptability of semantic agreement between individual nouns?

Finally, as I already mentioned at the beginning of this chapter, I wonder whether the age and/or sex of a participant might influence the acceptability of semantic agreement. Sleeman & Ihsane (2016) could not investigate these factors due to their limited number of participants. These points motivate my final question, for which I do not have a hypothesis either:

iv. Is there a significant difference in the acceptance of semantic agreement between younger and older, and between female and male participants?

In the next section, I present the methodology of the grammaticality judgement task that I carried out to find answers to these questions.

3.2 Methodology

In order to investigate which factors determine a speaker's choice between grammatical and semantic agreement in partitive constructions, I carried out

a grammaticality judgement task, created in Google Forms, which was distributed online, via (linguistic) mailing lists in France. Participants were not paid for their participation.[13] In addition to the grammaticality judgement task on gender agreement in partitive constructions, the questionnaire I submitted to the participants consisted of two other tasks, one on the feminisation of profession nouns and one on inclusive writing, of which the results are not discussed in this chapter.[14] The tasks were first tested in a small-scale pilot study, on the basis of which the final questionnaire was adapted.

3.2.1 Participants

The questionnaire was filled in by 80 people between June 2018 and March 2019. I had to exclude 18 participants, who were non-native speakers of French, were not living in France at the moment of testing, or had not completed the tasks. The remaining 62 participants were living in France at the moment of testing and were born and/or raised there too. All participants were asked to fill in a background questionnaire with questions on age, sex, language background, profession, where they were born and raised, where they had lived, as well as some additional questions on different topics to know their attitude towards changes in language and society. In the analysis of the results, however, I will only consider the variables sex and age. Table 2 presents information on the participants with respect to these variables:

Table 2 – Participant information

Age	< 30	30-40	40-50	50-60	> 60	
	9	5	10	11	27	62
Sex	male	female				
	20	42				62

Please note that the imbalanced age and sex groups are partly due to online testing and that I did not specifically target specific age groups.

[13] The test was approved by the Ethical Committee of the University of Amsterdam (file 2017-43) and all participants consented to take part.

[14] I briefly come back to the results of the task on the feminisation of profession nouns in Chapter 5; the task on inclusive writing will not be discussed in this dissertation.

3.2.2 Test design and procedure

The Grammaticality Judgement Task consisted of 80 sentences containing a partitive construction. The participants had to judge each sentence on a 5-point scale, 5 indicating a fully acceptable and 1 a fully unacceptable sentence. In the instructions I indicated that the participants should follow their own intuitions and should not reflect too long on each sentence. The participants first saw an example before starting the task.

The test sentences contained 13 different nouns, representing the noun classes established by Sleeman & Ihsane (2016) and listed in Table 3:

Table 3 – Nouns included in the task

Class B	**Class C**	**Class D**
chanteur 'singer'	*collègue* 'colleague'	*personne*.F 'person'
étudiant 'student'	*guide* 'guide'	*sentinelle*.F 'guard'
policier 'police.officer'	*ministre* 'minister'	*victime*.F 'victim'
recteur 'rector'	*professeur* 'teacher'	*génie*.M 'genius'
		personnage.M 'character'

The nouns were selected based on the results of the dictionary search presented in Chapter 2, in which I investigated the inclusion of feminine forms of profession nouns throughout time in different editions of the French monolingual *Petit Robert* dictionary. The selection was based on the feminisation strategy used to derive the feminine form of the profession noun. I did not include class A nouns in the test, because these never give rise to a gender mismatch: grammatical and semantic agreement always match with these nouns. As I noted previously, Sleeman & Ihsane's group of class B nouns could be further split into two distinct groups, based on the way the feminine and masculine forms of these nouns are derived: the affixation class B nouns (e.g. *étudiant* – *étudiante*) and the suffix alternation class B nouns (e.g. *chanteur* – *chanteuse*). Therefore, I included nouns of both types: *étudiant* and *policier* as examples of affixation class B and *chanteur* and *recteur* as examples of suffix alternation class B.

Next to noun class, the test includes two more predictors: (i) partitive type (quantified or superlative) and (ii) agreement type (grammatical or semantic). Thus, all nouns figured at least in four sentences throughout the task: two times in a quantified and two times in a superlative partitive. For each noun in each partitive type, I included a sentence with grammatical and one with semantic agreement, as exemplified for the noun *étudiant* in a superlative partitive in (20). In example (20a) the set phrase *de mes anciens*

étudiants is masculine default and so is the superlative *le plus intelligent*, even if the intended referent is female: (20a) presents a case of grammatical agreement. In (20b), the set phrase is default masculine, but the superlative's gender matches with its referent's biological sex and therefore takes the feminine form, exhibiting semantic agreement:

(20) a. *Le plus intelligent de mes ancien-s étudiant-s*
the.M SUP intelligent.M of my.PL former.M-PL student.M-PL
s'=appelle Françoise.
REFL.3SG=call Françoise
b. *La plus intelligent-e de mes ancien-s étudiant-s*
the.F SUP intelligent-F of my.PL former.M-PL student.M-PL
s'=appelle Françoise.
REFL.3SG=call Françoise
'The most intelligent of my former students is called Françoise.'

All test sentences were constructed according to the model in (20), in order to avoid interference from additional factors, such as linear distance between agreeing elements or word order.

Within the total number of 80 test sentences, 4 x 13 = 52 sentences were constructed in this way. The remaining 28 sentences were control sentences in which no gender mismatch was possible. As a consequence, these control sentences did not show any competition between grammatical and semantic agreement. One of the control sentences was in the masculine form (21a) and one in the feminine form (21b):

(21) a. *Le plus intelligent de mes ancien-s étudiant-s*
the.M SUP intelligent.M of my.PL former.M-PL student.M-PL
s'=appelle Henri.
REFL.3SG=call Henri
'The most intelligent of my former students is called Henri.'
b. *La plus intelligent-e de mes ancien-ne-s étudiant-e-s*
the.F SUP intelligent-F of my.PL former-F-PL student-F-PL
s'=appelle Françoise.
REFL.3SG=call Françoise
'The most intelligent of my former students is called Françoise.'

These control sentences were included for part of the 13 nouns tested. The full set of test sentences is included in Appendix B.

The test sentences were presented to the participants in a randomised order, identical for all participants, assuring that a noun never reappeared in

the next sentence. At this point, a caveat is in order. I decided not to include any fillers, because adding these to the 80 test sentences would have made the task too long. I was aware that this might be a drawback. Apart from assuring that a participant uses all points on the judgement scale, fillers are meant to distract the participant from the actual object of study. In this case, I judged that the different partitive types, the different sentence types, including the controls, the noun types, and the various contexts were distinct enough to hide away my object of study from the participants.

3.2.3 Data analysis

All test results were collected in a spreadsheet. The results were statistically analysed in multiple ways. First, I computed a linear mixed-effects model in the R environment (R Development Core Team, 2018), because such a model can provide a more profound insight into possible influences of the predictors partitive type, agreement type, and noun class on the participants' acceptability rates on the test sentences. To compute this model in R, I used the lmer function from the lmerTest package (Kuznetsova et al., 2017). The dependent variable was the acceptability rate of each test sentence, measured on a five-point scale. Agreement type (grammatical or semantic), partitive type (quantified or partitive), and noun class (class B, C, or D) were the fixed factors. I also included interactions between these factors in the model. For the ternary factor noun class, I specified orthogonal sum-to-zero contrasts: (i) class D nouns (coded as -2/3) were compared to class B and C nouns (both coded as +1/3); (ii) class B nouns (coded as -1/2) were opposed to class C nouns (coded as +1/2). I specified participant as a random factor. Second, I carried out T-tests in R to check for each noun class and for each individual noun in both partitive constructions whether the difference between the sentence with grammatical and the one with semantic agreement was significant.

3.3 Results

In the following sections, the results of the grammaticality judgement task will be reported. First, I present the results that answer research questions (i-ii), investigating the influence of partitive type and noun class on the acceptability of semantic agreement in partitives. In a next step, I take a closer look at the individual nouns of the different noun classes investigated, addressing

research question (iii). Finally, I discuss the influence of the metalinguistic variables sex and age on the acceptance of semantic agreement in partitives, answering research question (iv).

3.3.1 The influence of partitive type and noun class

First, I check whether the type of partitive construction (quantified or superlative) influences the acceptability of semantic agreement. Indeed, the outcome of the mixed-effects model in R confirms that the type of partitive has an influence. The model shows that there is a significant effect of partitive type on the acceptability of semantic agreement (estimated difference of judgements = 1.44; 95% confidence interval = 1.17 … 1.71; $p < 0.001$), indicating that native speakers of French judge semantic agreement to be significantly more acceptable in superlative than in quantified partitives. This answers research question (i).

Figure 1 visualises the average judgements for the test sentences with grammatical and semantic agreement for both partitive types:[15]

Figure 1 – Partitive types

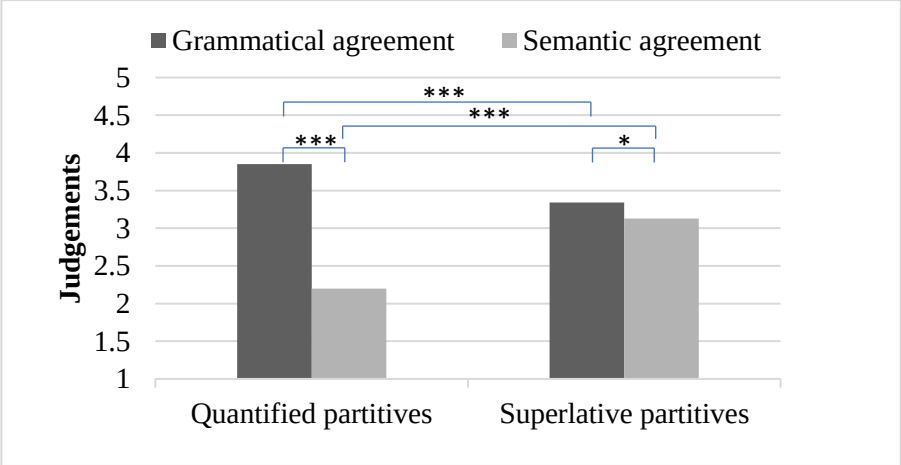


Figure 1 shows that the participants judge grammatical agreement to be significantly more acceptable than semantic agreement in quantified partitives ($p < 0.001$). For superlative partitives, grammatical agreement receives a significantly higher acceptability score than semantic agreement too ($p = 0.013$), although the difference is considerably smaller than for the quantified

[15] In the figures, significance is marked by * ($p < 0.05$), ** ($p < 0.01$) and *** ($p < 0.001$).

partitives. This contrasts with the results of the mixed-effects model, but as we will see below, this discrepancy is caused by noun class differences. In addition, comparing both partitive types reveals that grammatical agreement is judged significantly better in quantified than in superlative partitives ($p < 0.001$), whereas semantic agreement receives a significantly higher acceptability score in superlative than in quantified partitives ($p < 0.001$).

Next, I look at the influence of noun class on the acceptability of semantic agreement, addressing research question (ii). As I will show, noun class differences play an important role in the acceptance of semantic agreement, particularly for superlative partitives. The results of the mixed-effects model in R, comparing noun classes B and C to noun class D, show that there is a significant effect of noun class on the acceptability of semantic agreement between class B and C nouns on the one hand and class D nouns on the other hand (estimated difference of judgements = 1.78; 95% confidence interval = 1.52 … 2.04; $p < 0.001$), showing that native speakers of French judge semantic agreement to be significantly more acceptable with class B and C nouns than with class D nouns. If we only look at class B and class C nouns, we observe a significant effect of noun class on the acceptability of semantic agreement too (estimated difference of judgements = 0.27; 95% confidence interval = 0.04 … 0.50; $p = 0.018$), indicating that native speakers of French judge semantic agreement to be significantly more acceptable with class C nouns than with class B nouns.

Figures 2 and 3 show the average acceptability rates of the different noun classes in quantified and in superlative partitives in sentences with either grammatical or semantic agreement (class B = suffix alternation, affixation, e.g. *un chanteur – une chanteuse, un étudiant – une étudiante*; class C = one stem that can trigger both feminine and masculine agreement, e.g. *un/une ministre*; class D = fixed-gender nouns, e.g. *une sentinelle*). The figures do not include the acceptability rates of the control sentences.

With quantified partitives (Figure 2), sentences with grammatical agreement are judged to be considerably more acceptable than sentences with semantic agreement for all three noun classes. The differences in average judgement of grammatical versus semantic agreement are all significant ($p < 0.001$ for all noun classes), but the difference looks more pronounced for class D nouns. According to the participants, quantified partitives with grammatical agreement are highly acceptable with class D nouns. With class B and class C nouns, on the other hand, the overall judgement for the sentences with grammatical agreement is considerably lower than for class D nouns, although

the sentences with grammatical agreement are significantly preferred over those with semantic agreement.

Figure 2 – Quantified partitives noun classes

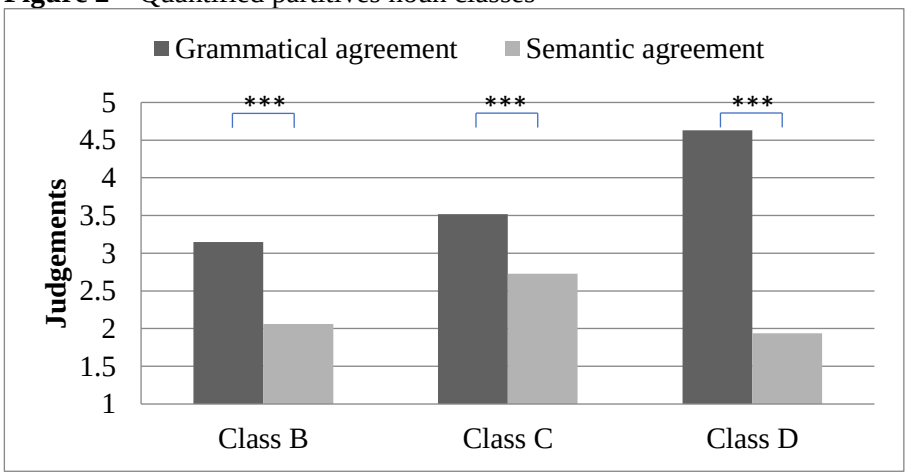
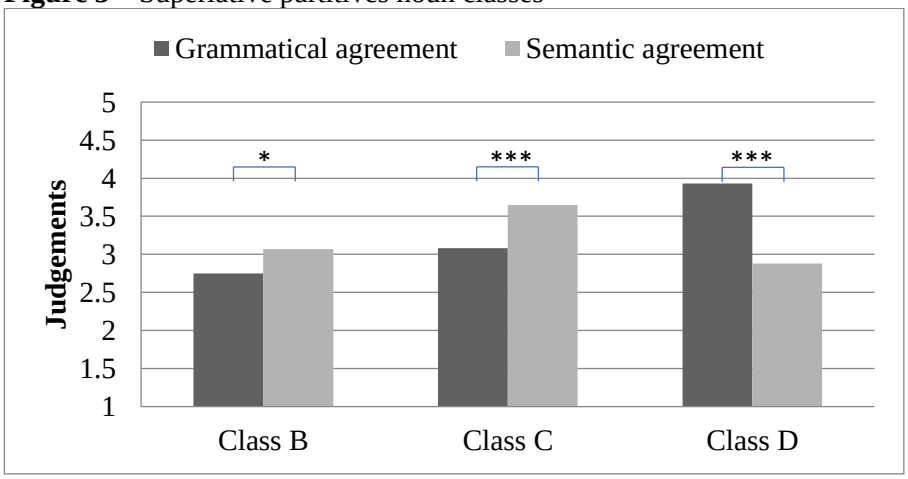


Figure 3 – Superlative partitives noun classes



In superlative partitives (Figure 3), semantic agreement is judged more acceptable than grammatical agreement with class B ($p = 0.027$) and class C nouns ($p < 0.001$), whereas the class D nouns show the opposite pattern ($p < 0.001$). However, the difference in judgement of the sentences with either grammatical or semantic agreement is smaller with class B nouns than with class C nouns. This indicates a stronger competition between grammatical and semantic agreement for class B nouns.

The examples with a superlative partitive below illustrate the contrast between classes B and C for the class C noun *ministre* 'minister' (22) and for the class B noun *chanteur* 'singer' (24). Still, these sentences with semantic agreement are preferred over those with grammatical agreement, as shown in (23) for *ministre* and (25) for *chanteur*, respectively. The numbers between square brackets indicate the participants' average judgements:

(22) *La plus intelligent-e des nouveau-x ministre-s est*
the.F SUP intelligent-F of.the.PL new.M-PL minister-PL is
Madame Ranquière. [3.99]
Mrs. Ranquière
'The most intelligent of the new ministers is Mrs. Ranquière.'

(23) *Le plus intelligent des nouveau-x ministre-s est*
the.M SUP intelligent.M of.the.PL new.M-PL minister-PL is
Madame Ranquière. [3.29]
Mrs. Ranquière
'The most intelligent of the new ministers is Mrs. Ranquière.'

(24) *La plus jeune des chanteur-s présent-s est*
the.F SUP young of.the.PL singer.M-PL present.M-PL is
Françoise Hardy. [2.63]
Françoise Hardy
'The youngest of the singers present is Françoise Hardy.'

(25) *Le plus jeune des chanteur-s présent-s est*
the.M SUP young of.the.PL singer.M-PL present.M-PL is
Françoise Hardy. [2.33]
Françoise Hardy
'The youngest of the singers present is Françoise Hardy.'

As can be concluded from the contrasts in judgements between the examples involving the class C noun *ministre* (22-23) on the one hand, and the examples with the class B noun *chanteur* (24-25), on the other hand, the sentences with the class C noun turn out to have higher acceptability scores than those involving the class B noun.

In fact, with class B nouns, the participants prefer the presence of a feminine set noun if the subset is a female, as suggested by the results on the control sentences. The example in (26) below shows the control sentence with the feminine set noun *chanteuses*, which can be compared to the examples above involving semantic (24) and grammatical agreement (25):

(26) *La plus jeune des chanteuse-s présent-e-s est*
the.F SUP young of.the.PL singer.F-PL present-F-PL is
Françoise Hardy. [4.97]
Françoise Hardy
'The youngest of the singers present is Françoise Hardy.'

Whereas sentence (26), with the feminine set noun *chanteuses*, is unsurprisingly judged as fully acceptable by nearly all participants, the sentences (24-25), with the default masculine set noun *chanteurs*, are judged to be far less acceptable, both with grammatical (25) and semantic agreement (24). Both differences (i.e. 25 vs. 26, and 24 vs. 26) are significant ($p < 0.001$).

Class C nouns generally show the same pattern: the control sentences with a feminine set noun, as exemplified in (27) for the noun *ministre*, receive higher judgements than the mismatch sentences with semantic (22) or grammatical agreement (23):

(27) *La plus intelligent-e des nouvelle-s ministre-s est*
the.F SUP intelligent-F of.the.PL new.F-PL minister-PL is
Madame Ranquière. [4.71]
Mrs. Ranquière
'The most intelligent of the new ministers is Mrs. Ranquière.'

As can be observed, the difference in judgement for the class C noun *ministre* between the sentence with the feminine set phrase *nouvelles ministres* in (27) and the sentences in (22-23) is smaller than for the class B noun *chanteur*. Still, both differences are significant for *ministre* too ($p < 0.001$ for 23 vs. 27, $p = 0.001$ for 22 vs. 27).

Surprisingly, however, with the class C noun *professeur* 'teacher' this pattern does not hold, as the examples (28-30) show:

(28) *Le plus intelligent des nouveau-x professeur-s est*
the.M SUP intelligent.M of.the.PL new.M-PL teacher-PL is
Madame Arbelette. [3.59]
Mrs. Arbelette
'The most intelligent of the new teachers is Mrs. Arbelette.'

(29) *La plus intelligent-e des nouveau-x professeur-s est*
the.F SUP intelligent-F of.the.PL new.M-PL teacher-PL is
Madame Arbelette. [3.87]
Mrs. Arbelette
'The most intelligent of the new teachers is Mrs. Arbelette.'

(30) *La plus intelligent-e des nouvelle-s professeur-s est* the.F SUP intelligent-F of.the.PL new.F-PL teacher-PL is *Madame Arbelette.* [2.89]
Mrs. Arbelette
'The most intelligent of the new teachers is Mrs. Arbelette.'

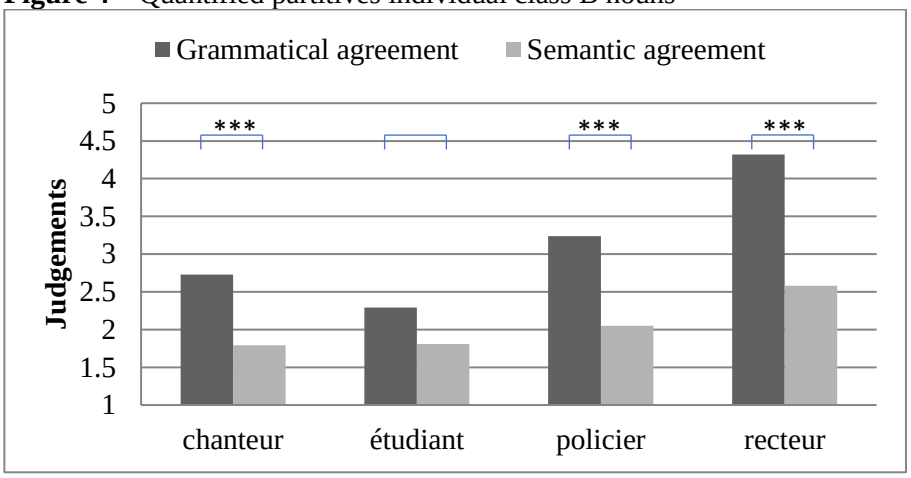
As the judgements indicate, the feminine control sentence (30) is judged to be less acceptable than the sentences with and without a gender mismatch (28-29), whereas in general the control sentences are judged more acceptable than the actual test sentences. The difference between (29) and (30) is significant ($p = 0.001$), as well as the difference between (28) and (30) ($p = 0.049$), but then in the other direction, the sentence with grammatical agreement and a masculine group noun (28) or with a gender mismatch (29) being significantly preferred over the control sentences with a feminine group noun (30). Why would this be the case? A possible explanation for this low judgement might be that the participants do not consider the noun *professeur* to be a class C noun, as I did, but rather classify this noun as a class B noun. As a class B noun, the feminine form of *professeur* would not be *la professeur*, but *la professeure*.

3.3.2 Further insight

Apart from research questions (i-ii), which aimed at checking the findings of Sleeman & Ihsane's (2016) study, I raised two additional research questions, asking about differences between individual nouns (iii) and about the influence of the participants' sex and age on the acceptability rates (iv). The results related to these questions are presented in this section.[16] First, I take a closer look at the judgements on the individual nouns of each noun class. I start with the class B nouns. Figure 4 reports the results on quantified partitives, while Figure 5 represents superlative partitives.

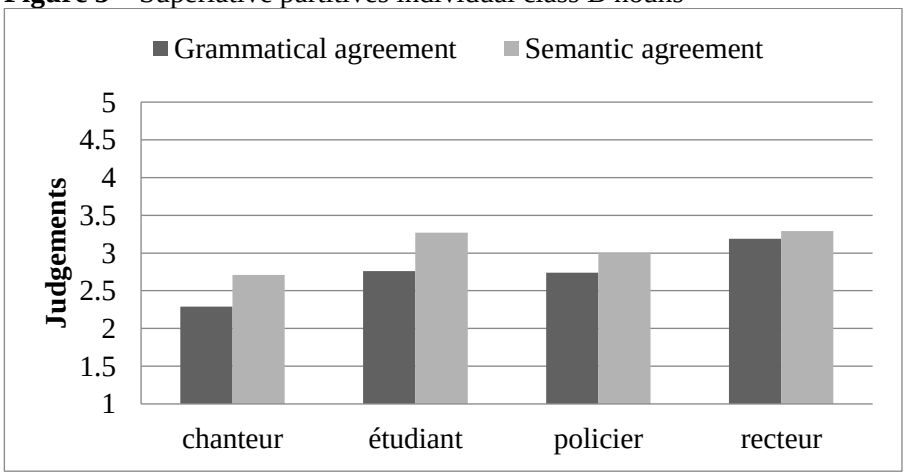
[16] Additionally, I investigated whether the relative frequency of the individual nouns influenced the results. To this end, I checked the lemma frequency of the 13 test nouns in the online *Lexique* corpus (New & Pallier, 2019) and carried out correlation tests in R between the test noun's lemma frequency and the acceptability scores. This only revealed weak correlations, which suggests that the lemma frequency of a noun does not substantially influence the participants' judgements on the test sentences.

Figure 4 – Quantified partitives individual class B nouns



The sentences with grammatical agreement are judged significantly better than those with semantic agreement for three of the class B nouns in quantified partitives ($p < 0.001$), except for the noun *étudiant* ($p = 0.055$). As Figure 4 shows, we can observe some differences in that the overall judgements for the nouns *chanteur*, *étudiant* and *policier* are lower than for the noun *recteur*. When comparing both suffix change class B nouns *chanteur* and *recteur* to the affixation nouns *étudiant* and *policier*, we cannot observe a clear difference between these two types. Rather, the suffix change noun *chanteur* seems to pattern with both affixation nouns *étudiant* and *policier*, whereas the other suffix change noun *recteur* behaves somewhat differently.

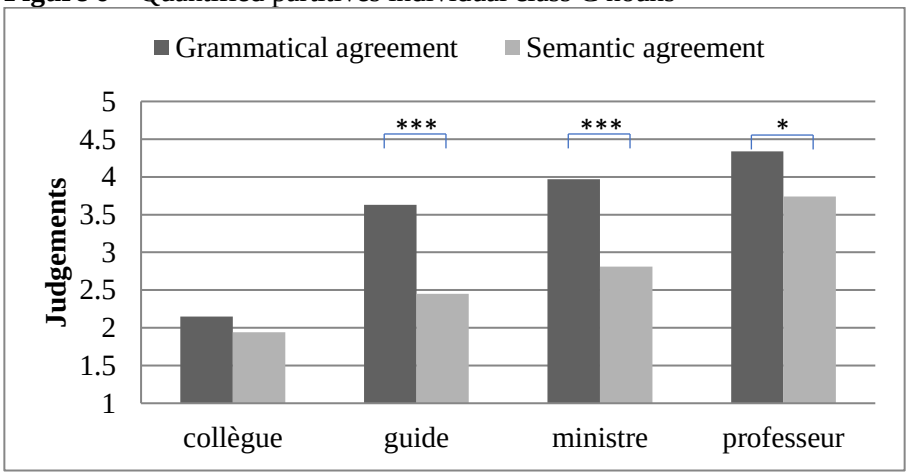
Figure 5 – Superlative partitives individual class B nouns



As for the superlative partitives, Figure 5 shows that semantic agreement is judged to be more acceptable than grammatical agreement with the nouns *étudiant* ($p = 0.082$) and *chanteur* ($p = 0.145$), and to a lesser extent also with *policier* ($p = 0.383$), although the differences are not significant. For the noun *recteur* ($p = 0.727$), there seems to be only a very small difference in judgement between the sentences with grammatical and semantic agreement. Again, we do not see differences between the two types of class B nouns. It is again the suffix change noun *recteur* that behaves differently from the other suffix change noun *chanteur*, which in turn appears to pattern with both affixation nouns *étudiant* and *policier*. Besides, note that the overall judgements for the noun *chanteur* are quite low compared to the other three class B nouns.

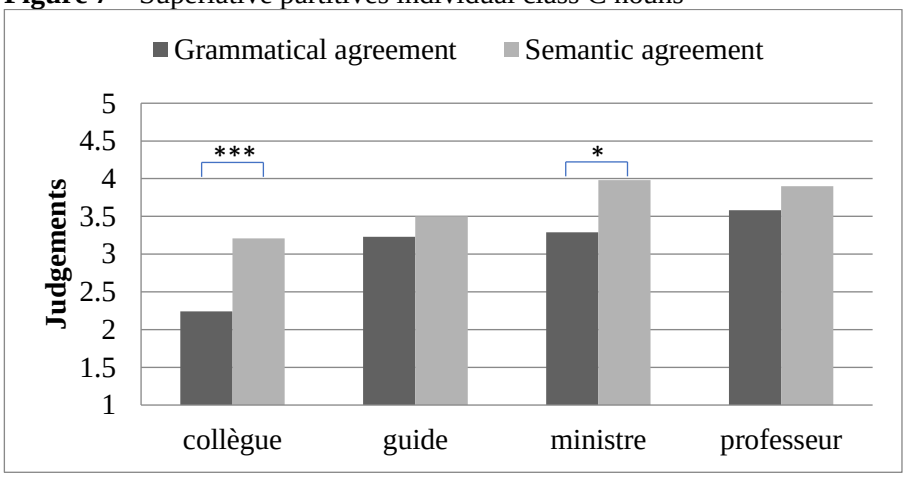
The results for the individual class C nouns are visualised in Figure 6 for the quantified and in Figure 7 for the superlative partitives.

Figure 6 – Quantified partitives individual class C nouns



As we can see from Figure 6, the noun *collègue* falls apart, since both the sentences with grammatical and semantic agreement are judged to be rather unacceptable, whereas for the other class C nouns, at least the sentences with grammatical agreement are accepted by the participants. This pattern is confirmed by the fact that the differences in judgement between the sentences with grammatical and semantic agreement are significant with the nouns *professeur* ($p = 0.019$), *guide* ($p < 0.001$) and *ministre* ($p < 0.001$), but not with the noun *collègue* ($p = 0.353$). Furthermore, for the noun *professeur*, the sentence with semantic agreement is judged to be quite acceptable too; to a lesser extent this also holds for the noun *ministre*.

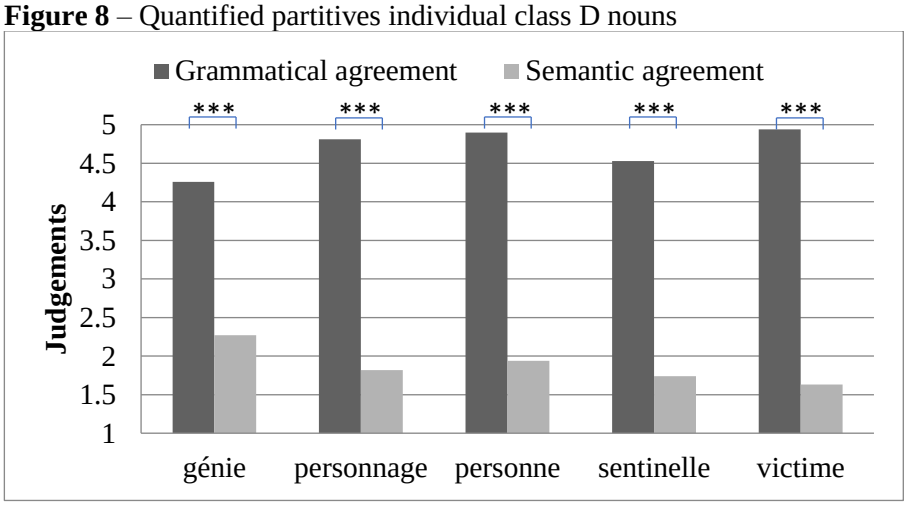
Figure 7 – Superlative partitives individual class C nouns



As Figure 7 shows, for all class C nouns, semantic agreement is judged to be more acceptable than grammatical agreement in superlative partitives, although the differences are only significant with the nouns *ministre* (p = 0.018) and *collègue* ($p < 0.001$), but not with the nouns *professeur* (p = 0.247) and *guide* (p = 0.337). Again, the noun *collègue* behaves differently, since for this noun the sentence with grammatical agreement is judged to be rather unacceptable, whereas this is not the case with the other class C nouns.

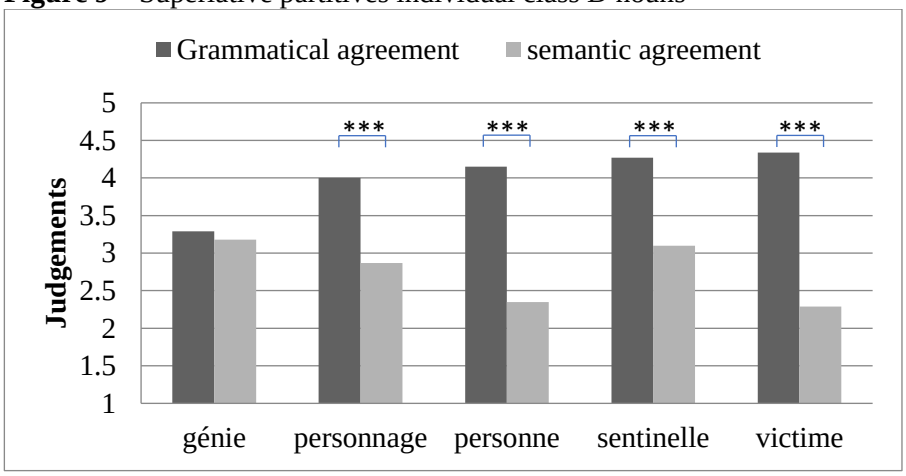
Finally, the results for the class D nouns are presented in Figure 8 for quantified partitives and in Figure 9 for superlative partitives.

Figure 8 – Quantified partitives individual class D nouns



In quantified partitives (Figure 8), with all class D nouns the sentences with grammatical agreement are judged to be significantly more acceptable than the sentences with semantic agreement ($p < 0.001$ for all nouns).

Figure 9 – Superlative partitives individual class D nouns



With all class D nouns, grammatical agreement is judged to be more acceptable than semantic agreement in superlative partitives (Figure 9). However, for the noun *génie* the difference between the sentences with semantic and those with grammatical agreement is not significant ($p = 0.710$). This contrasts with the nouns *personne* ($p < 0.001$), *victime* ($p < 0.001$), *sentinelle* ($p < 0.001$) and *personnage* ($p < 0.001$). The overall judgements of the sentences with the noun *génie* are lower too. For *sentinelle*, as opposed to both other feminine class D nouns *personne* and *victime*, the sentence with semantic agreement appears to be more acceptable, which is comparable to the judgements on the masculine class D nouns *génie* and *personnage*.

A final point to mention is the variation across participants that follows from the results. Whereas some participants judge partitive constructions to be unacceptable either with grammatical or semantic agreement, other participants almost always consider these constructions to be acceptable, irrespective of semantic or grammatical agreement. Likewise, some participants judge sentences with semantic agreement acceptable with some nouns of a noun class, whilst others accept them with all nouns of the same class. I included two metalinguistic factors, sex and age, to investigate whether these factors influence the acceptability rates of individual participants. Using an Independent Samples T-Test in SPSS, I established that there are no significant differences between males and females on the one hand ($p =$

0.726), and between the five age groups (see Table 2) of participants on the other hand (p = 0.696). I therefore conclude that sex and age do not seem to influence the acceptability rates, answering research question (iv). I will discuss an alternative explanation for the participant variation in section 3.4.3.

3.4 Discussion

The goal of the present study was to further explore gender agreement in partitive constructions in French, building on Sleeman & Ihsane (2016), who investigated this phenomenon based on a limited number of informants' judgements and sentences, and proposed a theoretical analysis to account for their observations. I carried out a Grammaticality Judgement Task with native speakers of French to answer the following questions:

i. Do superlative and quantified partitives differ significantly with respect to the acceptance of semantic agreement, as Sleeman & Ihsane's (2016) results suggest?
ii. Do classes B, C, and D nouns differ significantly with respect to the acceptance of semantic agreement in superlative partitives?
iii. Is there a significant difference in the acceptability of semantic agreement between individual nouns?
iv. Is there a significant difference in the acceptance of semantic agreement between younger and older, and between female and male participants?

In section 3.1.3, I formulated some hypotheses for the first two research questions, based on Sleeman & Ihsane's (2016) study:

a. In superlative partitives, semantic agreement is judged to be significantly more acceptable than in quantified partitives.
b. In superlative partitives, the acceptance of semantic agreement depends on the type of animate noun: semantic agreement is judged significantly more acceptable with class C and then with class B nouns, whereas grammatical agreement is judged significantly more acceptable with class D nouns.

In the next section, I address research questions (i-ii) and compare the results with Sleeman & Ihsane's (2016) findings to check whether my hypotheses are borne out. Subsequently, I further discuss the results with respect to noun (class) and speaker variation and return to research questions (iii-iv) as well.

3.4.1 Comparing the results to Sleeman & Ihsane's (2016) findings

Table 4 summarises and compares the main findings of the present study to those of Sleeman & Ihsane (2016), separated for the different conditions (partitive type, noun class, and agreement type):

Table 4 – Comparison of results

Partitive type	**Noun class**	**Agreement type**	**Sleeman & Ihsane (2016)**	**Present study**
Quantified partitives	class B	grammatical	not tested	accepted
		semantic	not accepted	not accepted
	class C	grammatical	not tested	accepted
		semantic	not accepted	not accepted
	class D	grammatical	not tested	accepted
		semantic	not tested	not accepted
Superlative partitives	class B	grammatical	not tested	in general accepted
		semantic	in general accepted (participant variation)	accepted (but less than with class C)
	class C	grammatical	not tested	in general accepted
		semantic	accepted	accepted
	class D	grammatical	not tested	accepted
		semantic	not tested	not accepted

Sleeman & Ihsane (2016) did not investigate the acceptance of grammatical agreement in partitives. They also did not test sentences with class D nouns because they expected gender mismatches not to occur with these nouns. The results presented here confirm this assumption, since the participants in my study judged the sentences with grammatical agreement to be more acceptable than those with semantic agreement for class D nouns.

With respect to research questions (i-ii), I can conclude the following: indeed, quantified partitives readily allow grammatical agreement, which is judged to be significantly more acceptable than semantic agreement. By contrast, the acceptance of semantic agreement in superlative partitives depends on noun class. Whereas with class C nouns, the sentences with semantic agreement are judged to be significantly more acceptable than those with grammatical agreement, the class D nouns show the opposite pattern. With class B nouns, superlative partitives seem to be more acceptable with semantic than with grammatical agreement, but this difference is not significant. This corresponds to the observation that the participants judge

semantic agreement to be significantly more acceptable with class C nouns than with class B nouns. I can conclude that my hypotheses on the first two research questions are borne out. The results of the study are largely compatible with those of Sleeman & Ihsane (2016), but they also give further insights into gender agreement in partitives.

Considering the theoretical analysis of gender agreement in partitives, I can conclude that the findings do not invalidate Sleeman & Ihsane's (2016) analysis. The difference in acceptability of semantic agreement in quantified and superlative partitives could be explained by adopting their claim that these partitive types are structurally different. The structure of superlative partitives contains a second Gender Phrase in the outer DP, allowing for later insertion of semantic gender, contrary to quantified partitives, whose structure only contains a Gender Phrase in the inner DP. Next, their analysis could also be adopted to account for the differences between the noun classes. Whereas grammatical gender is marked in the lexicon on class D nouns, it is unmarked for class C nouns, in the latter case giving the opportunity to let semantic gender play a role. If a speaker accepts semantic agreement with a class B noun, this noun is unmarked for grammatical gender in the speaker's mental lexicon, as is the case for class C nouns; if, on the contrary, a speaker does not accept semantic agreement with a class B or a class C noun, this noun is marked for grammatical gender, just like class D nouns.

It should be noted, however, that other accounts of gender agreement are also compatible with the results presented here, just as Sleeman & Ihsane's (2016) account. Indeed, I will develop an alternative account of gender agreement in partitive constructions in the final part of this dissertation (Chapters 6 and 7), taking into account data from German as well, which I introduce in Chapter 4.

3.4.2 Noun (class) differences

Let us now take a closer look at the noun class distinctions, as well as at individual noun differences, which were addressed by research questions (ii) and (iii). I focus on the superlative partitives here, as speakers only accepted semantic agreement in these constructions. On the one hand, the results show a contrast between class B and class C nouns, for which semantic agreement is accepted, and class D nouns, which display a preference for grammatical agreement. On the other hand, we observe a difference between classes B and C too, in that semantic agreement is judged significantly more acceptable with class C nouns than with class B nouns.

A possible explanation for the difference between class B and class C nouns might be the fact that for class B nouns, there exist two distinct forms for the feminine and the masculine (e.g. *la rectrice* 'the.F rector.F' – *le recteur* 'the.M rector.M'), which is not the case for class C nouns (e.g. *la/le ministre* 'the.F/the.M minister'). The differences between class B and class C nouns could then be related to morphology. But how? Recall that according to Sleeman & Ihsane's (2016) analysis, the noun of the outer DP is a copy of the noun of the inner DP. Example (31) shows a partitive construction with the class B set noun *étudiants* in the default masculine plural form. The unpronounced copy of this noun ~~*étudiant*~~ is also in the default masculine (singular) form:

(31) *La plus jeune* ~~*étudiant*~~ *des ancien-s étudiant-s.*
the.F SUP young student.M of.the.PL former.M-PL student.M-PL
'The youngest of the former students.'

In (31), the covert copy of the class B noun *étudiant* is morphologically masculine, which results in a clash with the feminine determiner *la*. With a class C noun, instead, the noun's morphological form does not convey any gender information, as illustrated with the noun *ministre* 'minister' in (32):

(32) *La plus jeune* ~~*ministre*~~ *des ancien-s ministre-s.*
the.F SUP young minister of.the.PL former.M-PL minister-PL
'The youngest of the former ministers.'

In (32), there is no clash between the unpronounced copy ~~*ministre*~~ and the feminine determiner *la*. This might explain why gender mismatches are less accepted with class B nouns than with class C nouns.

Within the group of class B nouns, I did not observe any clear differences between the suffix alternation (*chanteur* and *recteur*) and the affixation (*étudiant* and *policier*) nouns. For the class B noun *recteur*, the results of the superlative partitives show only a very small difference in acceptability rates between the sentence with semantic and the one with grammatical agreement. For all the other class B (and class C) nouns, the differences in acceptability rates between the sentences with semantic and grammatical agreement are more prominent. Probably, the title of *recteur* is seen as generally attributed to men. Accordingly, the masculine form *recteur* would thus be more frequent than the feminine form *rectrice*, which could also

be related to the number of female rectors. Within class C, only the noun *collègue* constitutes an exception to the pattern because the sentences with this noun are judged less acceptable overall than those with the other class C nouns. I do not have an explanation for this unexpected result yet, although it might be the case that the participants rejected the sentences with *collègue* for other reasons than agreement issues.

The second noun class contrast, the distinct behaviour of class D nouns as opposed to class B and class C nouns, may partly be explained by the fact that class D constitutes a closed, rather limited set of nouns. These nouns could be considered an exception to the usual situation for human nouns, according to which grammatical gender and biological sex match (cf. Cerquiglini, 2018). Moreover, the number of class D nouns has decreased over time, since many (masculine) profession nouns that traditionally belonged to class D, such as *professeur* 'teacher' or *juge* 'judge', have changed to classes B or C under the process of feminisation. Indeed, as I showed in Chapter 2, the number of feminine noun forms included in the French dictionary *Le Petit Robert* has considerably increased in the last decades. The possibility of such a change is further supported by the comparable, originally masculine fixed-gender noun *témoin* 'witness', of which the feminine form *la témoin* 'the.F witness' is indicated in a recent version (2016) of the *Petit Robert*.

In the group of class D nouns, the masculine noun *génie* 'genius' shows slightly different acceptability rates in superlative partitives as opposed to the other nouns. For the noun *génie*, the difference in judgement between the superlative partitives with grammatical and semantic agreement is smaller than for the other class D nouns, which indicates a greater likelihood of semantic agreement. This may be an indication that the noun *génie*, traditionally a masculine fixed-gender noun, could become a class C noun in the future, allowing for both a masculine and a feminine use. Thus, *génie* could be in the course of a noun class shift, as explained above. Instead, the other masculine class D noun, *personnage* 'character', seems to resist such a change, which may be explained by its morphological form, similarly to what I proposed for the contrast between classes B and C. *Personnage* contains the suffix *-age*, which usually derives masculine nouns. Finally, for the feminine class D nouns *personne* 'person' and *vcitime* 'victim', we could speculate about another explanation for the unacceptability of semantic agreement, related to semantics: the referents of the nouns *personne* and *victime* might be considered more patient-like, which could entail that speakers do not judge sex to be a highly relevant feature for these nouns. However, further investigation is required to confirm this assumption.

3.4.3 A note on variation

Compared to Sleeman & Ihsane's (2016) study, my test involved more different nouns for each of the noun classes and was completed by a larger number of participants. Accordingly, I observed a lot of participant variation in the results. Research question (iv) addressed two factors that could be responsible for this variation, age and sex.

However, I did not observe an influence of these factors on the acceptance of semantic agreement. Age and sex thus not seem to explain the variation present in the results. I think that the variation could be partially related to the way in which a specific noun is stored and classified in a person's lexicon, an explanation also suggested by Ihsane & Sleeman (2016), to account for the observation that gender mismatches with class B nouns are not accepted by all their informants. For one speaker, a specific noun could be marked with feminine grammatical gender in the lexicon, whereas for another speaker, this same noun might be unmarked for grammatical gender, thus resulting in different agreement situations. For the first speaker, the entire sentence would have to show agreement with the noun's feminine grammatical gender; for the second speaker, in the absence of a grammatical gender value on the noun, semantic gender can play a role in agreement. I will come back to this point in Chapter 5, in relation to a speaker's attitude towards feminisation, as well as in Chapter 7, when further discussing the theoretical explanation of gender agreement in partitives.

3.5 Conclusion

The goal of this chapter was to provide a more thorough investigation of gender agreement in partitive constructions in French, building on an explorative study by Sleeman & Ihsane (2016). Sleeman & Ihsane (2016) concluded that the acceptability of semantic gender agreement in French depends on the type of partitive construction and on the type of noun. In quantified partitives, semantic agreement is not accepted. In superlative partitives, semantic agreement is accepted with class B and even more with class C nouns, but not with class D nouns. By means of a grammaticality judgement task, I verified these patterns on a larger scale. In general, the results of the present study were compatible with the patterns reported by Sleeman & Ihsane (2016). Yet, they displayed a lot of variation on different levels. I observed variation between individual nouns within the same noun class and across participants. I suggested that both types of variation could be

accounted for by assuming differences in the encoding of grammatical gender on specific nouns in the lexicon of a language user. However, more research is needed to further explore potential sources of such variation, which may provide more insight into the mechanisms behind gender agreement in situations that present a competition between grammatical and semantic agreement. In the next chapter, I take a first step towards further research and investigate gender agreement in partitive constructions in German. Although belonging to a different language family (Germanic instead of Romance), German partitives present the same challenges as their French counterparts.

Chapter 4

Gender agreement in partitives in German

In Chapter 3, I investigated gender agreement in French partitive constructions. Based on the results of a grammaticality judgement task, I determined that the preference for grammatical or semantic agreement depends on different factors. In the present chapter, I turn to German, the other language under scrutiny in this dissertation.

Similarly to French, German partitives involving human nouns can be challenging with respect to gender agreement. When the set noun refers to a mixed group of persons, this noun takes the masculine form. If we now select a female from the group, in principle, we face two options for gender agreement on the subset: (1a) grammatical agreement with the set noun's gender, which is masculine, or (1b) semantic agreement with the referent's biological sex, resulting in feminine gender on the superlative:[1]

(1) a. *Der klein-ste der intelligent-en Student-en*
the.M small-SUP the.GEN.PL intelligent-PL student.M-PL
ist Marie.
is Marie

b. *Die klein-ste der intelligent-en Student-en*
the.F small-SUP the.GEN.PL intelligent-PL student.M-PL
ist Marie.
is Marie
'The smallest of the intelligent students is Marie.'

In (1a), there is no gender mismatch between the masculine set noun *Studenten* and the masculine superlative subset *der kleinste*, but the use of a masculine form to refer to a female might be considered infelicitous if a feminine alternative exists, as in (1b). Yet, this feminine alternative (1b) leads to a gender mismatch between the masculine noun *Studenten* and the feminine superlative *die kleinste*.

[1] Recall from Chapter 1 (section 1.1.2) that I do not use the terms *grammatical agreement* and *semantic agreement* in a technical sense. I use *grammatical agreement* merely to indicate that two elements share the same gender value; the term *semantic agreement* is used when the gender values of two elements present a mismatch.

To the best of my knowledge, gender agreement in partitive constructions has not been investigated for German yet, although several studies have looked into semantic agreement in other contexts (e.g. Audring, 2009; Braun & Haig, 2010; Kraaikamp, 2017).[2] The present chapter aims to fill this gap and answers the third research question of this dissertation:

III. Do speakers of German prefer semantic or grammatical agreement in partitive constructions; what influences this choice?

In the previous chapter, I observed that gender agreement in French partitives is influenced by two key factors: (i) the type of partitive construction and (ii) the type of animate noun. I carry out a grammaticality judgment task with native speakers of German in order to find out whether these two factors influence agreement in German partitives too.

In section 4.1, I start with an overview of the German gender system. In a next step, I sketch the theoretically possible agreement patterns for German partitives, based on the findings from French reported in Chapter 3. Ultimately, this discussion motivates the research questions the present study will seek to answer. I elaborate on the methodology of the grammaticality judgement task in section 4.2 and present the results in section 4.3. In section 4.4, I further discuss my findings and present some conclusions in section 4.5. I will not compare the German results to the French data; this will be postponed to Chapter 5.

4.1 Gender and agreement in German

German distinguishes three different genders: masculine, feminine, and neuter. All German nouns are assigned a gender value, which is visible through agreement expressed on functional elements, such as determiners, or modifiers, such as attributive adjectives. For inanimate nouns, gender assignment is often arbitrary (2a-c), although in many cases a noun's gender can be predicted from its ending, especially with certain derivational affixes (cf. Köpcke & Zubin, 1996). For instance, nouns that end in *-ung* are always feminine (2d), whereas diminutives that end in *-chen* are always neuter (2e):

[2] I investigated gender agreement in German partitives in my Research MA thesis (Westveer, 2016), but, as I mentioned in Chapter 1, I will not take the results of this exploratory study into account in this dissertation.

(2) a. *der Baum* the.M tree
b. *die Uhr* the.F clock
c. *das Buch* the.N book
d. *die Regier-ung* the.F government-F
e. *das Bäum-chen* the.N tree-DIM.N

For human nouns, lexical gender usually corresponds to the biological sex of the referent: nouns that refer to males are masculine and those that refer to females are feminine, as shown in (3):

(3) a. *der Bruder* – *die Schwester*
the.M brother.M – the.F sister.F
b. *der Lehrer* – *die Lehrer-in*
the.M teacher.M – the.F teacher-F
c. *der Studierende* – *die Studierende*
the.M student – the.F student

The noun *Lehrerin* (3b) illustrates the fact that in German, many human nouns allow derivation of a feminine form by means of the suffix *-in*.[3]

In general, the masculine nouns are used to refer to males and the feminine nouns to females. However, the masculine form may also function as a generic, capable of referring to both females and males.[4] In addition, some studies (e.g. Cacouault-Bitaud, 2001; Horvath et al., 2016; Merkel et al., 2012) have shown that speakers sometimes prefer the use of a masculine noun to refer to a female, even when a feminine equivalent noun exists. The reason for this is that speakers, particularly females, fear a lack of prestige if they use a feminine instead of a masculine noun. Thus, social factors can lead to a mismatch between a noun's lexical gender and its referent's biological sex.

A limited number of human nouns in German does systematically lack a correspondence between lexical gender and biological sex. Their lexical gender is not semantically motivated, as for inanimate nouns. These nouns are usually called *epicenes* and can refer to either females or males alike,

[3] See Chapter 2, section 2.2.2 for more details on noun feminisation in German.

[4] Multiple (psycholinguistic) studies investigated the generic status of the masculine and showed that language users do not perceive the generic masculine as gender neutral: generic masculine forms do not address females and males alike, but generally trigger male referents (cf. Braun et al., 1998; Ulrich et al., 2004; Brauer & Landry, 2008; Gygax et al., 2012; Misersky et al., 2013). To avoid the use of the generic masculine, gender neutral forms (e.g. *die Studierenden* 'the.PL student.PL') or double forms (e.g. *die StudentInnen* 'the.PL student.F.M.PL' or *die Studentinnen und Studenten* 'the.PL student.F.PL and student.M.PL') can be used (cf. Stahlberg & Sczesny, 2001; Scott, 2006; Blake & Klimmt, 2010).

irrespective of their lexical gender, which can be masculine (4a), feminine (4b), or neuter (4c):

(4) a. *der Star* the.M celebrity
b. *die Person* the.F person
c. *das Opfer* the.N victim

As I will show in this chapter, the difference between epicene and non-epicene nouns seems relevant for agreement in partitive constructions.

Gender agreement in German surfaces on several types of elements, such as determiners, attributive adjectives, or personal pronouns. On determiners and attributive adjectives, grammatical agreement is obligatory, as shown in (5) for nominative case:[5]

(5) a. *ein* *klug-er* *Lehrer*
a.M smart-M teacher.M
b. *ein-e* *klug-e* *Lehrer-in*
a-F smart-F teacher-F
c. *ein* *klug-es* *Kind*
a.N smart-N child.N

Definite determiners and accompanying adjectives (e.g. *der kluge* 'the.M smart.M') display a partially different agreement paradigm than the indefinite determiner in (5). Other functional elements, like demonstrative or possessive pronouns, follow the agreement paradigms of either definite or indefinite determiners. Table 1 presents the full agreement paradigm for the German definite determiner, including case and number values. Note that there is considerable syncretism across case distinctions, especially for masculine and neuter gender (cf. Duden, 2005):

[5] German distinguishes four different cases: nominative, genitive, dative, and accusative, which mark different functions in the clause (cf. Duden, 2005).

Table 1 – Agreement paradigm of the definite determiner

	sg.			**pl.**
	M	**F**	**N**	
nom.	*der kluge Lehrer*	*die kluge Lehrerin*	*das kluge Kind*	*die klugen Lehrer*
gen.	*des klugen Lehrers*	*der klugen Lehrerin*	*des klugen Kindes*	*der klugen Lehrer*
dat.	*dem klugen Lehrer*	*der klugen Lehrerin*	*dem klugen Kind*	*den klugen Lehrern*
acc.	*den klugen Lehrer*	*die kluge Lehrerin*	*das kluge Kind*	*die klugen Lehrer*
	'the smart male teacher'	'the smart female teacher'	'the smart child'	'the smart (male) teachers'

As Table 1 shows, gender distinctions are limited to the singular, since the plural only displays one agreement pattern for all nouns, irrespective of a noun's grammatical gender. The examples in (6-7) illustrate this point:

(6) a. *Die* *fleißig-en* *Student-en* *lesen* *die* *Bücher.*
the.PL studious-PL student.M-PL read the.PL book.PL
b. *Die* *fleißig-en* *Student-inn-en* *lesen* *die* *Bücher.*
the.PL studious-PL student-F-PL read the.PL book.PL
'The studious students read the books.'

(7) *Die* *fleißig-en* *Kind-er* *lesen* *die* *Bücher.*
the.PL studious-PL child-PL read the.PL book.PL
'The studious children read the books.'

In (6a), the masculine plural noun *Studenten* is used, whereas (6b) contains the feminine plural noun *Studentinnen*. Still, agreement on the attributive adjective *fleißigen*, as well as on the definite determiner *die* is identical in both examples. The only visible difference between (6a) and (6b) concerns the morphological form of the noun, which contains the feminine suffix *-innen* in (6b).

Such visible and/or audible cues are even absent from the example in (7), involving the neuter plural noun *Kinder*. As in (6a-b), the attributive adjective and the definite determiner only mark plural agreement. Since the noun *Kinder* does not show any morphological gender marking, the fact that this noun is neuter can only be retrieved from lexical storage, that is, speakers of German know that the (singular) noun *Kind* is neuter. The absence of gender differences in the plural might affect agreement in partitives too, as I

will explain in section 4.1.2. First, I turn to agreement on pronouns, which may not only display grammatical, but also semantic agreement.

4.1.1 Semantic agreement in German

So far, the discussion on agreement in German only focussed on cases of grammatical agreement. That is, the agreement target matches the lexical gender of the agreement controller, the noun. However, German can exhibit semantic agreement in some situations too (cf. Corbett, 1991). For instance, this applies to personal pronouns that refer to a neuter human noun, such as *Mädchen* 'girl' in (8) (cf. Audring, 2009):

(8) *Ich sehe ein Mäd-chen. Es/Sie liest ein Buch.*
I see a.N girl-DIM.N 3SG.N/3SG.F reads a.N book.N
'I see a girl. She reads a book.'

Although the diminutive *Mädchen* in (8) is neuter and therefore can be referred to by the neuter pronoun *es*, showing grammatical agreement, it is also possible to use the feminine pronoun *sie* because the referent is a female. This is an instance of semantic agreement, which is particularly common with neuter nouns such as *Mädchen* or *Kind* 'child'. These nouns are often called *hybrid nouns* (cf. Corbett, 1991), since their lexical gender does not systematically correspond to referential gender, that is, the sex of their referents. Audring (2009) reports on the results of a corpus study on German, carried out in Strauss (2007). The findings of this study suggest that speakers of German use semantic agreement on pronouns referring to neuter human nouns (e.g. *Kind* 'child') in about 55% of the cases investigated, albeit with a lot of variation. Similarly, a study by Braun & Haig (2010) shows that with the neuter noun *Mädchen*, speakers of German use semantic agreement on related personal pronouns in about half of the cases.

Corbett (1991) argues that the likelihood of semantic agreement depends on the specific type of agreement target. He proposes the Agreement Hierarchy in (9) to capture the differences between pronouns, on the one hand, and determiners and attributive adjectives, on the other hand (cf. Corbett, 1979):

(9) attributive – predicate – relative pronoun – personal pronoun

The more to the right an element is situated, the more likely it is to show semantic agreement, implying, for instance, that semantic agreement is

expected to occur more often on personal pronouns than on attributive adjectives.

Several studies investigated the use and acceptability of semantic agreement in different Germanic languages, mainly focussing on pronouns (e.g. Siemund, 2008, on English; Audring, 2009, on Dutch; Braun & Haig, 2010, on German; Kraaikamp, 2017; de Vogelaer et al., 2020, on Dutch and German). The examples in (10) below, taken from Audring (2009: 194), show that German is more conservative than Dutch. In both languages, the noun designating 'girl' — *das Mädchen* in German (10a), *het meisje* in Dutch (10b) — is neuter:

(10)	a.	*Das*	*Mäd-chen*	*fuhr*	*auf*	*seinem*	*Fahrrad.*
		the.N	girl-DIM.N	rode	on	POSS.N	bike
	b.	**Het*	*meisje*	*reed*	*op*	*zijn*	*fiets.*
		the.N	girl.DIM.N	rode	on	POSS.N	bike
		'The girl rode on her bike.'					

In German (10a), the possessive pronoun *seinem* referring back to the noun *Mädchen* may take the neuter form in correspondence with the noun's grammatical gender. Instead, the use of the neuter possessive *zijn* in Dutch (10b) is considered ungrammatical by native speakers, which indicates that semantics more strongly influences agreement in Dutch than in German.

As I already illustrated at the start of this chapter with the examples in (1), partitive constructions could, theoretically speaking, also give rise to semantic agreement. In the next section, I present the different potential agreement situations that may arise in German partitives with human nouns. Since none of the existing studies on semantic agreement in German discussed partitive constructions, I establish the theoretical possibilities based on the results of my study on French, which I presented in Chapter 3.

4.1.2 Gender agreement in partitive constructions

Standard grammars of German (e.g. Duden, 2005) do not seem to discuss whether semantic agreement could be adopted in partitive constructions. The examples in (1) (repeated here in 11) show that, in principle, we could either have grammatical (11a) or semantic (11b) agreement on the superlative if the subset's referent is a female:

(11) a. *Der* *klein-ste* *der* *intelligent-en* *Student-en*
the.M small-SUP the.GEN.PL intelligent-PL student.M-PL
ist *Marie.*
is Marie
b. *Die* *klein-ste* *der* *intelligent-en* *Student-en*
the.F small-SUP the.GEN.PL intelligent-PL student.M-PL
ist *Marie.*
is Marie
'The smallest of the intelligent students is Marie.'

The example in (11) involves a superlative partitive construction, in which a superlative refers to the subset.

In the study on French, I did not only investigate superlative but also quantified partitives, in which a quantifier refers to the subset, like the numeral *one* in *one of the students*.[6] Quantified partitives exist in German too and present the same potential choice between either grammatical (12a) or semantic (12b) agreement as the superlative ones:

(12) a. *Ein-er* *der* *neu-en* *Student-en* *ist Marie.*
one-M the.GEN.PL new-PL student.M-PL is Marie
b. *Ein-e* *der* *neu-en* *Student-en* *ist Marie.*
one-F the.GEN.PL new-PL student.M-PL is Marie.
'One of the new students is Marie.'

As I showed in Chapter 3, different types of nouns may give rise to a difference in the acceptability of semantic agreement in partitives in French. For German, it is possible to distinguish the same four classes of animate nouns as I did for French. Recall that this noun classification depends on the form-meaning mapping of the respective nouns. Table 2 presents the noun classification for German:

[6] Other quantifiers are possible as subset in a quantified partitive too, such as *viele* 'many' or *einige* 'some', as well as other cardinal numerals (e.g. *zwei* 'two', etc.). With such quantifiers, however, the subset is in the plural, which eliminates any gender distinctions in German (see examples 6-7). Therefore, I only investigate quantified partitives with the numeral *ein* 'one'.

Table 2 – Classification of German animate nouns

Class A	**different lexemes**: two unrelated forms for masculine and feminine	*der Vater* 'the.M father.M' *die Mutter* 'the.F mother.F'
Class B	**one lexeme, two word forms**: masculine and feminine forms derived from the same lexeme by affixation	*der Student* 'the.M student.M' *die Studentin* 'the.F student.F'
Class C	**one lexeme, one word form, two genders**: one stem for female and male referents	*der Studierende* 'the.M student' *die Studierende* 'the.F student'
Class D	**one lexeme, one word form, one gender**: one stem for female and male referents (also called *epicene forms*)	*der Mensch* 'the.M human.being.M' *die Person* 'the.F person.F' *das Kind* 'the.N child.N'

Nouns of classes A and B present separate forms for female and male referents, the difference being that class B contains morphologically related feminine and masculine forms derived from the same lexeme, whereas the feminine and masculine forms of class A nouns are only related on a conceptual level.[7] Formally, masculine and feminine forms of class A nouns can be considered distinct lexemes. Nouns of classes C and D have only one word form for the masculine and the feminine. Class C nouns can combine with determiners and attributive adjectives showing either feminine or masculine agreement, referring to a female or a male respectively. Instead, class D nouns can only trigger agreement with one gender — masculine, feminine, or neuter — which is fixed for each of the nouns and does not depend on the biological sex of the referent.

The distribution of nouns over the distinct noun classes in Table 2 is not static and nouns may change class. For instance, nouns that used to have a

[7] For French, as I showed in Chapter 3 (section 3.1.1), class B also consists of nouns that derive their feminine form by means of suffix alternation (e.g. *chanteur – chanteuse* 'singer.M/.F'). Although examples of suffix alternation exist in German (e.g. *Friseur/Friseuse* 'hairdresser.M/.F), they are very rare. The example at case here, *Friseur*, has been borrowed from French, together with its feminine form *Friseuse*. However, in modern German, the common feminine form of *Friseur* is now *Friseurin*, following the standard feminisation strategy. The original feminine *Friseuse* still exists, but is classified as outdated according to the 2011 *Duden Universalwörterbuch*.

masculine form only and, therefore, belonged to class D, like *Minister* 'minister', now have a feminine form (*Ministerin* 'female minister'). This relates to changes in society, as even traditionally male dominated professions became open to women, triggering the need for nouns referring to female professionals, as for example *Ministerin*. In Chapter 2, I presented the results of a dictionary study, in which I investigated the presence of the feminine forms of a number of profession nouns in editions from different time periods of the German monolingual *Duden Universalwörterbuch*. This investigation showed that the number of nouns for which a feminine form was listed in the dictionary has considerably grown between 1983 and 2011, following the growing awareness of gender equal language. As a consequence, many occupational nouns that originally only had one form and therefore belonged to class D, changed into class B nouns because of the derivation of a feminine form next to the existing masculine one.

Based on the data from French presented in Chapter 3, we may expect noun class differences in the acceptability of semantic agreement in German too, following up on the noun classification established in Table 2. As I did for French, I exclude class A nouns (e.g. *der Bruder* 'the.M brother.M – *die Schwester* 'the.F sister.F') from the present investigation because mismatches with class A nouns are unlikely for conceptual reasons. A set denoted by means of a plural class A noun cannot refer to a mixed group. For instance, a group of persons you refer to as *Brüder* 'brothers' can never contain a sister, nor vice versa.[8]

For the other noun classes, the situation is slightly different from French because German does not exhibit gender differences in the plural, as I showed in the previous section. Since partitive constructions involve a plural set noun, this means that the German set phrase does not express any gender agreement, contrary to what is the case for French. The examples in (13) illustrate this:

(13) a. *La plus jeune des nouveau-x étudiant-s.*
the.F SUP young of.the.PL new.M-PL student.M-PL
b. *Die jüng-ste der neu-en Student-en.*
the.F young-SUP the.GEN.PL new-PL student.M-PL
'The youngest of the new students.'

In the French example (13a), the set phrase clearly bears masculine gender, which is not only visible from the morphological form of the noun *étudiants*

[8] If one wants to refer to a mixed group of brothers and sisters, one would use the noun *Geschwister* 'siblings', which only exists in the plural.

'students', but also from the masculine agreement on the adjective *nouveaux* 'new'. In German (13b), agreement marking on the adjective *neuen* 'new' only indicates plurality, that is, a number feature. The gender of the set noun is only retrievable from its morphological form, as the suffix *-ent* derives masculine nouns. Consequently, the presence of a gender mismatch between set and subset in the examples in (13) is less salient in German than it is in French.

The absence of (visible/audible) gender agreement in the plural in German becomes particularly intriguing for class C nouns. Consider the examples in (14) with the class C noun *Studierende* 'student':

(14) a. *Der jüng-ste der neu-en Studierende-n ist*
the.M young-SUP the.GEN.PL new-PL student-PL is
Marie.
Marie

b. *Die jüng-ste der neu-en Studierende-n ist*
the.F young-SUP the.GEN.PL new-PL student-PL is
Marie.
Marie
'The youngest of the new students is Marie.'

In the set phrase, the adjective *neuen* 'new' and the set noun *Studierenden* 'students' itself do not convey any gender information.[9] As a consequence, in neither one of the examples in (14) can we identify a gender mismatch between set and subset. The only difference is that in (14a), a masculine superlative (*der jüngste*) is used to refer to a female, whereas the superlative is feminine (*die jüngste*) in (14b). Thus, gender mismatches in partitive constructions may only arise with class B and class D nouns in German, whereby only the morphological form of the set noun may give a speaker information about its grammatical gender.

Particularly interesting in German are the class D nouns, as they do not only comprise masculine and feminine, but also some neuter nouns, such as *Kind* 'child' and *Opfer* 'victim'. Masculine class D nouns, such as *Flüchtling* 'refugee', could give rise to feminine semantic agreement on a subset referring to a female (15b) next to masculine grammatical agreement (15a), just like the class B nouns (see examples 11-12):

[9] In fact, class C nouns, such as *Studierende* 'student', are often promoted as gender neutral forms, which can be used instead of double forms (such as *Student-inn-en* or *StudentInnen* (cf. Scott, 2006)) to avoid the use of the generic masculine.

(15) a. *Der jüng-ste der neu-en Flüchtling-e ist*
the.M young-SUP the.GEN.PL new-PL refugee.M-PL is
Marie.
Marie
b. *Die jüng-ste der neu-en Flüchtling-e ist*
the.F young-SUP the.GEN.PL new-PL refugee.M-PL is
Marie.
Marie
'The youngest of the new refugees is Marie.'

Feminine class D nouns like *Waise* 'orphan.F' could trigger masculine semantic agreement on a subset referring to a male, as shown in (16b), next to feminine grammatical agreement (16a):

(16) a. *Die jüng-ste der gerettet-en Waise-n ist*
the.F young-SUP the.GEN.PL rescued-PL orphan.F-PL is
Peter.
Peter
b. *Der jüng-ste der gerettet-en Waise-n ist*
the.M young-SUP the.GEN.PL rescued-PL orphan.F-PL is
Peter.
Peter
'The youngest of the rescued orphans is Peter.'

The neuter class D nouns, such as *Kind* 'child.N', could present both masculine (17b) and feminine (17c) semantic agreement, depending on whether the subset's referent is male or female. Neuter grammatical agreement could also apply (17a):

(17) a. *Das jüng-ste der Kind-er heißt Peter/Marie.*
the.N young-SUP the.GEN.PL child.N-PL is.called Peter/Marie
b. *Der jüng-ste der Kind-er heißt Peter.*
the.M young-SUP the.GEN.PL child.N-PL is.called Peter
c. *Die jüng-ste der Kind-er heißt Marie.*
the.F young-SUP the.GEN.PL child.N-PL is.called Marie
'The youngest of the children is called Peter/Marie.'

Although I almost exclusively presented examples with superlative partitives in this section, quantified partitives (see example 12) could theoretically present similar differences between the noun classes.

4.1.3 Research questions

In the previous section, I hypothesised that two factors may influence the acceptability of semantic agreement in German partitive constructions, the type of partitive construction and the type of animate noun, following up on the findings from French reported in Chapter 3. I want to determine whether these two factors indeed affect a speaker's preference for either grammatical or semantic agreement. To this end, I seek to answer four research questions, which I introduce in the remainder of this section.

The first question addresses the potential differences between quantified and superlative partitives:

i. Do we observe differences between quantified and superlative partitives in the acceptability of either grammatical or semantic agreement?

The second question relates to the different noun classes I established:

ii. Do we observe differences between different classes of animate nouns in the acceptability of either grammatical or semantic agreement?

I am specifically interested in agreement with noun classes B and D, as nouns of these classes may give rise to a gender mismatch in partitives. Although German class C nouns cannot give rise to such a mismatch, it is possible to use a masculine quantifier or superlative to refer to a female, as was illustrated in (14a). This resembles the cases of grammatical agreement with classes B and D, whereby the gender of the quantifier or the superlative does not match the sex of the referent. Therefore, class C nouns are included in the present study too, even though the focus will be on noun classes B and D.

The noun class distinctions I adopt may turn out to be too general, and individual nouns within a noun class may appear to behave differently with respect to the acceptability of semantic agreement, especially within class D, as this class contains masculine, feminine, and neuter nouns. Therefore, I also investigate the following:

iii. Is there a significant difference in the preference for either grammatical or semantic agreement between individual nouns?

Finally, I wonder whether the age and/or sex of a speaker might influence the acceptability of semantic agreement, as the literature on pronominal agreement in German suggests that these factors may play a role

(cf. Corbett, 1991; Braun & Haig, 2010). This motivates my final research question:

iv. Is there a significant difference in the acceptance of semantic agreement between younger and older, and between female and male participants?

In the next section, I discuss the methodology I use to answer these research questions.

4.2. Methodology

My main goal is to investigate whether native speakers of German accept grammatical and semantic gender agreement in partitive constructions. To this end, I created a linguistic questionnaire, which consisted of two parts: (i) a grammaticality judgement task on gender agreement in partitives; (ii) a gap filling and forced-choice task on feminisation in language. The questionnaire was created using Google forms and was distributed online.[10] The participants were not paid for participation. The questionnaire was first tested in a small-scale pilot study.

4.2.1 Participants

Between June 2018 and January 2019, 77 participants completed the questionnaire, of which three had to be excluded because they did not have German as their first language. The remaining 74 participants were all native speakers of German and were born and raised in Germany. As part of the experiments, the participants had to fill in a background questionnaire including questions about age, sex, native region, education and opinion on language change. Table 3 below gives details on the sex and age of the participants:

[10] The questionnaire was approved by the Ethical Committee of the Faculty of Humanities of the University of Amsterdam (file 2017-43). All participants consented to take part.

Table 3 – Participant information

Age	< 20	20-30	30-40	40-50	50-60	> 60	
	2	29	24	8	9	2	74
Sex	male	female					
	22	52					74

Please note that I do not have balanced sex and especially age groups, due to the online distribution of the test, which made it difficult to control for such factors.

4.2.2 Test design and procedure

As solely the results of the grammaticality judgement task are relevant for my research questions, I only discuss the design of this part of the questionnaire. I will briefly address the gap filling task in Chapter 5. The grammaticality judgement task was designed in a similar way as the task for French, which I presented in Chapter 3 (section 3.2). The task consisted of 80 sentences, that had to be graded on a five-point scale by the participants: 1 indicated a fully acceptable sentence (labelled as *komplett akzeptabler Satz*), whereas 5 denoted an unacceptable sentence (labelled as *komplett inakzeptabler Satz*), in accordance with the German grading system, under which 1 is the highest grade.

All test sentences were constructed according to the same model and featured a quantified or a superlative partitive, which functioned as subject of a predicative construction — either involving the verbs *sein* 'to be' or *heißen* 'to be called'. In all cases, the predicate was a personal name. An example is given in (18), involving a quantified partitive with the noun *Studenten* 'students':

(18) *Ein-er* *der* *neu-en* *Student-en* *ist Heinz.*
one-M the.GEN.PL new-PL student.M-PL is Heinz
'One of the new students is Heinz.'

All test sentences conformed to this pattern and exhibited the same word order (partitive, copula, predicate) to minimise interference of other factors known to affect agreement, such as linear distance between agreeing elements or word order (cf. Corbett, 1991; Audring, 2009).

The test sentences contained 13 different animate nouns of noun classes B, C, and D (see Table 2), as displayed in Table 4. These nouns were selected based on the results of the dictionary search presented in Chapter 2:

Table 4 – Nouns included in the task

Class B[11]	**Class C**	**Class D**
Beamte 'civil servant' *Lehrer* 'teacher' *Minister* 'minister' *Polizist* 'police officer' *Student* 'student'	*Studierende* 'student' *Vorgesetzte* 'superior'	*Flüchtling*.M 'refugee' *Star*.M 'celebrity' *Person*.F 'person' *Waise*.F 'orphan' *Kind*.N 'child' *Opfer*.N 'victim'

For class D, I included two masculine, two feminine, as well as two neuter nouns, to find out whether the different fixed genders of class D nouns influence the acceptability of semantic agreement in partitives. Since German class C nouns cannot give rise to a gender mismatch, I only included two of these nouns in the task

All nouns occurred at least four times in the task, in four different conditions: two times in a quantified partitive, once with grammatical and once with semantic agreement, and two times in a superlative partitive, again once with grammatical and once with semantic agreement. Table 5 illustrates the four test conditions:

Table 5 – Test conditions

	Quantified partitive	**Superlative partitive**
Grammatical agreement	*Einer*.M *der Studenten*.M *ist Sofie.*	*Der*.M *jüngste der Studenten*.M *ist Sofie.*
Semantic agreement	*Eine*.F *der Studenten*.F *ist Sofie.*	*Die*.F *jüngste der Studenten*.M *ist Sofie.*
	'One of the students is Sofie.'	'The youngest of the students is Sofie.'

In addition, for most of the nouns I included control sentences as well, in which both the group and the set are either in the masculine (19a) or in the feminine form (19b):

[11] In terms of nominal declension, the noun *Beamte* 'civil servant' corresponds to class C; its masculine form follows the declension scheme of the substantivized adjectives that belong to class C. Nevertheless, *Beamte* should be considered a class B noun because this noun can combine with the feminine suffix *-in* (cf. ten Cate et al., 2008).

(19) a. *Der* *jüng-ste* *der* *intelligent-en* *Student-en*
the.M young-SUP the.GEN.PL intelligent-PL student.M.PL
ist *Peter.*
is Peter
b. *Die* *jüng-ste* *der* *intelligent-en* *Student-inn-en*
the.F young-SUP the.GEN.PL intelligent-PL student-F-PL
ist *Marie.*
is Marie
'The youngest of the intelligent students is Peter/Marie.'

As I discussed in section 4.1.2, class C nouns do not present a similar gender mismatch in partitive constructions between set and subset as exemplified for the class B noun *Studenten* in (19). That is, plural class C nouns cannot show any visible cues concerning their gender. Therefore, the labels *grammatical* and *semantic agreement* do not fit class C nouns. For the sake of consistency, I nevertheless continue to use these terms in the context of the grammaticality judgement task. I use *grammatical agreement* to refer to a situation in which masculine agreement is used on the quantifier or superlative referring to a female. The expression *semantic agreement* indicates that the gender of the quantifier or superlative matches the sex of its referent.

During the test, the participants could only see one test sentences at a time. Crucially, the participants were not asked to compare test sentences, but had to judge each sentence individually. For all participants, the test sentences were presented in the same order. The distribution of the different conditions was randomised to assure that participants would never be presented sentences involving the same noun consecutively. This procedure was chosen to distract participants from the fact that I was interested in their preference for either grammatical or semantic agreement. More details on the distribution of the conditions within the test, as well as all test sentences can be found in Appendix C.

It should be mentioned that, similarly to my experiment on French, I decided not to include filler sentences in the task. Such addition would have significantly increased the time participants would spend to complete the already rather lengthy task. I am aware of the fact that this decision could affect the experiment in that participants became aware of the object of study. Nevertheless, I believe that the overall design of the questionnaire, consisting not only of the grammaticality judgement task, but also of a gap filling task, was sufficiently intricate to minimise this possibility.

4.2.3 Data analysis

After the participants completed the questionnaire, all test results were collected in a spreadsheet. For each test sentence, the average acceptability rates across participants were calculated. I statistically analysed the results in two ways. To find out whether the acceptability of either grammatical or semantic agreement is influenced by the factors partitive type and noun class, I ran a linear mixed-effects model in the R environment (R Development Core Team, 2018), using the lmer function from the package lmerTest (Kuznetsova et al., 2017). The results from this model answer research questions (i-ii). The acceptability rate of each test sentence, judged on a five-point scale, was the dependent variable. Participant was specified as a random factor. I included three fixed factors in the model, as well as interaction between them: (i) agreement type (grammatical or semantic agreement), (ii) partitive type (quantified or superlative partitive), and (iii) noun class (classes B, C, and D). For the ternary factor noun class, I specified orthogonal sum-to-zero contrasts: (i) class D nouns (coded as +2/3) were compared to class B and C nouns (both coded as -1/3), and (ii) class B nouns (coded as +1/2) were compared to class C nouns (coded as -1/2). I included the participant factors sex and age in the model to answer research question (iv). Finally, I performed additional T-tests in R to check for significant differences in acceptability rates between the sentence pairs with grammatical and semantic agreement, as well as for differences between individual nouns. This answers research question (iii).

4.3 Results

In this section, I present the results of the grammaticality judgement task. First, I look at the differences between the two partitive types, as well as between the three noun classes investigated, attempting to answer research questions (i-ii). In this way, I aim to establish whether the type of partitive construction and the type of animate noun influence agreement in partitives in German. Second, considering research question (iii), I compare the acceptability rates on the individual nouns within the three noun classes. In addition, I also check the influence of the participants' age and sex on their judgements, addressing research question (iv).

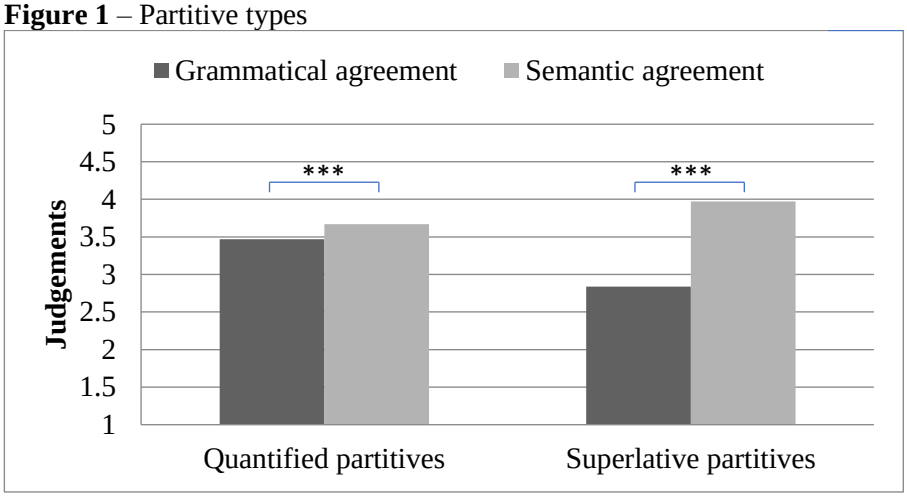
4.3.1 The influence of partitive type and noun class

I start by checking whether the acceptability of semantic agreement differs between quantified and superlative partitives. To this end, I look at the interaction between the type of partitive and the type of agreement within the linear mixed-effects model I ran in R. The outcome shows that there is an effect of partitive type (quantified or superlative) on the acceptability rates of both grammatical and semantic agreement, in that the participants judge the sentences with semantic agreement significantly higher in superlative than in quantified partitives, but the sentences with grammatical agreement significantly higher in quantified than in superlative partitives (estimated difference of judgements = 0.94; 95% confidence interval = 0.73 … 1.15; $p <$ 0.001). Speakers of German show a stronger preference for semantic agreement in superlative than in quantified partitives, which suggests that there is a difference between the two partitive types. This answers research question (i).

Figure 1 visualises the average acceptability scores for grammatical and semantic agreement in both quantified and superlative partitives. For ease of presentation and comparison, I present the scores on an inversed five-point scale compared to the actual test. In the original test, I asked the participants to give the sentences a grade running from 5 (completely unacceptable) to 1 (completely acceptable). In the figures below, however, I inversed the scale, with 1 now indicating 'completely unacceptable' and 5 'completely acceptable'.[12] Crucially, Figure 1 as well as all Figures to follow do not include the acceptability scores on the control sentences (see section 4.2.2); the results indicate that almost all participants accept the control sentences.

[12] In the figures, significance is marked by * ($p < 0.05$), ** ($p < 0.01$) and *** ($p < 0.001$).

Figure 1 – Partitive types



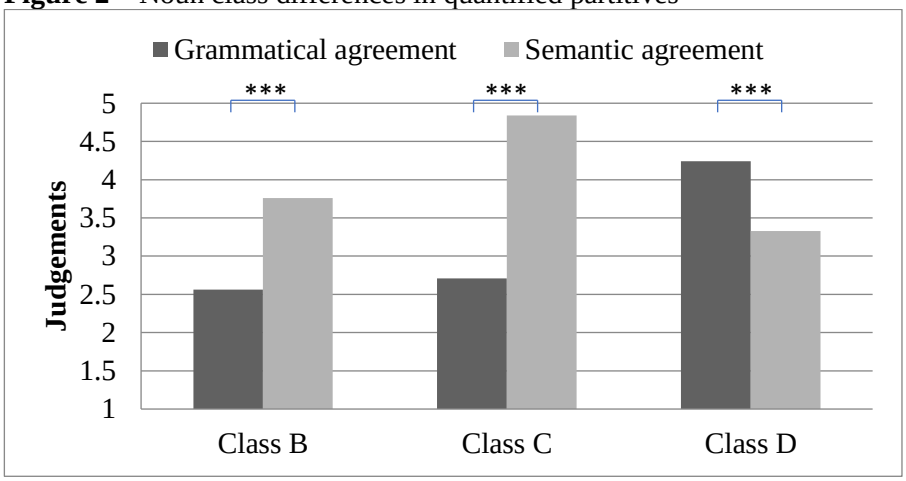
Interestingly, Figure 1 shows a difference between quantified and superlative partitives in terms of agreement preference. Semantic agreement is significantly preferred in both partitives types, as shown by the results of T-tests in R ($p < 0.001$ for both partitive types). Yet, the preference for semantic agreement turns out to be stronger for superlative than for quantified partitives, which corresponds to the results of the mixed-effects model.

Next, I am interested in differences between the three noun classes under consideration, as addressed by research question (ii). Indeed, the mixed-effects model shows that the acceptability of semantic agreement varies between the three noun classes. The participants judge sentences with semantic agreement significantly higher with classes B and C nouns than with class D nouns, irrespective of the partitive type (estimated difference of judgements = 2.09; 95% confidence interval = 1.78 … 2.39; $p < 0.001$). Speakers of German show a stronger preference for semantic agreement for class B and class C nouns than for class D nouns.[13] Thus, I can conclude that there is an effect of noun class on the acceptability rate of sentences with semantic agreement.

The acceptability rates for the three noun classes are presented in Figures 2 and 3, for quantified and superlative partitives, respectively.

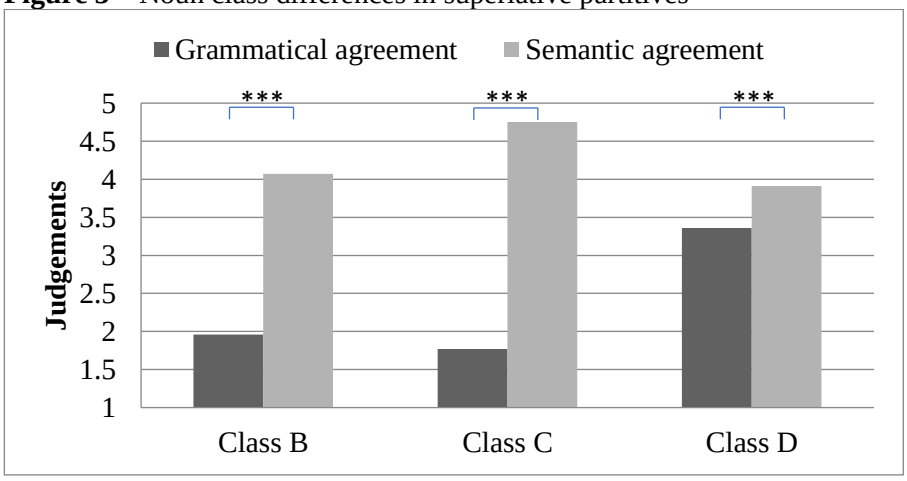
[13] Recall that with class C nouns, I use the term *grammatical agreement* to refer to the specific situation in which a masculine subset (quantifier or superlative) refers to a female (e.g. *der jüngste der Studierenden ist Marie* 'the.M youngest of the students is Marie').

Figure 2 – Noun class differences in quantified partitives



With regards to the three noun classes, Figure 2 shows that in quantified partitives, class D nouns behave differently from class B nouns. Semantic agreement is preferred for class B, whereas grammatical agreement shows a higher acceptability score with class D. For class C, Figure 2 shows that the participants prefer the use of a feminine quantifier to refer to a female. All these contrasts are significant, as shown by the results of T-tests ($p < 0.001$).

Figure 3 – Noun class differences in superlative partitives



For the superlative partitives (Figure 3), all three noun classes present the same pattern, as Figure 3 shows. Semantic agreement is preferred over grammatical agreement. Yet, the difference between grammatical and

semantic agreement is considerably smaller for class D than it is for class B. Class C even exhibits a stronger preference for the use of a feminine superlative to refer to a female than we saw for the quantified partitives. Here again, all differences turn out to be significant ($p < 0.001$).

4.3.2 Further insight

As I established in the previous section, the results show an influence of the two factors partitive type and noun class on the acceptability of semantic agreement. With respect to the latter factor, it is interesting to check for noun class internal differences by looking at the acceptability scores on the individual nouns. This relates to research question (iii), for which I focus on class B and class D nouns; still, I briefly consider the class C nouns too (see section 4.1.3). To check for differences between individual nouns I conducted T-tests in R. At the end of this section, I check the influence of the participants' sex and age on the judgements, addressing research question (iv).

The group of class B nouns in the test consisted of five nouns (*Beamte* 'civil servant', *Lehrer* 'teacher', *Minister* 'minister', *Polizist* 'police officer', and *Student* 'student'). Figure 4 presents an overview of the average acceptability scores for the individual class B nouns in quantified partitives:

Figure 4 – Individual class B nouns in quantified partitives

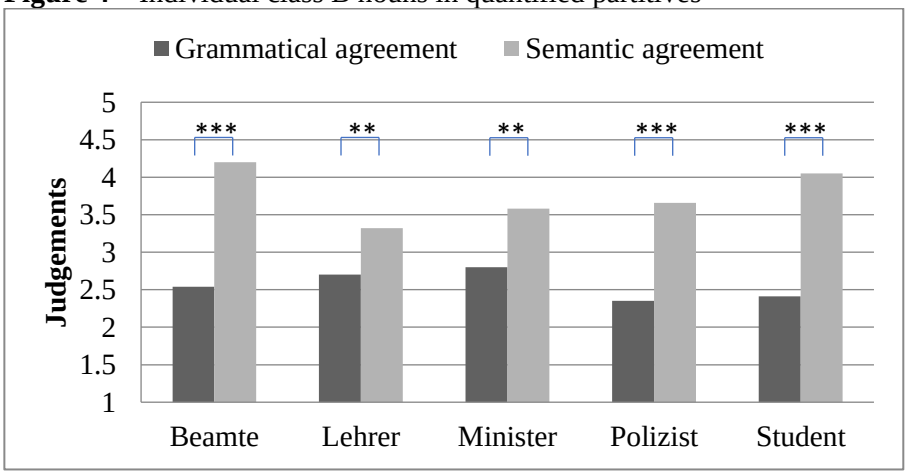
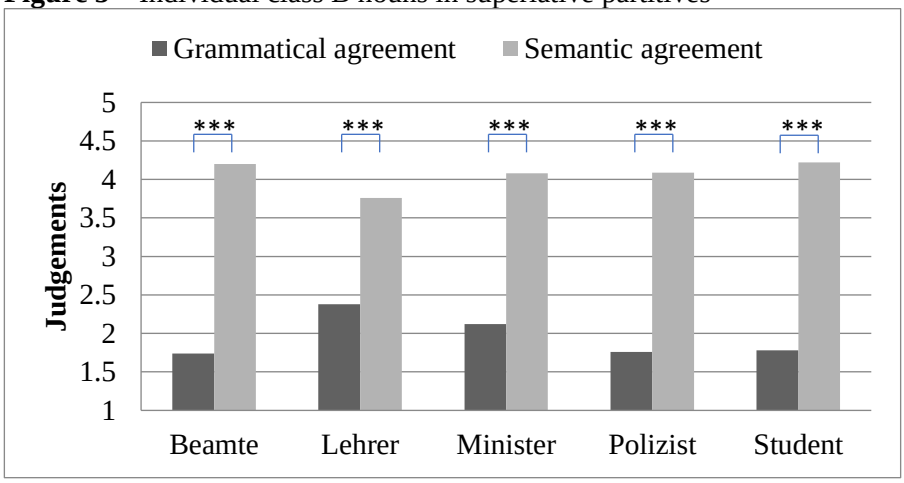


Figure 4 shows that all class B nouns present the same overall agreement pattern in quantified partitives. The sentences with semantic agreement receive significantly higher judgements than those with grammatical agreement. Still, the differences between grammatical and semantic

agreement are less pronounced for the nouns *Lehrer* and *Minister* ($p = 0.009$ and $p = 0.001$, respectively) than for the nouns *Beamte*, *Polizist*, and *Student* ($p < 0.001$ for all three nouns). This suggests that grammatical agreement is more acceptable with the nouns *Lehrer* and *Minister* in quantified partitives.

A similar pattern emerges from the results of the individual class B nouns for superlative partitives, presented in Figure 5:

Figure 5 – Individual class B nouns in superlative partitives

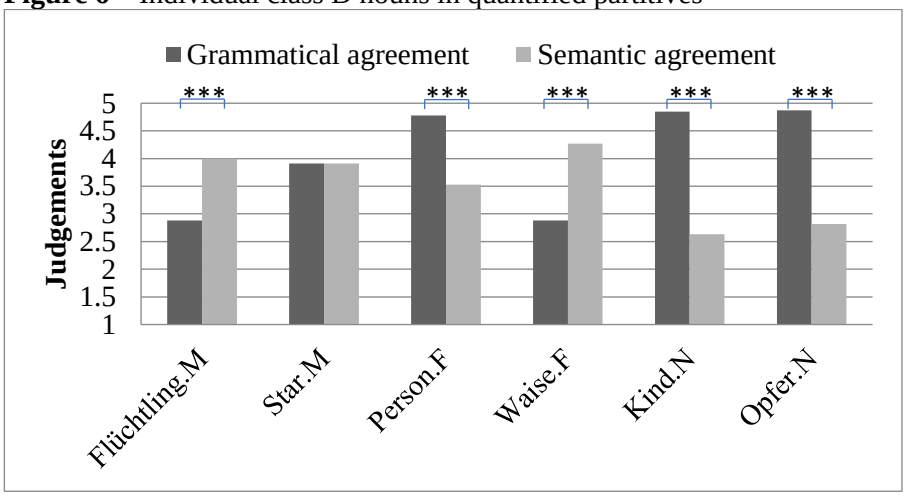


For the superlative partitives, again, semantic agreement is significantly preferred over grammatical agreement for all class B nouns ($p < 0.001$ for all nouns). Yet, grammatical agreement appears to be slightly more acceptable with the nouns *Lehrer* and *Minister* than with *Beamte*, *Polizist* and *Student*.

Let us now turn to the class D nouns, for which I included two masculine (*Flüchtling* 'refugee' and *Star* 'celebrity'), two feminine (*Person* 'person' and *Waise* 'orphan'), and two neuter nouns (*Kind* 'child' and *Opfer* 'victim') in the test (see Table 4).[14] As we will see, the group of class D nouns presents a considerable amount of variation. Figure 6 displays the acceptability scores for the individual class D nouns in quantified partitives:

[14] For the neuter class D nouns *Kind* and *Opfer*, I included sentences with male and with female referents. For ease of representation, however, I grouped the results of the sentences with female and male referents together. For both nouns, in two cases there turned out to be a significant difference between the sentence with a female and the one with a male referent (for *Kind* in the superlative partitives with semantic agreement the sentence with a female referent is judged better, $p < 0.001$; for *Opfer* in the quantified partitives with semantic agreement the sentence with a male referent is judged better, $p = 0.004$). In the other two cases, however, the differences were not significant at all.

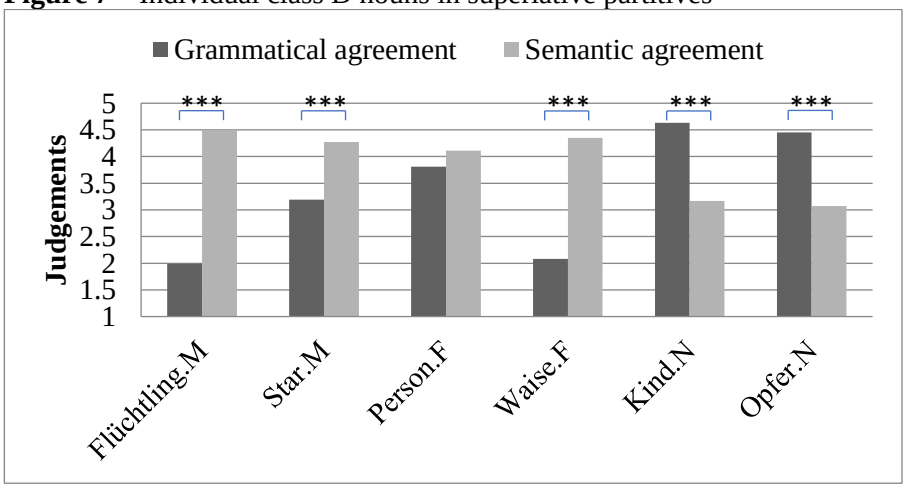
Figure 6 – Individual class D nouns in quantified partitives



As Figure 6 shows, the class D nouns present a varied picture for the quantified partitives. Only the two neuter nouns *Kind* and *Opfer* present a clear pattern: grammatical agreement is judged significantly more acceptable than semantic agreement ($p < 0.001$ for both nouns). Considering the two feminine nouns *Person* and *Waise*, the former appears to pattern with the neuter nouns in displaying a significant preference for grammatical agreement ($p < 0.001$). The latter, *Waise*, shows the opposite pattern, as semantic agreement is preferred ($p < 0.001$). The same is true for the masculine noun *Flüchtling* ($p < 0.001$), whereas the other masculine noun *Star* does not present an agreement preference at all ($p = 1.000$).

Figure 7 presents the noun class internal variation with class D nouns in superlative partitives:

Figure 7 – Individual class D nouns in superlative partitives



The superlative partitives turn out to display a less varied picture than the quantified ones (see Figure 6). Specifically, the non-neuter nouns present a clearer pattern, in that semantic agreement is significantly preferred over grammatical agreement for three out of the four nouns ($p < 0.001$ in all cases). Only for the feminine noun *Person* is the difference not significant ($p = 0.203$), although Figure 7 suggests a slight preference for semantic agreement. By contrast, the neuter nouns *Kind* and *Opfer* clearly stand apart, since the participants significantly prefer grammatical over semantic agreement ($p < 0.001$ for both nouns). Thus, the neuter nouns show the opposite pattern of the non-neuter ones. This contrast could partly explain the discrepancy discussed earlier between the mixed-effects model and the overall acceptability scores for the class D nouns reported in Figure 2.

Finally, I briefly turn to the class C nouns. Recall that I only included two of these nouns in the grammaticality judgement task, since they cannot present a gender mismatch in partitive constructions, unlike nouns of classes B and D. Still, with class C nouns, participants may have accepted the use of a masculine subset to refer to a female, as illustrated for the noun *Studierende* 'student' in (20):

(20) *Die/Der* *jüng-ste* *der* *neu-en* *Studierend-en* *ist*
the.F/the.M young-SUP the.GEN.PL new-PL student-PL is
Marie.
Marie
'The youngest of the new students is Marie.'

Figure 8 presents the acceptability scores for the two class C nouns *Studierende* 'student' and *Vorgesetzte* 'superior' in both quantified and superlative partitives:

Figure 8 – Individual class C nouns

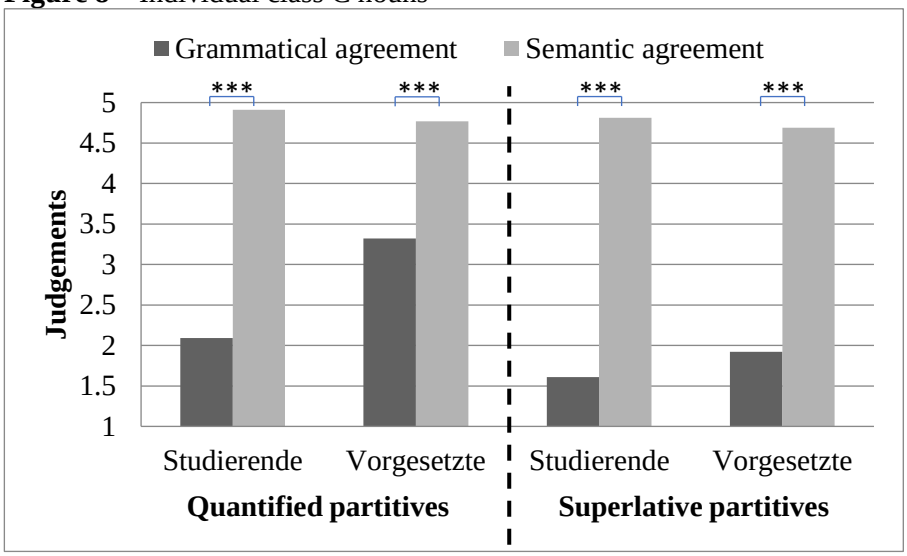


Figure 8 shows that with both class C nouns, the participants prefer a feminine subset (i.e. *die jüngste* in 20) to refer to a female, which corresponds to the pattern of the class B nouns. T-tests indicate that all differences are significant ($p < 0.001$). Considering the quantified partitives, grammatical agreement seems to be judged more acceptable for the noun *Vorgesetzte* than for *Studierende*. However, as I only included two class C nouns in the task, I will not further discuss this difference.

Before I proceed to the discussion of the results, I touch upon the influence of the participant's age and sex on the judgements, captured by research question (iv). The outcome of the mixed-effects model in R does not reveal any significant effect for any of the age groups as listed in Table 3 ($p < 0.001$ in all cases). With respect to sex, the results of the model show that the male participants do not grade the test sentences significantly differently from the female participants (estimated difference in judgements = 0.17; 95% confidence interval = -0.05 … 0.40; $p = 0.125$). This indicates that women do not grade partitive constructions in general as more acceptable than men, or vice versa. However, if we specifically look at grammatical and semantic agreement, the model shows that there is a small effect of sex on the

judgements. Anticipating the discussion of the results, the female participants grade sentences with grammatical agreement significantly higher than the male participants (estimated difference in judgements = 0.43; 95 % confidence interval = 0.01 … 0.84; *p*-value = 0.045). This suggests that women judge grammatical agreement in partitive constructions to be more acceptable than men.

4.4 Discussion

In this chapter, I investigate gender agreement with human nouns in German partitive constructions. Specifically, I wonder whether the same factors that I found to be of influence for French — partitive type and noun class — affect the acceptability of semantic agreement in German too. With the results of the grammaticality judgement task in mind, I can now return to the research questions that guided the present study. For convenience, I repeat them here:

i. Do we observe differences between quantified and superlative partitives in the acceptability of either grammatical or semantic agreement?
ii. Do we observe differences between different classes of animate nouns in the acceptability of either grammatical or semantic agreement?
iii. Is there a significant difference in the preference for either grammatical or semantic agreement between individual nouns?
iv. Is there a significant difference in the acceptance of semantic agreement between younger and older, and between female and male participants?

In the remainder of this section, I further discuss my findings and attempt to answer these questions.

4.4.1 The influence of partitive type

Research question (i) addressed differences between quantified (21) and superlative partitives (22):

(21) *Ein-e/Ein-er* *der* *anwesend-en* *Polizist-en*
one-F/one-M the.GEN.PL present-PL police.officer.M-PL
ist *Ingrid.*
is Ingrid
'One of the present police officers is Ingrid.'

(22) *Die/Der* *jüng-ste* *der* *anwesend-en*
the.F/the.M young-SUP the.GEN.PL present-PL
Polizist-en *ist* *Ingrid.*
police.officer.M-PL is Ingrid
'The youngest of the present police officers is Ingrid.'

On the one hand, the results indicate that the participants give semantic agreement a higher acceptability rate than grammatical agreement in both partitive types. On the other hand, they also display a difference, as semantic agreement is judged significantly more acceptable in superlative than in quantified partitives, which points towards a stronger preference for semantic agreement in superlative partitives than in quantified ones. It appears as well that the sentences with grammatical agreement receive a higher acceptability rate in quantified than in superlative partitives. Therefore, I can conclude that the factor partitive type does affect the acceptability of semantic agreement in German.

At this point, I briefly return to the cases of semantic agreement in German discussed in the literature (cf. Braun & Haig, 2010; Audring, 2009; Kraaikamp, 2017), which I introduced in section 4.1.1. Following up on Corbett (1991), these studies revealed that the possibility of semantic agreement depends on the specific agreement situation: semantic agreement may arise on pronouns in German, whereas attributive adjectives and determiners may only display grammatical agreement. For example, Braun & Haig's study (2010) showed that in about half of the cases, speakers of German use semantic agreement on pronouns referring back to neuter nouns (e.g. *Mädchen* 'girl', see example 8). This contrasts with the findings of the present study, which display a clear preference for grammatical agreement with the two neuter class D nouns (*Kind* 'child' and *Opfer* 'victim').

A plausible explanation for the difference between partitives and pronouns is indirectly provided by Corbett's (1979, 1991) Agreement Hierarchy: partitive constructions present a distinct agreement context from pronouns. Pronouns are located on the 'semantic' end of the hierarchy: they present a less local agreement context that favours referential agreement. Instead, agreement in partitive constructions is usually considered to be DP-internal, be it in a complex nominal construction (cf. Cardinaletti & Giusti, 2017; Falco & Zamparelli, 2019). Therefore, grammatical agreement is more likely to occur. I will come back to the syntactic structure of partitive constructions in Chapter 6. However, a careful comparative investigation of semantic agreement in different agreement contexts is necessary to determine

the exact similarities and differences between partitive constructions, DP-internal agreement, and pronominal agreement in German.

4.4.2 The influence of noun class

Research question (ii) related to the noun classes investigated. I particularly focussed on the differences between class B nouns (with different word forms for male and female referents, e.g. *der Student* 'the.M student.M' – *die Student-in* 'the.F student-F') and class D nouns (which only have one word form, with a fixed grammatical gender, e.g. *das Kind* 'the.N child.N'). The examples in (23-24) illustrate this:

(23) *Die/Der* *jüng-ste* *der* *Student-en* *ist Marie.*
the.F/the.M young-SUP the.GEN.PL student.M-PL is Marie
'The youngest of the students is Marie.'

(24) *Die/Das* *jüng-ste* *der* *Kind-er* *ist Marie.*
the.F/the.N young-SUP the.GEN.PL child.N-PL is Marie
'The youngest of the children is Marie.'

The results of the grammaticality judgement task show that the factor noun class influences the preference for grammatical or semantic agreement in partitives. With class B nouns, speakers prefer semantic agreement, which means that in (23), the use of the feminine superlative *die jüngste* prevails. Instead, grammatical agreement seems to be preferred with class D nouns, thus resulting in the neuter superlative *das jüngste* in (24).

However, especially class D exhibits a lot of noun class internal variation. Specifically, the results show a clear contrast between the neuter and non-neuter class D nouns. With neuter nouns, such as *Kind* 'child', speakers prefer grammatical agreement in both quantified and superlative partitives. The masculine and feminine nouns (e.g. feminine *Waise* 'orphan') show a tendency towards semantic agreement, particularly in superlative partitives. I come back to this difference in the next section.

Finally, I also included two class C nouns in the test, which have only one word form, but may trigger either masculine or feminine agreement. Within partitives, class C nouns present a special case because they cannot give rise to an overt gender mismatch between set noun and subset, as (25) shows:

(25) *Die/Der jüng-ste der Studierende-n ist Marie.*
the.F/.M young-SUP the.GEN.PL student-PL is Marie
'The youngest of the students is Marie.'

The noun *Studierenden* in (25) does not contain any overt gender marker, in contrast to the noun *Studenten* in (23), for which the suffix *-ent* indicates its masculine gender. Still, the class C nouns are interesting to take into account because speakers may opt for a masculine superlative (*der jüngste*) or for a feminine superlative (*die jüngste*), as illustrated in (25). Although the results show that most speakers prefer the feminine form for the subset of a partitive, which corresponds to the fact that with human referents, grammatical gender and biological sex usually match, some speakers accept the masculine form too. This might be related to issues of prestige: some speakers assume that feminine forms express a lower status than masculine forms (cf. Cacouault-Bitaud, 2001; Horvath et al., 2016; Merkel et al., 2012). Nevertheless, the observation that most speakers prefer the feminine superlative in (25) strengthens the idea that forms such as *Studierende* 'students' are gender-neutral forms, which may be used instead of the generic masculine to avoid gender biases.

4.4.3 Individual noun and speaker variation

In the previous sections, I showed that the factors partitive type and noun class appear to influence the acceptance of semantic agreement in partitives. With respect to noun class, I already noted that the proposed distinctions may be too broad. Therefore, I also investigated differences between individual nouns within each noun class, thus addressing research question (iii). As the results show, class-internal differences are most prevalent within class D. Class B displays slight differences between individual nouns, but no nouns show a completely different pattern from the other members of the class.

Within class B, the acceptability of grammatical agreement in both quantified and superlative partitives is higher with the nouns *Lehrer* and *Minister* than with *Polizist* and *Student*, which may be related to the derivational suffix *-er* present on the former. Human-denoting nouns derived by means of the suffixes *-er*, *-ler* and *-ner* are always masculine in German (cf. ten Cate et al., 2008). However, further research into this is necessary because the experiment reported on here only included five class B nouns. By designing a more elaborate experiment with more class B nouns, it may be possible to establish the influence of different noun endings in a more systematic way.

The most interesting class-internal differences are found within class D, specifically between the neuter and non-neuter nouns. With some of the masculine and feminine class D nouns, such as *Flüchtling* or *Waise*, semantic agreement is preferred. Instead, grammatical agreement is judged significantly more acceptable than semantic agreement with the neuter class D nouns *Kind* and *Opfer*. At this point, I can only speculate about the reasons for this difference. In contrast to what is the case for the masculine and the feminine, the neuter does not correlate with biological sex, which may decrease the likelihood of taking into account semantics for neuter nouns. Another factor that could be at stake concerns the number of neuter nouns that denote humans. Apart from the diminutives ending on *-chen*, such as the famous *Mädchen* 'girl' — which was not included in the experiment — the total number of neuter animate nouns in German is quite restricted. As a consequence, speakers of German may consider these nouns as exceptional and stick to grammatical agreement.

Another explanation could be sought in semantics. In their study on pronominal agreement, Braun & Haig (2010) observed that the age of the referent plays a role in the choice for grammatical or semantic agreement: grammatical agreement was more likely for younger referents. According to Braun & Haig, this suggests that for younger referents, sex does not play a role yet; a similar suggestion has been made by Köpcke & Zubin (1996). Here again, further investigation is needed to shed more light on the status of the neuter.

Finally, with respect to research question (iv), I observed that the female participants judge grammatical agreement in partitive constructions to be more acceptable than male participants. This difference may again be related to issues of prestige, just as I discussed for the class C nouns. Several studies (e.g. Cacouault-Bitaud, 2001; Merkel et al., 2012; Horvath et al., 2016) suggest that females sometimes opt for the use of the masculine instead of the feminine to refer to females because they believe that the feminine expresses a lower societal status than the masculine. However, since my participant group was rather small and unbalanced in terms of female/male distribution, more research is needed to gain insight into the influence of a speaker's sex on gender agreement.

4.5. Conclusion

This chapter addressed the question of gender agreement in partitives with human nouns in German. I investigated whether native speakers of German prefer grammatical or semantic agreement in these constructions by carrying out a grammaticality judgement task. The results indicated that the acceptability of semantic agreement was influenced by two key factors: (i) the type of partitive construction and (ii) the type of animate noun. Although the participants accepted semantic agreement in both quantified and superlative partitives, acceptability scores for semantic agreement were higher for superlative than for quantified partitives. In addition, the results showed that semantic agreement was accepted with most animate nouns, except for the neuter ones, such as *Kind* 'child', for which grammatical agreement was preferred. In the next chapter, I will compare the German results with the findings from the experiment on French, reported in Chapter 3. As such, I hope to gain a better understanding of the factors that influence the acceptability of semantic agreement from a cross-linguistic perspective.

Chapter 5

Explanandum, or factors influencing agreement in partitives

In the preceding chapters, I discussed gender agreement in partitive constructions in French (Chapter 3) and in German (Chapter 4), as well as the integration of feminine forms of profession nouns into dictionaries (Chapter 2). Building on the findings reported in those chapters, I can now provide for a comparative perspective in order to set the scene for a comprehensive theoretical account. This brings me to the fourth research question of this dissertation:

IV. What do the data on French and German tell us about the factors underlying agreement in partitive constructions?

In section 5.1, I compare the results of the grammaticality judgement tasks on French and German, which I discussed in Chapters 3 and 4, respectively. Section 5.2 touches upon a question I raised at the end of Chapter 2: Do speakers of French and German use feminine forms of profession nouns when referring to female professionals? Specifically, I consider the degree to which the feminisation of profession nouns is accepted by speakers as a diagnostic for their attitude towards language change. I will thus investigate whether a speaker's attitude influences agreement in partitives. In section 5.3, I discuss what the findings mean for the theoretical account I will develop; as such, this section serves as an introduction to the final part of the dissertation.

5.1 Comparing French and German

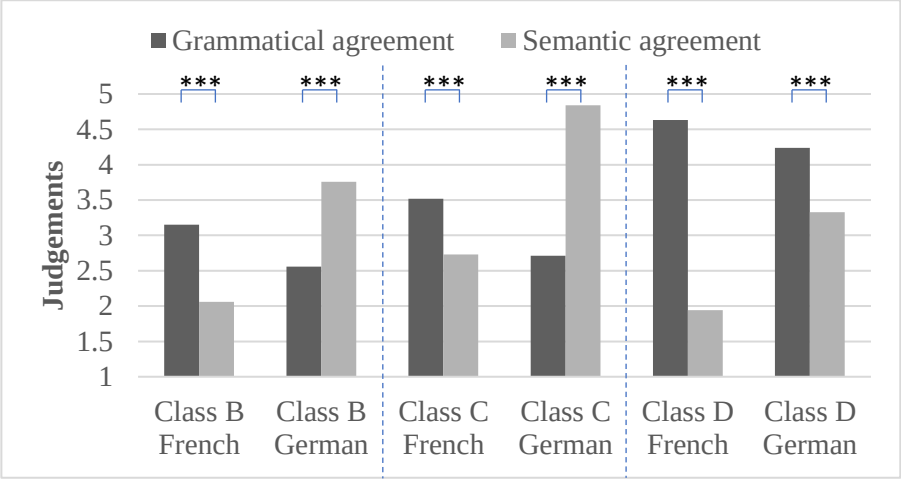
A comparison of the results of the French and German grammaticality judgement tasks provides a better understanding of the main factors that underly gender agreement in partitive constructions, which, in turn, will feed into my theoretical account. I attempt to answer the following question: Do we observe (dis)similarities between French and German in the acceptance of grammatical and semantic agreement in partitive constructions? I start by looking at quantified partitives, before moving on to the superlative ones. At

the end of this section, I establish the factors that influence agreement in partitive constructions based on the observed agreement patterns.

5.1.1 Quantified partitives

In quantified partitives, a quantifier refers to the subset (e.g. *one of the students*). Figure 1 below (a combination of Figure 2 in Chapter 3 and Figure 2 in Chapter 4) displays the results of the sentences with quantified partitives. For both languages, the results are separated for each noun class:[1,2]

Figure 1 – Quantified partitives



Let us first take a look at the general patterns emerging from Figure 1. For noun classes B and C, we observe a clear difference between the two languages. Semantic agreement is clearly downgraded in quantified partitives in French, but accepted with these nouns in German. Instead, French and German behave similarly with respect to noun class D, as grammatical agreement is judged better than semantic agreement in both languages.

As I discussed in Chapter 4 (section 4.1.2), there is a crucial difference between French and German with respect to the class C nouns. That is, German class C nouns cannot display a morphological gender mismatch in partitives because plural agreement shows syncretism with respect to gender

[1] As in Chapter 4, the acceptability scores of the German test have been reversed to facilitate comparison between French and German. Just for clarity, the scores presented in the present chapter range from 1 (fully unacceptable) to 5 (fully acceptable).

[2] In the figures, significance is marked by * ($p < 0.05$), ** ($p < 0.01$) and *** ($p < 0.001$).

in German. The example in (1) illustrates this with the class C noun *Studierende* 'student':

(1) *Die/Der jüng-ste der neu-en Studierende-n.*
the.F/the.M young-SUP the.GEN.PL new-PL student-PL
'The youngest of the new students.'

In (1), none of the agreement markers in the set phrase contains any morphological information from which the noun's lexical gender may be retrieved. As a result, there is no overt gender mismatch between set and subset in (1). By contrast, the French equivalent example in (2) contains an overt marker of masculine gender by virtue of the suffix *-eaux* on the adjective *nouveaux*:

(2) *La/Le plus jeune des nouveau-x étudiant-s.*
the.F/the.M SUP young of.the.PL new.M-PL student.M-PL
'The youngest of the new students.'

If the superlative takes the feminine form *la plus jeune*, this results in an overt gender mismatch between the masculine set and the feminine subset in (2).

In Chapter 4, I noted that German class D does not constitute a homogeneous group in terms of agreement. Rather, neuter class D nouns appear to behave differently from masculine and feminine class D nouns. With German neuter nouns, such as *Kind* 'child' in (3), grammatical agreement (3a) is preferred over semantic agreement (3b), a difference that is significant. Average acceptability scores are indicated at the end of each sentence:

(3) a. *Ein-es der best-en Kind-er ist Peter.* [4.91]
one-N the.GEN.PL best-PL child.N-PL is Peter
b. *?Ein-er der best-en Kind-er ist Peter.* [2.61]
one-M the.GEN.PL best-PL child.N-PL is Peter
'One of the best children is Peter.'

In (3a), the quantifier *eines* shows grammatical agreement with the neuter set noun *Kinder*. This sentence has a higher acceptability score than example (3b), in which the quantifier *einer* semantically agrees with the biological sex of its referent, the boy *Peter*.

By contrast, the non-neuter class D nouns display a mixed pattern. For instance, with the masculine noun *Star* in (4), we do not observe any

preference for either grammatical (4a) or semantic (4b) agreement on the quantifier:

(4) a. *¿Ein-er der anwesend-en Star-s ist*
one-M the.GEN.PL present-PL celebrity.M-PL is
Nina Hagen. [3.91]
Nina Hagen

b. *¿Ein-e der anwesend-en Star-s ist*
one-F the.GEN.PL present-PL celebrity.M-PL is
Nina Hagen. [3.91]
Nina Hagen
'One of the present celebrities is Nina Hagen.'

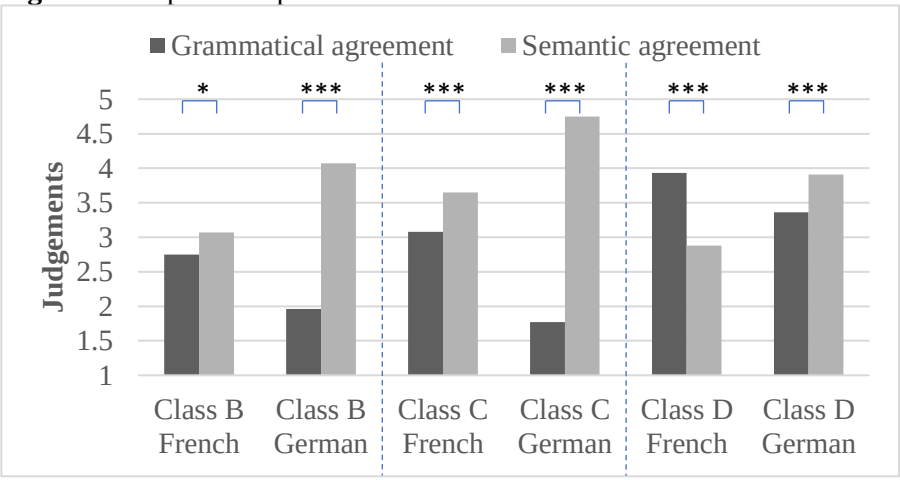
Some of the other non-neuter German class D nouns behave like the neuter ones in showing a preference for grammatical agreement. Others align with classes B and C, as semantic agreement is preferred. This internal variation only surfaces within German class D. We do not observe such a noun-class internal mixed pattern within the other two noun classes in German; neither does it appear in any of the three noun classes in French.

5.1.2 Superlative partitives

In superlative partitives, the subset is introduced by a superlative adjective (e.g. *the youngest of the students*). As before, I contrast the results on the superlative partitives in French and German. Figure 2 below (a combination of Figure 3 in Chapter 3 and Figure 3 in Chapter 4) shows this comparison, again separated per noun class. As we can observe, the French noun class D clearly stands apart. In both languages, semantic agreement is preferred over grammatical agreement in superlative partitives, except for French class D nouns. If we compare the two languages with respect to classes B and C, we observe that the differences in acceptability scores between grammatical and semantic agreement are considerably less pronounced for French than for German.[3] French class D displays a preference for grammatical instead of semantic agreement, which is not shared by German class D. Overall, grammatical agreement appears to be judged more acceptable by speakers of French than by speakers of German.

[3] Recall the special status of the German class C nouns, as discussed in section 5.1.1.

Figure 2 – Superlative partitives



For class D nouns, a closer inspection proves useful. As was the case for quantified partitives, German class D exhibits the same distinction between neuter and non-neuter nouns in superlative partitives too. For instance, grammatical agreement (5a) is judged significantly better than semantic agreement (5b) with the neuter noun *Opfer* 'victim':

(5) a. *Das jüng-ste der Opfer war Maria.* [4.46]
the.N young-SUP the.GEN.PL victim.N.PL was Maria
b. *?Die jüng-ste der Opfer war Maria.* [3.14]
the.F young-SUP the.GEN.PL victim.N.PL was Maria
'The youngest of the victims was Maria.'

In superlative partitives, the non-neuter nouns are even more coherent and are opposed to the neuter nouns in their preference for semantic agreement. Example (6) illustrates this with the feminine noun *Waise* 'orphan':

(6) a. *?Die jüng-ste der Waise-n ist Anton.* [2.08]
the.F young-SUP the.GEN.PL orphan.F-PL is Anton
b. *Der jüng-ste der Waise-n ist Anton.* [4.35]
the.M young-SUP the.GEN.PL orphan.F-PL is Anton
'The youngest of the orphans is Anton.'

The sentence with semantic agreement (6b) displays a higher acceptability score than the one with grammatical agreement (6a), a difference that is significant.

French class D does not present a clear noun-class internal distinction. However, judging from the average acceptability scores in Figure 2, semantic agreement is not considered that unacceptable with class D nouns in superlative partitives as it was in quantified ones. In fact, as I discussed in Chapter 3, some speakers seem to accept semantic agreement with class D nouns, especially with the masculine noun *génie* 'genius', but also with a feminine noun such as *sentinelle* 'guard'. For *génie*, examples are given below, which show that semantic agreement (7b) is not considered that unacceptable compared to grammatical agreement (7a):

(7) a. *¿Le plus gentil des génie-s présent-s est*
the.M SUP kind.M of.the.PL genius.M-PL present.M-PL is
Madeleine. [3.29]
Madeleine

b. *¿La plus gentil-le des génie-s présent-s est*
the.F SUP kind-F of.the.PL genius.M-PL present.M-PL is
Madeleine. [3.18]
Madeleine
'The kindest of the geniuses present is Madeleine.'

For the other class D nouns, the difference between grammatical and semantic agreement is more pronounced, which confirms the overall preference for grammatical agreement with class D nouns in French.[4]

5.1.3 From patterns to factors

Let us now check what the comparison of French and German teaches us about the factors that influence agreement in partitives. Table 1 summarises the general agreement patterns:[5,6]

[4] For a possible explanation of the behaviour of *génie*, see Chapter 3, section 3.4.2.

[5] French does not exhibit neuter gender, hence the absence of neuter class D nouns.

[6] For convenience, I stick to the terms *grammatical* and *semantic agreement* for the German class C nouns too, but see Chapter 4, section 4.1.2 for discussion as to why these terms may not be perfectly suitable in this context (see also the discussion on example (1) in the present chapter).

Table 1 – Comparative summary of main results

Partitive type			Quantified partitives		Superlative partitives	
Language			French	German	French	German
Noun class	B		*grammatical agreement*	*semantic agreement*	*semantic agreement*	*semantic agreement*
	C		*grammatical agreement*	*semantic agreement*	*semantic agreement*	*semantic agreement*
	D	non-neuter	*grammatical agreement*	*inconclusive*	*grammatical agreement*	*semantic agreement*
		neuter	*n/a*	*grammatical agreement*	*n/a*	*grammatical agreement*

Two factors turn out to play an important role in the acceptability of semantic agreement: partitive type and noun class. Especially for French, there is a clear distinction between the two types of partitives. On the one hand, grammatical agreement is preferred with nouns from all classes in quantified partitives. On the other hand, superlative partitives show a preference for semantic agreement for two out of the three noun classes (i.e. classes B and C).

For German, semantic agreement is preferred with noun classes B and C, irrespective of partitive type. German class D nouns present a more varied picture. With neuter class D nouns, a preference for grammatical agreement prevails in both partitive types. With non-neuter nouns, semantic agreement is preferred, at least in superlative partitives; for quantified partitives, there is no clear preference for either grammatical or semantic agreement. Crucially, German seems to differ from French in showing a preference for semantic agreement in quantified partitives. Yet, statistical analysis of the German results revealed that semantic agreement is judged significantly more acceptable in superlative than in quantified partitives, despite the patterns reported in Table 1. This suggests that for German, the factor partitive type plays a role in the acceptability of semantic agreement too.

As I noted in the respective chapters on French and German, the results display a considerable amount of variation between participants, which, surely, may be expected when asking speakers about the acceptability of sentences. Obviously, one needs to be careful when drawing firm conclusions from this, since I only tested acceptance, not production. It is a well-known fact that language users accept certain forms or constructions more than they would use them themselves (cf. Cornips & Poletto, 2005; Schütze, 2016). Furthermore, the participants had to judge the sentences in the grammaticality judgement tasks on a five-point scale, which also contributes to variation in the results. The results do not show a clear-cut distinction between acceptable

and unacceptable sentences, but instead express gradual differences between participants.

Nevertheless, the observed variation may lead us to expect differences between speakers' grammars.[7] Speakers who prefer grammatical agreement could be assumed to have different grammars from those who prefer semantic agreement. The fact that some speakers accept both grammatical and semantic agreement in a particular case may indicate that these speakers have a more flexible grammar, which allows them to accept both types of agreement. I discuss one possible source of variation in the next section, which relates to a topic I addressed in Chapter 2: the feminisation of profession nouns.

5.2 Feminisation as a predictor of semantic agreement?

At the end of Chapter 2, I raised the question as to whether the increase in the presence of feminine forms in dictionaries would mirror language use. That is, would speakers of French and German use feminine noun forms when referring to female persons? An in-depth investigation of this topic is beyond the scope of this dissertation, but the experiments I conducted included short gap filling tasks on the feminisation of profession nouns. Although I will not present the results of these tasks in detail here, I briefly discuss them from a different perspective, as a diagnostic of a speaker's attitude towards language change. Specifically, I wonder whether there could be a relation between the use of feminine noun forms and the acceptance of semantic agreement in partitives. I hypothesise that for speakers who are more progressive in the use of feminine forms this would translate to other aspects of language too, such as favouring one type of agreement pattern. Accordingly, I expect these speakers to judge semantic agreement in partitives to be more acceptable than speakers who do not use feminine noun forms. To verify these predictions, I compare the results of the gap filling tasks on noun feminisation to the grammaticality judgements on agreement in partitives. In the next section, I start with a description of the methodology I adopt to compare the results of the two tasks.

[7] Or, in Minimalist terms: speakers have different I-languages (cf. Chomsky, 2005).

5.2.1 Methodology

As part of the questionnaires including the grammaticality judgement tasks, I also presented the participants with short gap filling tasks on the feminisation of profession nouns in French and German. The questionnaires were distributed online, using Google Forms. In total, the results of 62 native speakers of French and of 74 native speakers of German were used in the analysis. For more details on the participants and the testing procedure, I refer the reader to Chapter 3, section 3.3 for French, and Chapter 4, section 4.3 for German.

In order to measure a participant's attitude towards innovative language, I specifically selected profession nouns that challenge the more common feminisation strategies. Based on the dictionary study presented in Chapter 2, I chose nouns of which the feminine form only appeared at a late stage in dictionaries, or which were mentioned by other studies as difficult to feminise.[8] The final gap filling tasks included 13 nouns for French and 12 nouns for German, some of which also figured in the grammaticality judgement tasks.

Table 2 lists the 13 nouns used in the French task.[9] Nouns that also figured in the grammaticality judgement task are in bold face:

Table 2 – Nouns of French gap filling task

auteur 'author'	*chef* 'chief'
docteur 'doctor'	*écrivain* 'writer'
guide 'guide'	*ingénieur* 'engineer'
marin 'marine'	***ministre*** 'minister'
policier 'police officer'	*pompier* 'firefighter'
professeur 'teacher'	***recteur*** 'rector'
témoin 'witness'	

Most nouns included in the French gap filling task represent cases known to resist feminisation; often, these nouns exhibit multiple possible feminine forms. The noun *auteur* 'author', for instance, has a regular feminine form with the morpheme *-trice* (*autrice*), but some speakers treat this noun as being invariable and therefore only combine it with a feminine determiner (i.e. *une auteur* 'an.F author') when the referent is female. Other speakers use the

[8] See Van Compernolle (2008) for French and Schoental (1989) for German.

[9] In addition to the nouns listed in Table 2, which all have a masculine base form, the French gap filling task included two feminine epicene nouns as well, *sentinelle* 'guard' and *victime* 'victim', which I did not include in the analysis reported on here.

feminine ending *-eure* for this noun (resulting in *auteure*). This latter strategy follows a feminisation convention from Québec (cf. Arbour & de Nayves, 2014).

Table 3 lists the 12 nouns figuring in the German task. Only two nouns were also included in the grammaticality judgement task; these are in bold face:

Table 3 – Nouns of German gap filling task

Arzt 'doctor'	*Feuerwehrmann* 'firefighter'
Flüchtling 'refugee'	*Gast* 'guest'
Ingenieur 'engineer'	*Lehrling* 'pupil'
Offizier 'officer'	*Passagier* 'passenger'
Richter 'judge'	*Schriftsteller* 'writer'
Staatssekretär 'secretary of state'	***Vorgesetzte*** 'superior'

For German, the sample mainly contained nouns for which the literature claimed that deriving their feminine forms would be difficult (cf. Schoental, 1989). This concerns nouns ending in *-ling*, such as *Flüchtling* 'refugee' or *Gast* 'guest'. Additionally, nouns like *Feuerwehrmann* 'fire man' denote a traditionally male profession. The noun *Staatssekretär* 'secretary of state' was included because the masculine and feminine base forms *Sekretär* and *Sekretärin*, which are both in use from time immemorial, originally had specific connotations: while the masculine noun *Sekretär* denoted a rather prominent leading function, the feminine noun *Sekretärin* traditionally referred to an assistant.[10]

For each noun, I created a separate test sentence. Consequently, the French task contained 13 test sentences, whereas the German variant consisted of 12 sentences. All test sentences contained a gap, which the participants had to complete by filling in a form of the given profession noun, sometimes including a determiner and attributive adjective too. The participants were asked to fill in a form that they believed to best denote the referent mentioned in the example.

Examples of the gap-filling sentences with possible responses are presented in (8) for French and (9) for German, respectively:

(8) a. *Madame Dupont est … … exemplaire.* (docteur)
'Mrs. Dupont is … … exemplary.' (doctor)

[10] This difference exists in many languages. See also Chapter 2, section 2.4.3.

b. *Madame Dupont est une docteure exemplaire.*
'Mrs. Dupont is a.FEM exemplary doctor.FEM.'

(9) a. *Frau Kluge ist …* … … . (Arzt – gut)
'Mrs. Kluge is … … … .' (doctor – good)
b. *Frau Kluge ist eine gute Ärztin.*
'Mrs. Kluge is a.FEM good doctor.FEM.'

As can be seen from the example sentences in (8) and (9), the participants could fill in any form they thought to be appropriate. I decided against an alternative involving the use of pre-defined sets of possible forms for each noun, although the adopted methodology could result in considerable variation between participants. The main reason for this was that for some nouns, many feminine forms exist, whereas for other nouns, it is largely unclear what the feminine form would be — apart from the option of using the masculine form as a generic, gender neutral form.

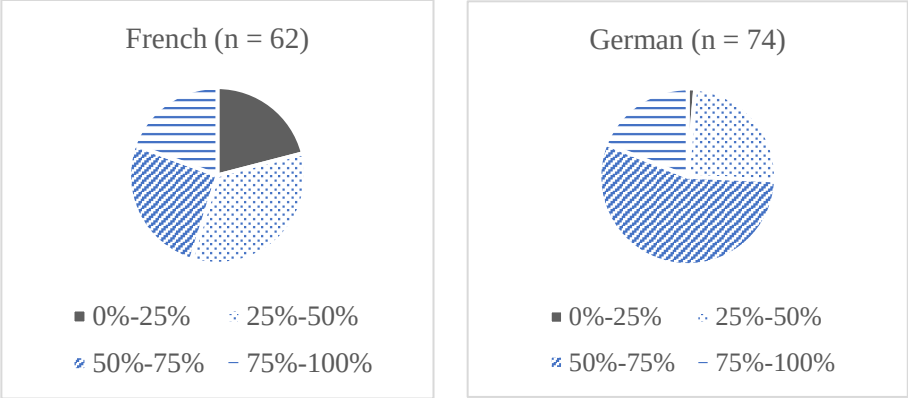
After running the experiments, the data were collected in spreadsheets. For each test noun, I checked whether the participants filled in a feminine form of the noun in the task. Consecutively, I counted for each participant in how many cases they used a feminine form, irrespective of the specific feminine form used. Based on this number, I calculated the average percentage of feminine forms used by each participant.

In a following step, I compared the percentages of feminine forms to the acceptability judgements on agreement in partitives. I performed statistical analyses to find out whether there was an effect of the use of feminine forms on the acceptability of semantic agreement. For both languages, I computed linear mixed-effects models within R (R Development Core Team, 2018), using the lmerTest package (Kuznetsova et al., 2017). Within each model, the acceptability rate of the partitive sentences, measured on a five-point scale (see Chapters 3 and 4), was the dependent variable. I included the percentages of feminine forms as a between-participant factor. To determine whether the use of feminine forms influenced the acceptance of semantic agreement, I included interactions with the fixed factor agreement type (either grammatical or semantic agreement) in the model, for which I specified orthogonal sum-to-zero contrasts. In the next section, I summarise the results of the gap filling tasks and discuss the outcome of the statistical analyses.

5.2.2 Results

As I mentioned previously, I calculated the average percentage of feminine forms filled in in the task for each participant. Occasionally, some participants did not provide a clear answer; I excluded these cases from the analysis.[11] Figure 3 below presents an overview of the percentages of feminine noun forms for both French and German. For ease of presentation, I divide the participants into four groups, based on the percentage of feminine forms they filled in: (i) in 0 to 25 percent of the sentences, (ii) in 25 to 50 percent of the sentences, (iii) in 50 to 75 percent of the sentences, and (iv) in 75 to 100 percent of the sentences.

Figure 3 – Overview scores French and German



As Figure 3 shows, German participants used more feminine forms than French participants. This is compatible with my conclusion in Chapter 2: German is ahead of French with respect to the feminisation of profession nouns. In the remainder of this section, I focus on the results of the statistical analyses, which allow me to determine whether the use of feminine noun forms impacts the acceptance of semantic agreement in partitives. I will not discuss any details concerning the specific feminine forms that the participants filled in. For a schematic overview of the results, the interested reader is referred to Appendix D.

For French, there appears to be an influence of the use of feminine forms on the acceptance of semantic agreement. The results of the mixed-effects model indicate that participants who use more feminine forms judge

[11] In some cases, the participants did not fill in a determiner, which, for some nouns, made it impossible to determine whether the participants selected a feminine or a masculine form of the noun.

partitives with semantic agreement to be significantly more acceptable than those with grammatical agreement (estimated difference of judgements = 1.68; 95% confidence interval = 0.97 … 2.39; $p < 0.001$). This suggests that speakers of French who use more feminine forms are also more likely to accept semantic agreement in partitive constructions.

For German, in contrast, the results of the model do not reveal an effect of use of feminine forms on the acceptance of semantic agreement. The interaction between the percentage of feminine forms used and the acceptability scores is not significant for the German participants (estimated difference in judgements = 1.14; 95% confidence interval = -0.02 … 2.32; $p = 0.054$). As a consequence, I cannot conclude that speakers of German who use more feminine forms are more inclined to accept semantic agreement in partitive constructions.

5.2.3 Discussion

Let us now return to the predictions I made earlier. I hypothesised that speakers who use more feminine noun forms would be more inclined to accept semantic agreement in partitives. The outcomes of the statistical models confirm this hypothesis for French, but not for German. Thus, for French, we can say that a speaker's attitude towards feminisation plays a role in the acceptance of semantic agreement. For German, instead, this does not seem to be the case. This observation raises the question what may cause the discrepancy between the two languages.

The difference between French and German could be related to the different sociolinguistic contexts regarding the integration and acceptance of inclusive language in the main speech communities, France and Germany, as I discussed in Chapter 2. In France, the derivation of feminine forms of occupational nouns is still subject to controverse, although feminisation appears to be more accepted now too. For this reason, it can be expected that speakers of French who accept feminisation of profession nouns will more easily accept semantic agreement in partitives too.

By contrast, the feminisation of profession nouns is much more widespread among speakers of German, as shown by the results of the gap filing task (see Figure 3). This pattern also corresponds to the results of the dictionary search reported in Chapter 2: the introduction of feminine forms of profession nouns went rather smoothly in Germany. German has one very productive feminisation strategy, which consists of adding the suffix *-in* to the masculine base form (e.g. *Autor* 'author.M' becomes *Autorin* 'author.F'). This

strategy may be applied for most profession nouns. As a consequence, the acceptability of semantic agreement may be less influenced by the percentage of feminine forms, for feminisation of profession nouns is usually accepted.

The fact that for French, a speaker's attitude towards feminisation appears to matter may provide some explanation of the variation observed across participants. I come back to this issue in Chapter 7 when proposing my theoretical account of gender agreement. In the next section, I discuss the main challenges for such an account.

5.3 Setting the scene for the theoretical account

In the previous sections, I presented a comparison of French and German with respect to gender agreement in partitive constructions, by recapitulating the main findings reported in the preceding chapters. In section 5.1, I summarised and compared the results of the grammaticality judgement tasks. As such, I could establish the two main factors that guide the choice for either grammatical or semantic agreement in partitives: (i) partitive type and (ii) noun class. Section 5.2 is devoted to an additional factor that could influence the choice for semantic agreement, that is, a speaker's attitude towards feminisation. To this end, I investigated whether the acceptance of semantic agreement in partitive constructions showed an effect of a speaker's willingness to use feminine forms of profession nouns. I observed an effect for French: speakers who used more feminine forms were also more likely to accept semantic agreement in partitives. Instead, I did not find such an effect for German. I hypothesised that this contrast might be due to the fact that the feminisation of nouns faced fewer obstacles for German than for French.

With all these pieces of information in place, I can turn to the final research question of this dissertation, which asks about a theoretical account of gender agreement in partitives:

V. Is it possible to provide a principled account for the French and German data that integrates the relevant underlying factors?

The theoretical account of gender agreement in partitives consists of two parts: (i) the syntactic structure of partitive constructions and (ii) the analysis of gender agreement. Although both subparts received considerable attention in the literature individually, no studies investigated the relation between the two aspects, apart from the study by Sleeman & Ihsane (2016), which I already

discussed in Chapter 3. In the following two chapters, I develop a theoretical account that addresses both the syntax of partitives and gender agreement.

While many studies on the syntactic structure of partitive constructions considered quantified partitives (e.g. Jackendoff, 1977; Milner, 1978; Kupferman, 1999; Sleeman & Kester, 2002; Martí-Girbau, 2010; Cardinaletti & Giusti, 2017; Falco & Zamparelli, 2019), superlative partitives were largely absent from the discussion. In **Chapter 6**, I will propose a novel syntactic derivation that includes both partitive types. I will specifically focus on the contrast between quantified and superlative partitives. For French, the data show that grammatical agreement is clearly preferred in quantified partitives, whereas speakers tend to accept semantic agreement in superlative partitives. By contrast, German presents a more challenging pattern, since speakers often accept semantic agreement in quantified partitives as well. This raises questions for the syntactic analysis, as we may wonder whether quantified partitives are structurally similar in French and German, or, instead, differ in terms of their syntactic derivation. At first sight, the data seem to support the latter assumption, but close scrutiny will show that an alternative is possible, in which the two partitive types build on similar underlying structures.

In **Chapter 7**, I return to gender agreement and explain my account of the agreement patterns I observed in partitive constructions. As I already noted in Chapter 1, the agreement situation in partitive constructions may be considered a case of mixed agreement (cf. Corbett, 1991, 2006). This phenomenon has been the topic of multiple studies, focussing on different kinds of agreement contexts in a variety of languages (e.g. Alexiadou, 2004; Kramer, 2009, 2014; Steriopolo & Wiltschko, 2010; Matushansky, 2013; Landau, 2016; Wurmbrand, 2017; Kučerová, 2018). Still, the agreement situations described in these studies cannot completely be compared to the specific cases at scrutiny here, involving partitive constructions. Therefore, I will propose an alternative account, starting from the syntactic derivation of partitives I develop in Chapter 6. This account should explain why semantic agreement is more likely in superlative than in quantified partitives, but it should also account for the observation that speakers of German still seem to prefer semantic agreement in quantified partitives, as opposed to speakers of French. Furthermore, I attempt to explain the observed noun (class) differences within my proposal as well.

Chapter 6

The syntactic structure of partitive constructions

In Chapter 5, I reported the main agreement patterns for partitives in French and German, based on the findings of the experiments. As I showed, French and German quantified and superlative partitives display differences and similarities with respect to the acceptability of semantic agreement, which raises questions with respect to their syntactic structures. While speakers of French only accept semantic agreement in superlative partitives, speakers of German accept it in quantified partitives too, but quantified partitives with semantic agreement received lower judgements than comparable superlative partitives. This suggests that there is a structural difference between the two partitive types in both French and German. If so, we may wonder what structural property could account for these dissimilarities.

In the present chapter, I address this question and propose a novel syntactic analysis for quantified and superlative partitives, under which the differences between the two types directly relate to their syntactic structure. Section 6.1 describes the main questions that guided the debate on the syntactic structure of partitive constructions, which also motivated the syntactic analysis developed by Sleeman & Ihsane (2016). In section 6.2, I discuss the theoretical assumptions on the basis of which I propose an alternative to existing approaches. I turn to the differences between quantified and superlative partitives in section 6.3. In section 6.4, I summarise the main characteristics of the proposed analysis.

6.1 Previous studies on the syntactic derivation of partitives

Over the past decades, the syntactic structure of partitive constructions received considerable attention in the literature (e.g. Jackendoff, 1977; Milner, 1978; Kupferman, 1999; Sleeman & Kester, 2002; Zribi-Hertz, 2003; Martí-Girbau, 2010; Sleeman & Ihsane, 2016; Cardinaletti & Giusti, 2017; Sauerland & Yatsushiro, 2017; Falco & Zamparelli, 2019). Although some of these studies discuss different types of partitives (cf. Falco & Zamparelli,

2019), in terms of syntactic structure, most of them predominantly focus on quantified partitives. Superlative partitives received considerably less attention and to the best of my knowledge, their syntactic derivation has only been addressed in some more detail by Sleeman & Ihsane (2016).

Sleeman & Ihsane (2016) discuss quantified and superlative partitives and propose syntactic derivations for both types, which allow them to account for agreement differences in French (see Chapter 3, section 3.1.2). Their analysis elaborates on an earlier study by Sleeman & Kester (2002), who extend a syntactic analysis of possessive constructions (e.g. *the car of John*) to partitives. In so doing, they partly deviate from the traditional approaches to the structure of these constructions. In the following sections, I discuss in more detail the analyses proposed by Sleeman & Kester (2002) for quantified partitives, and by Sleeman & Ihsane (2016) for both quantified and superlative partitives. As I discussed already in Chapter 3, the findings of the present, more elaborate study on agreement in French partitives can still be captured by the analysis of Sleeman & Ihsane (2016). When confronted with the German data, however, their proposal runs into problems, which makes me consider an alternative approach.

6.1.1 The structure of quantified partitives: main issues

From the surface, the structure of a quantified partitive seems to be rather straightforward: a subset, introduced by a quantifier (e.g. the numeral *one*), is selected form a set.[1] This set phrase takes the form of a PP (in French) or a genitive-marked DP (in German). In the examples in (1) below, the set phrase is marked with square brackets:[2]

(1) a. *un* [*de* *ces* *étudiants*]
one [of these students]
b. *einer* [*dieser* *Studenten*]
one [these.GEN students]
'one of these students'

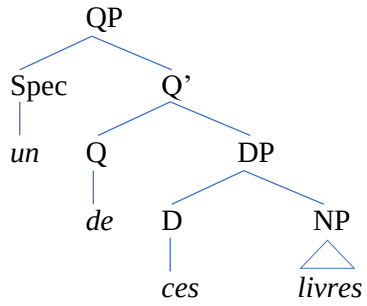
[1] Recall that, throughout this dissertation, I call the part referring to the subset the *subset phrase* and the part referring to the set the *set phrase*.

[2] For the sake of simplicity, I am overgeneralising here, as the partitive phrase in a German partitive construction may also contain the preposition *von* (+ dative case) instead of the genitive. In the German questionnaire (see Chapter 4, section 4.2.2), I only tested partitives in which the partitive phrase was marked with genitive case.

Despite this seemingly straightforward state of affairs, scholars have not come to a unified structural analysis yet. The two main points of debate concern (i) the question of whether partitive constructions involve an empty NP or not, and (ii) the way in which the set and subset phrases are combined and receive a partitive interpretation (cf. Sleeman & Kester, 2002; Cardinaletti & Giusti, 2017; Falco & Zamparelli, 2019).

Let us start with the question of whether the syntactic structure of a partitive contains an empty NP. At first sight, partitives seem to contain only one nominal element, the (plural) noun referring to the set (i.e. *étudiants/Studenten* 'students' in 1a-b). Some scholars (e.g. Kupferman, 1999; Zribi-Hertz, 2003; Martí-Girbau, 2010) assume that the underlying structure corresponds to the overt utterance and, therefore, only involves one nominal element, an NP referring to the set. In Kupferman's (1999) analysis, the quantifier *un* 'one' — which merges in [Spec, QP] — immediately selects the DP referring to the set, as shown in (2):

(2)

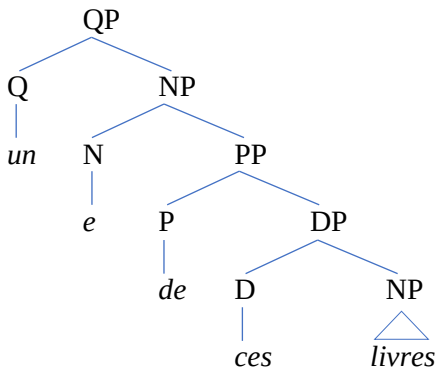


Crucially, the structure in (2) contains one NP, headed by the set noun *livres* 'books'. Therefore, such an analysis is often termed a *one-noun analysis*.[3]

Other studies argue that the underlying structure of a partitive construction involves a second NP, which is usually non-overt in the pronounced utterance (cf. Jackendoff, 1977; Milner, 1978; Sleeman & Kester, 2002; Sleeman & Ihsane, 2016; Cardinaletti & Giusti, 2017; Sauerland & Yatsushiro, 2017; Falco & Zamparelli, 2019). This second unpronounced NP is then taken to refer to the subset. The structure in (3) schematically visualises such a *two-noun analysis*:

[3] Martí-Girbau (2010) proposes a slightly different analysis than Kupferman (1999), involving predicate inversion. However, both Sleeman & Kester (2002) and Falco & Zamparelli (2019) argue against a predicate inversion analysis for partitives.

(3)



In (3), apart from the NP containing the set noun *livres* 'books', the upper part of the structure contains an NP too, which is selected by the quantifier *un* 'one'. This higher NP is headed by an empty element *e* (for empty), denoting the subset selected from the set of books. Literally, such a structure would translate into an English pseudo-phrase as *one book of those books*.

Sleeman & Kester (2002) (among others) present different arguments to motivate why partitive constructions involve a second, empty NP. First, a one-noun analysis cannot easily account for number agreement on a verb that takes a partitive construction as its subject. The example in (4) illustrates this:

(4) *Un* *de* *mes* *enfant-s* *est/*sont* *malade/malade-s.*
one.M of my.PL child-PL is/*are ill.SG/ill-PL
'One of my children is ill.'

As we can see in (4), the verb has to agree with the singular quantifier *un* and cannot agree with the immediately adjacent plural noun *enfants.* Yet, this is possible in an ordinary quantitative construction (e.g. *a couple of books*), as exemplified in (5) (examples taken from Doetjes & Rooryck, 2003: 3-4):

(5) a. *Une* *foule* *d'* *étudiant-s* *est/*sont* *dans* *le* *couloir.*
a.F crowd of student-PL is/are in the.M hallway
'A crowd of students is in the hallway.'
b. *Une* *foule* *d'* *étudiant-s* *se=sont/*s'=est* *succédé.*
a.F crowd of student-PL REFL=are/REFL=is succeeded
'A crowd of students came in one after each other.'

Within this quantitative construction, the verb agrees either with the singular quantifier *une foule* 'a crowd' (5a) or with the plural noun *étudiants* (5b). Partitive constructions do not present such a context-dependent alternation in

verbal agreement, as the verb always has to agree in number with the quantifier. This suggests that the outer part of a partitive, dominated by the quantifier, contains an element that blocks agreement with the lower NP. If we assume that the outer part contains a silent NP, we can explain why only singular agreement on the verb is possible in (4): the verb agrees with the covert noun in the subset part of the partitive and not with the overt plural noun. If we would assume, in contrast, that partitives only contain one NP — in the set phrase — it would not be clear why the verb would not agree with this plural NP.

Second, partitive constructions can in some cases contain an overtly realised noun referring to the subset, as shown in (6):

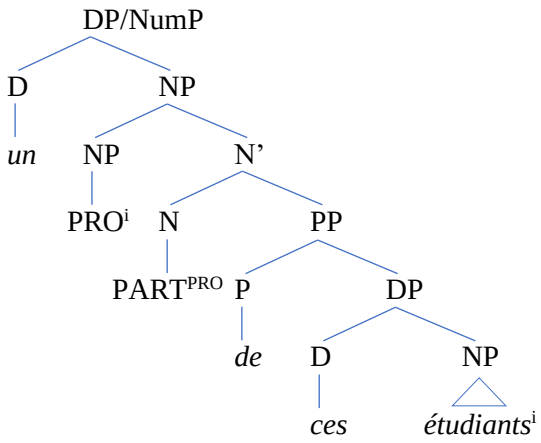
(6) *Un* *livre* *de* *ceux* *que* *j'=ai* *lu-s.*
one.M book of DEM.PL that 1SG=have read-PL
'One book of those that I have read.'

In (6), the subset noun *livre* in the outer DP is overtly realised, whereas the set noun in the inner DP is not realised as an overt noun, but as the demonstrative pronoun *ceux* 'those'. It should be noted that the presence of the relative clause *que j'ai lus* 'that I read' is required to allow the use of the demonstrative (cf. Sleeman, 2006). As Sleeman & Kester (2002) argue, this also suggests that the syntactic structure of a partitive contains an empty NP in its upper part, which, as the example in (6) shows, may sometimes be overtly realised. Building on these arguments, Sleeman & Kester (2002) adopt a two-noun analysis of partitive constructions.

The second point of debate with regard to the syntactic structure of partitives concerns the way in which set and subset phrase are merged together. Traditionally, the set phrase is taken to be the complement of the non-overt subset nominal. A recent analysis by Falco & Zamparelli (2019) adopts this position too. Under their analysis, the set phrase is selected by the preposition *de*, heading a PP, which merges as the complement of the empty nominal. This empty nominal is labelled PART^{PRO} and is a silent nominal operator. The NP headed by the silent operator hosts a pro-NP in its Specifier, which is co-indexed with the set noun. Structure (7) shows Falco & Zamparelli's (2019) derivation:[4]

[4] Falco & Zamparelli (2019) do not specify whether the quantifier (*un/une* in French, *ein/einer/eines* in German) is situated in D or in Num (cf. Zamparelli, 1998). Others, in turn, locate the quantifier in Q, the head of QP (Cardinaletti & Giusti, 1991; Cardinaletti & Giusti, 2017). While I simply adopt the latter position for my analysis, I leave the debate on the exact position of the quantifier for future research.

(7)



In (7), the set phrase, the PP *de ces étudiants* 'of these students', is merged as the complement of the silent nominal operator PART^{PRO}, which assures the partitive interpretation of the phrase. The presence of PRO in [Spec, NP], co-indexed with the set noun *étudiants*, establishes the set-subset relation between both parts of the partitive construction.

Falco & Zamparelli's (2019) analysis follows earlier proposals of complement analyses by, for instance, Jackendoff (1977) or Milner (1978). Although a complement analysis seems appealing because of its simplicity, Sleeman & Kester (2002) reject such an analysis.[5] Their main argument considers the role of the set phrase in relation to the empty nominal. Following Grimshaw (1991), Sleeman & Kester (2002) argue that from a semantic point of view, the set phrase of a partitive better compares to an adjunct than to an argument of the empty subset nominal. Compare the functions of the *of*-phrases in the examples in (8-9) below:

(8) *the destruction of Cartago by the Romans*

(9) *three of the students*

In (8), the *of*-phrase *of Cartago* clearly denotes an argument of the noun *destruction*, it indicates the object of destruction and therefore bears the thematic role of theme. In the partitive construction in (9), instead, it is not

[5] Sleeman & Kester (2002) also criticise Milner's (1978) analysis because it does not comply with Antisymmetry Theory (Kayne, 1994). In Milner's (1978) analysis, the partitive phrase originates as the complement of the quantifier in the outer DP before it moves to the complement position of the outer DP's noun. This involves rightward movement, which is not allowed under Antisymmetry Theory.

clear what the thematic role of the *of*-phrase *of the students* would be, as the *of*-phrase cannot really be interpreted as an argument of the quantifier (or the empty nominal dominated by the quantifier). That *of Cartago* in (8) has argument status, but not *of the students* in (9), is further motivated by the example in (10), in which the noun *destruction* is replaced by its verbal equivalent *to destroy*:

(10) *The Romains destroyed Cartago.*

The argument *of Cartago* of the noun *destruction* in (8) has become the direct object of the verb *to destroy* in (10), but still bears the theme-role. The partitive construction in (9), in contrast, does not allow such an alternation, which indicates that *of the students* is not an argument.

Structurally, the complement position of a head X is restricted to arguments of that head; it is not allowed to merge adjuncts in it. Therefore, for partitive constructions, we cannot assume that the set phrase merges in the complement position of N, as it is not an argument, but rather an adjunct. The assumption that the set phrase would be a complement of the subset nominal violates the Uniformity of Theta-Assignment Hypothesis (UTAH) (Baker, 1988), which states the following:

> Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure. (Baker, 1988: 46)

If the set phrase is an adjunct rather than an argument, adopting the UTAH, it cannot merge in the complement position of the subset phrase's noun because this position can only host arguments, not adjuncts. Building forth on the assumption that the set phrase of a partitive is semantically more like an adjunct than an argument, Sleeman & Kester (2002) present additional evidence in favour of an alternative to a complement analysis, based on a comparison between partitive and possessive constructions (e.g. *the car of John*), which I discuss in the next section.[6]

[6] Even though the validity of UTAH under current Minimalism (Chomsky, 1995) is debated (cf. Harley, 2011 for discussion), the comparability of partitives and possessives exists independently from this debate.

6.1.2 Sleeman & Kester (2002): partitives versus possessives

As I discussed in the previous section, Sleeman & Kester (2002) take the set phrase of a partitive construction to be an adjunct, rather than an argument of the subset nominal, which motivates their criticism of a simple complement analysis of partitives. Therefore, they propose a different analysis to capture the relation between set and subset: they adopt a small clause analysis originally developed for possessive constructions by Hulk & Tellier (2000). Sleeman & Kester (2002) motivate their choice by showing that partitive and possessive constructions display some remarkable similarities.

First, partitives and possessives are comparable from a semantic point of view. Hulk & Tellier (2000) argue that possessive constructions involve a *belong*-type interpretation, under which the possessee *belongs* to the possessor.[7] In a similar vein, Sleeman & Kester (2002) show that, in French, partitive constructions may also be analysed as expressing a *belong*-type interpretation, whereby the subset *belongs* to the set. The examples below illustrate this:

(11) *Tous les chapitre-s de ce livre sont intéressant-s.*
all the.PL chapter-PL of this book.SG are interesting-PL
'All chapters of this book are interesting.'

(12) *Un des chapitre-s en particulier m'=a vraiment marqué.*
one of.the.PL chapter-PL in particular me=has really impressed
'One of the chapters in particular really impressed me.'

In (11), *tous les chapitres* 'all the chapters' belongs to *ce livre* 'this book'. Likewise, in the partitive construction in (12), it can be said that the subset designated by the quantifier *un* 'one' belongs to the set of chapters, which together constitute the book (i.e. *one chapter belongs to the set of chapters*). Thus, both constructions are semantically similar in involving a *belong*-type interpretation between the two NPs.

Apart from semantic similarity, syntactic factors also point towards the comparability of partitive and possessive constructions. Sleeman & Kester

[7] The advantage of a *belong*-type analysis, as proposed by Hulk & Tellier (2000), is that it is not necessary to assume predicate inversion, which involves movement that needs additional motivation. Kayne (1994) proposes a *have*-type analysis of possessives, which involves predicate inversion. Likewise, Den Dikken (1998), while adopting a small clause approach, also assumes predicate inversion for possessives.

(2002) use the possibility of *en*-cliticisation as a diagnostic. If we compare partitives to other quantitative (and qualitative) constructions involving *de* (e.g. *un chapitre du livre* 'a chapter of the book') on the one hand, and possessive constructions on the other hand, we observe that partitives pattern with possessive constructions, rather than with quantitative constructions. Both possessives and (quantified) partitives do not allow *en*-cliticisation of their complement (13-14); this is possible with the quantitative constructions in (15) (examples taken from Sleeman & Kester, 2002: 8-9):

(13) a. *J'=ai lu la première page du chapitre*
I=have read the first page of.the chapter
premier de ce livre.
first of this book
'I have read the first page of the first chapter of this book.'

b. **J'=en=ai lu la première page du*
I=of.it=have read the first page of.the
chapitre premier.
chapter first
'I have read the first page of the first chapter of it.'

(14) a. *J'=ai lu un des chapitre-s de ce livre.*
I=have read one of.the.PL chapter-PL of this book
'I have read one of the chapters of this book.'

b. **J'=en=ai lu un des chapitre-s.*
I=of.it=have read one of.the.PL chapter-PL
'I have read one of the chapters of it.'

(15) a. *J'=ai lu six chapitre-s de ce livre.*
I=have read six chapter-PL of this book
'I have read six chapters of this book.'

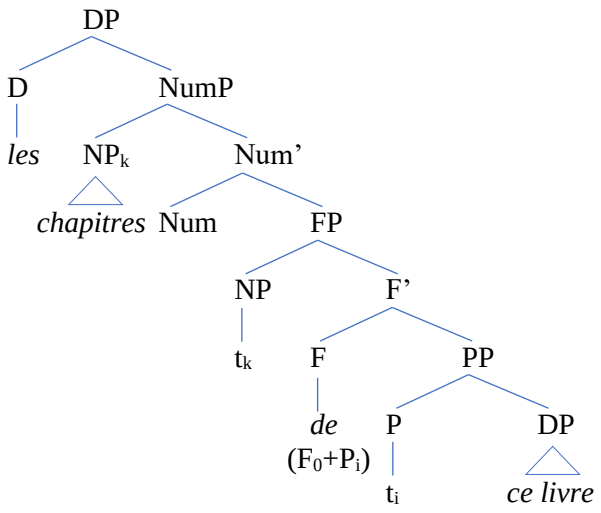
b. *J'=en=ai lu six chapitre-s.*
I=of.it=have read six chapter-PL
'I have read six chapters of it.'

In (15b), featuring a quantitative construction, *en*-cliticisation is allowed. By contrast, *en*-cliticisation leads to ungrammaticality in both the possessive (13b) and the quantified partitive construction (14b). This shows that from a structural point of view, possessives and (quantified) partitives appear to be similar too.

To capture these similarities, Sleeman & Kester (2002) propose a small clause analysis of partitive constructions, comparable to the analysis of

possessives adopted by Hulk & Tellier (2000). Under their analysis, the possessor (indicated by the *de*-phrase) merges as the complement of the small clause (represented as FP, Functional Projection), whereas the possessee is merged as the small clause's subject, i.e. merged in the specifier position. Furthermore, Hulk & Tellier (2000) argue that the preposition *de* is not a regular preposition located overtly in P, but rather an empty preposition that moves from P and incorporates into the head of the functional projection dominating the set phrase. This movement operation causes spell-out of the empty preposition as *de*. As the head of the small clause, the preposition has a *belong*-type interpretation. The structure in (16) visualises Hulk & Tellier's (2000) analysis of possessives:

(16)

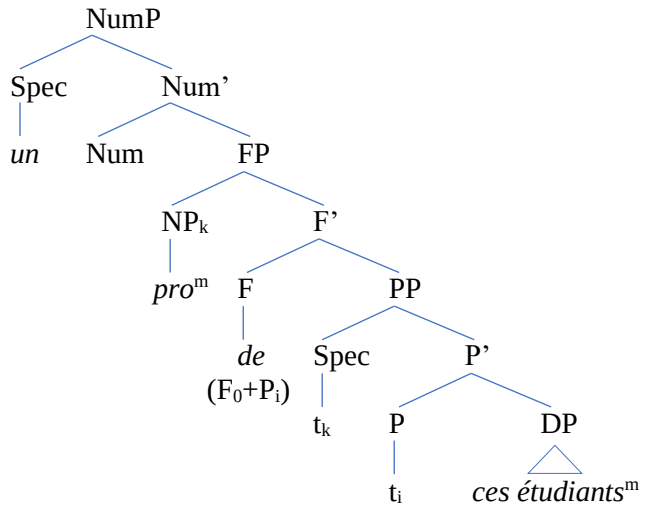


In (16), the derivation of the possessive (see 11) starts off with the small clause (FP), which contains the possessor PP *ce livre* 'this book' as its complement and the possessee NP *les chapitres* 'the chapters' as its specifier. The possessor PP is headed by an empty preposition, which has to move and incorporate into the F-head because of licensing requirements. As Hulk & Tellier (2000), following Den Dikken (1998), argue, incorporation of the empty preposition into the F-head results in spell-out as *de* in French. In a next step, the possessee NP *chapitres* moves to [Spec, NumP] to agree with number features located on the Num-head.

Sleeman & Kester (2002) extend this analysis to quantified partitives. Crucially, however, their analysis of partitives deviates from the one for possessives in assuming the presence of an empty element *pro* in [Spec, FP],

co-indexed with the set noun, instead of an overt noun. In this way, they capture the fact that in partitive constructions, the subset noun is usually non-overt. The structure in (17) represents Sleeman & Kester's (2002) analysis:

(17)

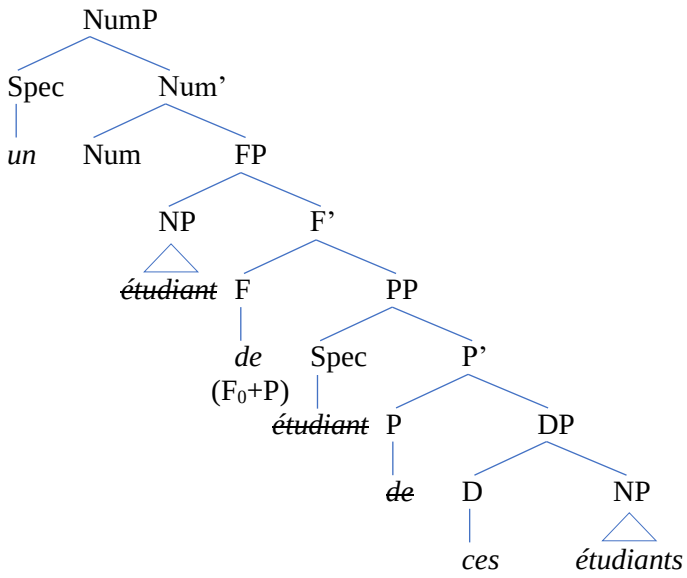


In (17), the empty element *pro*, which represents the subject of the small clause (FP), does not originate in [Spec, FP], but moves to this position from [Spec, PP]. While Sleeman & Kester (2002) do not motivate this movement, one could argue that it is required in order for *pro* to be in a Spec-Head relation with *de*, where it could be licensed. Apart from this, the derivation of the partitive resembles the one proposed for the possessive in (16): the empty preposition on the P-head moves to the head position of the small clause and incorporation of this preposition into the F-head results in spell-out of *de*.

Sleeman & Ihsane (2016) build on Sleeman & Kester's (2002) analysis of quantified partitives, but make one theoretical change: they abandon the analysis of the empty subset nominal as *pro*. Instead, they adopt the copy theory of movement (cf. Nunes, 2004; Corver & Nunes, 2007) to account for the impossibility of having two overt nouns in partitive constructions instead. Under the copy theory of movement, the non-overt subset is not just an empty element, but rather an unpronounced copy of the overt set noun, which moves up to the subject position of the small clause. In (18), Sleeman & Ihsane's (2016) derivation of quantified partitives is shown:[8]

[8] Another question that arises with respect to Sleeman & Ihsane's (2016) analysis concerns the number mismatch between set and subset: canonical partitives always contain a plural set, whereas the subset may either be singular, or plural, as long as it does not exceed the size of the

(18)



Apart from the difference described above — copy theory of movement instead of *pro* — the analysis in (18) is similar to Sleeman & Kester's (2002) in (17): the partitive phrase merges as the complement of the small clause and contains an empty preposition, which incorporates into the head F, resulting in spell-out of *de*.

In the next section, I turn to Sleeman & Ihsane's (2016) syntactic derivation of superlative partitives, which builds on the small clause analysis of quantified partitives adopted from Sleeman & Kester (2002). Sleeman & Ihsane's (2016) analysis specifically aims to account for the agreement differences between quantified and superlative partitives they observed based on informants' judgements. Therefore, I briefly touch upon the issue of gender agreement and return to Sleeman & Ihsane's (2016) account of agreement differences between the two partitive types, which I explained in greater detail in Chapter 3, section 3.1.2. However, a more thorough discussion of gender agreement in partitives will be left for the next chapter.

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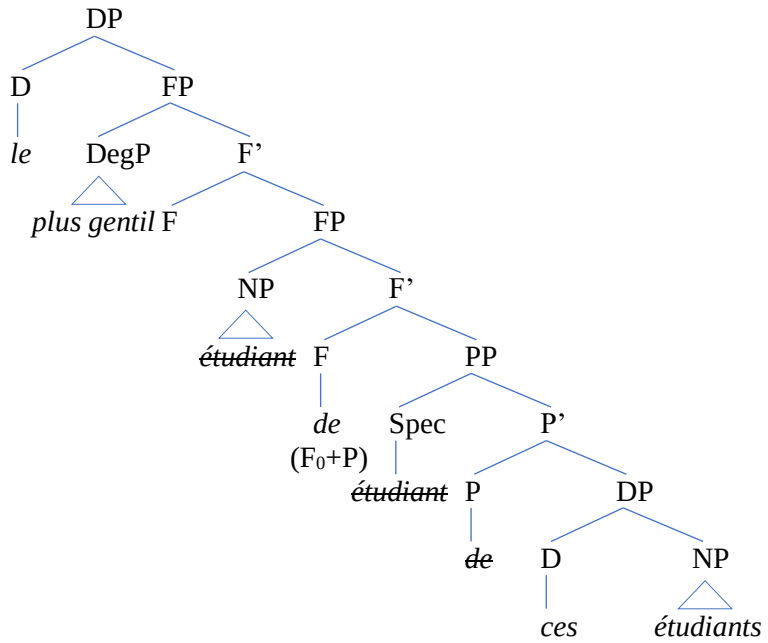
set (i.e. it is not possible to select four students from a group of three students). If we assume that number features head their own functional projection, labelled NumP, as proposed by Ritter (1993), and thus are not part of the NP, the possibility of number mismatches in partitive constructions can be explained by assuming that copying does only affect the NP-layer and no structurally higher functional projections, such as NumP. Thus, while the noun gets copied, number features are not copied and thus do not get transferred onto the covert subset noun.

6.1.3 Sleeman & Ihsane (2016): accounting for gender agreement

For superlative partitives, Sleeman & Ihsane (2016) basically adopt the same syntactic analysis as for quantified partitives. The main difference lies in the upper part of the structure. In quantified partitives, the small clause is selected by a Number Phrase, hosting a quantifier in its Specifier position (cf. 18). In a superlative partitive, instead, a more elaborate syntactic structure dominates the small clause, containing a projection hosting the superlative adjective, as well as a DP. The structure in (19) illustrates the basic derivation of superlative partitives (ignoring gender agreement for now):[9]

(19)



In (19), we identify again the small clause (FP) with the partitive PP as the complement of the F-head and the unpronounced copy of the set noun in [Spec, FP]. Just as for the quantified partitive (18), the partitive phrase contains an empty preposition, which, after incorporation into the F-head, results in spell-out of *de*. The structure in (19) is distinct from the structure in (18) with respect to the upper part of the derivation: an FP and a DP, hosting the superlative *le plus gentil* 'the kindest', dominates the small clause.

[9] With respect to the merge position of attributive adjectives, Sleeman & Ihsane (2016) follow Cinque (2010), who assumes that APs merge in the Specifier position of Functional Projections within the nominal domain (see also Van de Velde et al., 2014).

Quantified and superlative partitives in French differ in their behaviour with regard to gender agreement, as Sleeman & Ihsane (2016) already noticed. While speakers accept semantic agreement at least with some types of animate nouns in superlative partitives, semantic agreement is not accepted in quantified partitives, as illustrated in (20-21):

(20) *?Une/Un* *des* *étudiant-s* *est* *Hélène.*
one.F/one.M of.the.PL student.M-PL is Hélène
'One of the students is Hélène.'

(21) *?Le/La* *plus* *?gentil/gentil-le* *des* *étudiant-s* *est*
the.M/the.F SUP kind.M/kind-F of.the.PL student.M-PL is
Hélène.
Hélène
'The kindest of the students is Hélène.'

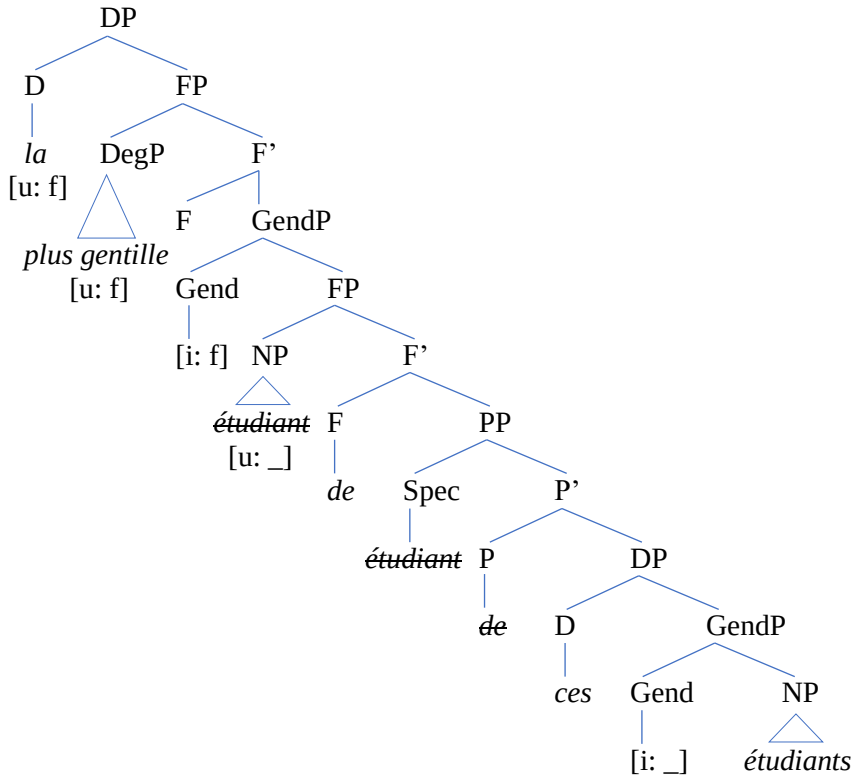
In both (20) and (21), the masculine plural form *étudiants* is used to refer to a mixed group of students. In both cases, a female student, *Hélène*, is selected from this group. Nevertheless, in the quantified partitive (20), the use of the feminine quantifier *une* is not accepted. Speakers prefer grammatical agreement, resulting in the masculine quantifier *un*. In the superlative partitive (21), in contrast, the use of the feminine superlative *la plus gentille* is preferred, causing a gender mismatch between the masculine set denoting noun *étudiants* and the feminine superlative referring to the subset.

As Sleeman & Ihsane (2016) argue, all features except number are copied from the set noun onto the subset noun, which accounts for the observation that their informants did not accept a gender mismatch between set and subset phrase in a quantified partitive. Recall that Sleeman & Ihsane (2016) introduce the functional projection Gender Phrase (building on Picallo, 1991) to account for the interplay between grammatical and semantic gender with animate nouns.[10] As they argue, a DP structure contains a Gender Phrase when designating an animate referent. While the set phrase in a partitive referring to an animate always contains a Gender Phrase too, this is not the case for the subset phrase. Sleeman & Ihsane (2016) argue that superlative partitives differ from their quantified counterparts by containing not one, but

[10] Sleeman & Ihsane (2016), building on Ihsane & Sleeman (2016), argue that grammatical and semantic gender should be distinguished for French animate nouns and are located on different levels in the structure: grammatical gender is expressed on the noun as a property of the mental lexicon; semantic gender is encoded on a functional projection Gender Phrase. See Chapter 3, section 3.1.3 for more details on Sleeman & Ihsane's (2016) theoretical assumptions.

two Gender Phrases: one in the set phrase and one in the subset phrase. The structure of superlative partitives is represented in (22):

(22)



According to Sleeman & Ihsane (2016), a mismatch in a superlative partitive can only arise when the set noun is unspecified for semantic gender, as indicated by the underscore in the rightward Gender Phrase in (22) (see Chapter 3, section 3.1.2 for further discussion). Unspecified semantic gender gives rise to Failed Agree (Preminger, 2009, 2011) and spell-out of the default masculine form in the set phrase. Only in this situation may a mismatch arise through insertion of feminine semantic gender in the leftward Gender Phrase (22), which triggers feminine agreement on the determiner and adjective of the subset phrase.

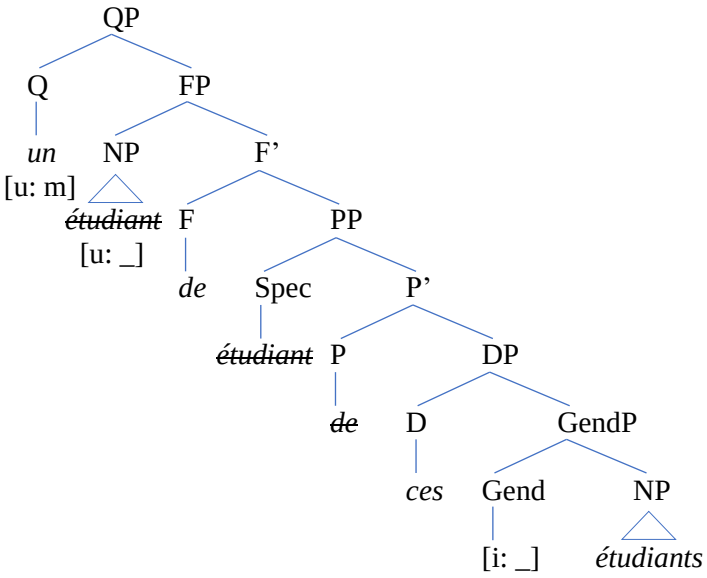
The structure of quantified partitives, in contrast, does not contain a second Gender Phrase, dominating the unpronounced subset noun, which could provide a 'second chance' to introduce a semantic gender value in the subset phrase. In this way, Sleeman & Ihsane (2016) account for the differences in agreement between the two partitive types. According to the

authors, this assumption is motivated by the fact that in quantified partitives, the quantifier immediately selects the FP. Whereas in ordinary DPs, a quantifier may be modified by an attributive adjective (23a), this is ruled out for the quantifier in a quantified partitive (23b):

(23) a. *deux* *jeune-s* *étudiant-s*
two young-PL student.M-PL
b. **deux* *jeune-s* *des* *étudiant-s*
two young-PL of.the.PL student.M-PL

Hence, the impossibility of having a mismatch in quantified partitives: the gender features of the subset noun are copied from the set noun and cannot be altered anymore, which necessitates gender uniformity within the entire partitive construction. The structure of quantified partitives is represented in (24):

(24)



Contrary to what we saw earlier for the superlative partitive in (22), the quantified partitive in (24) does not contain a second Gender Phrase. Under the copy theory of movement, the unvalued gender feature of the set noun is copied onto the unpronounced subset noun. Due to the absence of a second Gender Phrase in the upper part of the structure, specification via insertion of a semantic gender value is not possible. This leads to spell-out of default

gender (Preminger, 2009, 2011) in the subset phrase, just as in the set phrase, ultimately causing gender identity in the entire partitive construction.

6.1.4 The problem of German

As I discussed in Chapter 3, Sleeman & Ihsane's (2016) analysis is compatible with the results of the more elaborate experiment on agreement in French discussed in this dissertation. However, the results on German (see Chapter 4 for a complete overview) pose problems, especially with respect to quantified partitives. In terms of directionality, both partitive types show the same pattern: speakers consider semantic agreement significantly more acceptable than grammatical agreement. The examples in (25-26) below illustrate this:

(25) *?Ein-er/Ein-e* *dies-er* *Student-en* *ist Marie.*
one-M/one-F DEM-GEN.PL student.M-PL is Marie
'One of these students is Marie.'

(26) *?Der/Die* *jüng-ste* *dies-er* *Student-en* *ist Marie.*
the.M/the.F young-SUP DEM-GEN.PL student.M-PL is Marie
'The youngest of these students is Marie.'

Nevertheless, the statistical analysis of the results revealed a statistically significant difference in acceptability rate between quantified and superlative partitives in German, semantic agreement being judged significantly more acceptable in superlative than in quantified partitives. As I discussed in Chapter 5, this points towards an influence of the factor partitive type for German too.

Still, as the examples in (25-26) illustrate, German differs from French, where quantified partitives clearly present the opposite pattern of superlative partitives, semantic agreement being significantly less accepted in the first type than in the second type. Recall that Sleeman & Ihsane (2016) argued that syntactic reasons rule out semantic agreement in quantified partitives. According to these authors, quantified partitives do not contain a second Gender Phrase in the upper part, which eliminates the possibility to insert a semantically specified gender value on the quantifier. If this is correct, we cannot account for the acceptability of semantic agreement in German quantified partitives, which seems to allow insertion of a semantically specified gender value in the upper part of the derivation.

Of course, one could assume that the syntactic structure of German quantified partitives contains a second Gender Phrase in its upper part. This

would explain the contrast between French and German. However, one may wonder how to motivate this assumption, as there does not appear to be any empirical evidence for this line of thought. In addition, such an assumption would imply that German quantified partitives are structurally more complex than their French equivalents. Yet, German and French quantified partitives behave similarly, for instance with respect to the modifiability of the quantifier. As Sleeman & Ihsane (2016) already argued for French, the quantifier cannot be modified by means of an attributive adjective, as was illustrated earlier in example (23b). The same applies to German: while the quantifier of an ordinary DP may be modified by an attributive adjective (27a), this is excluded in quantified partitives (27b):

(27) a. *zwei* *jung-e* *Student-en*
two young-PL student.M-PL
b. **zwei* *jung-e* *der* *Student-en*
two young-PL of.the.PL student.M-PL

As the examples in (23b) and (27b) show, French and German behave comparably, which suggests that there are no interfering projections between the quantifier and the core part of the partitive construction in both languages. Therefore, we cannot evoke a structural difference by assuming that only German quantified partitives contain a second Gender Phrase.

Finally, several studies (e.g. Alexiadou, 2004; Kramer, 2016) question the existence of a functional projection Gender Phrase in the first place, a point to which I return in the next chapter. For now, I conclude from these observations that it seems implausible to attribute the differences between French and German considering quantified partitives to a structural explanation in terms of the presence or absence of a second Gender Phrase.

6.2 Towards an alternative analysis

In the previous sections, I briefly discussed different views on the syntactic structure of partitive constructions, while elaborating in more detail on the analyses proposed by Sleeman & Kester (2002) and by Sleeman & Ihsane (2016). Although the latter study attempts to explain gender agreement differences between quantified and superlative partitives in French, it falls short in accounting for the German data. The main question that emerges from the previous discussion is to what extent quantified and superlative partitives share structural similarity.

In the remainder of this chapter, I address this question by developing a novel syntactic analysis of quantified and superlative partitives. Based on the discussion so far, I make two main theoretical assumptions: (i) I assume that the syntactic structure of partitives contains an empty NP, denoting the subset. Specifically, I will argue that partitive constructions involve a silent nominal classifier. (ii) I adopt a small clause analysis of partitives, building on Sleeman & Kester (2002). Within the analysis I propose, quantified and superlative partitives are identical with respect to the lower part of their syntactic derivations, while the upper parts of their structures differ, thus explaining the contrasts between the two partitive types.

6.2.1 A small clause approach

I agree with Sleeman & Kester (2002) — and Sleeman & Ihsane (2016) — that partitive and possessive constructions show striking similarities, which suggest that the two constructions involve a comparable syntactic structure. For both partitives and possessives, a *belong*-type interpretation can be assumed, which motivates adopting a small clause analysis of partitive constructions along the same lines as the analysis proposed by Hulk & Tellier (2000) for possessive constructions. While I follow Sleeman & Kester (2002) in this respect, I deviate from their proposal considering the status of the element *de* (or its equivalents *of* in English, *van* in Dutch, or *von* — or genitive case — in German). In the next section, I present some additional evidence from German that favours the adoption of a small clause approach for partitive constructions in this language as well.

6.2.1.1 Justifying a small clause approach for partitives in German

As I discussed earlier, Sleeman & Kester (2002) present several arguments — both semantic and syntactic — that point towards some structural similarity of partitive and possessive constructions in French. For German, the semantic comparability can be maintained: for both possessives and partitives, a *belong*-type interpretation can be implied, as shown in (28) and (29), respectively:

(28) *das Buch des Lehrer-s*
the.N book the.GEN.PL teacher-GEN
'the book of the teacher'

(29) *das schön-ste der Bücher*
the.N beautiful-SUP the.GEN.PL book.GEN.PL
'the most beautiful (one) of the books'

The possessive in (28) clearly expresses a *belong* interpretation: *das Buch* 'the book' belongs to the genitive marked *des Lehrers* 'teacher'. Likewise, the partitive in (29) can be said to involve a *belong* interpretation too, whereby *das schönste (Buch)* 'the most beautiful (book)' belongs to the set of *Bücher* 'books'.

Moreover, there is also syntactic evidence for the comparability of partitives and possessives in German. Den Dikken (2006) shows that in German, possessive constructions differ from qualitative constructions (e.g. *an idiot of a doctor*) in terms of the linking element involved. In qualitatives, the two nouns are linked by the preposition *von*, either followed by a noun in dative case (30a) or by a noun without case marking (30b). The use of genitive case on the determiner of the rightward noun is ungrammatical (30c) (examples taken from Den Dikken, 2006: 214-215):

(30) a. *ein Biest von ein-em Präsident-en*
a beast of a-DAT president-DAT
b. *ein Biest von Präsident(*-en)*
a beast of president(-DAT)
c. **ein Biest ein-es Präsident-en*
a beast a-GEN president-GEN
'a beast of a president'

In possessives, the rightward noun expresses the possessor. This possessor noun cannot only be introduced by the preposition *von* in German, comparably to what we observed for qualitatives in (30a); it can also take genitive case marking, as shown in (31c). Please note that if the preposition *von* is used, German possessives necessarily require dative case marking on the possessor noun (31a). Absence of dative case marking (31b) results in ungrammaticality, which also contrasts with the situation in qualitatives (30b).

(31) a. *ein Brief vom Präsident-en*
a letter of.the.DAT president-DAT
b. **ein Brief von Präsident(*-en)*
a letter of president(-DAT)
c. *ein Brief des Präsident-en*
a letter the.GEN president-GEN
'a letter of the president'

Importantly, German partitive constructions pattern with possessive constructions (31) and not with qualitative constructions (30), as shown by the examples in (32) below:

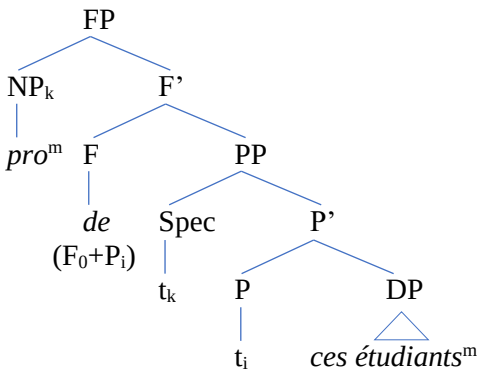
(32) a. *ein-er* *von* *den* *Präsident-en*
one-M of the.DAT.PL president-DAT.PL
b. **ein-er* *von* *Präsident(*-en)*
one-M of president(-DAT)
c. *ein-er* *der* *Präsident-en*
one-M the.GEN.PL president-DAT.PL
'one of the presidents'

In German partitives, the set phrase either has to be introduced by the preposition *von* combined with a noun bearing dative case (32a), or, as in the canonical partitive construction, it bears genitive case (32c), thus following the pattern of possessives. This further motivates extending Hulk & Tellier's (2000) small clause approach of possessive constructions to German partitives.

6.2.1.2 Canonical partitives do not contain a PP

Although I just showed that adopting a small clause approach along the lines of Sleeman & Kester (2002) (and Hulk & Tellier, 2000) can be justified for partitive constructions in German too, some changes to their proposal seem necessary. This specifically concerns their analysis of the preposition *de* in French partitives. Sleeman & Kester (2002), following Hulk & Tellier (2000), argue that the set phrase of a partitive construction is selected by a PP, which merges as the complement of the FP. The PP contains an empty preposition as its head, which needs to move to the F-head for licensing. Finally, incorporation of the empty preposition into the F-head results in spell-out of *de* in French. For convenience, the lower part of structure (17) is reproduced here again in (33):

(33)



Apart from the claim that the empty preposition must move to satisfy some licensing requirements, there appears to be no clear explanation for this movement, which makes it desirable to eliminate this stipulation.

An important independent reason for questioning the analysis of *de* (and its cross-linguistic variants) as the head of a PP comes from German. As I already mentioned earlier, German partitive constructions usually exhibit genitive case on the set phrase, instead of containing the German equivalent preposition of *de*, which is *von*. Of course, one could assume that the genitive-marked set phrase of a German partitive still contains a PP, headed by a covert preposition. Not only do we lack strong evidence in support of this claim, but some empirical facts even undermine this assumption. Consider the examples in (34). Partitives that contain the preposition *von* allow fronting of the subset phrase, as in (34a). By contrast, fronting of the subset phrase is not possible with canonical partitives, which involve a genitive-marked set phrase, as in (34b):

(34) a. *Von den Lehrer-n ist Peter der jüng-ste.*
of the.DAT.PL teacher.PL-DAT is Peter the.M young-SUP
b. **Der Lehrer ist Peter der jüng-ste.*
the.GEN.PL teacher.PL is Peter the.M young-SUP
'Of the teachers, Peter is the youngest one.'

The contrast between (34a) and (34b) suggests that, structurally, German partitives involving the preposition *von* are different from canonical partitives with genitive case marking. For (34a), we can straightforwardly conclude that a PP dominates the set phrase, which takes the preposition *von* as its head. However, it seems unlikely to assume the presence of a PP headed by a covert preposition for (34b), given the different behaviour with respect to fronting.

Another reason for questioning the presence of a PP dominating the set phrase in partitives comes from the behaviour of partitives involving another preposition than *de* or its equivalents in other languages, such as *of* in English or *di* in Italian. Sleeman & Ihsane (2016), following Cardinaletti & Giusti (2006), argue that partitive constructions involving the preposition *parmi* 'among' — labelled *among*-partitives — differ from canonical partitives with *de* in French, as they appear to show distinct behaviour with respect to gender agreement. While part of Sleeman & Ihsane's (2016) informants do not accept semantic agreement with the noun *étudiant* in a standard superlative partitive with *de*, they are more akin to accept semantic agreement with this noun in an *among*-partitive, as shown in (35) (example taken from Sleeman & Ihsane, 2016: 11, footnote 17):

(35) *La plus intelligent-e parmi mes ancien-s étudiant-s*
the.F SUP intelligent-F among my.PL former.M-PL student.M-PL
est malade.
is sick
'The most intelligent of my former students is ill.'

Even though agreement in *among*-partitives requires further research, the difference suggests that in these constructions, the relationship between the set and the subset is more intricate.

Cardinaletti & Giusti (2017) also discuss some Italian data which support this view. They show that *among*-partitives differ from partitives with *de* in not obeying the non-distinctness requirement, according to which partitive constructions may not contain two distinct overt nouns. While this is true for ordinary partitives with *de*, *among*-partitives can contain two distinct nouns, as shown by the contrast between the Italian examples in (36), involving an ordinary partitive, and (37), with an *among*-partitive (examples taken from Cardinaletti & Giusti, 2017: 31):

(36) **Ho letto molti romanzi dei libri della biblioteca.*
have.1SG read many novel.PL of.the book.PL in.the library
'I have read many novels of the books in the library.'

(37) *Ho letto molti romanza tra i libri della*
have.1SG read many novel.PL among the book.PL in.the
biblioteca.
library
'I have read many novels among the books in the library.'

The fact that *among*-partitives may contain two different nouns — although they should be semantically related — suggests that there is a different structural relationship between set and subset in these constructions. Such a structural difference between canonical and *among*-partitives could be captured by assuming the presence of a PP for the latter, but not for the former.

Finally, many scholars have argued that the French prepositions *de* and *à* are not simple prepositions to introduce an additional argument or an adjunct (cf. Spang-Hanssen, 1963; Marque-Pucheu, 2008). Rather, these prepositions are claimed to be semantically empty and to behave differently from other prepositions. If this description is correct, then it is reasonable to think that the element *de* in partitive constructions does not head a PP.

6.2.1.3 Partitives involve a nominal relator

As I showed in the previous section, there are multiple reasons to assume that *de* in French partitive constructions is not a preposition heading a PP; for German, nothing motivates the assumption that partitives involve a PP either. The question then is: What is the function of French *de* or German genitive case marking in these constructions? In the spirit of Den Dikken (2006), I propose that both French *de* and German genitive case constitute the overt realisations of a relator element, which functions as a nominal copula. In a partitive construction, this nominal relator links the subset to the set and expresses a *belong* interpretation.

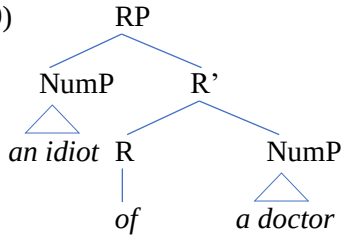
Den Dikken (2006) takes the English preposition *of* to be a nominal relator in complex nominal constructions, such as qualitative noun phrases, an example of which is given in (38) (example taken from Den Dikken, 2006: 162):

(38) *an idiot of a doctor*

Den Dikken (2006) assumes a small clause analysis for these qualitative constructions, under which one NP occupies the complement position in a small clause, whereas the other NP merges as a specifier. The structure in (39) schematically visualises this:[11]

[11] Den Dikken (2006) labels the small clause as *Relator Phrase* (RP).

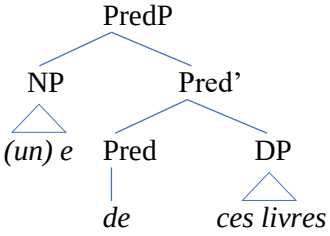
(39)



The head of the small clause labelled here as RP (for Relator Phrase) in (39) contains a nominal relator, which, in English, is pronounced as *of*.

Extending Den Dikken's (2006) approach for English *of* to French *de*, as well as to German genitive case assignment, I assume that in partitive constructions, French *de* or German genitive case assignment result from spell-out of a nominal relator too, just as English *of*. Thus, the French 'preposition' *de* originates in the head position of the small clause and does not land there as a consequence of movement, as argued for by Sleeman & Kester (2002). Consequently, the set phrase of a partitive construction is not dominated by a PP. As the presence of a nominal relator assumes a predicative relation, I label the small clause as *Predicate Phrase* (PredP), whereby the nominal relator represents the head Pred. Spell-out of the head of PredP gives rise to a partitive *token of set* interpretation. The structure in (40) below illustrates this for French:

(40)

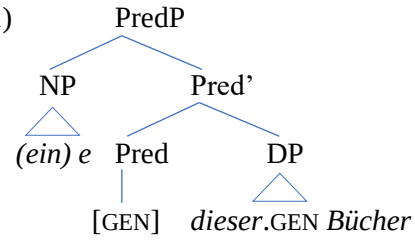


In (40), the head Pred of the Predicate takes the set-denoting DP *ces livres* 'these books' as its complement and the empty subset nominal — for now still represented as *e* (for *empty*) — as its specifier. The preposition *de* results from spell-out of the Pred-head. Please note that in the structure in (40), I ignore the exact position of the quantifier *un* for the moment. In section 6.3.1, I will argue that the quantifier, which heads a QP, selects the Predicative Phrase in a quantified partitive.

As I mentioned before, German partitives usually involve genitive case marking. To account for this, I assume that in a German partitive, the Pred-

head contains a case feature [GEN], which assigns genitive case to its complement. This is illustrated in (41):

(41)



In (41), the basic structure is comparable to the one for French in (40). The crucial difference results from the fact that the [GEN] feature on Pred assigns genitive case to the complement, in this case the set-denoting DP *dieser Bücher* 'these books'.

To summarise, I assume that in canonical partitive constructions — which either involve the element *de* in French or a genitive case marked set-DP in German —– the set-denoting DP is not dominated by a PP, but instead merges immediately in the complement position of the Predicate Phrase. Following Den Dikken (2006), I argue that both French *de* and German genitive case marking are overt manifestations of a nominal relator. This relator, situated in the head-position of the Predicate Phrase, expresses a *belong* interpretation in the case of partitive constructions.

6.2.2 A silent nominal classifier

Next to adopting a small clause analysis for partitive constructions, I already made a second theoretical assumption: partitive constructions contain an empty NP, which denotes the subset. As such, I follow several scholars who propose a two-noun analysis (e.g. Jackendoff, 1977; Milner, 1978; Sleeman & Kester, 2002; Sleeman & Ihsane, 2016; Cardinaletti & Giusti, 2017; Falco & Zamparelli, 2019). The question now is how we can conceive of this empty NP, a question to which different answers have been proposed in the literature.

As I showed in section 6.1.2, Sleeman & Kester (2002) take the subset NP to be headed by the empty pronoun *pro*. One may wonder, however, what the nature of *pro* is and whether the occurrence of *pro* in partitives may be compared to other instances of *pro* that we find in different syntactic constellations. Sleeman & Ihsane (2016), in contrast, assume that the subset NP is the result of spelling out the lower copy of a chain arising from movement (cf. Nunes, 2004).

While this proposal specifies the nature of the subset NP's head as an unpronounced copy of the set noun, questions arise with regards to the motivation of such a strategy, which has been shown in the literature to be the less optimum one. Indeed, Nunes (2004) argues that the lower copy of a chain is usually the one that is unpronounced, while the higher one is generally pronounced because it is the one for which all the features have been valued (cf. Chomsky, 1995). Non-pronunciation of the higher copy is therefore less economical under this theory.

With regard to the construction at stake, it is not clear why copying of the set noun occurs in the first place, and why the specifier position of the FP representing the small clause would trigger movement of a copy, which ultimately remains silent in this position.[12] A theory internal motivation for movement may be evoked by arguing for the presence of a particular feature on [Spec, FP/PredP] that triggers movement. Yet, the question remains whether an analysis in terms of movement is necessary.

Instead, I propose that we can account for the nature of the subset noun by assuming that partitives contain a silent classifier. This silent classifier is a noun (e.g. with the meaning *piece*, *token*, *unit*, etc.) that heads the subset NP and expresses a token interpretation. That is, it denotes a token selected from the larger set. Motivation for this assumption, I argue, comes from examples of partitive constructions that contain an overt classifier-like noun, as exemplified in (42):

(42) a. *un* *exemplaire* *des* *livre-s*
one copy of.the.PL book-PL
b. *ein* *Exemplar* *der* *Bücher*
one copy the.GEN.PL book.PL
'one copy of the books'

In the French example in (42a), the subset is represented by the noun *exemplaire* 'copy', which can be considered a nominal classifier. Likewise, the equivalent noun *Exemplar* denotes the subset in the German example in (42b).

The presence of such an overt classifier-like noun in French and German partitive constructions is restricted and does not often co-occur with animate referents. Nonetheless, the examples in (42) are important pieces of

[12] Further evidence against adopting the copy theory comes from the fact that ellipsis may only apply when the copy differs in number from the original noun; the copy may not differ in gender (e.g. Saab, 2010). Yet, partitive constructions may show a gender mismatch between the set noun and the unpronounced subset nominal.

evidence, as they suggest that partitive constructions may contain classifier nouns. This property opposes these partitives to instances of partitives involving two overt nouns, as illustrated in (43) and (44):

(43) a. *¿un livre des livre-s*
one book.SG of.the.PL book-PL
b. *¿ein Buch der Bücher*
one book.SG the.GEN.PL book.PL
'one book of the books'

(44) a. **un roman des livre-s*
one novel of.the.PL book-PL
b. **ein Roman der Bücher*
one novel the.GEN.PL book.PL
'one novel of the books'

In (43), the subset is expressed by means of an overt noun, which is largely identical to the set noun and only differs from the latter in number. As Cardinaletti & Giusti (2017) note, these examples are very marginal, possibly due to redundancy. The presence of a distinct, though semantically related overt noun, such as *roman/Roman* 'novel' in (44), leads to ungrammaticality too. This clearly contrasts with the examples containing the classifier-like element *exemplaire/Exemplar* 'copy' in (42). I take this to show that only classifier-like nouns can occur in partitives. More precisely, if a partitive contains two overt nouns, the subset nominal must be a classifier-like one.

That partitives may involve an overt or covert classifier-like element is also suggested by Sauerland & Yatsushiro (2017) and by Falco & Zamparelli (2019). Falco & Zamparelli (2019) present cross-linguistic evidence to further support the presence of a classifier in partitive constructions. Compare the Turkish examples in (45) below (examples cited by Falco & Zamparelli, 2019, but taken from Von Heusinger & Kornfilt, 2017):

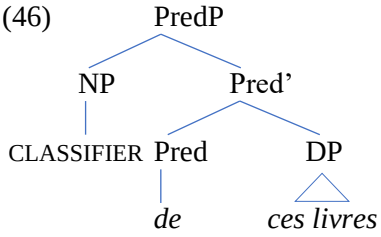
(45) a. *Meyve-ler-in alti-sm-i ye-di-m.*
fruit-PL-GEN six-3SG-ACC eat-PST-1SG
'I ate six of the fruits.'
b. *Meyve-ler-in üç tane-sin-i ye-di-m.*
fruit-PL-GEN three.3SG.ACC item-3SG-ACC eat-PST-1SG
'I ate three (items) of the fruits.'

Next to the canonical example in (45a), in which the subset is only expressed by means of a quantifier, Turkish allows for the overt realisation of the

classifier noun *tane* ‘item’ (45b), which can be seen as the overt realisation of a classifier.

I conclude from these facts that the empty element realising the head of the subset NP in a partitive is in fact a silent nominal classifier. In some cases, this silent classifier may be spelled out, leading to examples such as (42). The silent classifier in partitives denotes a token selected from the set and heads the subset NP, as visualised for French in (46):

(46)



The set DP *ces livres* ‘these books’ merges as the complement of the functional projection PredP in (46). PredP’s head Pred contains the nominal relator, which spells-out as *de*. The specifier position of the functional projection PredP hosts the subset NP, headed by the silent classifier, which indicates that a token (or multiple tokens) is selected from the set. As such, Pred links its complement, the set DP, to the subset, represented by the silent classifier. I assume that both quantified and superlative partitives involve the same syntactic derivation, along the lines of the structure given in (46). In the next subsection, I discuss how I nevertheless account for differences between quantified and superlative partitives by arguing that both partitive types deviate from each other with respect to the projections that dominate PredP.

6.3 Distinguishing partitive types

Up until now, I ignored the upper part of the partitive construction, as I focussed on the Predicate Phrase that constitutes the core of their syntactic structure. I defended a small clause analysis under which canonical partitives involve a silent nominal classifier. However, the question remains how we can distinguish quantified from superlative partitives, given that these constructions exhibit different behaviour that must be accounted for. As I show in the following sections, it is the upper part under which the predicate phrase PredP is embedded that discriminates between quantified and superlative partitives. Recall that quantified partitives contain a quantifier

denoting the subset, whereas in superlative partitives, the subset is represented by a definite determiner and superlative adjective, as illustrated by the French examples in (47-48):

(47) *un* *de ces* *étudiants*
one of these students

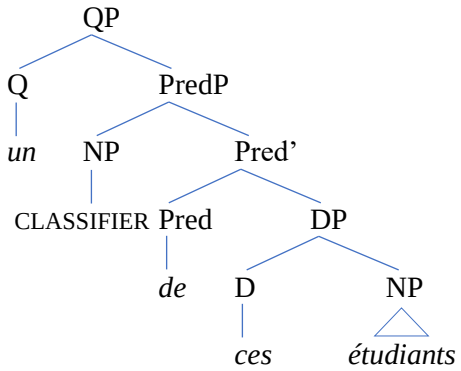
(48) *le* *plus* *intelligent* *de ces* *étudiants*
the most intelligent of these students

I claim that this difference also translates into the syntactic structure of the two partitive types. In what follows, I first discuss the structure of quantified partitives, before moving on to the derivation of the superlative ones.

6.3.1 The structure of quantified partitives

Quantified partitives, as shown in (47), contain a quantifier to denote the subset. I take the quantifier Q (projecting a QP) to select the PredP representing the small clause in a quantified partitive.[13] The quantifier renders the quantity *n* of its complement, the PredP, which may schematically be represented as Q [token of DP]. The full structure is given in (49), representing example (47):

(49)



As the structure in (49) shows, the upper part of the syntactic structure of a quantified partitive only consists of a QP, headed by a quantifier, which selects

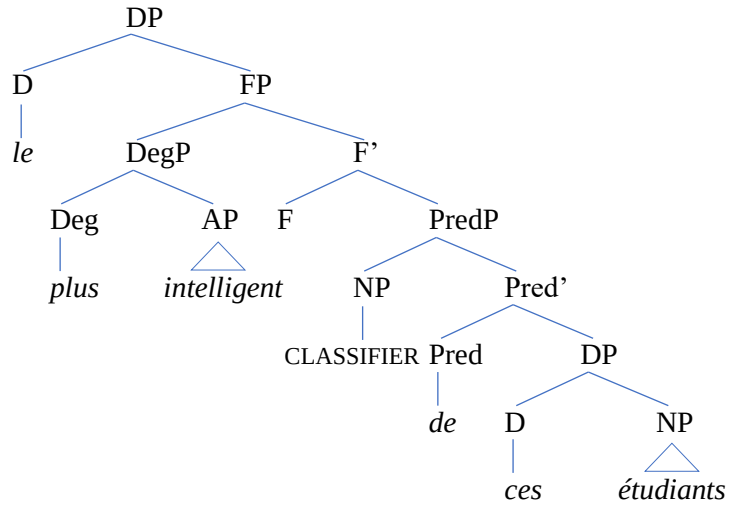
[13] In both Sleeman & Kester's (2002) and Sleeman & Ihsane's (2016) analyses, the quantifier merges in the Specifier position of NumP (see also footnote 5). In contrast, I assume that the quantifier heads a QP (following, e.g., Cardinaletti & Giusti, 1991), but a full discussion of this issue falls beyond the scope of this dissertation.

the Predicate Phrase. Instead, superlative partitives require a more articulate syntactic structure, as I explain in the next section.

6.3.2 The structure of superlative partitives

As the example in (48) showed, a superlative adjective with a definite determiner refers to the subset in a superlative partitive. Considering the syntactic structure, this means that the upper part of a superlative partitive, merged on top of the PredP, needs to contain at least two projections: (i) a projection hosting the superlative adjective, and (ii) a DP, headed by the definite determiner. The superlative adjective is dominated by a DegP, whose head Deg contains superlative morphology — either the independent morpheme *plus* in French or the suffix *-(e)ste* in German. The DegP merges in the specifier position of a Functional Projection.[14] Recall that I do not assume the presence of a functional projection Gender Phrase within neither the upper nor the lower part of a superlative partitive, contra Sleeman & Ihsane (2016).[15] The structure in (50) illustrates the structure I adopt for superlative partitives, representing the example in (48) above:

(50)



[14] Following Sleeman & Ihsane (2016), I adopt Cinque's (2010) approach to attributive adjectives, under which all adjectives merge in specifier positions of prenominal functional projections (see also footnote 10). Postnominal ordering of adjectives (as is relatively common in French) is derived by NP movement.

[15] For now, I ignore gender agreement. In Chapter 7, I show how I explain gender agreement in partitive constructions without using a Gender Phrase.

In (50), the PredP is selected by a F-head, whose specifier [Spec, FP] hosts the DegP containing the superlative adjective *plus intelligent* 'most intelligent'. This FP, in turn, is dominated by a DP with the definite determiner *le* as its head. A comparison of the structures in (50) for superlative partitives and (49) for quantified partitives shows that the difference resides in the complexity of the upper parts. For the quantified partitive (49), the PredP is only dominated by a QP, whereas a DP and a modifying projection (FP) containing the superlative adjective dominate the PredP of the superlative partitive (50).

In terms of interpretation, the structure in (50) shows that I adopt the same rationale for superlative partitives as I did for quantified partitives. In a superlative partitive, the superlative adjective does not simply modify the classifier, but rather refers to a specific referent, an individual (animate or inanimate) that is part of a larger set. Therefore, superlative partitives are semantically more complex than quantified partitives, in which the quantifier only denotes a quantity *n* of tokens from the set.

Structurally, this is reflected by the presence of a referential element in the upper part of a superlative partitive's structure. It contains a D-element, the definite determiner. Herein lies the crucial difference between the two partitive types: the structure of superlative partitives contains a referential D-element in its upper part, referring to a specific individual (or object) in discourse. Quantified partitives, on the other hand, lack a DP dominating the subset phrase, which amounts to saying that the upper part of their structure does not contain a referential D-element.

This structural difference between quantified and superlative partitives is also motivated by their diverging behaviour with respect to the Partitive Constraint (Jackendoff, 1977), which was formulated to capture restrictions on the types of determiners that may introduce the set phrase of a partitive construction (cf. Hoeksema, 1996). The Partitive Constraint states that the determiner introducing the set phrase needs to be definite. The examples in (51) show that this holds for quantified partitives:

(51) a. *one of the students*
b. *one of these students*
c. *one of my students*
d. **one of students*
e. **one of some students*
f. **one of all possible worlds*

Quantified partitives only allow the use of a definite determiner to introduce their set phrase. This determiner can be a definite article (51a), a demonstrative (51b) or a possessive (51c). Bare nouns (51d), indefinites (51e), or universals (51f) are excluded.

By contrast, Hoeksema (1996) shows that superlative partitives may contain a set phrase dominated by a universal, instead of a definite determiner. The example in (52), taken from Hoeksema (1996: 9), illustrates this:

(52) *the best of all possible worlds*

In the superlative partitive in (52), the universal quantifier *all* introduces the set phrase and the result is perfectly grammatical.

Hoeksema's (1996) observations also hold for French and German, the languages under study in this dissertation. The examples below show that superlative partitives in both languages may contain a set phrase introduced by a universal quantifier, either *tous* in French (53a) or *aller* in German (53b):

(53) a. *le plus beau de tous les livre-s*
the.M SUP beautiful.M of all.M.PL the.PL book-PL
b. *das schön-ste all-er Bücher*
the.N beautiful-SUP all-GEN.PL book.PL
'the most beautiful of all the books'

In quantified partitives, instead, the presence of a set phrase introduced by the same universal quantifiers leads to ungrammaticality in both languages, as exemplified in (54):

(54) a. **un de tous les livre-s*
one.M of all.M.PL the.PL book.PL
b. **ein-es all-er Bücher*
one-N all-GEN.PL book.PL
'one of all the books'

Sleeman & Ihsane (2016) also note that the Partitive Constraint (Jackendoff, 1977), which requires the set phrase to be definite, does only hold for quantified partitives.

De Hoop (2003), building on De Hoop (1997), argues that the contrast between partitive constructions that require the Partitive Constraint and those

that may violate it depends on the determiner selecting the subset phrase.[16] In the present section, I proposed that the main structural difference between quantified and superlative partitives lies in the presence of a referential D-element in the upper part of the structure of the latter, but not of the former type. As a consequence, the determiner differences immediately follow from a structural difference between both partitive types under my analysis, which straightforwardly explains the difference between quantified and superlative partitives with respect to the Partitive Constraint too.

6.4 Conclusion

In this chapter, I have discussed the syntactic structure of partitive constructions. Following up on a discussion of some main characteristics of previous analyses, I have developed an alternative approach to the derivation of partitives. I started from the following two assumptions: (i) I argued that the structure of partitives contains an empty NP, denoting the subset. Specifically, I proposed that this empty NP contains a silent nominal classifier, which is motivated by the existence of partitive constructions that display an overt realisation of this classifier. (ii) I adopted a small clause analysis of partitive constructions, building on Sleeman & Kester (2002). Under this approach, the core part of the syntactic structure of a partitive consists of a Predicate Phrase, headed by a nominal relator, which conveys a *belong*-type interpretation (cf. den Dikken, 2006). This nominal relator is realised as *de* in French, or assigns genitive case to its complement in German. The Predicate Phrase serves to link the set-denoting DP to the subset, which is expressed by means of a silent classifier merged in [Spec, PredP]. This gives rise to a *token-of-set* interpretation.

In a next step, I argued that the discrepancies between quantified and superlative partitives result from a difference in the upper part of their syntactic structures. In a quantified partitive, a quantifier selects the PredP and denotes the quantity of this phrase. In a superlative partitive, instead, the upper

[16] De Hoop (2003) proposes a semantically based explanation of the contrast between partitives that obey the Partitive Constraint and those that do not. Specifically, she distinguishes two semantic types of partitive constructions: (i) set partitives and (ii) entity partitives. While the former type obeys the Partitive Constraint and requires a set phrase that denotes a predefined set of elements (e.g. *one of these books* vs. **one of this book*), the latter type allows the presence of an undefined, unrestricted set, thus violating the Partitive Constraint (e.g. *half of these books* vs. *half of this book*). How this interacts with the syntactic analysis of partitives that I proposed in this chapter is a topic I hope to address in future work.

part of the structure dominating the Predicate Phrase is more articulate and consists of two projections: a DP headed by the definite determiner and an FP, which hosts the superlative adjective in its specifier. Semantically, the superlative denotes a specific referent, which is a token selected from the set. Crucially, the upper part of the structure of a superlative partitive, referring to a specific individual, contains a referential D-element, which lacks in the upper part of the structure of a quantified partitive.

In the next chapter, I return to the issue of gender agreement. I will show that the structural derivation proposed in the present chapter — superlative partitives differ from quantified partitives in the presence of a referential D-element — enables me to explain the agreement differences between quantified and superlative partitives. By contrast, the divergence between French and German will be shown to derive from a general agreement difference between the two languages. Finally, I turn to the noun class differences and explain how these can be accounted for within the proposed analysis as well.

Chapter 7

Explanans, or accounting for semantic agreement in partitives

In Chapter 6, I proposed a novel syntactic analysis for quantified and superlative partitives. Building on this, I now return to the issue of gender agreement and address the last research question of this dissertation:

V. Is it possible to provide a principled account for the French and German data that integrates the relevant underlying factors?

Following the main patterns identified in Chapter 5, the account I will propose has to explain the following three observations: (i) semantic agreement is more acceptable in superlative than in quantified partitives; (ii) semantic agreement is more acceptable with class C nouns and to a lesser extent with class B nouns than it is with class D nouns; (iii) German partly differs from French, particularly with respect to the quantified partitives.

Section 7.1 elaborates on the theoretical concept of gender agreement and the representation of gender features in syntax. This provides the basis for my theoretical assumptions concerning gender features and agreement. In section 7.2, I show how the syntactic analysis developed in Chapter 6 accounts for the distinct behaviour of quantified and superlative partitives, as well as for the contrast between French and German. I turn to the noun (class) differences in section 7.3 and reflect there on the role of the lexicon. Section 7.4 summarises the proposal.

7.1 Gender features and agreement

The phenomena of gender and agreement have intrigued many linguists, as can be seen from the seminal work by Corbett (1991, 2006) and many related studies. In what follows, I first introduce the concept of agreement within the framework of Minimalism (cf. Chomsky, 1995). Second, I discuss some influential proposals concerning the position of gender features in syntax. Finally, I introduce the theoretical assumptions I adopt within my analysis of agreement in partitive constructions.

7.1.1 A note on gender agreement

Within Minimalism (Chomsky, 1995), agreement is taken to be driven by the operation Agree. A feature on a specific agreement target — labelled *probe* — searches for a matching feature on a controller — the *goal* — which can value the probe's feature. Yet, establishing an Agree-relation between a probe and a goal cannot happen freely, but depends on the syntactic configuration involving both elements. To capture this relationship, different mechanisms have been proposed in the literature: target and controller must be in a Spec-Head configuration (Chomsky, 1995; Koopman, 1992, 1996), or the target needs to c-command the controller (Chomsky, 2001).[1] Alternatively, Matushansky (2013) proposes a checking mechanism under which all features enter the derivation already valued, so that no feature sharing takes place in syntax. Matushanksy (2013) takes agreement to be a licencing operation: features on agreement targets have to be properly licenced by a matching feature on a controller in order for the derivation to converge.[2] I refer the reader to the cited works for more discussion, since a thorough discussion of Agree falls beyond the scope of this dissertation.

Another point of discussion concerns how the operation Agree is conceived of. In Chomsky's (2000, 2001) terms, Agree consists of valuation and deletion: an interpretable valued feature values an uninterpretable unvalued counterpart. Thus, features can either be uninterpretable and unvalued, or interpretable and valued. The interpretability of a feature depends on whether its value may be semantically interpreted or not. Uninterpretable, unvalued features that are not valued by an interpretable counterpart cannot be deleted at the interfaces and cause the derivation to crash.

While this concept of agreement accounts for situations such as subject-verb agreement, it falls short on grammatical gender agreement, as many studies have shown (e.g. Kramer, 2009, 2014; Matushansky, 2013; Sleeman & Ihsane, 2016). In many languages, gender assignment is arbitrary and not semantically motivated. In French, for instance, the inanimate noun *table* 'table' is feminine, but there is no semantic motivation for this. The

[1] In the literature, different alternatives of Chomsky's (2001) c-command approach have been proposed. For instance, Schoorlemmer (2009) argues that the required structural relation between target and controller is not c-command, but dominance. Zeijlstra (2012) proposes that the controller needs to c-command the target, instead of the opposite, as proposed by Chomsky (2001). See also Danon (2010) for a discussion on DP-internal agreement.

[2] Matushansky (2013) argues that target features may also be licensed through semantic interpretation by an interpretable feature, which is inserted directly onto the agreement target as last-resort operation.

grammatical gender feature of the noun *table* should thus be uninterpretable and valued. This grammatical gender feature can function as a goal for an unvalued, uninterpretable feature on an agreement target, a determiner (*la table* 'the.F table.F'), for instance. According to the traditional Minimalist view, the absence of an interpretable feature in this situation would cause the derivation to crash, but that is not the case.

To account for the existence of unvalued, uninterpretable grammatical gender features on nouns, Pesetsky & Torrego (2007) argue that feature valuation and interpretability involve two distinct computational processes that may, but need not, be related. Following their approach, uninterpretable, unvalued features only require valuation in order to successfully complete the derivation; checking by an interpretable counterpart is not necessary. Consequently, both the noun *table* and the determiner *la* may bear uninterpretable gender features without causing the derivation to crash. Under this view, grammatical gender can be uninterpretable and valued. At this point, we may wonder where grammatical gender is exactly located in syntax, an issue to which I turn in the next section.

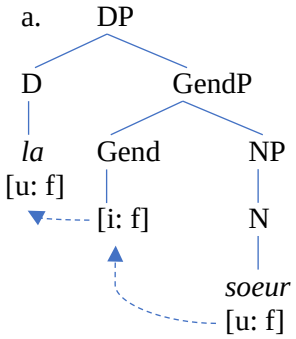
7.1.2 The whereabouts of gender in syntax

Building on Ihsane & Sleeman (2016), Sleeman & Ihsane (2016) argue that for animate nouns, grammatical and semantic gender should be distinguished. Both gender types realise features in syntax, which are located on different projections. The noun itself, that is, the N-head, bears the grammatical gender feature. Adopting Pesetsky & Torrego's (2007) view on agreement, which I introduced in the previous section, Sleeman & Ihsane (2016) propose that all nouns come with an uninterpretable, valued grammatical gender feature from the lexicon.

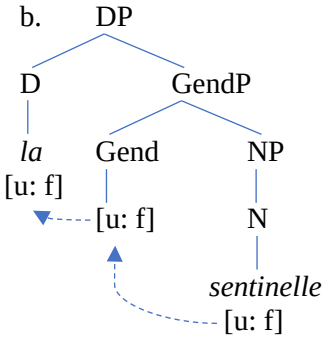
The semantic gender feature is encoded on the head of a functional projection labelled Gender Phrase, where it receives its value from the grammatical gender feature on N. The semantic feature can either be interpretable or uninterpretable, depending on whether the feature value corresponds to the biological sex of the noun's referent. This is exemplified in the structures in (1) below: the semantic feature is interpretable with the feminine class A noun *soeur* 'sister' (1a); with the feminine class D noun *sentinelle* 'guard', the feature is uninterpretable (1b) because the referent of

sentinelle can be a female or a male. The arrows in the structure represent how feature valuation proceeds:[3]

(1) a.



b.



I refer the reader to Chapter 3, section 3.1.2, for a detailed discussion on how Sleeman & Ihsane (2016) account for the possibility of agreement mismatches in partitives.

The idea that gender is located on a functional head within the extended projection of the NP has originally been proposed by Picallo (1991). A comparable approach is taken by Ritter (1993), who argues that gender features can be located on Num, the head of the Number Phrase that hosts number features.[4] Under both Picallo's (1991) and Ritter's (1993) analyses, a noun comes only with one gender feature, located on the functional head. This contrasts with Sleeman & Ihsane's (2016) approach that assumes the presence of two features, at least for animate nouns. Alexiadou (2004) argues against Picallo's (1991) approach because there is no independent evidence that motivates the postulation of a functional projection hosting gender features. A similar stance is taken by Kramer (2016), who additionally criticises Ritter's (1993) proposal to locate gender features on the Num-head on the same grounds.[5]

In an earlier work, Kramer (2009) develops an alternative approach, couched within the framework of Distributed Morphology (cf. Halle &

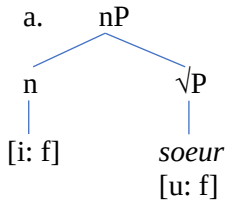
[3] Sleeman & Ihsane (2016) abbreviate Gender Phrase as GenP. However, I adopted the abbreviation GendP to avoid confusion with 'genitive'.

[4] Ritter (1993) distinguishes between languages for which gender is located on the Num-head, such as the Romance languages, and languages for which gender is located on N, such as Hebrew.

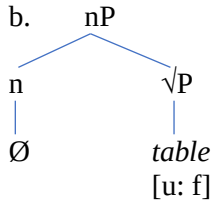
[5] Kramer (2016) notes that she does not criticise the postulation of a Gender Phrase if its presence is semantically motivated, which could be argued for Sleeman & Ihsane's (2016) approach, at least in cases where the semantic feature is interpretable.

Marantz, 1993; Harley & Noyer, 1999; Marantz, 2007).[6] Based on data from Amharic, she argues that grammatical gender is a property of the root; semantic gender is located on the categorising *n*-head. While the semantic gender feature is interpretable and valued with animate nouns, inanimate nouns come with an unspecified semantic feature. The examples in (2) illustrate this for the feminine animate noun *soeur* 'sister' (2a) and the feminine inanimate noun *table* 'table':

(2) a.



b.



Atkinson (2015) extends Kramer's (2009) analysis to French. Ihsane & Sleeman (2016) criticise both Kramer's (2009) and Atkinson's (2015) proposals because these treat animate class D nouns, such as French *sentinelle* 'guard', on a par with inanimate nouns. In this way, both analyses ignore the fact that class D nouns nevertheless have an animate referent, as opposed to inanimate nouns.[7]

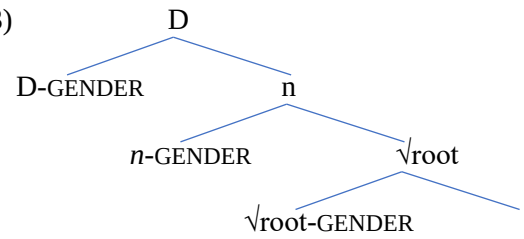
An alternative approach adopting Distributed Morphology comes from Steriopolo & Wiltschko (2010), who propose the Distributed Gender Hypothesis to account for typological differences in the contribution of semantics on linguistic gender. Steriopolo & Wiltschko (2010) argue that three different heads host gender features in syntax: the root, the categorising *n*-head, and the D-head. Contrary to Kramer (2009), they locate grammatical gender on the categorising *n*-head, while semantic gender is encoded on the root. Finally, the D-head contains what they label *discourse gender*, a gender feature that interacts with a noun's referent present in discourse. This is schematically represented in (3):

---

[6] For a discussion of the differences between and advantages of word-based and (decompositional) morpheme-based approaches to morphology, see, for instance, Booij (2005) or Haspelmath & Sims (2010).

[7] In later work, Kramer (2014, 2016) argues against her earlier analysis and proposes a simplified account, under which only one position in syntax, namely the *n*-head, contains gender features. Since she nevertheless aims to account for the differences between grammatical and semantic gender, Kramer (2014, 2016) proposes that the gender feature on the *n*-head may either be interpretable or uninterpretable. Still, Ihsane & Sleeman's (2016) criticism remains valid, as under Kramer's (2014) new approach, class D nouns would still be treated on a par with inanimate nouns.

(3)



Root-gender corresponds to semantic gender. Nouns with a root-gender feature are semantically specified for a particular gender in the lexicon. This holds, for instance, for a noun like *père* 'father', which always refers to males. In turn, *n*-gender corresponds to grammatical gender. Grammatical gender is arbitrarily assigned, not only to inanimate nouns, but also to some animate nouns such as *personne* 'person'. The noun *personne* always bears feminine grammatical gender, despite referring to both females and males. Finally, discourse gender is valued semantically with respect to a noun's referent in discourse. This concerns nouns that can refer to females and males and can trigger either feminine or masculine agreement, based on their referent's sex, such as *ministre* 'minister', which can take a feminine (*la ministre* 'the.F minister') or a masculine determiner (*le ministre* 'the.M minister').

As Steriopolo & Wiltschko (2010) show, the different levels of feature specification not only account for typological differences considering the interplay between semantics and gender assignment, but can also be used to explain differences in agreement. I will not discuss these agreement contexts because they do not involve partitive constructions. I refer the interested reader to Steriopolo & Wiltschko (2010) for more details.[8]

7.1.3 Theoretical assumptions

Adopting the traditional Minimalist concept of Agree, I take agreement to result from feature valuation, whereby an unvalued agreement target receives a value from a matching controller. In principle, I assume that the target needs to c-command the controller, except with cases of semantic agreement, as I will show later on in section 7.2. I follow Pesetsky & Torrego (2007) in assuming that valuation and interpretability should be distinguished and that uninterpretable features do not need to be checked by an interpretable

[8] Steriopolo (2018) proposes an updated version of the Distributed Gender Hypothesis for Russian sex-differentiable nouns, which only involves two gender features: a semantic feature on the categorizing *n*-head and a discourse feature on D.

counterpart, which explains why the grammatical gender feature on a noun may be valued and at the same time uninterpretable.

With respect to the location of gender features in syntax, I adopt the common view that grammatical gender is located on N (cf. Kramer, 2016). I follow Sleeman & Ihsane (2016) in assuming that for animate nouns, grammatical and semantic gender should be distinguished and that grammatical gender is always uninterpretable. However, I deviate from Sleeman & Ihsane's (2016) proposal on two key points.

First, I assume that, in general, all animate nouns are marked with a grammatical gender feature in the lexicon in both French and German (but see section 7.3.3 for an exception). I take the mental lexicon of a speaker to consist of all words the speaker knows, either actively or passively. For each noun, the lexicon contains information on its grammatical gender, as well as semantic details, which, for instance, specify the potential referents of the noun in the real world. I do not further discuss the exact composition of the mental lexicon here, as this fall beyond the scope of this dissertation (cf. Aitchison, 2012). The grammatical gender feature is valued as masculine or feminine for French; for German, the feature can be valued as masculine, feminine, or neuter. In this, I go against Sleeman & Ihsane (2016), who propose that for some French animate nouns — specifically, class B and class C nouns — grammatical gender can be unmarked in the lexicon (see Chapter 3, section 3.1.2). I come back to this point in section 7.3.

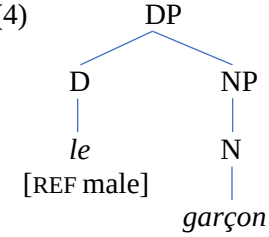
Second, I take another approach concerning the semantic gender feature, to circumvent the unmotivated postulation of a Gender Phrase in syntax (cf. Alexiadou, 2004; Kramer, 2016). Instead, I propose that semantic gender is reflected in a feature located on D, which I label *referent feature*. This recalls the position of Discourse-gender in Steriopolo & Wiltschko's (2010) Distributed Gender Hypothesis (see also Steriopolo, 2018), which I introduced earlier. Semantic gender can be considered a feature that interacts with the biological sex of the noun's referent in discourse, just as Steriopolo & Wiltschko's (2010) D-gender. As I argued in the previous chapter, DP is a referential projection, which establishes a link between syntax and discourse.[9] Therefore, I assume any referent-related features to be merged in this projection.

[9] Within Cartographic approaches to syntax (cf. Rizzi, 1997), more articulate structures for DP (and CP) have been proposed. For instance, Ihsane (2008) argues that the DP-NP-structure contains multiple functional projections, one of which specifically relates to reference, SRefP. I do not exclude this possibility, but for the sake of simplicity, I adopt a less fine-grained structure which uses DP as a short-cut.

Wechsler & Zlatić (2003), who develop an account of mixed agreement within the HPSG-framework, also argue in favour of positing a referent related feature — labelled *person feature* — next to a grammatical gender feature. With respect to agreement, they propose that this person feature does not affect DP-internal agreement; DP-internal agreement is always grammatical (cf. Wechsler, 2011). I follow Wechsler & Zlatić (2003) in assuming that DP-internally, grammatical agreement applies. However, semantic agreement may surface within DP under specific conditions, as I will propose later on.

To summarise, I assume that for animate nouns, two gender features are present in syntax: (i) a grammatical gender feature [GGEN] on N and (ii) a referent feature [REF] on D. In (4), I visualise this for the French masculine noun *garçon* 'boy':

(4)



<= **referent feature**

<= **grammatical gender feature**

I propose that the referent feature does not receive its value from the grammatical gender feature, as opposed to Sleeman & Ihsane's (2016) semantic feature. Instead, the referent feature is always valued from the discourse: its value matches the biological sex of the referent. Table 1 lists the potential values of the referent feature:

Table 1 – Referent feature values

The referent is…			
… a male / a group of males	*… a female / a group of females*	*… a mixed group of females and males*	*… unknown referent*
REF = [MALE]	REF = [FEMALE]	REF = [Ø]	REF = [Ø]

As Table 1 shows, the referent feature may not only be valued as [MALE] or [FEMALE], when referring to males or females, respectively, but also as [Ø], which means that the biological sex of a noun's referent is unspecified. This is the case when the referent's sex is unknown, or when a plural noun refers to a mixed group. For inanimate nouns, I assume that there is no referent feature on D.

7.2 The partitive type contrast: two conditions on semantic agreement

Let us now return to the observed agreement facts in partitive constructions, which I established in Chapter 5. Table 2 recapitulates the general agreement patterns for French and German, leaving aside noun class differences for now:

Table 2 – Agreement in partitives: overview

	French	**German**
Quantified partitives	Grammatical agreement *un*.M *des étudiants*.M *est Marie*	Semantic agreement *eine*.F *der Studenten*.M *ist Marie*
Superlative partitives	Semantic agreement *la*.F *plus intelligente*.F *des étudiants*.M *est Marie*	Semantic agreement *die*.F *intelligenteste der Studenten*.M *ist Marie*

Speakers of French only accept semantic agreement in superlative partitives. By contrast, speakers of German do not only accept semantic agreement in superlative, but also in quantified partitives. While I predicted a distinction between quantified partitives and superlative partitives for French, based on Sleeman & Ihsane's (2016) study, it is interesting to observe that such a difference seems to be largely absent from the German data.

In a sense, French quantified partitives constitute the 'exception to the rule', as only with them, grammatical agreement is clearly preferred. The question now is how this state of affairs may be explained within the syntactic analysis, an issue that I address in the next sections. First, I discuss a difference between French and German in terms of gender agreement, which will become relevant to explain the differences between the two languages. Second, I demonstrate how the analysis proposed here straightforwardly explains the contrast between quantified and superlative partitives found in French. Specifically, I will propose that semantic agreement may apply when some specific conditions are met. Third, I turn to German and discuss how the analysis can be extended to the German data too. At this point, I abstract away from the noun (class) differences; I will consider these in section 7.3.

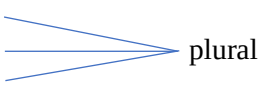
7.2.1 German's genderless plural

In Chapter 4 (section 4.1), I already hinted at an important difference between French and German with respect to gender agreement, which specifically concerns the plural. While in French, gender differences are expressed in

plural agreement, this is not the case for German. In German, there is only one agreement pattern for the plural, irrespective of a noun's lexical gender. Corbett (1991) visualises this in the following way:

(5) a. **French**

b. **German**



French exhibits distinct agreement patterns in the singular and in the plural for nominal modifiers, such as adjectives or determiners, as illustrated by the examples in (6-7):

(6) a. *le* *gentil* *étudiant*
the.M.SG kind.M.SG student.M.SG
b. *la* *gentil-le* *étudiant-e*
the.F.SG kind-F.SG student-F.SG

(7) a. *les* *gentil-s* *étudiant-s*
the.PL kind.M-PL student.M-PL
b. *les* *gentil-le-s* *étudiant-e-s*
the.PL kind-F-PL student-F-PL

Both in the singular (6) and in the plural (7), the adjective *gentil* 'kind' is inflected for gender, showing distinct masculine (6a-7a) and feminine (6b-7b) forms.

In German, gender marking is only visible in the singular; in the plural, there is syncretism between all three genders on all types of agreement targets, as illustrated by the examples in (8) and (9):[10]

(8) a. *der* *nett-e* *Student*
the.M.SG kind-M.SG student.M.SG
b. *die* *nett-e* *Student-in*
the.F.SG kind-F.SG student-F.SG
c. *das* *nett-e* *Mädchen*
the.N.SG kind-N.SG girl.N.SG

[10] In fact, in French, the plural determiner is syncretic, but agreement on (attributive) adjectives indicates that gender distinctions nevertheless play a role in the plural too.

(9) a. *die* *nett-en* *Student-en*
the.PL kind-PL student.M-PL
b. *die* *nett-en* *Student-inn-en*
the.PL kind-PL student-F-PL
c. *die* *nett-en* *Mädchen*
the.PL kind-PL girl.N.PL

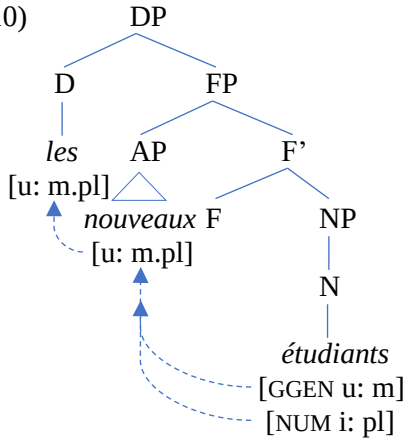
In the singular form (8), the definite determiner displays different gender markings, depending on the lexical gender of the noun: masculine (8a), feminine (8b), or neuter (8c). By contrast, the definite determiner shows syncretism for all three genders in the plural (9a-c). As we can see from the examples in (8-9), the only element that may overtly express gender in both the singular and the plural is the noun. For instance, the noun *Studentinnen* in (9b) is feminine, which can be concluded from the feminine suffix *-in*.

How does this situation impact the agreement process? I assume that in both French and German, a noun always bears a grammatical gender feature, whose value comes from the lexicon. In addition, nouns bear a number feature as well.[11] I propose that the difference between the two languages results from the following: in German, a [PLURAL] number feature on N takes precedence over a noun's gender feature, which makes that only the number feature acts as a goal for agreement, while in French, both the number and the gender features fulfil this function. Thus, in German, the agreement targets in a DP with a plural noun can only receive the value [PLURAL] from N; in French, the agreement targets receive both the number value and a gender value. The structures in (10) for French and (11) for German illustrate this; the arrows show how feature valuation proceeds:[12]

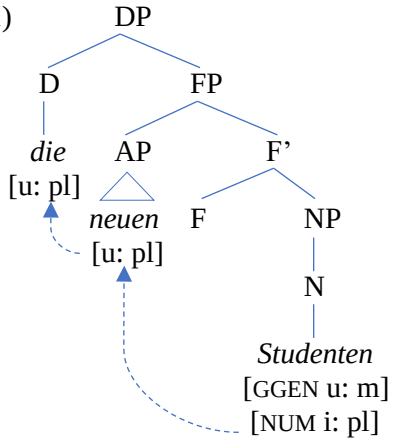
[11] In this dissertation, I simply assume that the number feature is also located on N in syntax. I do not exclude, however, the existence of a separate functional projection related to number, NumP, as proposed by, for instance, Ritter (1993), but a thorough discussion of this issue falls beyond the scope of my dissertation.

[12] Following the theoretical assumptions I made in section 7.1.3, the structures in (10-11) should contain referent features too, located on the D-head. Still, I left out the referent features here because their presence is not relevant to the discussion.

(10)



(11)



In French (10), both the gender [GGEN u: m] and the number feature [NUM i: pl] on the noun *étudiants* 'students' value the agreement features on the attributive adjective *nouveaux* 'new' and on the determiner. By contrast, in the German example (11), the agreement features on the attributive adjective *neuen* 'new' and on the definite determiner are only valued by the noun's number feature [NUM i: pl].[13] This results in syncretism in the plural, as the agreement features only receive a [PLURAL] number value, but no grammatical gender value. As I will show later on, this difference in gender agreement proves relevant to explain agreement in partitives in German. First, I discuss how I account for the French data.

7.2.2 Explaining agreement in French partitives

As I already hypothesised based on the earlier study of Sleeman & Ihsane (2016), speakers of French prefer grammatical agreement in quantified partitives, whereas semantic agreement turns out to be acceptable in superlative partitives. The examples in (12-13), including the class B noun *étudiants* 'students', illustrate this (acceptability scores are indicated between square brackets):

[13] Alternatively, one may formalise this by hypothesising that a feature on an agreement target contains a list of possible values, which, for German, would only include gendered forms for the singular, but not for the plural.

(12) a. *Un* *de* *mes* *ancien-s* *étudiant-s* *s'=appelle*
one.M of my.PL former.M-PL student.M-PL REFL.3SG=call
Henriette. [2.92]
Henriette

b. *?Une* *de* *mes* *ancien-s* *étudiant-s* *s'=appelle*
one.F of my.PL former.M-PL student.M-PL REFL.3SG=call
Henriette. [1.81]
Henriette
'One of my former students is called Henriette.'

(13) a. *?Le* *plus* *intelligent* *de* *mes* *ancien-s* *étudiant-s*
the.M SUP intelligent.M of my.PL former.M-PL student.M-PL
s'=appelle *Henriette.* [2.76]
REFL.3SG=call Henriette

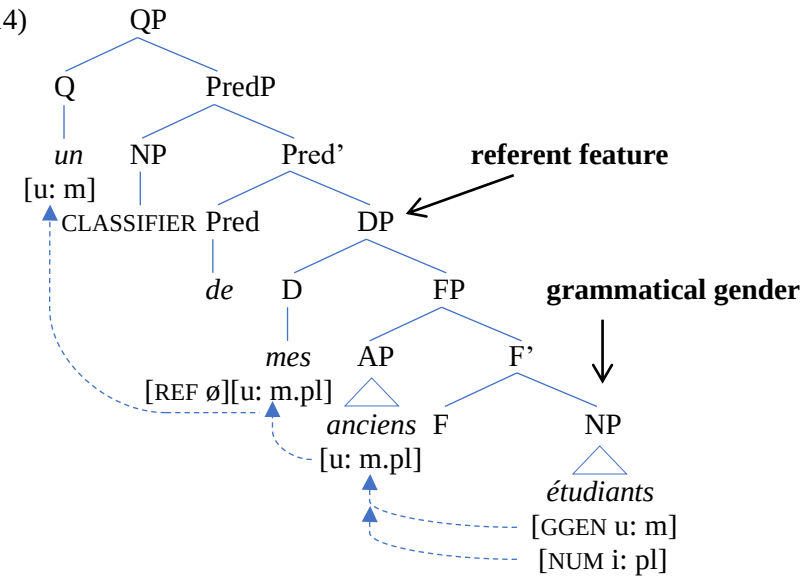
b. *La* *plus* *intelligent-e* *de* *mes* *ancien-s* *étudiant-s*
the.F SUP intelligent-F of my.PL former.M-PL student.M-PL
s'=appelle *Henriette.* [3.27]
REFL.3SG=call Henriette.
'The most intelligent of my former students is called Henriette.'

In what follows, I show how the agreement differences between quantified and superlative partitives straightforwardly derive from the proposed syntactic analysis. I start by discussing the derivation of the quantified partitive in (12a), before moving on to the superlative one in (13b).

7.2.2.1 Quantified partitives

As I described in Chapter 6, I adopt a small clause analysis of partitive constructions, under which a functional projection Predicate Phrase (PredP) constitutes the core part of the structure. The set DP merges as the complement of this functional projection, while the subset is expressed by means of a silent nominal classifier, located in [Spec, PredP]. PredP is headed by a nominal relator that assures a *belong*-type interpretation and is realised as the preposition *de* in French. In a quantified partitive, the Predicate Phrase is only dominated by a QP, taking a quantifier as its head. This quantifier renders the quantity *n* of its complement, the Predicate Phrase. The syntactic structure of the quantified partitive in (12a) is shown in (14):

(14)



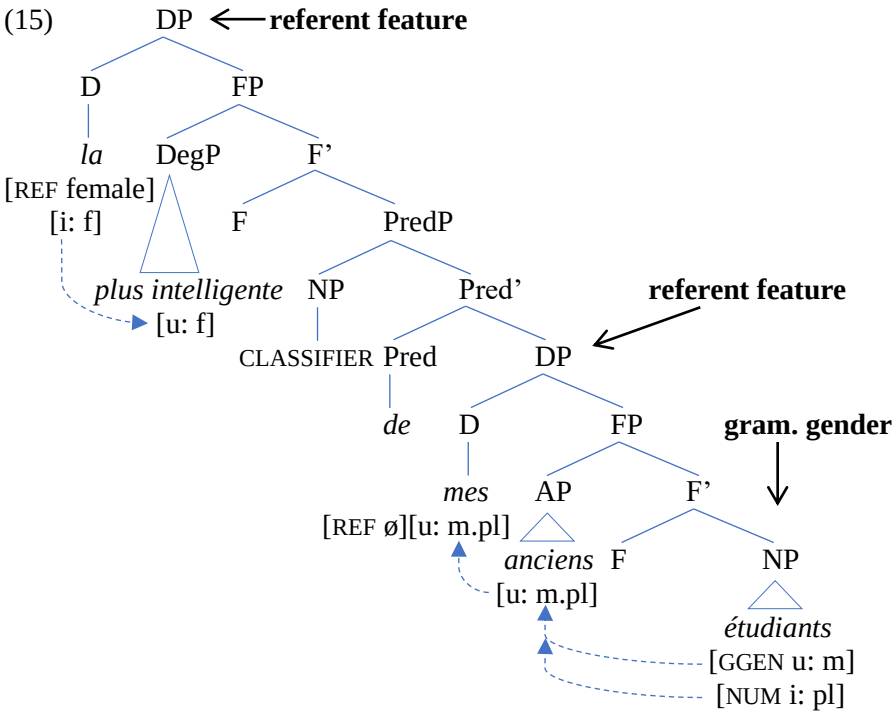
In terms of feature specification, the set noun *étudiants* 'students' in (14) bears an uninterpretable grammatical gender feature, valued as masculine, which comes from the lexicon. In addition, a plural number feature is marked on the noun as well. Furthermore, since *étudiants* is an animate noun, the DP contains a referent feature too, which is unspecified, as the set noun refers to a mixed group of female and male students.

The set DP in (14) contains two agreement targets whose features must be valued, the adjective *anciens* 'former' and the possessive. Both features are valued by the set noun, which results in masculine plural agreement within the lower DP. The upper part of the structure, the QP, also contains an unvalued gender feature on the quantifier. This feature probes down to the first feature it encounters, the masculine-valued feature on the lower D. This results in valuation of the quantifier's feature as masculine and, consequently, grammatical agreement within the full quantified partitive.

7.2.2.2 Superlative partitives

Let us now turn to the derivation of the superlative partitive in (13b). The structure differs from the one adopted for quantified partitives in terms of the functional projections that embed PredP. In a superlative partitive, PredP is dominated by at least two projections, an FP hosting the superlative adjective *plus intelligente* 'most intelligent' and a DP containing the definite determiner. Semantically, the superlative denotes a specific referent that is a token of the set. The structure of (13b) is presented in (15):

(15)



In terms of agreement, the constellation of the set DP in (15) is identical to the quantified partitive in (14) discussed earlier. The set noun *étudiants* 'students' bears both a masculine-valued grammatical gender feature and a plural number feature, which value the features on the adjective *anciens* 'former' and on the possessive *mes* 'my', resulting in masculine agreement within the set DP. In addition, the DP carries a referent feature, which is unspecified due to the referent being a mixed group of females and males.

The crucial difference between superlative and quantified partitives lies in the upper part of the structure, which is more articulate for superlative than for quantified partitives. The upper part of a superlative's structure contains a DP, a referential projection. As I argued in section 7.1.3, human-denoting DPs bear a referent feature, which links the superlative to its referent. As a consequence, the structure of a superlative partitive contains two referent features, one on the lower set DP and one on the higher DP that introduces the superlative, as shown in (15). The structure of quantified partitives, instead, only contains one referent feature, on the set DP.

To account for semantic agreement in superlative partitives, I propose that the presence of the second referent feature on the outer D facilitates semantic valuation of the gender features in the upper part of the structure.

The unvalued gender feature on the determiner may receive a semantically interpreted value from the context, instead of receiving a feature value from the set DP through grammatical agreement. In this, I follow Kučerová (2018), who proposes that the gender feature on D may be semantically valued from the context, instead of through grammatical agreement (cf. Dahl, 2000; Sauerland, 2004).[14] As a result, the feature on the determiner is valued as feminine and is interpretable, since its value reflects semantic information. In a next step, the feature on the determiner triggers feminine agreement on the superlative adjective *plus intelligente* 'most intelligent' too. This causes a mismatch between the feminine superlative *la plus intelligente* and the masculine set DP *mes anciens étudiants* in (15), which is what speakers of French prefer.

Yet, in section 7.1.3, I proposed that DP-internal agreement is always grammatical, following Wechsler & Zlatić (2003). Why would semantic agreement then be possible in a superlative partitive, which can be considered a complex DP? I assume that the possibility of semantic feature valuation in partitives is mediated by the two conditions listed in (16):

(16) **Conditions on semantic feature valuation**
1. The outer DP needs to contain a silent nominal classifier.
2. The outer DP needs to bear a referent feature.

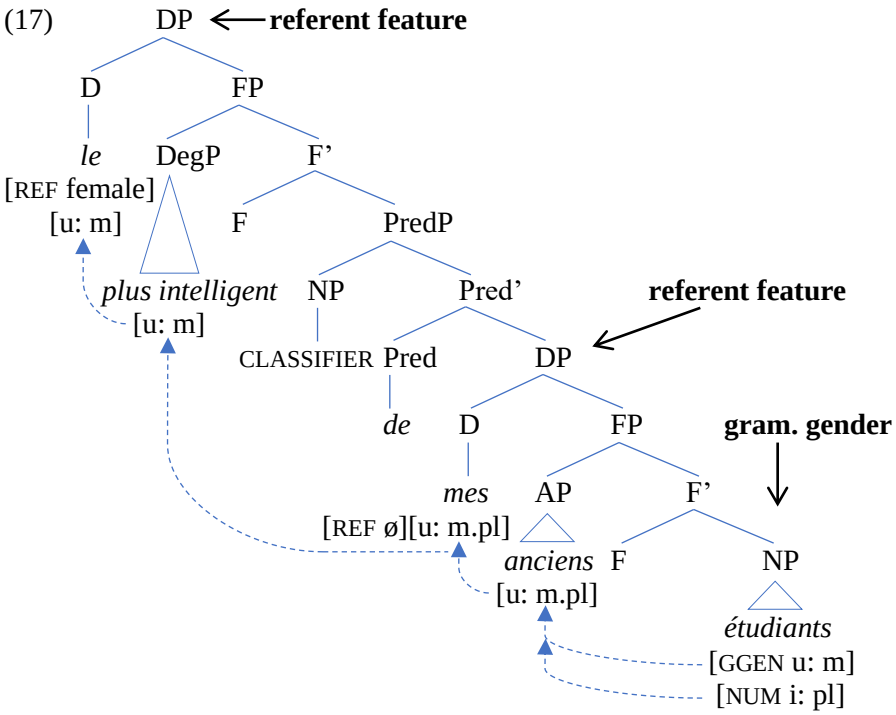
First, partitive constructions contain a silent nominal classifier under my analysis, instead of an overt noun. Second, the outer DP of a superlative partitive contains a referent feature when involving an animate noun, which is not the case for a quantified partitive. That semantic valuation may depend on the presence of a specific feature in syntax is also proposed by Kučerová (2018).

To explain semantic agreement on the superlative in (15), I deviate from the Minimalist concept of Agree, which requires the target to c-command the controller (cf. Chomsky, 2001). Indeed, (15) presents the opposite situation: the controller (the determiner) c-commands the target (the superlative adjective). To account for this state of affairs, I follow Zeijlstra (2012), who argues that the controller should c-command the target for valuation. I take this assumption to be justified here because of the presence of a silent classifier instead of an overt nominal.

[14] Feature valuation from the context has also been proposed by Stowell (1981) to account for contextual tense marking on infinitives.

Grammatical agreement is possible for superlative partitives too, as illustrated in example (13a). The structure in (17) shows this:

(17)



Although the outer D bears an interpretable referent feature, the features on the superlative adjective *plus intelligent* 'most intelligent' and the definite determiner may be valued by the grammatical gender of the set noun too, which is accessible from the set DP. That the outer DP in (17) shows grammatical agreement can also be concluded from the fact that the feature on the outer D is uninterpretable, as opposed to what we saw earlier for (15). Crucially, the presence of a referent feature on the outer D facilitates semantic agreement, but does not dictate it. Still, grammatical agreement turns out to be downgraded; feature valuation from the context is the preferred option for speakers of French.

7.2.2.3 A note on feature valuation from the context

The concept of feature valuation from the context raises the question whether valuation involves the linguistic or the non-linguistic context. Indeed, both options could be adopted for the specific examples at stake here, which all include copular constructions (with a form of *être* 'to be' or *s'appeler* 'be

called' for French). Following the model of the examples presented in (12-13), all test sentences contained a partitive construction as subject and a proper noun as nominal predicate. If one assumes that proper nouns bear a gender feature, it may be argued that the gender feature of the subset phrase of a partitive syntactically agrees with the gender feature of the proper noun, as schematically represented in (18):

(18) *La plus jeune de mes nouveau-x étudiant-s est Marie.*
the.F SUP young of my.PL new.M-PL student.M-PL is Marie.F

In (18), the feminine gender feature on the superlative *la plus jeune* receives its value from the linguistic context, that is, from the proper noun *Marie*. In turn, it may also be argued that the gender value is derived from the referent's biological sex, that is, from the non-linguistic context.

The results of Sleeman & Ihsane's (2016) small-scale experiment seem to support the latter explanation, valuation from the non-linguistic context. Consider the example in (19) with the class C noun *élève* 'pupil' (example taken from Sleeman & Ihsane, 2016: 10):

(19) *La/Le plus jeune de mes ancien-s élève-s a*
the.F/the.M SUP young of my.PL former.M-PL pupil.M-PL have.3SG
trouvé un emploi.
find.PTCP a.M job.M
'The youngest of my former pupils has found a job.'

The example in (19) does not contain any overt information that conveys the biological sex of the referent designated by the superlative. Despite the fact that the set phrase *mes anciens élèves* is in the masculine form, Sleeman & Ihsane's (2016) informants accepted both the masculine (*le plus jeune*) and the feminine form (*la plus jeune*) of the superlative in (19), which suggests that they take into account information that is not present in the immediate linguistic context. Although determining the exact origin of the gender value constitutes an interesting point of discussion, I leave this question for future research, as it does not influence the explanation proposed in this dissertation.

7.2.3 Explaining agreement in German partitives

In the previous section, I accounted for the observation that speakers of French in general prefer semantic agreement in superlative partitives, but

grammatical agreement in quantified ones. By contrast, speakers of German prefer semantic agreement in both partitive types, although the difference in acceptability scores between grammatical and semantic agreement is lower in quantified than in superlative partitives. The German examples in (20-21) illustrate this for the class B noun *Student* 'student'; for both examples, the differences in the acceptability scores between the sentence pairs are significant:

(20) a. *?Ein-er* *der* *neu-en* *Student-en* *ist* *Katharina.* [2.41]
one-M of.the.PL new-PL student.M-PL is Katharina
b. *Ein-e* *der* *neu-en* *Student-en* *ist* *Katharina.* [4.05]
one-F of.the.PL new-PL student.M-PL is Katharina
'One of the new students is Katharina.'

(21) a. *?Der* *jüng-ste* *der* *neu-en* *Student-en* *ist* *Katharina.* [1.78]
the.M young-SUP of.the.PL new-PL student.M-PL is Katharina
b. *Die* *jüng-ste* *der* *neu-en* *Student-en* *ist* *Katharina.* [4.22]
the.F young-SUP of.the.PL new-PL student.M-PL is Katharina
'The youngest of the new students is Katharina.'

As such, the behaviour of the German quantified partitives challenges the proposed analysis, for semantic valuation appears to be possible (20b). Nevertheless, I maintain my assumption that quantified partitives exhibit the same structural derivation in both languages. In what follows, I will show that the divergent pattern for German quantified partitives can be attributed to the difference in plural agreement described in section 7.2.1. In a next step, I discuss the superlative partitives.

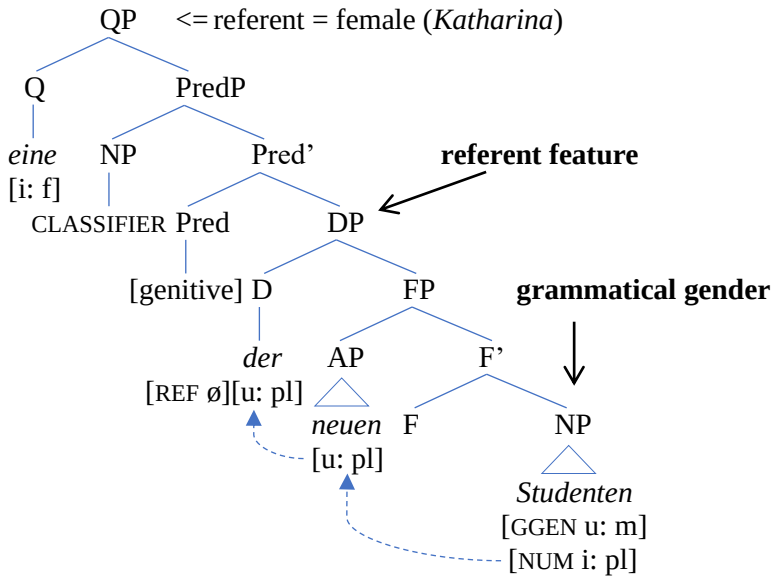
7.2.3.1 Quantified partitives

Speakers of German prefer semantic agreement in quantified partitives, which contrasts with what we observed for French. In section 7.2.2.2, I have proposed that DP-internal semantic agreement is possible under two conditions, the presence of a silent nominal classifier and the presence of a referent feature (see 16). Within the analysis proposed in Chapter 6, I argued that for quantified partitives, the upper part of their structure does not contain a DP; as a consequence, a referent feature is missing too. This means that a priori, one condition for semantic agreement is not met. Therefore, semantic

valuation should not be possible in quantified partitives, contrary to what we observe.

I assume that here, the difference in plural agreement between French and German comes into play. As I discussed in section 7.2.1, German plural agreement is subject to syncretism and, therefore, does not mark gender differences (see the examples in 9). As a consequence, in German quantified partitives, the agreement feature on the quantifier that dominates the Predicate Phrase cannot receive a gender value from the determiner of the set phrase. The set noun bears a [pl] number feature, which means that all agreement targets within the set DP display syncretism. The structure in (22) below, representing example (20b), illustrates this:

(22)



In (22), the highest agreement feature of the set DP, on the determiner *der* in D, only bears the number value [pl]. It lacks a gender value that could value the agreement feature of the quantifier *eine* 'one'. Of course, it is possible to probe down to the grammatical gender feature of the set noun, but I propose that for German animate nouns, an alternative exists: the feature on the quantifier may also be valued semantically, from the context. As the referent of the quantifier is a female, *Katharina* (see 20), this results in feminine agreement on the quantifier and, consequently, a mismatch between the (generic masculine) set DP and the (feminine) quantifier. Since the quantifier's feature is interpretable, its value may be semantically interpreted.

Obviously, this raises the question why semantic valuation of the quantifier's feature is possible in German, but not in French. I believe that this assumption is justified for German because of the syncretism in plural gender agreement I described earlier in this section. With a plural noun, any related agreement target may only receive a number value, which implies that the agreement features in the set DP of a German partitive construction are only specified for number, not for gender. As a consequence, in German, the feature of the quantifier cannot receive a gender value from the first feature it comes across when looking downward for valuation, as the determiner of the set phrase does not transfer any gender value. The only way to receive a gender value through grammatical agreement is to probe further down onto the grammatical gender value of the set noun.

This state of affairs further favours feature valuation from the context, which is an option with animate nouns.[15] Consequently, the second condition on semantic agreement I proposed earlier in (16) should be slightly updated. In absence of a referent feature on the outer D (condition 2), semantic feature valuation is favoured if the inner D lacks a gender value, which is the case in German due to the gender syncretism in the plural (see section 7.2.1). The second version is formulated in (23):

(23) **Conditions on semantic feature valuation** (second version)
1. The outer DP needs to contain a silent nominal classifier.
2. The outer DP needs to bear a referent feature OR the inner D lacks a gender value.

For German, semantic valuation can be considered some sort of last-resort option — as has also been argued by Matushansky (2013) for Russian — although grammatical agreement is not excluded either. In French, there is no reason to resort to semantic valuation because the agreement feature on the inner D contains a gender value (see also 14).

Still, the German data also show a significant difference between quantified and superlative partitives. Although speakers prefer semantic agreement in both partitive types, it is judged significantly more acceptable in superlative than in quantified partitives. This is compatible with the analysis I presented above: in quantified partitives, semantic valuation is a last-resort option to avoid having to probe down the structure to the grammatical gender

[15] As such, feature valuation from the context could be favoured in German for reasons of economy, but it is unclear what actual factor mediates the possibility of semantic feature valuation here.

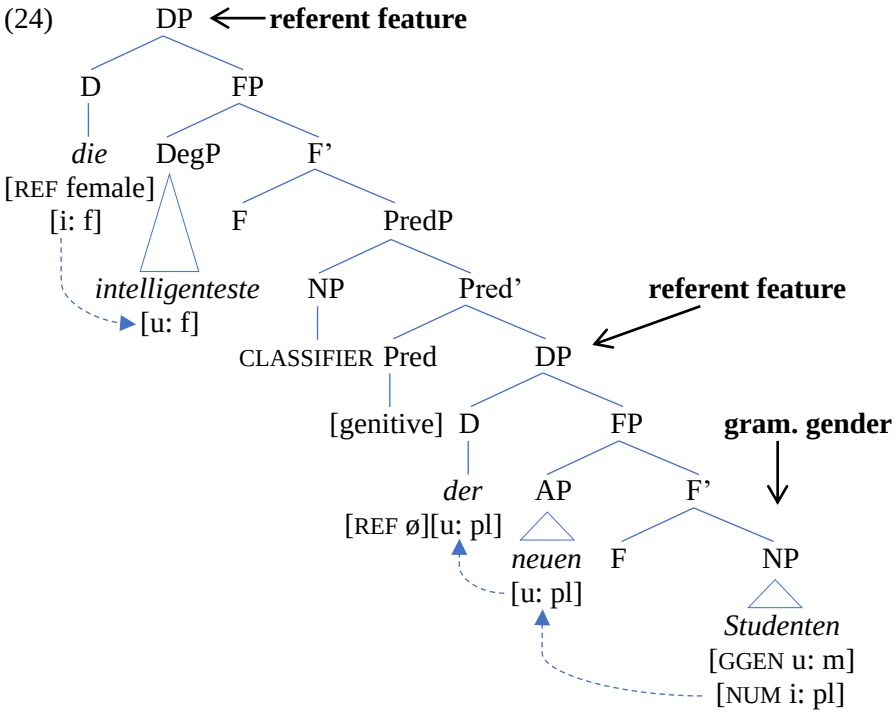
of the set noun. By contrast, the syntactic structure of superlative partitives triggers the presence of a referent feature in the upper part of the structure, which facilitates semantic feature valuation, as I demonstrate in the next section.

7.2.3.2 Superlative partitives

The agreement situation in German superlative partitives straightforwardly results from the analysis I proposed for French in the previous section. German superlative partitives fulfil the two requirements for semantic agreement listed in (23). First, they involve a silent nominal classifier. Second, the upper part of their structure contains a DP that bears a referent feature. This state of affairs facilitates semantic feature valuation from the context. However, there is an additional motivation for semantic valuation in German, the syncretism in plural agreement, which I discussed in section 7.2.1. Crucially, the set phrase of a canonical partitive construction involves a plural noun, as it refers to a set, a plural entity. This means that in German, the features on the agreement targets in the set DP (the determiner and any attributive adjectives) do not receive a gender value, but only a number value.

Consider the structure in (24), representing example (21b):

(24)



In (24), the set DP is in the plural form, which means that both its agreement targets, the attributive adjective *neuen* 'new' and the determiner *der*, only receive a number value from the set noun *Studenten* 'students'. As a consequence, the agreement features present on the superlative adjective *intelligenteste* 'most intelligent' and on the definite determiner in the upper part of the structure cannot receive a gender value from the highest feature within the set DP, on the inner D, which only bears the value [pl]. Instead of probing down to the grammatical gender feature on the set noun, the feature on the outer D is semantically valued from the context as feminine. As a consequence, the feature is interpretable. Semantic valuation is facilitated by the presence of a referent feature on the outer D of the superlative partitive. In turn, the determiner's feature also values the feature on the superlative adjective as feminine, which results in a gender mismatch between set and subset DP in (24).

7.2.4 Interim summary

Starting from the syntactic analysis of partitives I developed in Chapter 6, I accounted for the main agreement patterns in partitive constructions in French and German. Specifically, I proposed that the possibility of having semantic agreement depends on two requirements: (i) the outer DP contains a silent nominal classifier, and (ii) the outer D hosts a referent feature, or semantic agreement is favoured by the absence of a gender value on the inner D, as I proposed to be the case for German quantified partitives. Table 3 summarises how I accounted for the different cases in French and German:

Table 3 – Overview

Partitive type	**Language**	*Referent feature on outer D?*	*Feature valuation from…*
Quantified partitives	*French*	no	inner D-head
	German	no	semantic context **OR** set noun
Superlative partitives	*French*	yes	semantic context (or inner D-head)
	German	yes	semantic context (or set noun)

In the remainder of this chapter, I will show that we need an additional lexical condition on semantic agreement to account for the noun (class) differences, which I largely ignored in the agreement discussion since Chapter 5.

7.3 Noun (class) differences: the role of the lexicon

In the previous section, I provided a syntactic explanation of the agreement differences between quantified and superlative partitives. Specifically, I proposed that the possibility of semantic agreement in partitives is mediated by two conditions, which I captured in (23). For convenience, I repeat these conditions in (25):

(25) **Conditions on semantic feature valuation** (second version)
1. The outer DP needs to contain a silent nominal classifier.
2. The outer DP needs to bear a referent feature OR the inner D lacks a gender value.

Semantic agreement in superlative partitives is facilitated by the presence of a referent feature on the outer D, in combination with the presence of a silent classifier. As I showed, this account correctly derives the observed differences between quantified and superlative partitives.

Until now, I abstracted away from noun (class) differences, which are nevertheless present in the data. Although most animate nouns follow the agreement patterns accounted for in the previous sections, some nouns show distinct behaviour. Table 4 recapitulates the main noun class differences:

Table 4 – Comparative summary of main results

Partitive type			Quantified partitives		Superlative partitives	
Language			French	German	French	German
Noun class	B		*grammatical agreement*	*semantic agreement*	*semantic agreement*	*semantic agreement*
	C		*grammatical agreement*	*semantic agreement*	*semantic agreement*	*semantic agreement*
	D	non-neuter	*grammatical agreement*	*inconclusive*	*grammatical agreement*	*semantic agreement*
		neuter	*n/a*	*grammatical agreement*	*n/a*	*grammatical agreement*

Especially the class D nouns turn out to be a challenge for the analysis I developed. In French, with class D nouns, speakers do not only prefer grammatical agreement in quantified partitives — as with classes B and C — but also in superlative partitives. For German, a subclass of class D nouns appears to deviate from the behaviour of other nouns. In general, speakers accept semantic agreement in both quantified and superlative partitives, but

this does not hold for neuter class D nouns, such as *Kind* 'child' or *Opfer* 'victim'. These nouns show the opposite pattern: grammatical agreement is preferred for both partitive types.

To account for these noun (class) differences, I will propose a third condition to complement the conditions in (25). This condition relates to the specification of grammatical gender in a speaker's lexicon. Specifically, I will assume that semantic agreement is possible with animate nouns that come with an underspecified grammatical gender feature from the lexicon. I introduce the concept of underspecified grammatical gender for French in the following sections and show how it enables me to explain the noun (class) differences. In a next step, I extend the proposal to German. I end with a short discussion of my proposal's main characteristics.

7.3.1 Underspecified grammatical gender in French[16]

To account for the noun class variation, I assume that with French animate nouns, grammatical gender may not only be specified as masculine or feminine in a speaker's lexicon, but requires a more articulate classification. This classification includes an additional value labelled *underspecified masculine*. Underspecified masculine gender constitutes a less categoric, weaker gender, which leaves room for further semantic specification in the course of the derivation, outside the DP that contains the noun. As a consequence, it does not automatically result in grammatical agreement.

If the set noun of a partitive is marked for underspecified masculine gender, it is possible to further specify the gender in the subset phrase through semantic valuation, based on the referent's biological sex. This is illustrated in (26) with the class C noun *ministre* 'minster'; the subset refers to a female:

(26)

La	*plus*	*jeune*	*des*	*nouv-eau-x*	*ministre-s*	*(est Hélène).*
the.F	SUP	young	of.the.PL	new-M-PL	minister.M-PL	(is Hélène)
semantic gender				**underspecified masculine**		

In (26), the set phrase shows grammatical agreement with the noun's gender, resulting in the masculine form of the adjective *nouveaux*. However, since the

[16] This section extends on a proposal presented in the following paper: Westveer, Thom; Petra Sleeman & Enoch O. Aboh. Forthcoming. La lutte des genres : l'accord de genre dans les phrases partitives superlatives en français. In: Gabrielle Le Tallec & Benjamin Fagard (eds.), *Entre masculin et féminin… Approche contrastive : français et langues romanes*. For consistency, I continue using the pronoun *I* rather than *we*.

noun's grammatical gender is underspecified, semantic gender may come in outside the set phrase, which results in feminine agreement on the superlative *la plus jeune*, in line with the biological sex of the referent.

Crucially, I claim that grammatical gender may be underspecified with animate nouns, but not unspecified. In this, my proposal differs from Sleeman & Ihsane (2016), who assume that grammatical gender may be unspecified — unvalued — for some animate nouns in French (see Chapter 3, section 3.1.2). I disagree with their assumption because of the male-bias in referent perception, reported by multiple psycholinguistic studies on the interpretation of generic masculine gender (cf. Stahlberg & Sczesny, 2001; Brauer & Landry, 2008; Gabriel et al., 2008). This suggests that the grammatical gender of a noun is always active during language processing, even with animate nouns that are supposed to be generic.

Further motivation for the claim that grammatical gender may be underspecified, but not unspecified is provided by the behaviour of feminine class D nouns, such as *sentinelle* 'guard'. With these nouns, some speakers of French turn out to accept semantic agreement in a superlative partitives, as shown in (27):

(27) *Le plus jeune des nouv-elle-s sentinelle-s*
the.M SUP young of.the.PL new-F-PL guard.F-PL
(est Jean-Luc).
(is Jean-Luc)
'The youngest of the new guards (is Jean-Luc).'

To account for the fact that some speakers accept semantic agreement with the class D noun *sentinelle*, I assume that this noun may bear underspecified gender too, following the rationale I adopted for the class C noun *ministre* in (26). Yet, this underspecified gender needs to take into account the feminine, since DP-internal agreement within the set phrase in (27) is necessarily grammatical, as shown by the feminine adjective *nouvelles*. Therefore, I propose that grammatical gender may also be marked as *underspecified feminine*. Crucially, the specification of grammatical gender may vary from speaker to speaker, which accounts for speaker variation.

In sum, I propose that grammatical gender for French animate nouns may not only be marked as masculine or feminine, but also as underspecified masculine or underspecified feminine in a speaker's lexicon. Specifically, I assume that grammatical gender is underspecified with class B and class C nouns, but specified with class D nouns. Table 5 summarises the grammatical

gender values for the different noun classes. In what follows, underspecified grammatical gender is indicated by the diacritic ^{u}:[17]

Table 5 – Grammatical gender in French

Noun class	**Lexeme**	**Word forms**	**Grammatical gender feature**
B	{étudiant}	*étudiant* 'student.M'	[GGEN u: m^{u}]
		étudiant-e 'student-F'	[GGEN u: f]
C	{ministre}	*ministre* 'minister'	[GGEN u: m^{u}]
			[GGEN u: f]
D	{génie}	*génie* 'genius.M'	[GGEN u: m]
	{sentinelle}	*sentinelle* 'guard.F'	[GGEN u: f]

As Table 5 indicates, I propose that grammatical gender is underspecified [GGEN u: m^{u}] for masculine class B and class C nouns, or specified as feminine [GGEN u: f] for the feminine noun forms. For class D nouns, instead, I take grammatical gender to be specified as masculine [GGEN u: m] or feminine [GGEN u: f]. Importantly, there may be variation between speakers: for one speaker, a noun may be marked with underspecified grammatical gender, whereas for another speaker, the same noun could bear specified grammatical gender. If a noun is marked for underspecified grammatical gender in the lexicon in a speaker's lexicon, semantic agreement may arise with that noun, as I demonstrate in the next section. Since most noun class differences occur in superlative partitives, I focus on these constructions.

7.3.2 French: noun class and speaker variation

For French, class D nouns turn out to behave differently in that semantic agreement is judged less acceptable than with class B and class C nouns. In what follows, I show how the observed noun class differences derive from the proposal presented in the previous section. I start with the class B and class C nouns, before moving on to the class D nouns. I end with a short discussion of speaker variation, specifically focussing on class D nouns.

[17] Recall that I distinguish between lexemes, the general concept of a noun, irrespective of its morphological form, and word forms, which are the specific morphological forms, for instance, the singular form *chanteur* and the plural form *chanteurs* (cf. Haspelmath & Sims, 2010).

7.3.2.1 French classes B and C

With class B and class C nouns in French, speakers generally accept semantic agreement in superlative partitives. In (28), this is illustrated for the class C noun *ministre* 'minister'. The acceptability rates indicate that a sentence with semantic agreement (28b) is preferred over a sentence with grammatical agreement (28a), a difference that is significant:

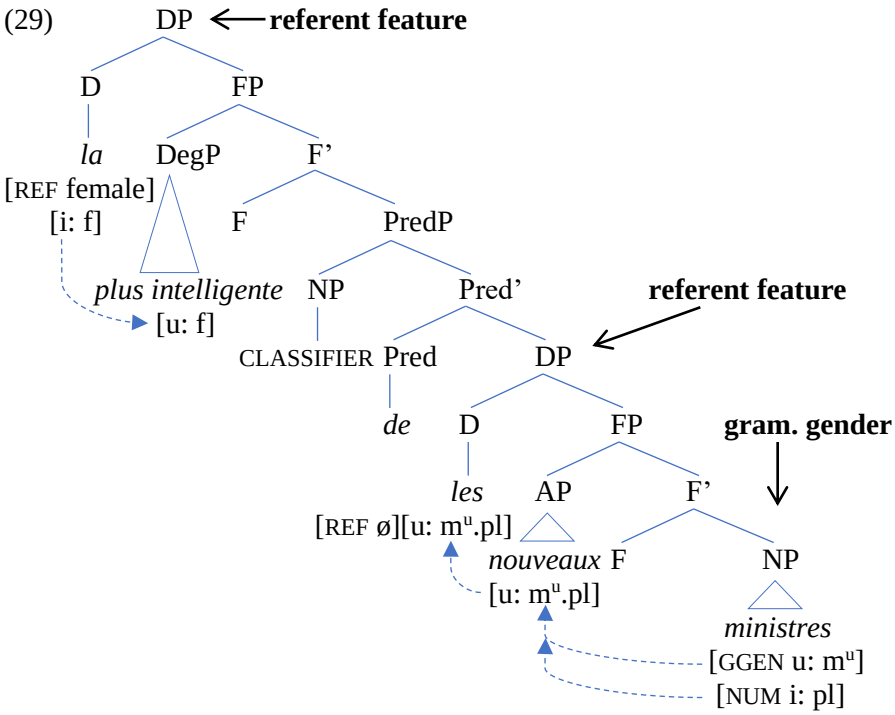
(28) a. *?Le plus intelligent des nouveau-x ministre-s est*
the.M SUP intelligent.M of.the.PL new.M-PL minister-PL is
Madame Ranquière. [3.29]
Mrs. Ranquière

b. *La plus intelligent-e des nouveau-x ministre-s est*
the.F SUP intelligent-F of.the.PL new.M-PL minister-PL is
Madame Ranquière. [3.98]
Mrs. Ranquière
'The most intelligent of the new ministers is Mrs. Ranquière.'

Pursuing the proposal I presented above, I take the class C noun *ministre* 'minister' to be marked for underspecified masculine grammatical gender in the lexicon. This is indicated as [GGEN u: m^u] on the noun in (29), representing the structural derivation of example (28b):[18]

[18] See section 7.2.2.2 for an example with the class B noun *étudiant* 'student'. Following up on the present discussion, I assume that the noun *étudiant* is marked for underspecified masculine gender [GGEN u: m^u] in the lexicon.

(29)



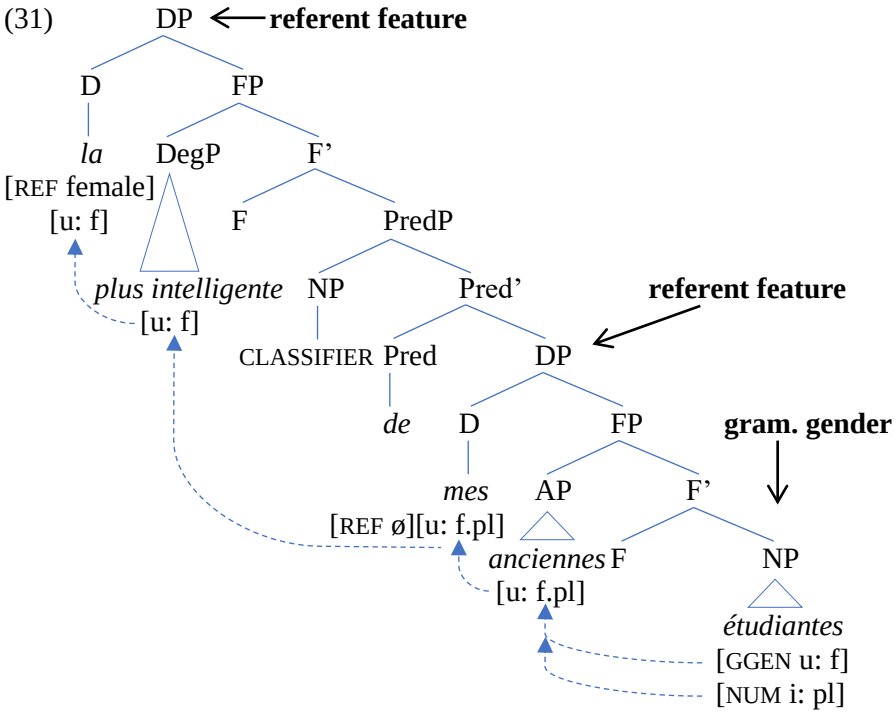
In (29), the set noun's (underspecified) masculine gender results in masculine grammatical agreement on the adjective *nouveaux* 'new' and on the definite determiner within the set DP. Since the set noun is marked for underspecified masculine gender in the lexicon, semantic valuation from the context is allowed in (29), which is further facilitated by the presence of a referent feature on the outer D, as well as by the fact that the structure in (29) involves a silent classifier. Therefore, the feature on the outer determiner may receive a semantically interpreted value from the context, which, in turn, values the feature on the superlative adjective *plus intelligente*. As the superlative refers to a female, feminine agreement arises, resulting in a gender mismatch between set and subset.

For the feminine forms of class B and class C nouns, such as *une étudiante* 'a.F student.F' or *une ministre* 'a.F minister', I assume that these forms are marked with specified feminine gender in the lexicon. If the feminine set noun *étudiantes* is used, the superlative necessarily has to refer to a female, as shown in (30):

(30) *La plus intelligent-e de mes ancien-ne-s étudiant-e-s*
the.F SUP intelligent-F of my.PL former-F-PL student-F-PL
s'=appelle Françoise. [4.94]
REFL.3SG=call Françoise
'The most intelligent of my former female students is called Françoise.'

The syntactic derivation of (30) is presented in (31):

(31)



Both the determiner and the superlative adjective grammaticality agree with the feminine gender of the set noun in (31).

With these feminine forms, mismatches never occur in partitives, as illustrated with the feminine class B noun *étudiante* 'student' in (32):

(32) **Le plus intelligent de mes ancien-ne-s étudiant-e-s*
the.M SUP intelligent.M of my.PL former-F-PL student-F-PL
s'=appelle Henri.
REFL.3SG=call Henri
'The most intelligent of my former (female) students is called Henri.'

The unacceptability of (32) is straightforwardly derived by my analysis: mismatches may only arise as a result of semantic agreement, which, in turn, is only allowed with nouns that bear underspecified grammatical gender. In addition, the impossibility of a mismatch in (32) can also be explained on semantic grounds, for a group of female students — which is the only possible referent of the feminine form *étudiantes* — may never contain a male student, as this would make the set heterogeneous and, consequently, trigger the use of the generic masculine form *étudiants*.

7.3.2.2 French class D

With class D nouns, speakers of French usually do not accept semantic agreement, as exemplified for the feminine noun *sentinelle* ‘guard’ in (33):

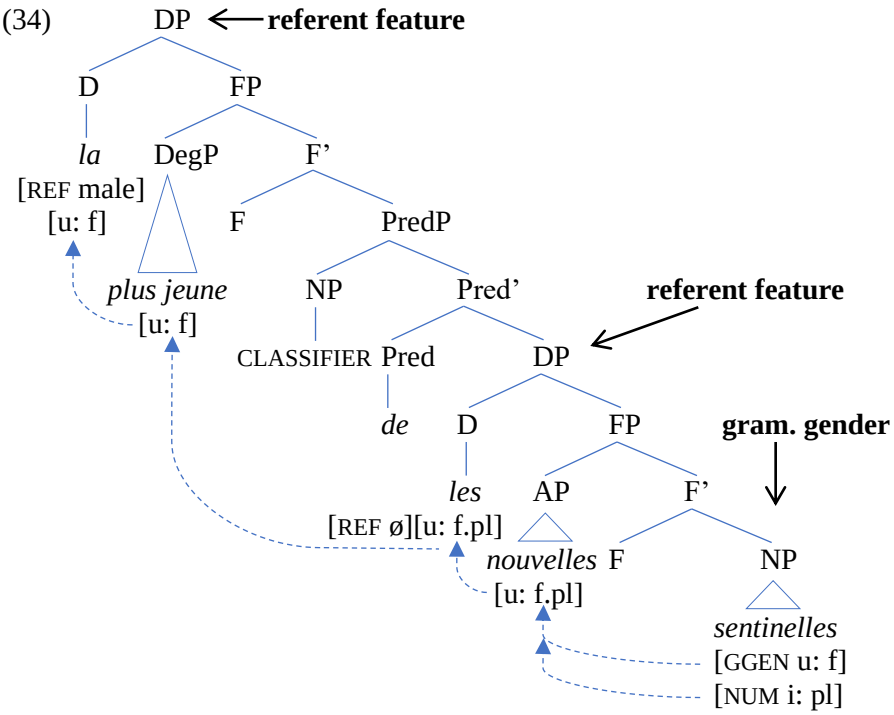
(33) a. *La plus jeune des nouvelle-s sentinelle-s*
the.F SUP young of.the.PL new.F-PL guard.F-PL
s’=appelle Henri. [4.27]
REFL.3SG=call Henri

b. *?Le plus jeune des nouvelle-s sentinelle-s*
the.M SUP young of.the.PL new.F-PL guard.F-PL
s’=appelle Henri. [3.10]
REFL.3SG=call Henri
‘The youngest of the new guards is called Henri.’

As the (significant) difference in acceptability judgements between the examples with grammatical (33a) and semantic (33b) agreement shows, grammatical agreement is preferred by most speakers of French.

To account for this, I argue that the class D noun *sentinelle* ‘guard’ is marked with a specified grammatical gender feature in the lexicon. The structure in (34) presents the derivation of (33a):

(34)



The class D set noun *sentinelle*s 'guards' bears a specified feminine grammatical gender feature [GGEN u: f], which values the agreement features on the adjective *nouvelles* 'new' and on the definite determiner within the set DP. Since the grammatical gender feature is not underspecified, semantic valuation of the gender features on the outer DP does not occur in (34), despite the presence of a referent feature. Instead, the superlative *la plus jeune* 'the youngest' agrees with the set noun's grammatical gender through the feature on the inner D-head. This results in grammatical agreement on the entire partitive in (34). Yet, some speakers accept semantic agreement with *sentinelle*, as in (33b). I explain how I account for these cases in the next subsection.

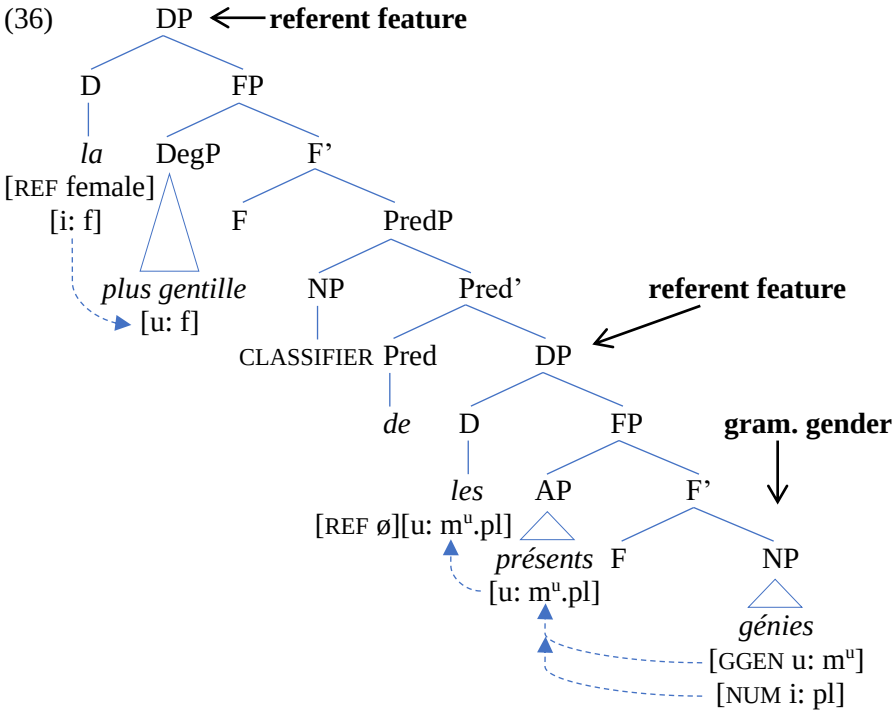
7.3.2.3 Variation with French class D

As I noted in Chapter 5 (section 5.1.2) (and in the previous subsection), some speakers of French do accept semantic agreement with class D nouns, especially with the masculine noun *génie* 'genius'. These speakers would accept a sentence as in (35), in which the superlative semantically agrees with its female referent *Hélène*, instead of agreeing with the masculine grammatical gender of the noun:

(35) *La plus gentil-le des génie-s présent-s est*
the.F SUP kind-F of.the.PL genius.M-PL present.M-PL is
Hélène. [3.18]
Hélène
'The kindest of the geniuses present is Hélène.'

To account for these cases, I adopt a similar explanation as for class B and class C nouns: the class D noun *génie* is marked for underspecified grammatical gender in the lexicon, which means that semantic feature valuation from the context is allowed now. The structure in (36) illustrates this:[19]

(36)



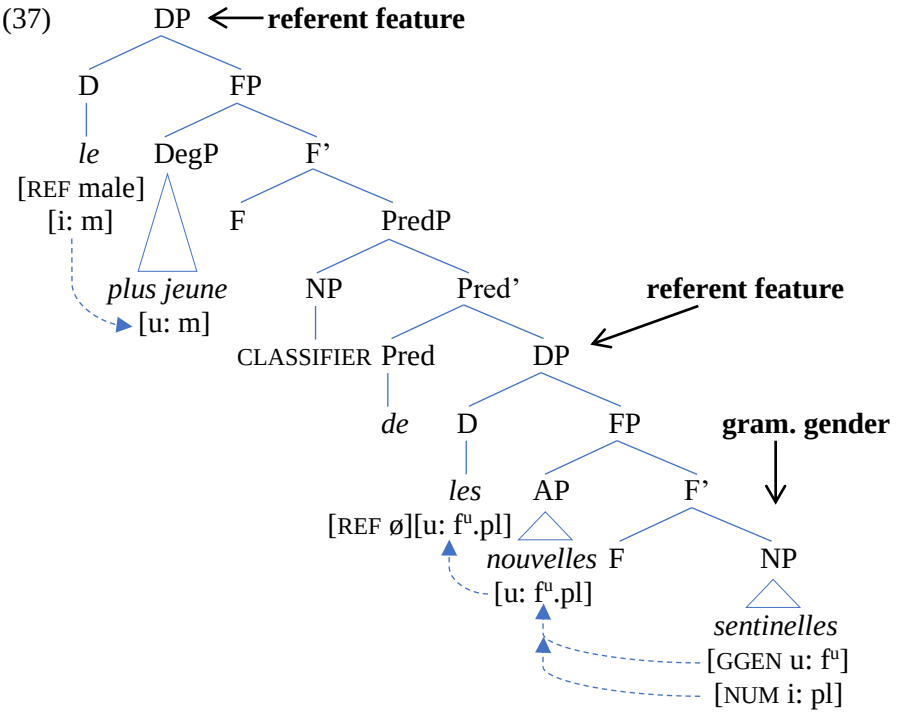
The underspecified grammatical gender feature [GGEN u: m^{u}] on the set noun *génie* 'genius' values the agreement features on the adjective *nouveaux* 'new'

[19] Recall that I follow Cinque (2010) in arguing that both pre- and postnominal attributive adjectives in French are merged in the Specifier position of a Functional Projection dominating the NP (see Chapter 6, footnote 9). The postnominal position of adjectives results from NP movement to a Specifier position above the AP. Please note that I ignore this movement in the structure in (36), which includes the postnominal adjective *présent* 'present'.

as well as on the definite determiner within the inner DP. Instead, the features on the superlative *la plus gentille* 'the kindest' receive a semantically interpreted value from the context, which results in feminine agreement. Semantic valuation is allowed by these speakers because the noun *génie* is marked with underspecified masculine gender in their lexicon.

Furthermore, some speakers accept semantic agreement with feminine class D nouns in superlative partitives. These speakers would accept a sentence as in (33b), in which the superlative semantically agrees with the male referent *Henri*, instead of with the noun's feminine grammatical gender (33a). For these speakers, the class D noun *sentinelle* is marked with an underspecified grammatical gender feature in their lexicon, as illustrated in (37):

(37)



In (37), the set noun *sentinelles* 'guards' bears underspecified feminine grammatical gender [GGEN u: f^u], which means that semantic feature valuation is allowed. As in (34), the gender features on the inner DP's adjective *nouvelles* 'new' and definite determiner agree with the set noun's grammatical gender. The features on the superlative *le plus jeune* 'the youngest' may receive a semantically interpreted value due to the noun bearing

underspecified grammatical gender. As a consequence, the superlative shows masculine semantic agreement, resulting in a mismatch between set and subset.

7.3.3 Extending the proposal to German

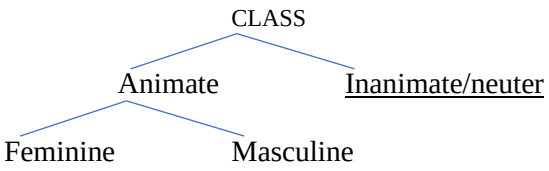
In the previous sections, I accounted for noun class variation in French by proposing that the possibility of semantic agreement depends on the specification of grammatical gender in the lexicon. Specifically, I assumed that grammatical gender is underspecified for class B and class C nouns, but generally not for class D nouns. Semantic feature valuation may occur in partitives if a noun is marked for underspecified grammatical gender in the lexicon. Importantly, there may be variation between speakers: for one speaker, a noun may be marked with underspecified grammatical gender, whereas for another speaker, the same noun could bear specified grammatical gender.

The data summarised in Table 4 point towards a discrepancy between French and German with respect to the behaviour of the different noun classes. For most speakers of French, the acceptability of semantic agreement depends on the noun class, as we observe a clear difference between class D nouns and class B and class C nouns. By contrast, most speakers of German accept semantic agreement with nouns from all noun classes, except with a specific subset: the neuter class D nouns. Furthermore, German class C nouns are different in that they do not show any morphological gender distinctions. To capture these contrasts, I propose that French and German differ in terms of the number of noun classes for which grammatical gender is underspecified. I will discuss some additional motivation for this assumption in section 7.3.5.

For German, the data suggest that grammatical gender is always underspecified for animate nouns, except for the neuter ones. Yet, this raises the following question: Why would neuter nouns be different from other animate nouns? I argue that this contrast is motivated by the special status of neuter gender for animate nouns. Masculine and feminine gender can be mapped onto a biological sex (male or female), even though both genders may be used arbitrarily, for instance on inanimate nouns. This is not the case for the neuter gender, which does not relate to a particular biological sex.

The particular status of neuter gender vis-à-vis masculine and feminine gender is also reflected by a feature geometry proposed by Harley & Ritter (2002). Part of this feature geometry is shown in (38):

(38)



Although Harley & Ritter (2002) use this feature geometry to explain typological contrasts in pronoun and agreement systems, they also attribute a special status to neuter gender, whereas masculine and feminine gender group together under the *animate*-node in (38).[20]

In addition, the distribution of neuter gender across animate nouns in German is rather limited. In fact, most neuter animate nouns are diminutives, such as *das Mädchen* 'the.N girl.N' or *das Brüderchen* 'the.N little.brother.N', which bear neuter gender because of the diminutive suffix *-chen*. Apart from the diminutives, there are only very few other neuter animate nouns, of which *das Kind* and *das Opfer* are the most common ones. This further underlines the exceptional status of the German neuter gender. Therefore, I take it to be justified to assume that neuter grammatical gender in German cannot be underspecified, in contrast to masculine and feminine gender.

Finally, I need to account for the distinct situation of the German class C nouns, which I discussed in Chapter 4 (section 4.1.2). German class C nouns cannot present an overt gender mismatch in partitives because their morphological form does not display any gender marking, in contrast to, for instance, class B nouns. Consider the examples in (39):

(39)	a.	*die*	*Student-en*	**class B masculine**
		the.PL	student.M-PL	
	b.	*die*	*Student-inn-en*	**class B feminine**
		the.PL	student-F-PL	
	c.	*die*	*Studierende-n*	**class C**
		the.PL	student-PL	

[20] Additional motivation for both the tighter relationship between masculine and feminine gender, as well as for the distinct status of neuter gender, comes from a historical change that took place in Dutch. Originally, Dutch had a three-way gender system, distinguishing masculine, feminine, and neuter gender, just as in German. In modern standard Dutch, however, the three-way system has largely disappeared and been replaced by a two-way gender system, under which masculine and feminine gender conflated and became what is nowadays labelled as *common gender*. Neuter gender, instead, has not been affected by this change. The three-way gender system survived on personal pronouns. Besides, multiple dialects in the southern part of the Netherlands, as well as in Flanders, still exhibit a three-way gender system (cf. Audring, 2009; de Vogelaer, 2010; de Vogelaer & de Sutter, 2011).

Whereas the gender of the masculine and feminine forms of the class B nouns in (39a-b) can be derived from their morphological form — the suffix *-in* marking the feminine — this is not the case for the class C noun in (39c). Contrary to what I proposed for all other nouns, for German class C nouns, I follow Sleeman & Ihsane (2016) in assuming that grammatical gender may be unspecified. I believe that this is motivated by the special status of the class C nouns, of which the plural forms are usually promoted to be gender-equal and inclusive (e.g. *liebe Studierenden* 'dear student.PL'). When referring to a mixed group of females and males, these forms can be used to avoid doubling (e.g. *liebe Studentinnen und Studenten* 'dear student.F.PL and student.M.PL') or the binnen-I (e.g. *liebe StudentInnen* 'dear Student.M.F.PL') (cf. Scott, 2006).[21] Furthermore, the set of class C nouns in German is special in that it contains nouns that are derived from adjectives and participles.

In sum, for German, I assume that masculine and feminine grammatical gender are generally underspecified, except for the class C nouns discussed above. Neuter grammatical gender cannot be underspecified, hence neuter class D nouns bear specified grammatical gender. Table 6 summarises the grammatical gender values for the different noun classes:

Table 6 – Noun specification German

Noun class	**Lexeme**	**Word forms**	**Grammatical gender feature**
B	{Student}	*Student* 'student.M'	[GGEN u: m^u]
		Student-in 'student-F'	[GGEN u: f]
C	{Vorgesetzte}	*Vorgesetzte* 'superior'	unmarked
D	{Flüchtling}	*Flüchtling* 'refugee.M'	[GGEN u: m^u]
	{Waise}	*Waise* 'orphan.F'	[GGEN u: f^u]
	{Kind}	*Kind* 'child.N'	[GGEN u: n]

For (masculine) class B nouns, as well as for masculine and feminine class D nouns, I assume that grammatical gender may either be valued as underspecified masculine [GGEN u: m^u] or as underspecified feminine [GGEN

[21] The singular forms of class C nouns may display morphological gender differences when combined with an indefinite determiner, as shown in (i):

(i) a. *ein* *Studierend-er* **masculine**
a.M student-M
b. *ein-e* *Studierend-e* **feminine**
a-F student-F

I assume that in the singular, these differences arise through semantic feature valuation.

u: f^{u}]. Instead, neuter class D nouns bear specified neuter grammatical gender [GGEN u: n]. Finally, I take class C nouns to be unmarked for grammatical gender. In the next section, I show how this translates into gender agreement in partitive constructions, again focussing on the superlative ones.

7.3.4 German: noun class and speaker variation

As I already proposed for French, I claim that semantic agreement in partitives is possible with nouns that are marked with underspecified (or unspecified, for class C) grammatical gender in the lexicon; for German, this means that semantic agreement arises with all noun classes, except with neuter class D nouns. In what follows, I explain how this proposal enables me to account for the noun class differences in German, starting with the class B nouns.

7.3.4.1 German class B

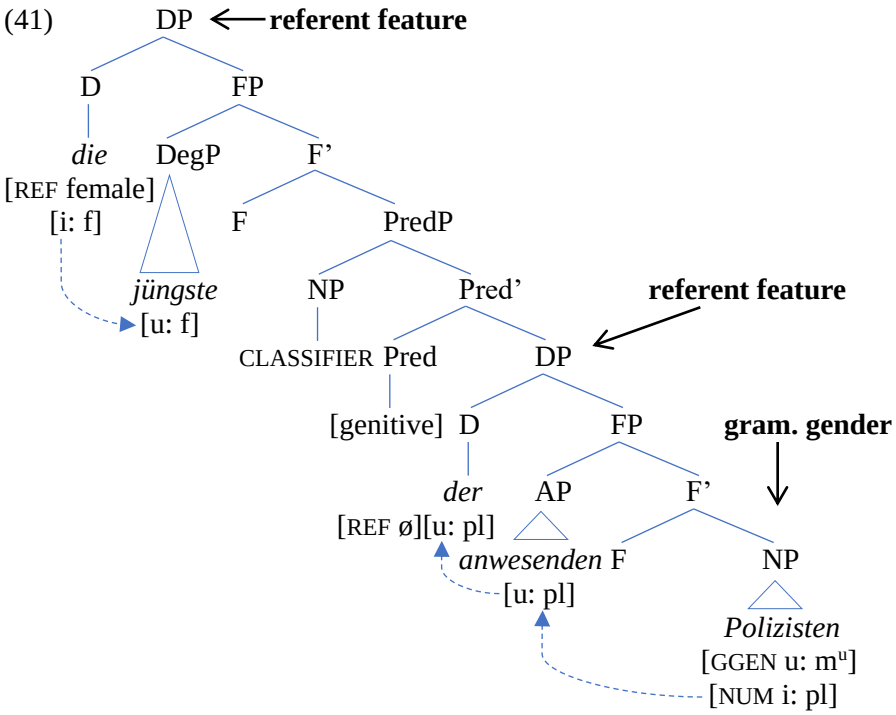
With class B nouns, speakers of German clearly prefer semantic agreement, as exemplified with the noun *Student* 'student' in (40). The acceptability judgements show that the sentence with semantic agreement (40b) received a considerably higher judgement than the one with grammatical agreement (40a), a difference that turned out to be significant:

(40) a. *?Der jüng-ste der anwesend-en Polizist-en*
the.M young-SUP the.GEN.PL present-PL police.officer.M-PL
ist Ingrid. [1.76]
is Ingrid

b. *Die jüng-ste der anwesend-en Polizist-en*
the.F young-SUP the.GEN.PL present-PL police.officer.M-PL
ist Ingrid. [4.09]
is Ingrid
'The youngest of the police officers present is Ingrid.'

I propose that German class B nouns are marked for underspecified grammatical gender in the lexicon. The structure in (41) represents the syntactic derivation of example (40b):

(41)



The set noun *Polizisten* 'police officers' in (41) is marked for underspecified masculine grammatical gender [GGEN u: m^{u}], which means that semantic feature valuation is allowed. As the set noun is in the plural form, the agreement features of the inner DP only receive the [PLURAL] value from the number feature, but no gender. Therefore, the agreement features on the superlative *die jüngste* 'the youngest' in the outer DP cannot receive a value from the feature on the inner D. Instead, the features on the outer DP receive a semantically interpreted value from the context, which is further facilitated by the presence of a referent feature on the outer D. This results in feminine semantic agreement on the superlative and, as a consequence, a mismatch between set and subset.

7.3.4.2 German class C

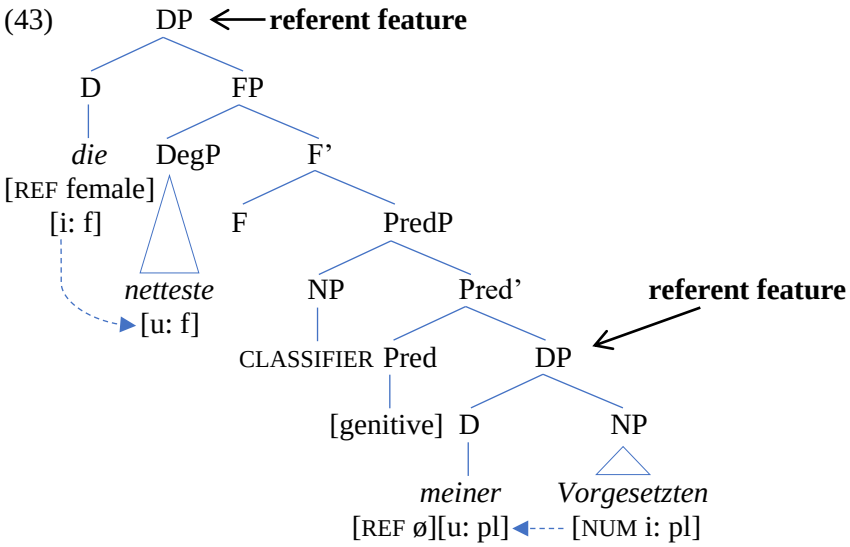
In general, class C nouns show the same pattern as class B nouns, but the situation is a bit more intricate. As I discussed earlier, German class C nouns are special in that they cannot present overt gender mismatches in partitives because they do not carry any morphological gender distinctions in the plural. The examples in (42) illustrate this with the noun *Vorgesetzte* 'superior':

(42) a. *?Der* *nett-este* *mein-er* *Vorgesetzte-n* *war* *Frau*
the.M kind-SUP my-GEN.PL superior-PL was Mrs.
Kluge. [1.92]
Kluge
b. *Die* *nett-este* *mein-er* *Vorgesetzte-n* *war* *Frau*
the.F kind-SUP my-GEN.PL superior-PL was Mrs.
Kluge. [4.69]
Kluge
'The kindest of my superiors was Mrs. Kluge.'

The only difference between (42a) and (42b) concerns the gender of the superlative: masculine in (42a), feminine in (42b). Still, the use of a feminine superlative (42b) to refer to a female is preferred. The set noun does not display any gender morphology, contrary to what was the case for the class B noun *Polizisten* in (40), for which the suffix *-ist* pointed towards the noun's underlying masculine gender.

To explain the particular status of the German class C nouns, in section 7.3.3, I argued that these nouns are unmarked for grammatical gender in the lexicon. Gender agreement always arises through semantic valuation. This is shown in (43), representing the derivation of (42b):

(43)



The set noun *Vorgesetzten* in (43) does not bear a grammatical gender feature, but only a number feature, which values the agreement feature on the possessive *meiner*. The agreement features on the outer DP are semantically

valued from the context, which results in feminine agreement on the superlative *die netteste*.

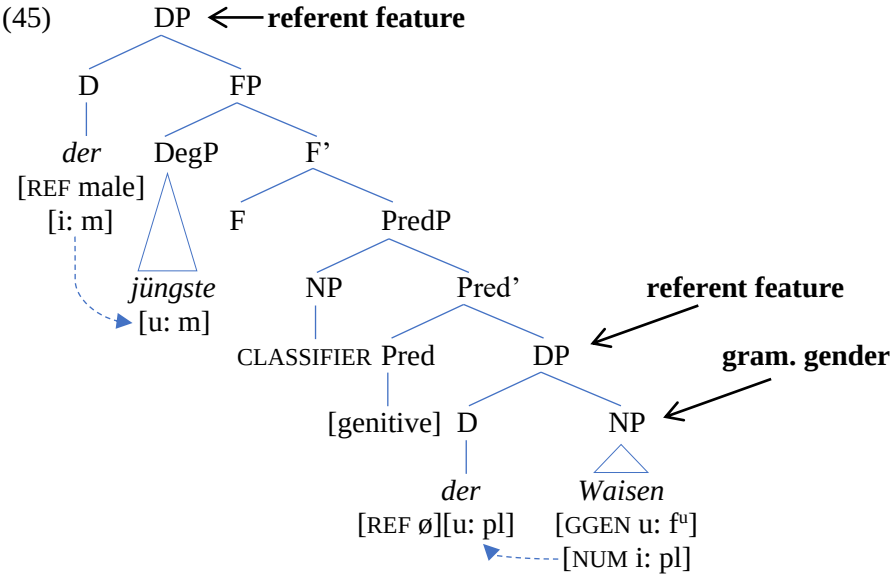
7.3.4.3 German masculine and feminine class D

With masculine and feminine class D nouns, speakers of German accept semantic agreement, just as with the class B nouns. The examples in (44) illustrate this for the feminine noun *Waise* 'orphan':

(44) a. *?Die jüng-ste der Waise-n ist Anton.* [2.08]
the.F young-SUP the.GEN.PL orphan.F-PL is Anton
b. *Der jüng-ste der Waise-n ist Anton.* [4.35]
the.M young-SUP the.GEN.PL orphan.F-PL is Anton
'The youngest of the orphans is Anton.'

As can be concluded from these examples, semantic agreement (44b) is significantly preferred over grammatical agreement (44a). To account for this, I argued that German masculine and feminine class D nouns are marked with underspecified grammatical gender in the lexicon, similar to class B nouns. The structural derivation of (44b) is visualised in (45):

(45)



The set noun *Waisen* 'orphans' in (45) bears underspecified feminine grammatical gender [GGEN u: fᵘ], therefore allowing for semantic feature valuation from the context. Since the set noun is plural, the agreement features

within the inner DP only receive the value [PLURAL] from the noun's number feature. The superlative *der jüngste* 'the youngest' in the outer DP may receive a semantically interpreted value, which is further facilitated by the presence of a referent feature on the outer D-head. This results in masculine agreement on the superlative and causes a mismatch between set and subset.

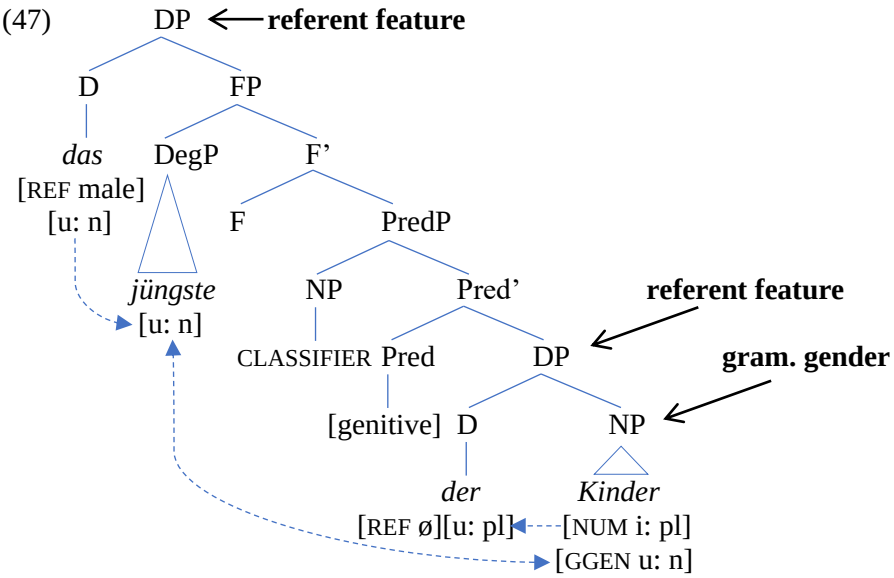
7.3.4.4 German neuter class D

As opposed to the masculine and feminine class D nouns, neuter class D clearly deviates: with these nouns, such as *Kind* 'child' or *Opfer* 'victim', grammatical agreement is preferred in both quantified and superlative partitives. The examples in (46) illustrate this for the noun *Kind* 'child'. The acceptability judgements indicate a preference for grammatical agreement (46a), a difference that proves significant too:

(46)	a.	*Das*	*jüng-ste*	*der*	*Kind-er*	*ist Heinz.*	[4.63]
		the.N	young-SUP	the.GEN.PL	child.N-PL	is Heinz	
	b.	*?Der*	*jüng-ste*	*der*	*Kind-er*	*ist Heinz.*	[3.17]
		the.M	young-SUP	the.GEN.PL	child.N-PL	is Heinz	
		'The youngest of the children is Heinz.'					

To account for the exceptional behaviour of German neuter class D nouns, I proposed that neuter class D nouns are marked with specified grammatical gender in the lexicon. The derivation for the superlative partitive with the neuter set noun *Kinder* 'children' is given in (47), representing the structure of example (46a):

(47)



The set noun *Kinder* 'children' comes with specified neuter grammatical gender from the lexicon. Therefore, it is not possible to semantically value the agreement features on the outer DP from the context, despite the presence of a referent feature on the outer D. The features on the outer DP's determiner and superlative adjective probe down to the grammatical gender feature of the set noun, which results in neuter agreement. As a consequence, there is no gender mismatch in (47).

7.3.5 A third condition on semantic feature valuation

In the previous sections, I provided an explanation for the noun (class) differences in the acceptability of semantic agreement in (superlative) partitives. I proposed that these differences depend on the specification of a noun's grammatical gender feature in the lexicon. Only if a noun is marked with underspecified (or unspecified, for German class C) grammatical gender is semantic agreement allowed.

For French, following up on the results of the grammaticality judgement task, I assumed that grammatical gender is underspecified for nouns of classes B and C (e.g. *le directeur* 'the.M director.M', *le ministre* 'the.M minister'), but not for nouns of class D (e.g. *la victime* 'the.F victim.F'). As a consequence, semantic valuation of the gender features on the superlative may only occur with class B and class C nouns, not with class D nouns.

However, I also stipulated that the specification of grammatical gender may vary from speaker to speaker, which accounts for speaker variation.

For German, I proposed that masculine and feminine grammatical gender are always underspecified, not only with class B nouns (e.g. *der Direktor* 'the.M director.M'), but also with masculine and feminine class D nouns (e.g. *der Star* 'the.M celebrity.M', *die Waise* 'the.F orphan.F'). By contrast, I argued that neuter grammatical gender is never underspecified, which affects the neuter class D nouns (e.g. *das Opfer* 'the.N victim.N'). Finally, I assumed that German class C nouns (e.g. *der/die Studierende* 'the.M/.F student') are unmarked for grammatical gender in the lexicon. Therefore, semantic agreement is allowed with all class B and class C nouns, as well as with the masculine and feminine class D nouns; with neuter class D nouns, grammatical agreement prevails.

I propose that the differences between French and German are further supported by the comparison of the results of the gap filling task with the grammaticality judgements on partitives, which I presented in Chapter 5, section 5.2. Specifically, I investigated whether the use of feminine noun forms influences the likelihood of accepting semantic agreement in partitive constructions. The results of the statistical analysis showed that there is indeed a significant effect for French, which means that speakers of French who use more feminine noun forms are also more akin to accept semantic agreement. This indicates that the acceptability of semantic agreement depends on a speaker's attitude towards noun feminisation and inclusive language.

I did not observe a significant effect of the use of feminine noun forms on the acceptability of semantic agreement in partitives for German, which suggests that the preference for semantic agreement is not influenced by a speaker's attitude towards feminisation in this language. This difference could be related to the fact that in German, the use of feminine forms of occupational nouns is more widespread than in French, as I discussed in Chapter 2. While the derivation and use of feminine noun forms did not pose many problems in German, the situation used to be different in France. There, the feminisation of profession nouns met a lot of resistance, both from language users as well as from official institutions, such as the *Académie française*. In the last decade, however, the situation has changed and the use of feminine noun forms has become more common in France too, even though there still exists variation between speakers.

From this state of affairs, we may expect to find more speaker variation for French than for German, which is confirmed by the contrastive analysis of the grammaticality judgement and gap filling tasks. Furthermore, the results

of the grammaticality judgement tasks on agreement in partitives itself also show that speakers of German are more acceptant towards semantic agreement than speakers of French. Therefore, I believe it to be justified to assume that, for French, underspecification of grammatical gender is more restricted than for German.

Let us now return to the conditions on semantic agreement in partitives that I proposed in section 7.2. As I already stipulated at the start of section 7.3, we need to add a third — lexical — condition on semantic feature valuation, which involves the specification of a noun's grammatical gender in the lexicon. This leads to the definitive version in (48):

(48) **Conditions on semantic feature valuation** (definitive version)
1. The outer DP needs to contain a silent nominal classifier.
2. The outer DP needs to bear a referent feature OR the inner D lacks a gender value.
3. The set noun needs to be marked for underspecified grammatical gender in the lexicon.

In sum, I assume that the possibility of having semantic agreement in partitive constructions depends on the interplay between the three conditions in (48). This makes it unsurprising that we observe considerable variation between speakers. Finally, the conditions in (48) facilitate semantic agreement, they do not dictate it, which means that we do not get a black-white distinction. Speakers can opt for semantic agreement if the necessary conditions are met. Nonetheless, the results of the grammaticality judgement task suggest that speakers often choose semantic agreement if the context allows it. In the next chapter, I will further elaborate on how the observations on agreement in partitives fit within the current debates on feminisation and inclusive language in French and German.

7.4 Conclusion

In this chapter, I proposed a theoretical account of gender agreement in partitive constructions to explain differences in the acceptability of semantic agreement. Starting from the syntactic analysis I developed in Chapter 6, I showed how the agreement differences between quantified and superlative partitives in French and German could largely be related to syntactic differences. In turn, I provided a lexical explanation to account for noun (class) differences and speaker variation. I formulated three conditions that

facilitate semantic agreement in partitives: (i) the presence of a silent nominal classifier, (ii) the presence of a referent feature on the outer D, and (iii) the presence of a noun with underspecified grammatical gender. As I demonstrated, the interplay between these three conditions allowed me to account for the differences in the acceptability of semantic agreement.

Now that the final research question has been answered, we can take a step back to reflect on the different aspects addressed in this dissertation. In the next and final chapter, I recapitulate the main findings and discuss them from a broader perspective. Specifically, I will highlight what the findings teach us about the influence of social factors on language.

Chapter 8

Final discussion: how society shapes language

In this dissertation, I focussed on a phenomenon that has received very little attention in the literature: gender agreement in partitive constructions. As I hope to have demonstrated, the topic is interesting from various perspectives and the proposed analysis provides new insights into the syntax of gender agreement and the acceptability of agreement mismatches. In the preceding chapters, I successively addressed the sociolinguistic background, the acceptance of agreement mismatches by native speakers of French and German, and the factors that influenced their acceptance. In so doing, I aimed to answer the main research question of this dissertation:

> Do speakers of French and German accept mismatches in partitive constructions with human referents and if so, what factors influence their choices?

Indeed, speakers of French and German turned out to accept mismatches in partitive constructions, but my findings indicate that their acceptability depends on multiple factors, such as the specific type of partitive construction, the specific noun included in the partitive, but also a speaker's attitude towards feminisation in language. Ultimately, all these aspects culminated in the theoretical account I proposed to explain the different patterns of gender agreement in French and German partitive constructions.

These findings may also inform us on the interplay between language and society, which is particularly relevant given the ongoing discussions on gender inclusivity in language. The influence of social factors on language brings us back to the title of this dissertation: *How society shapes language*. In this final chapter, I discuss my findings in the light of this statement. I will also elaborate on the wider implications of the results and point to some outstanding questions that could form the starting point for future research.

In section 8.1, I summarise my main findings and discuss their wider implications from a sociolinguistic perspective. Section 8.2 presents a brief reflection on the applied methodology and provides some suggestions for alternatives. In section 8.3, I return to the linguistic factors influencing gender agreement in partitive constructions and discuss the wider implications of the

theoretical account I proposed. I discuss what my findings teach us about how social factors may influence language change in section 8.4. Section 8.5 concludes this dissertation.

8.1 The main findings from a broader perspective

In this section, I discuss my main findings from a broader perspective, specifically focussing on the empirical findings reported in Chapters 2 to 5. The theoretical account, as developed in Chapters 6 and 7, will be addressed in section 8.3. The discussion is guided by the five specific research questions I introduced in Chapter 1, which I have answered in the preceding chapters. First, I elaborate on the results of the dictionary study on the integration of feminine noun forms in the lexicon. Second, I turn to the data from the grammaticality judgement tasks on agreement in partitive constructions. In both cases, I start by recapitulating the main findings and compare them to the sociolinguistic context. In a next step, I discuss what we may learn from the results regarding the influence of social factors on language.

8.1.1 Feminisation and inclusive language

In Chapter 2, I started by investigating the current state of affairs regarding inclusive language in French and German, as well as its historical development. These aspects were covered by the first research question:

I. What is the current sociolinguistic situation regarding inclusivity for French and German, and what is its historical development?

I specifically looked at the feminisation of profession nouns. Based on a dictionary study, I investigated the integration of such feminine noun forms in two monolingual dictionaries of French and German, respectively. For both languages, I observed a clear rise in the presence of feminine forms, with the major changes approximately situated around the year 2000. The results also showed a slight difference between French and German, both in terms of the current state of affairs, as well as its historical development.

For German, we saw that the integration of feminine forms did not seem to pose many problems, since for almost all nouns, a feminine form was included in the most recent edition of the dictionary. I explained the apparent ease of feminisation for German by arguing that German has a very productive feminisation strategy — suffixation by *-in* — which can be applied to most

nouns. This state of affairs corresponds to the development of feminisation and inclusive language in Germany. Since the feminisation of nouns did not seem to face too many obstacles, the discussion in Germany rather quickly shifted to a broader subject, inclusive language use in general (cf. Hergenhan, 2015). As I explained in Chapter 2, this discussion concerns questions on how to ensure equal representation of women and men in language, for instance in forms of address, which led to the creation of different inclusive writing strategies, such as double call (e.g. *die Studentinnen und Studenten* 'the students.F and students.M') or the notorious *-In* suffix, the *binnen-I* (e.g. *die StudentInnen* 'the student.M.F.PL') (cf. Scott, 2006). Recently, the discussion even seemed to have moved to yet another level, this time focussing on the representation in language of non-binary gender. This results in novel formal writing strategies such as the gender gap (*Student_innen*) or the gender star (*Student*innen*). These innovative forms are meant to refer not only to females or males, but also to persons that do not identify with a specific gender (cf. Hergenhan, 2015).

For French, the results of the dictionary search showed that the feminisation of nouns was more difficult. This could also be concluded from the presence of remarks on the use of the feminine forms, which were often said to have a negative connotation (e.g. *mairesse* 'female maire' denoted the wife of a maire, rather than a female maire). That some feminine forms could have a negative connotation has also been observed in a study with native speakers of French by Van Compernolle (2008). For instance, Van Compernolle (2008) notes that one of his informants disapproved the feminine form *pompière* 'firefighter' because of its sound. This example illustrates the crucial role of morphological form in the acceptance of feminine profession nouns.[1] Unlike German, French exhibits many different feminisation strategies, which vary from simply combining a noun with a feminine determiner (e.g. *le/la ministre* 'the.M/.F minister') to different types of suffix alternations (e.g. for masculine *-(t)eur*, there exist *-(t)euse*, *-(t)rice* or *-(t)eure*), which often depend on the masculine base form they attach to, but may also result in variation for one single noun. This complicated state of affairs has made the feminisation of nouns a controversial issue over the past decades, especially in France, where the influential *Académie française* had tried to stop the feminisation process for a long time (cf. Fleischman, 1997).[2] In other

[1] Until 2019, the *Académie française* also rejected all feminine forms derived by innovative morphological strategies, such as *auteure* 'female author'.

[2] Only in 2019, the *Académie française* finally accepted the feminisation of nouns (cf. Académie française, 2019).

francophone communities, such as Québec, the feminisation of nouns was less contentious (cf. Arbour & de Nayves, 2014; de Nayves & Arbour, forthcoming). Only recently, a shift towards a more general discussion on inclusive language use can be observed in France too, as I noted in Chapter 2 (cf. Hergenhan, 2015). For instance, a school manual edited in inclusive writing appeared in 2017 (cf. Fagard & Le Tallec, forthcoming).[3]

Although dictionaries may show a delay in the integration of new forms and often also fulfil a prescriptive function, I believe that the presence of feminine noun forms in dictionaries can be taken as representative of the current state of affairs in the two speech communities. Speakers seem to use feminine forms of profession nouns, which suggests that they are aware of the semantics of grammatical gender, that is, they seem to match masculine gender with male referents and feminine gender with female referents. This assumption corresponds to the findings of several psycholinguistic studies on gender perception (cf. Brauer & Landry, 2008; Gabriel et al., 2008; Sato et al., 2013), which all report a male bias in referent perception for masculine nouns, even if these are intended to function as generic, gender neutral forms.

If speakers prefer to have a match between a noun's grammatical gender and its referent's biological sex, we may wonder whether a same tendency could be observed for gender agreement too. That is, would speakers prefer semantic instead of grammatical agreement? I address this question in the next section, where I discuss the results of the grammaticality judgement tasks on agreement in partitive constructions.

8.1.2 Gender agreement in partitive constructions

Chapters 3, 4, and 5 investigated the acceptability of grammatical and semantic gender agreement in partitive constructions, in order to gain more insight into this understudied phenomenon. To this end, I created two linguistic experiments, which were administered to native speakers of French and German. First, I looked at the two languages under consideration separately.

Chapter 3 discussed French, following up on the second research question:

[3] The appearance of the first school manual adopting inclusive writing led to many reactions in the French press, for instance the article *Prêt.e.s pour l'écriture inclusive* by Frédéric Joignot, published in *Le Monde* in October 2017 (Joignot, 2017).

II. Do speakers of French prefer semantic or grammatical agreement in partitive constructions; how does this translate into the findings of Sleeman & Ihsane (2016)?

I showed that for French, two key factors guide the acceptability of semantic agreement in partitives: partitive type and noun class. This was in line with the findings from an earlier study by Sleeman & Ihsane (2016). Speakers of French did not accept semantic agreement in quantified partitives. For superlative partitives, the acceptance of semantic agreement depended on the type of animate noun. Speakers did not accept semantic agreement with class D nouns (one lexeme, one word form, one gender, e.g. *une sentinelle* 'a.F guard.F'). By contrast, semantic agreement was accepted with nouns of classes B (one lexeme, two word forms, e.g. *un étudiant – une étudiante* 'a.M/.F student.M/.F') and C (one lexeme, one word form, two genders, e.g. *un/une ministre* 'a.M/.F minister'), although semantic agreement turned out to be less acceptable with class B than with class C, a contrast which I suggested to be related to morphological differences.

In Chapter 4, I turned to German, addressing the third research question:

III. Do speakers of German prefer semantic or grammatical agreement in partitive constructions; what factors influence this choice?

I showed that speakers of German often accepted semantic agreement in both quantified and superlative partitives. Their acceptability also depended on the type of animate noun. The results showed differences between noun classes B and D for both partitive types.[4] Speakers clearly preferred semantic agreement with class B nouns. Instead, class D nouns presented a more varied picture. Crucially, the variation with the class D nouns could be related to a noun class internal distinction between the neuter (e.g. *das Kind* 'the.N child.N') and the non-neuter (e.g. *die Waise* 'the.F orphan.F') nouns. While grammatical agreement was clearly preferred with the neuter nouns, the results showed a tendency towards semantic agreement for the feminine and masculine nouns, especially in superlative partitives.

Second, I compared the two languages to find out more about the common factors guiding agreement in partitive constructions. This was the topic of Chapter 5, in which I answered the fourth research question:

[4] Recall the special status of German class C nouns, such as *Studierende* 'student', whose morphological form does not present any visible gender information; these nouns do not give rise to overt gender mismatches in partitives (see Chapter 4, section 4.1.2).

IV. What do the data on French and German tell us about the factors underlying agreement in partitive constructions?

The comparison of French and German revealed that, despite apparent differences, the same two factors turned out to influence agreement: (i) the type of partitive construction and (ii) the type of animate noun. Considering the factor partitive type, the statistical analysis showed an effect for both languages, in that semantic agreement was judged significantly more acceptable in superlative than in quantified partitives. Yet, French and German displayed opposite agreement patterns for quantified partitives. While speakers of German preferred semantic agreement in these constructions, grammatical agreement was preferred for French.

In terms of noun class differences, both languages displayed comparable patterns, in that semantic agreement was judged to be more acceptable with class B (and class C) than with class D nouns. Nevertheless, upon closer inspection, the comparison indicated again a gradual difference. In French, the results revealed a neat distinction between classes B and C, which showed a preference for semantic agreement, and class D, for which speakers preferred grammatical agreement. The German results pointed towards a more fine-grained distinction for class D, since the neuter class D nouns turned out to contrast with both class B nouns as well as with the non-neuter class D nouns in showing a clear preference for grammatical agreement.

In the second part of Chapter 5, I investigated whether a speaker's attitude towards feminisation could account for the observed speaker variation. To this end, I compared the acceptability judgements to the results of small-scale gap filling tasks on the feminisation of nouns, which were also included in the questionnaires. For French, I indeed found that the acceptability of semantic agreement depends on a speaker's attitude towards feminisation: speakers that used more feminine noun forms in the gap filling task were also more likely to accept semantic agreement in the grammaticality judgement task. By contrast, I could not establish such an effect for German. Thus, at least for French, speaker variation may be attributed to differences in a speaker's attitude towards feminisation. In Chapter 5, I assumed that the difference between French and German could be related to the different situations in France and Germany with respect to feminisation and inclusive language. As I also discussed in section 8.1.1, feminisation has been highly debated in France, which resulted in much variation between speakers. In Germany, the feminisation of nouns was accepted more smoothly in society.

At this point, we can return to the issue I left unanswered at the end of the previous section. I proposed that the increasing use of feminine noun forms could lead to an increasing awareness of the semantics of the gender system, which may make us wonder whether a similar pattern may appear in gender agreement too. Indeed, the results from the grammaticality judgement tasks seem to indicate that many speakers prefer a match between grammatical gender and biological sex, although we saw that linguistic factors mediate the acceptability of semantic agreement in partitives. In other words: speakers generally do not consider the masculine forms (of the quantifier or the superlative) to be gender neutral, which, again, seems to correspond to the male bias in referent perception reported by many psycholinguistic studies (cf. Brauer & Landry, 2008; Gabriel et al., 2008; Sato et al., 2013). As such, the agreement situation in partitives can be said to follow ongoing tendencies towards inclusivity in language.

Of course, one may object that the noun class differences — particularly the behaviour of the class D nouns — contradict the assumption that speakers of French and German prefer matching of grammatical gender and biological sex in partitives. However, we should keep in mind that to some extent, class D nouns are exceptional: most human nouns belong to classes B or C. Furthermore, the proposed noun classifications are not static and nouns may change class over time. Particularly, many profession nouns that traditionally belonged to class D (such as the famous French *professeur* 'teacher') shifted to class B or class C upon the derivation of feminine forms. The increasing presence of feminine forms of profession nouns in dictionaries, as observed in Chapter 2, provides additional support for such change.

In sum, the results imply that speakers often prefer grammatical gender and biological sex to match, also in agreement in partitive constructions. Nevertheless, the acceptability of semantic agreement was shown to depend on two linguistic factors: partitive type and noun class. In Chapters 6 and 7, I proposed a theoretical account to explain the influence of these two factors on agreement, which addressed the fifth research question:

V. Is it possible to provide a principled account for the French and German data that integrates the relevant underlying factors?

I zoom in on the relevant factors and discuss the wider implications of my theoretical account in section 8.3, but first, I briefly reflect on the methodological approach I adopted within this dissertation.

8.2 A brief note on the methodology

I used grammaticality judgement tasks to gain more insight into gender agreement in partitive constructions.[5] This means that the results I reported above are based on speakers' acceptance, rather than on their production. It is a well-known fact that speakers accept more forms than they would actually use themselves (cf. Cornips & Poletto, 2005). From this perspective, it would be interesting to investigate gender agreement in partitives in language production, but testing production (e.g. using an elicitation experiment) is not an easy task for the phenomenon at stake; the use of corpus data does not present an alternative either, due to the limited presence of partitive constructions in the data sets.

Grammaticality judgement tasks have the advantage of providing negative evidence (cf. Schütze, 2016). That is, the results of a grammaticality judgement task may either show that a sentence is grammatical or ungrammatical. Instead, corpus research or elicitation tasks only give insight into what speakers actually use, which does not necessarily cover the full array of possible sentences in a language. Insight into ungrammatical utterances is especially relevant when providing a theoretical analysis, which should correctly predict possible and impossible constructions of a language.

Notwithstanding the advantages of a grammaticality judgement task, the adopted methodology could be improved in future research to address some weaknesses, as well as to further investigate outstanding issues. Methodological improvement could operate along two lines. On the one hand, the test design could be further improved, for which I already gave some suggestions in Chapters 3 and 4. Follow-up studies could further explore participant variation by taking into account factors such as sex or age. On a more general note, future research could adopt a more guided approach, for instance by investigating participants' reaction times, which may point towards differences in cognitive processing of agreement. Such a strategy has been adopted by De Vogelaer et al. (2020) to investigate pronominal agreement in Dutch and German.

[5] In Chapter 2, I already made a suggestion for future research on the feminisation of profession nouns. Specifically, I suggested to look at the use of such forms by native speakers, which I explored by means of the gap filling tasks discussed in Chapter 5 (section 5.2). Due to space limitations, I could not provide a comprehensive discussion of this topic, which I leave for future research. In addition, corpus studies may also be used to investigate the integration of feminine noun forms in language use.

On the other hand, a slightly different type of grammaticality judgement task could be envisaged, a two-alternative forced-choice task.[6] In such a task, the participants would see two sentences at the same time and would have to select the sentence they believe to be most suitable in the given context (cf. Parafita Couto & Stadthagen-Gonzalez, 2019). A two-alternative forced-choice task also mainly taps into acceptance, but might give slightly more insight into production, as participants can be asked to indicate what option they would choose to refer to a specific situation.

Finally, in terms of research topic, future studies could compare partitive constructions to other agreement contexts, such as pronouns. As I will discuss in the next section, such comparison may give additional insight into the linguistic factors that mediate the choice between grammatical and semantic agreement.

8.3 Linguistic factors: the interplay between syntax and the lexicon

Let us now return to the linguistic factors, partitive type and noun class, which I found to influence the acceptability of semantic agreement in partitive constructions. Starting from these two factors, I developed a theoretical account that covered the observed agreement patterns. In Chapter 6, I focused on the syntactic structure of partitive constructions and proposed a novel derivation for both quantified and superlative partitives. In Chapter 7, I provided a theoretical explanation to answer the question why speakers prefer grammatical agreement in some contexts, but semantic agreement in other cases. As such, this dissertation contributes to the existing body of theoretical work in two domains: (i) the derivation of partitive constructions and (ii) gender agreement and agreement mismatches. Crucially, I provide a novel perspective by combining insights from both aspects, partitive constructions and gender agreement, which had only been done earlier by Sleeman & Ihsane (2016). As such, this study complements to the existing theoretical work on semantic agreement in other agreement contexts in various languages (e.g. Wechsler & Zlatić, 2003; Steriopolo & Wiltschko, 2010; Matushansky, 2013; Landau, 2016).

[6] I thank Maria Carmen Parafita Couto (p.c.) for suggesting the use of a two-alternative forced-choice task.

Although the syntactic structure of partitive constructions had already received considerable attention in the literature (cf. Cardinaletti & Giusti, 2017; Falco & Zamparelli, 2019), most studies focussed on quantified partitives only. Superlative partitives were often ignored; hence the added value of this dissertation. To account for the observation that semantic agreement was less accepted in quantified than in superlative partitives, I argued that the two partitive types partially differ in terms of their syntactic structure. This specifically concerns the upper part of their structures, containing either the quantifier or the superlative. For quantified partitives, the upper part only contains a QP hosting the quantifier. Instead, superlative partitives present a more articulate structure, which contains a DP. Crucially, I argued that this DP bears a referent feature, which establishes a link with the referent, thereby facilitating semantic feature valuation. This results in semantic agreement on the superlative and, possibly, a mismatch. Quantified partitives lack a DP and therefore such a referent feature, which makes semantic feature valuation less likely.

While I related the factor partitive type to a syntactic contrast, I proposed a lexical explanation to account for the noun class differences, as well as speaker variation. I argued that animate nouns differ with respect to the specification of grammatical gender in the lexicon and that with some nouns, grammatical gender may be underspecified, which gives room for further specification via semantics at a later stage in the derivation. Crucially, gender specification may vary from speaker to speaker and may be subject to change.

Recently, the topic of this dissertation has been taken up by Giusti & Zanoli (forthcoming), who conducted an experiment on agreement mismatches in partitives in Italian.[7] Their results show that speakers of Italian accept semantic agreement under the same conditions as speakers of French. Consider the Italian examples in (1-2), involving the noun *insegnanti* 'teachers':

(1) a. *Uno dei nuov-i insegnant-i è Giulia Pareschi.*
one.M of.the.M.PL new-M.PL teacher-PL is Giulia Pareschi
b. *?Una dei nuov-i insegnant-i è Giulia Pareschi.*
one.F of.the.M.PL new-M.PL teacher-PL is Giulia Pareschi
'One of the new teachers is Giulia Pareschi.'

[7] The design of Giusti & Zanoli's experiment was based on the experiments carried out in this dissertation (cf. Giusti & Zanoli, forthcoming).

(2) a. *?Il più intelligent-e dei nuov-i insegnant-i*
the.M SUP intelligent-SG of.the.M.PL new-M.PL teacher-PL
è Sofia Arbore.
is Sofia Arbore
b. *La più intelligent-e dei nuov-i insegnant-i*
the.F SUP intelligent-SG of.the.M.PL new-M.PL teacher.PL
è Sofia Arbore.
is Sofia Arbore
'The most intelligent of the new teachers is Sofia Arbore.'

Semantic agreement is accepted in superlative partitives (2b), but downgraded in quantified ones (1b). In addition, Giusti & Zanoli (forthcoming) also observed noun class differences for Italian, again comparable to what I found for French.[8]

Based on the Italian data from Giusti & Zanoli (forthcoming), we may wonder whether the theoretical account I proposed on the basis of French and German could be extended to other Romance and Germanic languages more generally. Future research on other languages — not limited to the Indo-European family — is also necessary to confirm this assumption.[9] Nevertheless, insights from existing studies on semantic agreement in other agreement contexts suggest that both syntactic and lexical factors influence the likelihood of semantic agreement.

That syntactic differences play a role in the likelihood of semantic agreement is captured by the Agreement Hierarchy (Corbett, 1991: 226), shown in (3):

(3) **The Agreement Hierarchy**
attributive – predicate – relative pronoun – personal pronoun

Based on data from typologically diverse languages, Corbett proposed the hierarchy in (3) to account for differences in likelihood of semantic

[8] Giusti & Zanoli (forthcoming) observed an effect of prestige on their results. That is, nouns denoting professions with higher social status (e.g. *rettore* 'rector') were found to be more prone to grammatical agreement. Although I reconned that a profession's status may play a role for French and German too, I could not further investigate this, due to the lack of a means to measure a noun's status. Further research could take up this issue.

[9] Although partitive constructions may exist in any language, the specific agreement mismatches only arise in languages that display some overt gender morphology. English partitives, for instance, do not present such mismatches, as shown in (i):

(i) *The youngest of the new students is Peter/Mary.*

agreement: the more to the right an element is located on the hierarchy, the likelier it is to find semantic agreement on that element. Thus, semantic agreement is expected to be more common on personal pronouns than on attributive elements, such as adjectives or determiners.

Sleeman & Ihsane (2016) proposed an extended version of Corbett's Agreement Hierarchy, to which they added both quantified and superlative partitives. Based on informants' judgements, they found that semantic agreement was more accepted in superlative than in quantified partitives. As a consequence, both partitive types were individually added to the cline, as shown in (4) (Sleeman & Ihsane, 2016: 21):

(4) attributive – predicate – quantified partitive – superlative partitive – relative pronoun – personal pronoun

This dissertation's findings provide at least partial support for Sleeman & Ihsane's (2016) extended cline in (4), as I also observed that semantic agreement was judged less acceptable in quantified than in superlative partitives in both French and German. However, further research is needed to further inform us on how partitive constructions behave with respect to other agreement targets, which may help us to verify the exact position of partitive constructions within the hierarchy.

Apart from the syntactic relation, several studies on semantic agreement in different Germanic languages — mainly focussing on pronouns — suggest that other factors may influence gender agreement too (e.g. Audring, 2009; Braun & Haig, 2010; Kraaikamp, 2017; de Vogelaer et al., 2020). One of these factors is *Individuation*. Individuation concerns the 'degree of animacy' of a referent: humans are perceived to be more 'animate' than animals, which, in turn, are considered more 'animate' than countable objects, and so on (cf. Dahl, 2000). Based on corpus data, Audring (2009) argues that gender agreement on pronouns in Dutch may be influenced by Individuation. She proposes the Individuation Hierarchy in (5) to capture this (Audring, 2009: 124):

(5) **The Individuation Hierarchy**

human >	animal >	bounded object/abstract >	specific mass >	unspecific mass/abstract
father, sister	*sheep*	*book, name*	*this tea*	*sand, growth*
masculine/feminine gender				**neuter gender**

Pronouns related to referents located more to the right on the hierarchy in (5), such as mass nouns, are more likely to show neuter gender in Dutch. By contrast, pronouns referring to animates often take the masculine or feminine form.

Future research could investigate whether Individuation also influences gender agreement in partitive constructions, an issue that I have not been able to address in my study, since I limited myself to human nouns only and did not investigate inanimate nouns of any kind. Yet, the crucial point I want to make here is that Individuation can be considered a lexical factor. From this perspective, the observation that Individuation may influence gender agreement further supports my theoretical account of gender agreement in partitive constructions, which argues that lexical factors influence the likelihood of semantic agreement.

In sum, within my theoretical account, I proposed that both syntactic and lexical differences affect the acceptability of semantic agreement in partitive constructions. Although I only based my account on evidence from two languages, French and German, details from other studies on semantic agreement seem to support the relevance of both syntactic and lexical factors for agreement. In the next section, I discuss what my findings suggest with respect to potential language change.

8.4 From social factors to language change?

Within the theoretical account I developed in Chapters 6 and 7, and which I further discussed in the previous section, I proposed that the main source of variation was the lexicon. That is, differences between speakers in terms of lexical marking result in differences in gender agreement. In terms of language change, this assumption predicts the lexicon to be the starting point for linguistic change. Consequently, we may ask ourselves: How could such language change be initiated? Earlier on, in section 8.1, I argued that the results of the grammaticality judgement tasks show a growing awareness of the semantics of the gender system. Although mediated by linguistic factors, speakers seem to have a preference for matching between grammatical gender and biological sex. As I explained, speakers' awareness of the semantics of the gender system can be related to the situation regarding feminisation and inclusive language, which resulted from social changes.

Indeed, many scholars have argued that social factors play an important role in language change, particularly since the influential work of William

Labov (Labov, 1994-2010). Labov argues that society may influence language in two ways, which he labels *change from above* and *change from below*. Change from above is defined in the following terms (Labov, 1994: 78):

> **Changes from above** are introduced by the dominant social class, often with full public awareness. Normally they represent borrowings from other speech communities that have higher prestige in the view of the dominant class. Such borrowings do not immediately affect the vernacular patterns of the dominant class or other social classes, but appear primarily in careful speech, reflecting a superposed dialect learned after the vernacular is acquired.

Labov talks about change from above when a specific form is deliberately introduced in language use. In the context of this dissertation, this holds, for instance, for the choice to use a feminine form of a profession noun, or to adopt an inclusive writing strategy. Speakers deliberately choose such forms, following up on tendencies in society, often mediatised in the press. Crucially, as the long-standing debate on the feminisation of profession nouns in France has illustrated, the influence from above may not only go in the direction of change, but can also be exemplary of conservatism. For France, we have seen that on the one hand, the use of feminine noun forms was already officially accepted by the French government in 1986, but largely went unnoticed, due to strong criticism by the influential *Académie française*, which rejected the propositions for feminine noun forms by the Roudy commission. Only rather recently (in 2019) the *Académie* changed its opinion on feminisation.

Labov defines change from below as follows (Labov, 1994: 78):

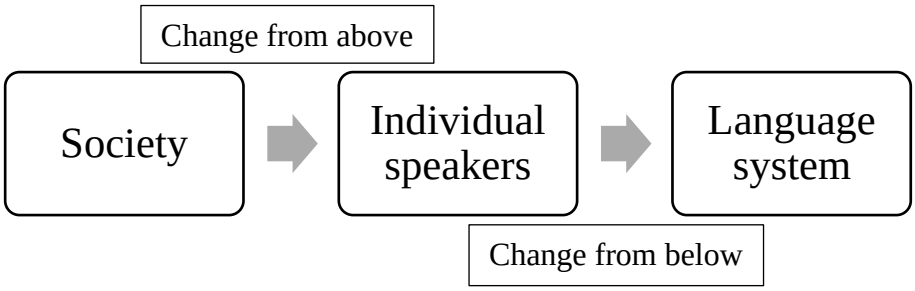
> **Changes from below** are systematic changes that appear first in the vernacular, and represent the operation of internal, linguistic factors. At the outset, and through most of their development, they are completely below the level of social awareness. […] It is only when changes are nearing completion that members of the community become aware of them.

Change from below involves "internal, linguistic factors". From this perspective, the taking into account of semantic factors in establishing gender agreement could be seen as an effect of change from below. I argued that the results of the grammaticality judgement tasks on semantic agreement in partitives suggest that speakers indeed take into account the underlying semantics of the gender system, in that they demonstrate a preference for

matching between grammatical gender and biological sex, although mediated by linguistic factors. I proposed that this growing awareness of the semantics of gender may have been caused by the increasing presence of feminisation in language.

This reasoning hypothesises that change from below may be the consequence of change from above, resulting from the interaction between society, the individual speaker, and the language system. Based on the interplay between these three actors, I propose the model of society-driven language change in (6):

(6) **The society-driven language change model**



The first step of the process is a change in society, which may affect language. In this dissertation, the societal change concerns the increasing participation of females in every aspect of society, which led to questions on the visibility of females in languages. Second, individual speakers become aware of the semantics of the gender system and refrain from the traditional concept of the 'generic masculine'. Instead, they prefer the use of feminine gendered forms to refer to females, also in terms of gender agreement in partitive constructions, leading to speaker variation. That an individual speaker's language development may be influenced by social factors is also proposed by Chomsky (2005), who argues that experience — which is necessarily experience within a society — is one of the three factors involved in language development, next to the genetically determined language faculty and more general cognitive processes.

In the final step of the description in (6), changes from below, unconsciously taken into account by the individual speakers, could lead to a change in the language system. From the results of my dissertation, we cannot directly conclude that such a change has taken place for the gender agreement systems in French and German, since I could only investigate synchronous data. If we look at the results from an acquisitional perspective, we can

nevertheless speculate whether a change would be plausible. On the one hand, the results show a competition between grammatical and semantic agreement depending on linguistic factors. On the other hand, the results show considerable variation between speakers in the acceptability of semantic agreement. When we now think about the input that children acquiring the language could receive, both these points suggest that this input would contain considerable variation between grammatical and semantic agreement too.[10] As a consequence, children acquiring the gender system could be confronted to conflicting input, which could lead them to reanalyse the system during the process of acquisition.

That child L1-acquisition plays an important role in internalising language change into the system has been argued by several scholars (cf. Weerman, 2011). Children follow up on changes made by adult speakers, which is what Weerman (2011) labels *adult L1-acquistion*.[11] From this perspective, adult speakers are the initiators of language change, as they are responsible for the variation within the input by opting for semantic agreement. If children incorporate the changes made by adults, this may lead to substantial language change by altering the underlying system, probably resulting in a resemanticisation of the gender system, which has also been proposed by Audring (2009) for the Dutch pronominal gender system.

Thus, the description in (6) makes the assumption that social factors — via individual language users — may eventually lead to a resemanticisation of a language's gender system. As such, the analysis makes predictions for all languages that have a noun classification system that is at least partly based on semantics. If social changes lead to discrepancies between formally based and semantically based classification values, eventually, that may lead to a resemanticisation of the classification system.[12] Such possible changes would be particularly interesting to investigate in future research for languages with complex nominal classification systems, such as many Bantu languages (cf. Demuth, 2000; Katamba, 2003). In the end, we may even wonder whether the description that I presented in (6) should not be seen as a cycle, which could continue endlessly, as some sort of Jespersen's cycle.

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[10] I thank Eric Haeberli (p.c.) for pointing out the possible effects on language acquisition.

[11] Within many approaches to language change, change is mainly considered to be the result of L2-acquisition and language contact, which may affect child L1-acquisition (cf. Meisel et al., 2013). Weerman (2011) partly criticizes these approaches and argues that change does not always result from L2-contact, but may also be initiated by adult L1-speakers themselves.

[12] Several studies have shown that such processes of resemanticisation took place in the evolution of the Indo-European languages since Proto-Indo-European (cf. Luraghi, 2011; Kraaikamp, 2017).

8.5 Conclusion

In this dissertation, I investigated gender agreement in partitive constructions in French and German. I observed that native speakers of French and German may accept semantic agreement in partitives involving human referents, but that the acceptability of semantic agreement depends on an interplay between syntactic and lexical factors. To explain the differences in acceptability of semantic agreement, both between the two languages, as well as between individual speakers, I have proposed a novel theoretical account of agreement in partitives, which I have shown to cover the observed agreement patterns. As such, this dissertation does not only give us insight into an understudied phenomenon, gender agreement in partitive constructions, but also contributes to our understanding of semantic agreement in general, both from a formal, as well as from a sociolinguistic perspective.

In this final chapter, I discussed what my findings teach us about the influence of social factors on language, based on which I established a model that captures the possibility of language change deriving from social factors. I proposed that society dependent changes may affect an individual speaker's language. If the resulting changes are persistent enough and, thus, present in the input for children, they may reanalyse the existing system in an attempt to regularise the novel forms, which may eventually lead to language change. That is how society may shape language.

References

Abbou, Jullie. 2011. Double gender marking in French: a linguistic practice of antisexism. *Current Issues in Language Planning* 12 (1), 55-75.

Académie française. 2019. Féminisation (des noms de métier, de titres, etc.). URL: http://www.academie-francaise.fr/questions-de-langue#38_strong-em-fminisation-des-noms-de-mtier-de-titres-etc-em-strong

Aitchison, Jean. 2012. *Words in the Mind: An Introduction to the Mental Lexicon* (4th edn.). Chichester: Wiley-Blackwell.

Alexiadou, Artemis. 2004. Inflection Class, Gender and DP Internal Structure. In Gereon Müller; Lutz Gunkel & Gisela Zifonun (eds.), *Explorations in Nominal Inflection*, 21-50. Berlin: Walter de Gruyter.

Alpheratz. Forthcoming. Le genre neuter en français, expression d'enjeux du XXIe siècle. To appear in Benjamin Fagard & Gabrielle Le Tallec (eds.), *Entre masculin et féminin… Approche contrastive : français et langues romanes.*

Arbour, Marie-Ève & Hélène de Nayves. 2014. Féminisation linguistique : étude comparative de l'implantation de variantes féminines marquées au Canada et en Europe. *Langage et Société* 148, 31-51.

Atkinson, Emily. 2015. Gender features on *n* & the root: An account of gender in French. In Jason Smith & Tabea Ihsane (eds.), *Romance linguistics 2012: Selected papers from the 42nd Linguistics Symposium on Romance Languages (LSRL)*, 229-244. Amsterdam: John Benjamins.

Audring, Jenny. 2009. *Reinventing Pronoun Gender.* Utrecht: LOT.

Audring, Jenny. 2013. A pronominal view of gender agreement. *Language Sciences* 35, 32-46.

Baider, Fabienne; Évelyne Jacquey & Anita Liang. 2007. La place du genre dans les bases de données multilingues : le cas d'EuroWordNet. *Nouvelles Questions Féministes* 26 (3), 57-69.

Baker, Mark. 1988. *Incorporation: a Theory of Grammatical Function Changing*. Chicago: University of Chicago Press.

Becquer, Anne-Marie; Bernard Cerquiglini; Nicole Cholewka; Marine Coutier; Josette Frécher & Marie-Josèphe Mathieu. 1999. *Femme, j'écris ton nom… Guide d'aide à la féminisation des noms de métiers, titres, grades et fonctions.* Paris: La Documentation française.

Blake, Christopher & Christoph Klimmt. 2010. Geschlechtergerechte Formulierungen in Nachrichtentexten. *Publizistik* 55, 289-304.

Booij, Geert. 2005. *The grammar of words: an introduction to linguistic morphology*. Oxford: Oxford University Press.

Bradley, Evan. D. 2020. The influence of linguistic and social attitudes on grammaticality judgements of singular 'they'. *Language Sciences* 78.

Brauer, Markus & Michäel Landry. 2008. Un ministre peut-il tomber enceinte ? L'impact du générique masculin sur les représentations mentales. *L'année psychologique* 108 (2), 243-272.

Braun, Friederike; Anja Gottburgsen; Sabine Sczesny & Dagmar Stahlberg. 1998. Können Geophysiker Frauen sein? Generische Personenbezeichnungen im Deutschen. *Zeitschrift für germanistische Linguistik* 26 (3), 265-283.

Braun, Friederike & Geoffrey Haig. 2010. When are German 'girls' feminine? How the semantics of age influences the grammar of gender agreement. In Markus Bieswanger; Heiko Motschenbacher & Susanne Mühleisen (eds.), *Language in Its Socio-cultural Context: New Explorations in Gendered, Global and Media Uses*, 69-85. Frankfurt am Main: Peter Lang.

Brick, Noëlle & Clarissa Wilks. 2002. Les partis politiques et la féminisation des noms de métier. *French Language Studies* 12, 43-53.

Cacouault-Bitaud, Marlaine. 2001. La féminisation d'une profession est-elle le signe d'une baisse de prestige ? *Travail, genre et sociétés* 1 (5), 91-115.

Cardinaletti, Anna & Giuliana Giusti. 1991. Partitive *ne* and the QP-hypothesis. A case study. *University of Venice Working Papers in Linguistics* 1, 1-19.

Cardinaletti, Anna & Giuliana Giusti. 2006. Quantified expressions and quantitative clitics. In Martin Everaert & Henk C. van Riemsdijk (eds.), *The Blackwell Companion to Syntax vol. V*, 23-93. Oxford: Blackwell.

Cardinaletti, Anna & Giuliana Giusti. 2017. Quantified Expressions and Quantitative Clitics. In Martin Everaert & Henk C. van Riemsdijk (eds.), *The Wiley Blackwell Companion to Syntax* (2nd edn.), 1-61. John Wiley & Sons.

ten Cate, Abraham P.; Hans G. Lodder & André Kootte. 2004. *Deutsche Grammatik: eine kontrastiv deutsch-niederländische Beschreibung für den Fremdspracherwerb* (2nd edn.). Bussum: Coutinho.

Cerquiglini, Bernard. 2018. *Le ministre est enceinte. Ou la grande querelle de la féminisation des noms*. Paris: Seuil.

Chomsky, Noam. 1995. *The Minimalist Program.* Cambridge MA: MIT Press.

Chomsky, Noam. 2000. Minimalist Inquiries: The Framework. In Roger Martin; David Michaels & Juan Uriagereka (eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, 89-155. Cambridge MA: MIT Press.

Chomsky, Noam. 2001. Derivation by Phrase. In Michael Kenstowicz (ed.), *Ken Hale: A Life in Language*, 1-52. Cambridge MA: MIT Press.

Chomsky, Noam. 2005. Three Factors in Language Design. *Linguistic Inquiry* 36 (1), 1-22.

Cinque, Gugliemo. 2010. *The Syntax of Adjectives: A Comparative Study*. Cambridge MA: MIT Press.

van Compernolle, Rémi-Adam. 2008. « Une pompière ? C'est affreux ! » Étude lexicale de la féminisation des noms de métiers et grades en France. *Langage et société* 123, 107-130.

van Compernolle, Rémi-Adam. 2009. What do women want? Linguistic equality and the feminization of job titles in contemporary France. *Gender and Language* 3 (1), 33-52.

Corbett, Greville G. 1979. The agreement hierarchy. *Journal of Linguistics* 15, 203-224.

Corbett, Greville G. 1991. *Gender*. Cambridge: Cambridge University Press.

Corbett, Greville G. 2006. *Agreement*. Cambridge: Cambridge University Press.

Cornips, Leonie & Cecilia Poletto. 2005. On standardising syntactic elicitation techniques (part 1). *Lingua* 115, 939-957.

Corver, Norbert & Jairo Nunes. 2007. *The Copy Theory of Movement*. Amsterdam/Philadelphia: John Benjamins.

Dahl, Östen. 2000. Animacy and the notion of semantic gender. In Barbara Unterbeck; Matti Rissanen; Terttu Nevalainen & Mirja Saari eds.), *Gender in Grammar and Cognition*, 99-116. Berlin: Mouton de Gruyter.

Danon, Gabi. 2010. Agreement and DP-Internal Feature Distribution. *Syntax* 14 (4), 297-317.

Darmestädter, Clémentine. 2011. Modernité et modernisation du 'Dictionnaire de l'Académie française' : quelles transformations de la huitième à la neuvième édition ? *Études de linguistique appliquée* 163 (2), 285-306.

Dawes, Elizabeth. 2003. La féminisation des titres et fonctions dans la Francophonie. *Ethnologies* 252, 195-213.

Demuth, Katherine. 2000. Bantu noun class systems: loanword and acquisition evidence of semantic productivity. In Gunter Senft (ed.), *Classification Systems*, 270-292. Cambridge: Cambridge University Press.

den Dikken, Marcel. 1998. Predicate inversion in DP. In Artemis Alexiadou & Chris Wilder (eds.), *Possessors, Predicates and Movement in the Determiner Phrase*, 177-214. Amsterdam: John Benjamins.

den Dikken, Marcel. 2006. *Relators and Linkers: The Syntax of Predication, Predicate Inversion, and Copulas*. Cambridge MA: MIT Press.

Dister, Anne & Marie-Louise Moreau. 2006. « Dis-moi comment tu féminises, je te dirai pour qui tu votes. » Les dénominations des candidates dans les élections européennes de 1989 et de 2004 en Belgique et en France. *Langage et société* 115, 5-45.

Doetjes, Jenny & Johan Rooryck. 2003. Generalizing over quantitative and qualitative constructions. In Martine Coene & Yves D'hulst (eds.), *From NP to DP. Volume 1: The syntax and semantics of noun phrases*, 277-296. Amsterdam: John Benjamins.

Duden. 2005. *Die Grammatik: unentbehrlich für richtiges Deutsch*. Mannheim: Dudenverlag.

Duden. n.d. Wie kommt ein Wort in den Duden? URL: https://www.duden.de/ueber_duden/wie-_kommt-ein-wort-in-den-duden

Elmiger, Daniel. 2008. *La féminisation de la langue en français et en allemand : Querelle entre spécialistes et réception par le grand public*. Paris: Honoré Champion.

Elmiger, Daniel. 2015. Masculin, féminin : et le neutre ? Le statut du genre neutre en français contemporain et les propositions de 'neutralisation' de la langue. *Implications philosophiques*, 29-06-2015. URL: http://www.implications-philosophiques.org/actualite/une/masculin-feminin-et-le-neutre/

Elmiger, Daniel. Forthcoming. Les guides de rédaction non sexiste / inclusive dans les langues romanes : un genre textuel évolutif. To appear in Benjamin Fagard & Gabrielle Le Tallec (eds.), *Entre masculin et féminin… Approche contrastive : français et langues romanes.*

Epple, Barbara. 2000. Sexismus in Wörterbüchern. *Proceedings of EURALEX 2000*, 739-754.

Fagard, Benjamin & Gabrielle Le Tallec. Forthcoming. Introduction. To appear in Benjamin Fagard & Gabrielle Le Tallec (eds.), *Entre masculin et féminin… Approche contrastive : français et langues romanes.*

Falco, Michelangelo & Roberto Zamparelli. 2019. Partitives and partitivity. *Glossa: a journal of general linguistics* 4 (1), 111-158.

Fleischman, Suzanne. 1997. The Battle of Feminism and Bon Usage: Instituting Nonsexist Usage in French. *The French Review* 70 (6), 834-844.

Gabriel, Ute; Pascal Gygax; Oriane Sarrasin; Alan Garnham & Jane Oakhill. 2008. Au pairs are rarely male: Norms on the gender perception of role names across English, French, and German. *Behavior Research Methods* 40 (1), 206-212.

Giusti, Giuliana & Emma Zanoli. Forthcoming. Tra lingua e cultura: I partitivi dei nomi di ruolo in italiano. To appear in Benjamin Fagard & Gabrielle Le Tallec (eds.), *Entre masculin et féminin… Approche contrastive : français et langues romanes.*

Greco, Luca. 2014. Les recherches linguistiques sur le genre : un état de l'art. *Langage et société* 148 (2), 11-29.

Grimshaw, Jane. 1991. *Extended Projections.* Ms. Brandeis University.

Guentherodt, Ingrid; Marlis Hellinger; Luise F. Pusch & Senta Trömel-Plötz. 1980. Richtlinien zur Vermeidung sexistischen Sprachgebrauch. *Linguistische Berichte* 69, 15-20.

Gustafsson Sendén, Marie; Emma A. Bäck & Anna Lindqvist. 2015. Introducing a gender-neutral pronoun in a natural gender language: the influence of time on attitudes and behavior. *Frontiers in Psychology* 6, 1-12.

Gygax, Pascal; Ute Gabriel; Arik Lévy; Eva Pool; Marjorie Grivel & Elena Pedrazzini. 2012. The masculine form and its competing interpretations in French: When linking grammatically masculine role names to female referents is difficult. *Journal of Cognitive Psychology* 24 (4), 395-408.

Haby, René. 1976. Tolérenace grammaticales ou orthographiques. *Journal Officiel*, 09-09-1977.

Halle, Morris & Alec Marantz. 1993. Distributed Morphology and the Pieces of Inflection. In Morris Halle & Samuel Jay Keyser (eds.), *The View from Building 20. Essays in Linguistics in honor of Sylvain Bromberger*, 111-176. Cambridge MA: MIT Press.

Harley, Heidi. 2011. A Minimalist Approach to Argument Structure. In Cedric Boeckx (ed.), *The Oxford Handbook of Linguistic Minimalism*, 427-448. Oxford: Oxford University Press.

Harley, Heidi & Rolf Noyer. 1999. State-of-the-article: Distributed Morphology *GLOT International* 4, 3-9.

Harley, Heidi & Elizabeth Ritter. 2002. Person and Number in Pronouns: A Feature-Geometric Analysis. *Language* 78 (3), 482-526.

Haspelmath, Martin & Andrea D. Sims. 2010. *Understanding morphology* (2nd edn.). New York: Routledge.

Hergenhan, Jutta. 2015. Von der Überwindung des generischen Maskulinums hin zum kreativen antidiskriminierenden Sprachhandeln im Deutschen und im Französischen. *L'Homme. Zeitschrift für Feministische Geschichtswissenschaft* 26 (1), 99-106.

Hergenhan, Jutta. 2020. Langage non sexiste et antiféminisme en Allemagne. *Cahier du Genre* 69 (2), 85-107.

von Heusinger, Klaus & Jaklin Kornfilt. 2017. Partitivity and case marking in Turkish and related languages. *Glossa: a journal of general linguistics* 2 (1), 1-40.

Hoeksema, Jacob. 1996. Introduction. In Jacob Hoeksema (ed.), *Partitives: Studies on the Syntax and Semantics of Partitive and Related Constructions*, 1-24. Berlin: Mouton de Gruyter.

de Hoop, Helen. 1997. A semantic reanalysis of the partitive constraint. *Lingua* 103, 151-174.

de Hoop, Helen. 2003. Partitivity. In Lisa Cheng & Rint Sybesma (eds.), *The Second Glot International State-of-the-Article Book*, 179-212. Berlin: Mouton de Gruyter.

Horvath, Lisa K.; Elisa F. Merkel; Anne Maass & Sabine Sczesny. 2016. Does gender-fair language pay off? The social perception of professions from a cross-linguistic perspective. *Frontiers in Psychology* 6, 1-12.

Houdebine, Anne-Marie. 1987. Le français au féminin. *La Linguistique* 23 (1), 13-34.

Hulk, Aafke & Christine Tellier. 2000. Mismatches: Agreement in qualitative constructions. *Probus* 12, 33-65.

Ihsane, Tabea. 2008. *The Layered DP: Form and meaning of French indefinites.* Amsterdam/Philadelphia: John Benjamins.

Ihsane, Tabea & Petra Sleeman. 2016. Gender agreement with animate nouns in French. In Christine Tortora; Marcel den Dikken; Ignacio Montoya & Teresa O'Neill (eds.), *Selected Papers of the 43rd Linguistic Symposium on Romance Languages (LSRL)*, 159-175. Amsterdam/Philadelphia: John Benjamins.

Irmen, Lisa & Vera Steiger. 2005. Zur Geschichte des Generischen Maskulinums: Sprachwissenschaftliche, sprachphilosophische und psychologische Aspekte im historischen Diskurs. *Zeitschrift für germanistische Linguistik* 33 (2-3), 212-235.

Jackendoff, Ray. 1977. *X-bar Syntax: A Study of Phrase Structure.* Cambridge MA: MIT Press.

Joignot, Frédéric. 2017. Prêt.e.s pour l'écriture inclusive ? *Le Monde*, 13-10-2017, URL: https://www.lemonde.fr/idees/article/2017/10/13/pret-e-s-pour-l-ecriture-inclusive

Kastovsky, Dieter & Christiane Dalton-Puffer. 2002. Sexist German – non-sexist English or non-sexist German – sexist English? Historical observations on a pragmatic question. *Language Sciences* 24, 285-296.

Katamba, Francis. 2003. Bantu nominal morphology. In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 103-120. London: Routledge.

Kayne, Richard S. 1994. *The Antisymmetry of Syntax.* Cambridge MA: MIT Press.

Khaznadar, Edwige. 2002. Métalangage du genre : un flou artistique. In Marie-Jo Mathieu (ed.), *Extension du féminin : les incertitudes de la langue*, 25-44. Paris: Champion.

Koopman, Hilda. 1992. On the Absence of Case Chains in Bambara. *Natural Language & Linguistic Theory* 10 (4), 555-594.

Koopman, Hilda. 1996. The Spec-head relation. *Syntax at Sunset (UCLA Working Papers in Syntax and Semantics 1)*, 37-65. Los Angeles: Department of Linguistics UCLA.

Köpcke, Klaus-Michael & David Zubin. 1996. Prinzipien für die Genuszuweisung im Deutschen. In Ewald Lang & Gisela Zifonun (eds.), *Deutsch-typologisch*, 473-491. Berlin/New York: De Gruyter.

Kraaikamp, Margot. 2017. *Semantic versus lexical gender: Synchronic and diachronic variation in Germanic gender agreement*. Utrecht: LOT.

Kramer, Ruth. 2009. *Definite Markers, Phi-features, and Agreement: A Morphosyntactic Investigation of the Amharic DP*. UC Santa Cruz.

Kramer, Ruth. 2014. Gender in Amharic: a morphosyntactic approach to natural and grammatical gender. *Language Sciences* 43, 102-115.

Kramer, Ruth. 2016. The location of gender features in the syntax. *Lang Linguist Compas* 10, 661-677.

Kučerová, Ivona. 2018. Φ-features at the syntax-semantics interface: Evidence from nominal inflection. *Linguistic Inquiry* 49 (4), 813-845.

Kupferman, Lucien. 1999. Réflexions sur la partition : les groupes nominaux partitifs et la relativisation. *Langue Française* 122, 30-51.

Kuznetsova, Alexandra; Per Bruun Brockhoff & Ruen Haubo Bojesen Christensen. 2017. lmerTest package: Tests in linear mixed effects models. *Journal of Statistical Software* 82 (13), 1-26.

Labbé Grunberg, Hernán. 2020. *Storage and processing of Dutch morphological information: Early electrophysiological responses to lexical, morphological and syntactic information*. Amsterdam: LOT.

Labov, William. 1994. *Principles of linguistic change*. *Bd. 1: Internal Factors*. Oxford/Cambridge: Blackwell.

Landau, Idan. 2016. DP-internal semantic agreement: A configurational analysis. *Natural Language & Linguistic Theory* 34, 975-1020.

Legate, Julie Anne. 2002. *Phases in "Beyond Explanatory Adequacy"*. Ms. MIT.

Lipovsky, Caroline. Gender-specification and occupational nouns: has linguistic change occurred in job advertisements since the French feminisation reforms? *Gender and Language* 8 (3), 361-392.

Luraghi, Silvia. 2011. The origin of the Proto-Indo-European gender system: Typological considerations. *Folia Linguistica* 45 (2), 435-464.

Lyster, Roy. 2006. Predictability in French gender attribution: A corpus analysis. *Journal of French Language Studies* 16, 69-92.

Marantz, Alec. 2007. No escape from Syntax: Don't try morphological analysis in the privacy of your own lexicon. In Alexis Dimitriadis; Laura Siegel; Clarissa Surek-Clark & Alexander Williams (eds.), *Proceedings of the 21st Annual Penn Linguistics Colloquium*, 201-225. University of Pennsylvania Working Papers in Linguistics 4 (2).

Marque-Pucheu, Christiane. 2008. La couleur des prépositions à et de. *Langue française* 157 (1), 74-105.

Martí-Girbau, Núria. 2010. *The Syntax of Partitives*. Universitat Autònoma de Barcelona.

Matthey, Marinette. 2000. Féminisation du lexique et du discours en Suisse romande : un état des lieux. *Bulletin suisse de linguistique appliquée* 72, 63-79.

Matushansky, Ora. 2013. Gender confusion. In Lisa Lai-Shen Cheng & Norbert Corver (eds.), *Diagnosing syntax*, 271-294. Oxford: Oxford University Press.

Meisel, Jürgen M.; Martin Elsig & Esther Rinke. 2013. *Language Acquisition and Change: A Morphosyntactic Perspective.* Edinburgh: Edinburgh University Press.

Merchant, Jason. 2014. Gender mismatches under nominal ellipsis. *Lingua* 151, 9-32.

Merkel, Elisa; Anne Maass & Laura Frommelt. 2012. Shielding women against status loss: The masculine form and its alternatives in the Italian language. *Journal of Language and Psychology* 31 (3), 311-320.

Milner, Jean-Claude. 1978. *De la Syntaxe à l'Interprétation*. Paris: Seuil.

Misersky, Julia; Pascal M. Gygax; Paolo Canal; Ute Gabriel; Alan Garnham; Friederike Braun; Tania Chiarini; Kjellrun Englund; Adriana Hanulikova; Anton Öttl; Jana Valdrova; Lisa von Stockhausen & Sabine Sczesny. 2013. Norms on the gender perception of role nouns in Czech, English, French, German, Italian, Norwegian, and Slovak. *Behavior Research Methods* 46 (3), 841-871.

Moron-Puech, Benjamin; Anne Saris & Léa Bouvattier. 2020. La normalisation étatique de l'inclusivité du langage. Retour sur les différences franco-québécoises. *Cahiers du Genre* 69 (2), 151-176.

Moron-Puech, Benjamin; Anne Saris & Léa Bouvattier. Forthcoming. Regards comparatistes sur les normes d'inclusivité du langage édictées en France et au Québec. To appear in Benjamin Fagard & Gabrielle Le Tallec (eds.), *Entre masculin et féminin… Approche contrastive : français et langues romanes.*

de Nayves, Hélène & Marie-Ève Arbour. Forthcoming. La féminisation linguistique au Québec et ses défis actuels. To appear in Benjamin Fagard & Gabrielle Le Tallec (eds.), *Entre masculin et féminin… Approche contrastive : français et langues romanes.*

New, Boris & Christine Pallier. 2019. *Lexique*. URL: www.lexique.org

Nunes, Jairo. 2004. *Linearization of Chains and Sideward Movement*. Cambridge MA: MIT Press.

Ott, Christine. 2017. *Sprachlich vermittelte Geschlechterkonzepte. Eine diskurslinguistische Untersuchung von Schulbüchern der Wilhelminischen Kaiserzeit bis zur Gegenwart*. Berlin: De Gruyter Mouton.

Parafita Couto, Maria Carmen & Hans Stadthagen-Gonzalez. 2019. El book or the libro? Insights from acceptability judgements into determiner/noun code-switches. *International Journal of Bilingualism* 23 (1), 349-360.

Paveau, Marie-Anne. 2002. La féminisation des noms de métiers : résistances sociales et solutions linguistiques. *Le français aujourd'hui* 136, 121-128.

Pesetsky, David & Esther Torrego. 2007. The syntax of valuation and the interpretability of features. In Simin Karimi; Vida Samijan & Wendy Wilkins (eds.), *Phrasal and Clausal Architecture: Syntactic derivation and interpretation*, 262-294. Amsterdam: John Benjamins.

Picallo, M. Carme. 1991. Nominals and nominalization in Catalan. *Probus* 3, 279-316.

Preminger, Omer. 2009. Breaking Agreements: Distinguishing Agreement and Clitic Doubling by Their Failures. *Linguistic Inquiry* 40 (4), 619-666.

Preminger, Omer. 2011. *Agreement as a Fallible Operation*. PhD dissertation: MIT.

R Development Core Team. 2018. R: A language and environment for statistical computing. Vienna: R Foundation for statistical computing. URL: https://www.R-project.org

Ritter, Elizabeth. 1993. Where's Gender? *Linguistic Inquiry* 24 (4), 795-803.

Rizzi, Luigi. 1997. The fine structure of the left periphery. In Lilianne Haegeman (ed.), *Elements of grammar*, 281-337. Dordrecht: Springer.

le Robert. n.d. Nos métiers. URL: https://www.lerobert.com/nos-metiers

Saab, Andrés Leandro. 2010. (Im)possible deletions in the Spanish DP. *Iberia* 2 (2), 45-83.

Sato, Sayaka; Pascal Gygax & Ute Gabriel. 2013. Gender Inferences: Grammatical features and their impact on the representation of gender in bilinguals. *Bilingualism: Language and Cognition* 16 (4), 792-807.

Sauerland, Uli. 2004. *A Comprehensive Semantics for Agreement*. Ms. Universität Tübingen.

Sauerland, Uli & Kazuko Yatsushiro. 2017. Two nouns in partitives: evidence from Japanese. *Glossa: a journal of general linguistics* 2 (1), 1-29.

Schoental, Gisela. 1989. Personenbezeichnungen im Deutschen als Gegenstand feministischer Sprachkritik. *Zeitschrift für Germanistische Linguistik* 17, 296-314.

Schoorlemmer, Erik. 2009. *Agreement, Dominance and Doubling: The morphosyntax of DP*. PhD dissertation, Universiteit Leiden.

Schütze, Carson T. 2016. *The empirical base of linguistics. Grammaticality judgements and linguistic methodology*. Berlin: Language Science Press.

Scott, Alan K. 2006. Das suffix *-In*: Eine Ergänzung zum deutschen Wortbildungssystem. *Zeitschrift für Dialektologie und Linguistik* 2, 161-175.

Siemund, Peter. 2008. *Pronominal Gender in English – A Study of English Varieties from a Cross-linguistic Perspective*. London: Routledge.

Sleeman, Petra. 2006. La structure de la construction partitive suivie d'une relative. In Georges Kleiber; Chatherine Schnedecker & Anne Theissen (eds.), *La relation partie-tout*, 320-355. Leuven: Peeters.

Sleeman, Petra & Tabea Ihsane. 2016. Gender mismatches in partitive constructions with superlatives in French. *Glossa: a journal of general linguistics* 1 (1), 1-25.

Sleeman, Petra & Ellen-Petra Kester. 2002. Partitive constructions and antisymmetry. In Claire Beyssade; Reineke Bok-Bennema; Frank Drijkoningen & Paola Monachesi (eds.), *Romance languages and linguistic theory (Current Issues in Linguistic Theory)*, 271-286. Amsterdam: John Benjamins.

Spang-Hansen, Ebbe. 1963. *Les prépositions incolores du français moderne.* Copenhague: Aarhuus Stiftsbogtrykkerie.

Stahlberg, Dagmar & Sabine Sczesny. 2001. Effekte des generischen Maskulinums und alternativer Sprachformen auf den gedanklichen Einbezug von Frauen. *Psychologische Rundschau* 52 (3), 131-140.

Stahlberg, Dagmar; Sabine Sczesny & Friederike Braun. 2001. Name your Favorite Musician: Effects of Masculine Generics and of their Alternatives in German. *Journal of Language and Social Psychology* 20 (4), 464-469.

Steele, Susan. 1978. Word order variation: a typological study. In Joseph H. Greenberg & Charles A. Ferguson (eds.), *Ferguson Universals of Human Language*, 585-623. Stanford: Stanford University Press.

Steriopolo, Olga. 2018. Morphosyntax of Gender in Russian Sex-Differentiable Nouns. *Journal of Slavic Linguistics* 26 (2), 1-29.

Steriopolo, Olga & Martina Wiltschko. 2010 Distributed GENDER hypothesis. In Gerhild Zybatow; Philip Dudchuk; Serge Minor & Ekaterina Pshehotskaya (eds.), *Formal Studies in Slavic Linguistics*, 155-172. New York: Peter Lang.

Stowell, Tim. 1981. *Origins of phrase structure*. PhD dissertation, MIT.

Strauss, Sabine. 2007. *The Gender of Pronouns Co-Occurring With Neuter Hybrid or Epicene Antecedents in German*. Unpublished MA-thesis, VU University Amsterdam

Ulrich, Joachim Gerd; Andreas Krewerth & Tanja Tschöpe. 2004. Berufsbezeichnungen und ihr Einfluss auf das Berufsinteresse von Mädchen und Jungen. *Sozialwissenschaften und Berufspraxis* 27 (4), 419-434.

van de Velde, Freek; Petra Sleeman & Harry Perridon. 2014. The adjective in Germanic and Romance: Development, differences and similarities. In Petra Sleeman; Freek van de Velde & Harry Perridon (eds.), *Adjectives in Germanic and Romance*, 1-32. Amsterdam/Philadelphia: John Benjamins.

Viennot, Élianne. 2019. Rapport de l'Académie française sur « La féminisation des noms de métiers et de fonctions ». Décryptage. URL: http://www.elianeviennot.fr/Langue/Acad2019-Decryptage.pdf

de Vogelaer, Gunther. 2010. (Not) acquiring grammatical gender in two varieties of Dutch. In Dirk Geernaerts; Gitte Kristiansen & Yves Peirsman (eds.), *Advances in Cognitive Sociolinguistics*, 167-190. Berlin: Mouton de Gruyter.

de Vogelaer, Gunther & Gert de Sutter. 2011. The geography of change: Pronominal and adnominal gender in Flemish dialects of Dutch. *Language Sciences* 33 (1), 192-205.

de Vogelaer, Gunther; Johanna Fanta; Greg Poarch; Sarah Schimke & Lukas Urbanek. 2020. Syntactic or semantic gender agreement in Dutch, German and German learner Dutch: a speeded grammaticality judgement task. In Gunther de Vogelaer; Dietha Koster & Torsten Leuschner (eds.), *German and Dutch in Contrast*, 271-298. Berlin/Boston: Walter de Gruyter.

Wechsler, Stephen. 2011. Mixed agreement, the person feature, and the index/concord distinction. *Natural Language & Linguistic Theory* 29, 999-1031.

Wechsler, Stephen & Larisa Zaltić. 2003. *The Many Faces of Agreement*. Stanford CA: CSLI Publications.

Weerman, Fred. 2011. Diachronic change: Early versus late acquisition. *Bilingualism: Language and Cognition* 14 (2), 149-151.

Westveer, Thom. 2016. *Matching mismatches? Comparing gender mismatches in French and German partitive constructions*. MA-thesis, Universiteit van Amsterdam.

Westveer, Thom; Petra Sleeman & Enoch O. Aboh. 2018. Discriminating dictionaries? Feminine forms of profession nouns in dictionaries of French and German. *International Journal of Lexicography* 31 (4), 371-393.

Westveer, Thom; Petra Sleeman & Enoch O. Aboh. 2021. Competing genders: French partitive constructions between grammatical and semantic gender. In Marc-Olivier Hinzelin; Natascha Pomino & Eva-Maria Remberger (eds.), *Formal approaches to Romance morphosyntax*, 49-87. Berlin: De Gruyter.

Westveer, Thom; Petra Sleeman & Enoch. O. Aboh. Forthcoming. La lutte des genres : l'accord de genre dans les phrases partitives superlatives en français. To appear in Benjamin Fagard & Gabrielle Le Tallec (eds.), *Entre masculin et féminin… Approche contrastive : français et langues romanes*.

Wurmbrand, Susi. 2017. Formal and Semantic Agreement in Syntax: A Dual Feature Approach. In Joseph Edmonds & Markéta Janebová (eds.), *Language Use and Linguistic Structure. Proceedings of the Olomouc Linguistics Colloquium 2016*, 19-56. Olomouc: Palacký University.

Zamparelli, Roberto. 1998. Dei ex machina. A note on plural/mass indefinite determiners. *Studia Linguistica* 62 (3), 301-327.
Zeijlstra, Hedde. 2012. There is only one way to agree. *Linguistic review* 29 (3), 491-539.
Zribi-Hertz, Anne. 2003. Pour une analyse unitaire de *de* partitif. In Francis Corblin & Lucien Kupferman (eds.), *Proceedings of the Indéfinis et prédication conference*, 141-154. Paris: Presses de la Sorbonne.

Dictionaries

Drosdowski, Günther. 1983. *Duden Deutsches Universalwörterbuch.* Mannheim: Bibliographisches Institut.
Drosdowski, Günther. 1996. *Duden Deutsches Universalwörterbuch*. Mannheim: Dudenverlag.
Dudenredaktion. 2011. *Duden Deutsches Universalwörterbuch.* Mannheim: Dudenverlag.
Dudenredaktion. *Duden-online-Wörterbuch.* URL: http://www.duden.de/woerterbuch
Klosa, Annette & Anette Auberle. 2001. *Duden Deutsches Universalwörterbuch*. Mannheim: Dudenverlag.
le Petit Robert. *Petit Robert Électronique*. URL: http://www.lerobert.fr
Robert, Paul; Josette Rey-Debove & Alain Rey. 1967. *Le Petit Robert: dictionnaire alphabétique et analogique de la langue française*. Paris: Société du nouveau Littré.
Robert, Paul; Josette Rey-Debove & Alain Rey**.** 1977. *Le Petit Robert: dictionnaire alphabétique et analogique de la langue française*. Paris: Société du nouveau Littré.
Robert, Paul; Josette Rey-Debove & Alain Rey. 1984. *Le Petit Robert: dictionnaire alphabétique et analogique de la langue française*. Paris: Le Robert.
Robert, Paul; Josette Rey-Debove & Alain Rey. 1994. *Le Nouveau Petit Robert: dictionnaire alphabétique et analogique de la langue française*. Paris: Dictionnaires Le Robert.
Robert, Paul; Josette Rey-Debove & Alain Rey. 1996. *Le Nouveau Petit Robert: dictionnaire alphabétique et analogique de la langue française*. Paris: Dictionnaires Le Robert.
Robert, Paul; Josette Rey-Debove & Alain Rey y. 2003. *Le Nouveau Petit Robert: dictionnaire alphabétique et analogique de la langue française*. Paris: Dictionnaires Le Robert.
Robert, Paul; Josette Rey-Debove & Alain Rey. 2011. *Le Petit Robert: dictionnaire alphabétique et analogique de la langue française*. Paris: Dictionnaires Le Robert.

Robert, Paul; Josette Rey-Debove & Alain Rey. 2016. *Le Petit Robert: dictionnaire alphabétique et analogique de la langue française*. Paris: Le Robert.

Appendix A

Samples of nouns used in the dictionary search (Chapter 2)

The sample nouns are grouped according to the noun classification adopted in Chapter 2. This classification represents differences in feminisation strategy. For each noun, the table lists the first dictionary edition of the corpus in which the feminine form was included between brackets.

A. French

Class	Nouns
A.	*architecte* (1994) *guide* (1967) *juge* (2003) *maire* (2003) *ministre* (1996) *pilote* (2003) *poète* (2012) *secrétaire* (1977)
B.	*apprenti* (1967) *attaché* (1967) *chargé* (1994) *député* (1967)
C.	*adjoint* (1967) *chancelier* (2003) *chirurgien* (1967) *écrivain* (2003) *huissier* (1996) *partisan* (1967) *policier* (2003) *pompier* - Exceptions *chef* (1994) *mannequin* (2003) *marin* -

	médecin – une médecin(e) (2003) *témoin – une témoin* (2003)
D.	+ *-euse* *chroniqueur* (1977) *entrepreneur* (1967) *footballeur* (1977) *programmeur* (1967) *sauveur* (2012) Exceptions *censeur* (2012) *gouverneur* (2012) *ingénieur* (2003) *précurseur* (2012) *professeur* (2003) *supérieur* (1967)
E.	+ *-trice* *administrateur* (1967) *agriculteur* (1994) *conducteur* (1967) *instituteur* (1967) *lecteur* (1967) *orateur* (1967) *recteur* (1996) *sculpteur* (1994) *sénateur* (1996) + *-teuse* *un acheteur* (1967) *un chanteur* (1967) *un metteur (en scène)* (1967) *un transporteur* - Exceptions *auteur* (2012) *docteur* (2012 (*docteur(e)*) / 1967 (*doctoresse*))

B. German

Class	Examples
A.	*Agent* (1983) *Amtsträger* (2001 *Anhänger* (2001) *Architekt* (2001) *Arzt* (1983) *Assistent* (1983) *Autor* (2001) *Bauer* (1983) *Beförderer* (2001) *Bildhauer* (2001) *Buchhalter* (1983) *Bürgermeister* (2001) *Chef* (1983) *Chirurg* (2001) *Chronist* (2001) *Dichter* (1983) *Doktor* (2011) *Fahrer* (2001) *Flieger* (2001) *Führer* (1983) *Fußballspieler* (2001) *Gerichtsvollzieher* (2001) *Gouverneur* (2011) *Ingenieur* (2001) *Kanzler* (2001) *Käufer* (1983) *Lehrer* (1983) *Lektor* (1983) *Matrose* (2011) *Mediziner* (1983) *Minister* (1983) *Mitarbeiter* (1983) *Pilot* (2001) *Poet* (2001) *Polizist* (1983) *Professor* (1983) *Programmierer* (1983) *Regisseur* (1983) *Rektor* (1983)

	Retter (1983) *Richter* (1983) *Sänger* (1983) *Schriftsteller* (1983) *Sekretär* (1983) *Senator* (2001) *Sprecher* (1983) *Unternehmer* (1996) *Vertreter* (1996) *Vorgänger* (2001) *Zensor* (2011) *Zeuge* (1983)
B.	*Abgeordneter* (1983) *Auszubildender* (1983) *Beauftragter* (1983) *Vorgesetzter* (1983)
C.	*Feuerwehrmann* (2001) *Seemann* (Duden-Online)

Appendix B

Test sentences grammaticality judgement task French (Chapter 3)

Table 1 – Distribution of nouns in the task

Partitive type	**Noun class**	**Noun**	**Grammatical agreement** (sentence number in task)	**Semantic agreement** (sentence number in task)	**Control sentence** (sentence number in task)	**Feminine control sentence** (sentence number in task)	Total number of sentences
Quantified	B	*chanteur*	34	17	44	59	4
		étudiant	19	26	75	32	4
		policier	65	11	x	x	2
		recteur	1	9	x	x	2
	C	*collègue*	29	63	x	x	2
		guide	74	53	60	22	4
		ministre	79	13	50	55	4
		professeur	70	5	x	x	2
	D	*génie* (M)	15	71	47	n/a	3
		personnage (M)	64	48	43	n/a	3
		personne (F)	68	37	3	n/a	3
		sentinelle (F)	24	73	56	n/a	3
		victime (F)	51	78	66	n/a	3
Total No.			13	13	9	4	39
Superlative	B	*chanteur*	54	49	2	62	4
		étudiant	67	35	4	40	4
		policier	52	18	x	x	2
		recteur	25	38	x	x	2

	C	*collègue*	57	12	x	x	2
		guide	41	69	46	6	4
		ministre	21	72	28	45	4
		professeur	77	31	36	14	4
	D	*génie* (M)	20	8	61	n/a	3
		personnage (M)	10	33	58	n/a	3
		personne (F)	30	42	76	n/a	3
		sentinelle (F)	39	80	16	n/a	3
		victime (F)	23	27	7	n/a	3
Total No.			13	13	10	5	41
							80

Class B nouns

Chanteur 'singer'

Quantified partitives	
no mismatch	*34. Un des chanteurs présents est Françoise Hardy.*
mismatch	*17. Une des chanteurs présents est Françoise Hardy.*
masculine control	*44. Un des chanteurs présents est Julien Clerc.*
feminine control	*59. Une des chanteuses présentes est Françoise Hardy.*
Superlative partitives	
no mismatch	*54. Le plus jeune des chanteurs présents est Françoise Hardy.*
mismatch	*49. La plus jeune des chanteurs présents est Françoise Hardy.*
masculine control	*2. Le plus jeune des chanteurs présents est Julien Clerc.*
feminine control	*62. La plus jeune des chanteuses présentes est Françoise Hardy.*

***Étudiant* 'student'**

Quantified partitives	
no mismatch	*19. Un de mes anciens étudiants s'appelle Henriette.*
mismatch	*26. Une de mes anciens étudiants s'appelle Henriette.*
masculine control	*75. Un de mes anciens étudiants s'appelle Jean.*
feminine control	*32. Une de mes anciennes étudiantes s'appelle Henriette.*
Superlative partitives	
no mismatch	*67. Le plus intelligent de mes anciens étudiants s'appelle Henriette.*
mismatch	*35. La plus intelligente de mes anciens étudiants s'appelle Françoise.*
masculine control	*4. Le plus intelligent de mes anciens étudiants s'appelle Henri.*
feminine control	*40. La plus intelligente de mes anciennes étudiantes s'appelle Françoise.*

***Policier* 'police officer'**

Quantified partitives	
no mismatch	*65. Un des gentils policiers s'appelait Marie.*
mismatch	*11. Une des gentils policiers s'appelait Françoise.*
Superlative partitives	
no mismatch	*52. Le plus jeune des gentils policiers s'appelait Françoise.*
mismatch	*18. La plus jeune des nouveaux policiers s'appelait Françoise.*

***Recteur* 'rector'**

Quantified partitives	
no mismatch	*1. Un des nouveaux recteurs s'appelle Marie Lafont.*
mismatch	*9. Une des nouveaux recteurs s'appelle Marie Lafont.*
Superlative partitives	
no mismatch	*25. Le plus jeune des nouveaux recteurs s'appelle Marie Lafont.*
mismatch	*38. La plus jeune des nouveaux recteurs s'appelle Marie Lafont.*

Class C nouns

Collègue ‘colleague’

Quantified partitives	
no mismatch	*29. Un de mes vieux collègues s’appelle Isabelle.*
mismatch	*63. Une de mes vieux collègues s’appelle Isabelle.*
Superlative partitives	
no mismatch	*57. Le plus gentil de mes vieux collègues s’appelle Isabelle.*
mismatch	*12. La plus gentille de mes vieux collègues s’appelle Isabelle.*

Guide ‘guide’

Quantified partitives	
no mismatch	*74. Un des vieux guides s’appelle Hélène.*
mismatch	*53. Une des vieux guides s’appelle Hélène.*
masculine control	*60. Un des vieux guides s’appelle Jean.*
feminine control	*22. Une des vieilles guides s’appelle Hélène.*
Superlative partitives	
no mismatch	*41. Le plus ennuyeux des vieux guides s’appelle Hélène.*
mismatch	*69. La plus ennuyeuse des vieux guides s’appelle Hélène.*
masculine control	*46. Le plus ennuyeux des vieux guides s’appelle Henri.*
feminine control	*6. La plus ennuyeuse des vieilles guides s’appelle Hélène.*

Ministre ‘minister’

Quantified partitives	
no mismatch	*79. Un des nouveaux ministres est Madame Lagarde.*
mismatch	*13. Une des nouveaux ministres est Madame Lagarde.*
masculine control	*50. Un des nouveaux ministres est Monsieur Dupont.*
feminine control	*55. Une des nouvelles ministres est Madame Lagarde.*

Superlative partitives	
no mismatch	*21. Le plus intelligent des nouveaux ministres est Madame Ranquière.*
mismatch	*72. La plus intelligente des nouveaux ministres est Madame Arbelette.*
masculine control	*28. Le plus intelligent des nouveaux ministres est Monsieur Lefèbre.*
feminine control	*45. La plus intelligente des nouvelles ministres est Madame Ranquière.*

***Professeur* 'teacher'**

Quantified partitives	
no mismatch	*70. Un des nouveaux professeurs de français est Madame Ranquière.*
mismatch	*5. Une des nouveaux professeurs de français est Madame Ranquière.*
Superlative partitives	
no mismatch	*77. Le plus intelligent des nouveaux professeurs est Madame Arbelette.*
mismatch	*31. La plus intelligente des nouveaux professeurs est Madame Arbelette.*
masculine control	*36. Le plus intelligent des nouveaux professeurs est Monsieur Lefèbre.*
feminine control	*14. La plus intelligente des nouvelles professeurs est Madame Arbelette.*

Class D

***Génie* 'genius' (masculine noun)**

Quantified partitives	
no mismatch	*15. Un des génies présents est Hélène.*
mismatch	*71. Une des génies présents est Madeleine.*
masculine control	*47. Un des génies présents est Philippe.*
Superlative partitives	
no mismatch	*20. Le plus gentil des génies présents est Madeleine.*
mismatch	*8. La plus gentille des génies présents est Hélène.*
masculine control	*61. Le plus gentil des génies présents est Philippe.*

***Personnage* 'character' (masculine noun)**

Quantified partitives	
no mismatch	*64. Un des personnages principaux du roman s'appelle Aline.*
mismatch	*48. Une des personnages principaux du roman s'appelle Madeleine.*
masculine control	*43. Un des personnages principaux du roman s'appelle Jean-Jacques.*
Superlative partitives	
no mismatch	*10. Le plus vieux des personnages principaux du roman s'appelle Juliette.*
mismatch	*33. La plus vieille des personnages principaux du roman s'appelle Juliette.*
masculine control	*58. Le plus vieux des personnages principaux du roman s'appelle Jean-Jacques.*

***Personne* 'person' (feminine noun)**

Quantified partitives	
no mismatch	*68. Une des personnes les plus intelligentes est Monsieur Dupont.*
mismatch	*37. Un des personnes les plus intelligentes est Monsieur Dupont.*
feminine control	*3. Une des personnes les plus intelligentes était Madame Truffaut.*
Superlative partitives	
no mismatch	*30. La plus gentille des personnes intelligentes est Monsieur Hupot.*
mismatch	*42. Le plus gentil des personnes intelligentes est Monsieur Lefèbre.*
feminine control	*76. La plus gentille des personnes intelligentes est Madame Hupot.*

***Sentinelle* 'guard' (feminine noun)**

Quantified partitives	
no mismatch	*24. Une des nouvelles sentinelles s'appelle Henri.*
mismatch	*73. Un des nouvelles sentinelles s'appelle Henri.*
feminine control	*56. Une des nouvelles sentinelles s'appelle Madeleine.*

Superlative partitives	
no mismatch	*39. La plus jeune des nouvelles sentinelles s'appelle Henri.*
mismatch	*80. Le plus jeune des nouvelles sentinelles s'appelle Jean-Jacques.*
feminine control	*16. La plus jeune des nouvelles sentinelles s'appelle Marie.*

Victime 'victim' (feminine noun)

Quantified partitives	
no mismatch	*51. Une des nombreuses victimes de l'accident était Monsieur Dupont.*
mismatch	*78. Un des nombreuses victimes de l'accident est Monsieur Dupont.*
feminine control	*66. Une des nombreuses victimes de l'accident est Madame Hupot.*
Superlative partitives	
no mismatch	*27. Le plus jeune des nombreuses victimes est Monsieur Dupont.*
mismatch	*23. La plus jeune des nombreuses victimes est Monsieur Dupont.*
feminine control	*7. La plus jeune des nombreuses victimes est Madame Hupot.*

Appendix C

Test sentences grammaticality judgement task German (Chapter 4)

Table 1 – Distribution of sentences in the task

Partitive type	**Noun class**	**Noun**	**Grammatical agreement** (sentence number in task)	**Semantic agreement** (sentence number in task)	**Control sentence** (sentence number in task)	**Feminine control sentence** (sentence number in task)	Total number of sentences
Quantified	B	*Beamte*	14	64	25	x	3
		Lehrer	22	52	46	11	4
		Minister	78	23	x	x	2
		Polizist	61	80	x	x	2
		Student	36	50	13	59	4
	C	*Studierende*	26	39	x	n/a	2
		Vorgesetzte	55	5	29	n/a	3
	D	*Flüchtling* (M)	31	75	19	n/a	3
		Star (M)	42	72	10	n/a	3
		Person (F)	7	68	16	n/a	3
		Waise (F)	34	62	3	n/a	3
		Kind (N)	8+58	44+77	n/a	n/a	4
		Opfer (N)	48+66	28+37	n/a	n/a	4
Total No.			15	15	8	2	40
Superlative	B	*Beamte*	45	32	57	x	3
		Lehrer	1	67	35	40	4
		Minister	2	49	x	x	2
		Polizist	73	12	x	x	2
		Student	43	4	76	24	4
	C	*Studierende*	20	51	6	n/a	3
		Vorgesetzte	70	15	x	n/a	2

D	*Flüchtling* (M)	9	79	56	n/a	3
	Star (M)	38	21	65	n/a	3
	Person (F)	27	60	63	n/a	3
	Waise (F)	41	71	47	n/a	3
	Kind (N)	18+69	30+54	n/a	n/a	4
	Opfer (N)	53+74	17+33	n/a	n/a	4
Total No.		15	15	8	2	40
						80

Class B nouns

Beamte 'civil servant'

Quantified partitives	
no mismatch	*14. Einer der neuen Beamten ist Frau Hering.*
mismatch	*64. Eine der neuen Beamten ist Frau Hering.*
masculine control	*25. Einer der neuen Beamten ist Herr Kruse.*
Superlative partitives	
no mismatch	*45. Der älteste der neuen Beamten ist Frau Hering.*
mismatch	*32. Die älteste der neuen Beamten ist Frau Hering.*
masculine control	*57. Der älteste der neuen Beamten ist Herr Kruse.*

Lehrer 'teacher'

Quantified partitives	
no mismatch	*22. Einer meiner neuen Lehrer heißt Frau Maron.*
mismatch	*52. Eine meiner neuen Lehrer heißt Frau Maron.*
masculine control	*46. Einer meiner neuen Lehrer heißt Herr Kruge.*
feminine control	*11. Eine meiner neuen Lehrerinnen heißt Frau Maron.*
Superlative partitives	
no mismatch	*1. Der intelligenteste der neuen Lehrer heißt Frau Maron.*
mismatch	*67. Die intelligenteste der neuen Lehrer heißt Frau Maron.*
masculine control	*35. Der intelligenteste der neuen Lehrer heißt Herr Kruge.*
feminine control	*40. Die intelligenteste der neuen Lehrerinnen heißt Frau Maron.*

***Minister* 'minister'**

Quantified partitives	
no mismatch	*78. Einer der neuen Minister ist Frau Kruse.*
mismatch	*23. Eine der neuen Minister ist Frau Kruse.*
Superlative partitives	
no mismatch	*2. Der älteste der neuen Minister ist Frau Eckhardt.*
mismatch	*49. Die älteste der neuen Minister ist Frau Eckhardt.*

***Polizist* 'police officer'**

Quantified partitives	
no mismatch	*61. Einer der anwesenden Polizisten ist Ingrid*
mismatch	*80. Eine der anwesenden Polizisten ist Ingrid.*
Superlative partitives	
no mismatch	*73. Der jüngste der anwesenden Polizisten ist Ingrid.*
mismatch	*12. Die jüngste der anwesenden Polizisten ist Ingrid.*

***Student* 'student'**

Quantified partitives	
no mismatch	*36. Einer der neuen Studenten ist Katharina.*
mismatch	*50. Eine der neuen Studenten ist Katharina.*
masculine control	*13. Einer der neuen Studenten ist Heinz*
feminine control	*59. Eine der neuen Studentinnen ist Katharina.*
Superlative partitives	
no mismatch	*43. Der jüngste der neuen Studenten ist Katharina.*
mismatch	*4. Die jüngste der neuen Studenten ist Katharina.*
masculine control	*76. Der jüngste der neuen Studenten ist Heinz.*
feminine control	*24. Die jüngste der neuen Studentinnen ist Katharina*

Class C nouns

***Studierende* 'student'**

Quantified partitives	
masculine subset with female	*26. Einer der Studierenden ist Anja.*
feminine subset with female	*39. Eine der Studierenden ist Anja.*

Superlative partitives	
masculine subset with female	*20. Der klügste der Studierenden ist Anja.*
feminine subset with female	*51. Die klügste der Studierenden ist Anja.*
masculine subset with male	*6. Der klügste der Studierenden ist Karl.*

Vorgesetzte ‘superior’

Quantified partitives	
masculine subset with female	*55. Einer meiner Vorgesetzten war Frau Kluge.*
feminine subset with female	*5. Eine meiner Vorgesetzten war Frau Kluge.*
masculine subset with male	*29. Einer meiner Vorgesetzten war Herr Ruge.*
Superlative partitives	
masculine subset with female	*70. Der netteste meiner Vorgesetzten war Frau Kluge.*
feminine subset with female	*15. Die netteste meiner Vorgesetzten war Frau Kluge.*

Class D nouns

Flüchtling ‘refugee’ (masculine noun)

Quantified partitives	
no mismatch	*31. Einer der Flüchtlinge heißt Maria.*
mismatch	*75. Eine der Flüchtlinge heißt Maria.*
masculine control	*19. Einer der Flüchtlinge heißt Thomas.*
Superlative partitives	
no mismatch	*79. Der jüngste der Flüchtlinge heißt Maria.*
mismatch	*9. Die jüngste der Flüchtlinge heißt Maria.*
masculine control	*56. Der jüngste der Flüchtlinge heißt Arnold.*

Star ‘celebrity’ (masculine noun)

Quantified partitives	
no mismatch	*42. Einer der anwesenden Stars ist Nina Hagen.*
mismatch	*72. Eine der anwesenden Stars ist Nina Hagen.*
masculine control	*10. Einer der anwesenden Stars ist Jörg Pilawa.*

Superlative partitives	
no mismatch	*38. Der bekannteste der anwesenden Stars ist Helene Fischer.*
mismatch	*21. Die bekannteste der anwesenden Stars ist Helene Fischer.*
masculine control	*65. Der bekannteste der anwesenden Stars ist Udo Lindberg.*

Person 'person' (feminine noun)

Quantified partitives	
no mismatch	*7. Eine der anwesenden Personen ist Herr Gottschalk.*
mismatch	*68. Einer der anwesenden Personen ist Herr Gottschalk.*
feminine control	*16. Eine der anwesenden Personen ist Frau Maron.*
Superlative partitives	
no mismatch	*27. Die älteste der anwesenden Personen ist Herr Gottschalk.*
mismatch	*60. Der älteste der anwesenden Personen ist Herr Gottschalk.*
feminine control	*63. Die älteste der anwesenden Personen ist Frau Maron.*

Waise 'orphan' (feminine noun)

Quantified partitives	
no mismatch	*34. Eine der Waisen heißt Karl.*
mismatch	*62. Einer der Waisen heißt Karl.*
feminine control	*3. Eine der Waisen heißt Monika.*
Superlative partitives	
no mismatch	*41. Die jüngste der Waisen ist Anton.*
mismatch	*71. Der jüngste der Waisen ist Anton.*
feminine control	*47. Die jüngste der Waisen ist Marie*

***Kind* 'child' (neuter noun)**

Quantified partitives	
no mismatch	*58. Eines der besten Kinder ist Peter.* *8. Eines der besten Kinder ist Nina.*
mismatch	*44. Einer der besten Kinder ist Peter.* *77. Eine der besten Kinder ist Nina.*
Superlative partitives	
no mismatch	*69. Das jüngste der Kinder ist Heinz.* *18. Das jüngste der Kinder ist Anja.*
mismatch	*30. Der jüngste der Kinder ist Heinz.* *54. Die jüngste der Kinder ist Anja.*

***Opfer* 'victim' (neuter noun)**

Quantified partitives	
no mismatch	*66. Eines der Opfer ist Peter.* *48. Eines der Opfer ist Katharina.*
mismatch	*28. Einer der Opfer ist Peter.* *37. Eine der Opfer ist Katharina.*
Superlative partitives	
no mismatch	*53. Das jüngste der Opfer war Peter.* *74. Das jüngste der Opfer war Maria.*
mismatch	*17. Der jüngste der Opfer war Peter.* *33. Die jüngste der Opfer war Maria.*

Appendix D

Feminisation of profession nouns

In this part, I briefly show the results with respect to feminisation of profession nouns, as tested by means of gap filling tasks (Chapter 5, section 5.2).

A. French

Base form	**Answers by participants**
auteur 'author'	*Madame Dupont est … … exemplaire.* 'Mrs. Dupont is an exemplary author.'
	une auteure [34 – 54,8%] *un auteur* (masculine) [26 – 41,9%] *une autrice* [4 – 6,5%] *une auteur* [2 – 3,2%] *une autoresse* [1 – 1,6%]
chef 'leader'	*Madame Dupont est … … exemplaire.* 'Mrs. Dupont is an exemplary leader.'
	un chef (masculine) [24 – 38,7%] *une cheffe* [23 – 37,1%] *une chef* [13 – 21,0%] *une chèfe* [3 – 4,8%] *une cheftaine* [1 – 1,6%]
docteur 'doctor'	*Madame Dupont est … … exemplaire.* 'Mrs. Dupont is an exemplary doctor.'
	un docteur (masculine) [36 – 58,1%] *une doctoresse* [16 – 25,8%] *une docteure* [10 – 16,1%] *une docteuresse* [2 – 3,2%] *une docteur* [1 – 1,6%] *une doctereuse* [1 – 1,6%]
écrivain 'writer'	*Madame Dupont est … … … (seul) qui ait publié dix romans.* 'Mrs. Dupont is the only writer who published ten novels.'

	la seule écrivaine [32 – 51,6%] *le seul écrivain* (masculine) [26 – 41,9%] *la seule écrivain* [6 – 9,7%] *la seule femme écrivain* [1 – 1,6%]
guide 'guide'	*Madame Hupot est … … exemplaire.* 'Mrs Hupot is an exemplary guide.'
	une guide [44 – 71,0%] *un guide* (masculine) [23 – 37,1%]
ingénieur 'engineer'	*Madame Dupont est … … exemplaire.* 'Mrs. Dupont is an exemplary engineer.'
	une ingénieure [32 – 51,6%] *un ingénieur* (masculine) [27 – 43,5%] *une ingénieur* [4 – 6,5%]
marin 'marine'	*Madame Dupont est … … exemplaire.* 'Mrs Dupont is an exemplary marine.'
	un marin (masculine) [48 – 77,4%] *une marine* [6 – 9,7%] *une marin* [4 – 6,5%] *une femme marin* [3 – 4,8%]
ministre 'minister'	Madame Dupont est … … exemplaire. 'Mrs. Dupont is an exemplary minister.'
	une ministre [53 – 85,5%] *un ministre* (masculine) [12 – 19,4%]
policier 'police officer'	*Madame Dupont est … … … (seul) qui ait réussi à l'examen.* 'Mrs. Dupont is the only police officer who passed the exam.'
	la seule policière [44 – 71,0%] *le seul policier* (masculine) [15 – 24,2%] *la seule femme policier* [2 – 3,2%]
pompier 'firefighter'	*Madame Dupont est … … exemplaire.* 'Mrs. Dupont is an exemplary firefighter.'
	un pompier (masculine) [47 – 75,8%] *une pompière* [9 – 14,5%] *une pompier* [2 – 3,2%] *une femme pompier* [2 – 3,2%]
professeur 'teacher'	*Madame Dupont est … … exemplaire.* 'Mrs. Dupont is an exemplary teacher.'

	un professeur (masculine) [33 – 53,2%] *une professeure* [30 – 48,4%] *une professeur* [4 – 6,5%]
recteur 'rector'	*Madame Séverine est … … exemplaire.* 'Mrs Séverine is an exemplary rector.'
	une rectrices [38 – 61,3%] *un recteur* (masculine) [24 – 38,7%] *une recteure* [5 – 8,1%] *une recteur* [1 – 1,6%]
témoin 'witness'	*Madame Séverine est … … … (seul) à raconter son histoire.* 'Mrs. Séverine is the only witness who talks about her experience.'
	le seul témoin (masculine) [44 – 71,0%] *la seule témoin* [15 – 24,2%] *la seule personne témoin* [1 – 1,6%] *la seule femme témoin* [1 – 1,6%]
sentinelle (feminine noun) 'guard'	*Monsieur Hupot est … … … (seul) qui ait rencontré le Président de la République.* 'Mr. Hupot is the only guard who met the president.'
	la seule sentinelle (feminine) [59 – 95,2%] *le seul sentinelle* [2 – 3,2%] *le seul sentinel* [1 – 1,6%]
victime (feminine noun) 'victim'	*Monsieur Hupot est … … … (seul) qui ait survécu.* 'Mr. Dupot is the only victim who survived.'
	la seule victime (feminine) [62 – 100%]

B. German

Base forms	Answers by participants
Arzt 'doctor'	*Frau Kluge ist … … … (gut).* 'Mrs. Kluge is a good doctor.'
	eine gute Ärztin [72 – 97,3%] *ein guter Arzt* (masculine) [4 – 5,4%]
Feuerwehrmann 'fireman'	*Frau Kluge ist … … … (gut).* 'Mrs. Kluge is a good firefighter.'
	eine gute Feuerwehrfrau [48 – 64,9%] *ein guter Feuerwehrmann* (masculine) [23 – 31,1%] *eine gute Feuerwehrkraft* [1 – 1,4%] *eine gute Rettungskraft* [1 – 1,4%]
Flüchtling 'refugee'	*Frau Kluge ist … … … (ehemalig).* 'Mrs. Kluge is a former refugee.'
	ein ehemaliger Flüchtling (masculine) [66 – 89,2%] *eine ehemalige Geflüchtete* [3 – 4,1%] *eine ehemalige Flüchtling* [1 – 1,4%] *eine ehemalige Flüchtige* [1 – 1,4%] *eine ehemalige Flüchtende* [1 – 1,4%] *eine ehemalige Geflohene* [1 – 1,4%]
Gast 'guest'	*Frau Kluge ist … … … (angenehm).* 'Mrs. Kluge is a pleasant guest.'
	ein angenehmer Gast (masculine) [71 – 95,9%] *eine angenehme Gästin* [2 – 2,7%]
Ingenieur 'engineer'	*Frau Kluge ist … … … (ausgezeichnet).* 'Mrs. Kluge is an extraordinary engineer.'
	eine ausgezeichnete Ingenieurin [67 – 90,5%] *ein ausgezeichneter Ingenieur* (masculine) [6 – 8,1%]
Lehrling 'pupil'	*Maria ist … … … (gut).* 'Maria is a good pupil.'
	ein guter Lehrling (masculine) [67 – 90,5%] *eine gute Auszubildende* [7 – 9,5%] *eine gute Azubine* [2 – 2,7%]
Offizier 'officer'	*Frau Kluge ist … … … (gut).* 'Mrs. Kluge is a good officer.'
	ein guter Offizier (masculine) [37 – 50,0%] *eine gute Offizierin* [36 – 48,6%]
Passagier 'passenger'	*Frau Kluge ist … … … (kritisch).* 'Mrs. Kluge is a critical passenger.'

	ein kritischer Passagier (masculine) [47 – 63,5%] *eine kritische Passagierin* [26 – 35,1%]
Richter 'judge'	*Frau Kluge ist … … … (gut).* 'Mrs. Kluge is a good judge.'
	eine gute Richterin [69 – 93,2%] *ein guter Richter* (masculine) [5 – 6,8%]
Schriftsteller 'writer'	*Frau Kluge ist … … … (gute).* 'Mrs. Kluge is a good writer.'
	eine gute Schriftstellerin [73 – 98,6%]
Staatssekretär 'State Secretary'	*Frau Kluge ist … … … (gut).* 'Mrs. Kluge is a good State Secretary.'
	eine gute Staatssekretärin [62 – 83,8%] *ein guter Staatssekretär* (masculine) [10 – 13,5%]
Vorgesetzte 'superior'	*Frau Kluge ist … … … (ausgezeichnete).* 'Mrs. Kluge is an extraordinary superior.'
	eine ausgezeichnete Vorgesetzte [72 – 97,3%] *ein ausgezeichneter Vorgesetzter* (masculine) [1 – 1,4%]

Summary

Gender mismatches in partitive constructions in French and German

How society shapes language

In this dissertation, I investigate gender agreement in partitive constructions (e.g. *the youngest of the students*), in which a subset is selected from a larger set. These partitives may give rise to a gender mismatch when they involve human referents. Suppose that you want to talk about a new group of female and male students, and say that one of them, Marie, is the most intelligent student. In French, you would typically use the masculine plural form *des nouveaux étudiants* 'of the new students' to denote the mixed group of students. Since Marie is a female, it would make sense to refer to her by means of the feminine superlative *la plus intelligente*, as in (1a):

(1) a. *La plus intelligent-e des nouveau-x étudiant-s*
the.F SUP intelligent-F of.the.PL new.M-PL student.M-PL
est Marie.
is Marie

b. *Le plus intelligent des nouveau-x étudiant-s*
the.M SUP intelligent.M of.the.PL new.M-PL student.M-PL
est Marie.
is Marie
'The most intelligent of the new students is Marie.'

Yet, the use of a feminine superlative in (1a) causes a mismatch between the feminine gender on the superlative and the masculine gender of the plural DP *des nouveaux étudiants*, referring to the group. Alternatively, the superlative could take the masculine form *le plus intelligent* to avoid such a mismatch, as in (1b). However, this implies the use of a masculine form to refer to a female, which may also seem infelicitous.

Usually, the situation with a mismatch in (1a) is referred to by the term *semantic agreement*. The term *grammatical agreement* is used to denote a situation in which formal gender on different elements matches, as in (1b) (cf. Corbett, 1991). Despite the lack of clear rules, native speakers have intuitions

on whether semantic or grammatical agreement should be preferred in partitives that involve human referents.

To the best of my knowledge, agreement in partitives has largely been ignored in the literature, with the exception of a study by Sleeman & Ihsane (2016) on French. This dissertation aims to fill this gap, not only by gaining additional insight on French, but also by extending the investigation to another language: German. German displays a similar competition between grammatical and semantic agreement in partitives as French. The example in (2) illustrates this:

(2) a. *Ein-e* *der* *neu-en* *Student-en* *ist Marie.*
one-F the.GEN.PL new-PL student.M-PL is Marie
b. *Ein-er* *der* *neu-en* *Student-en* *ist Marie.*
one-M the.GEN.PL new-PL student.M-PL is Marie
'One of the new students is Marie.'

In (2a), we find again an instance of semantic agreement, which results in a mismatch between the feminine quantifier *eine* and the masculine plural noun *Studenten*. A mismatch is absent in example (2b), which displays grammatical agreement: both the quantifier *einer* and the plural noun *Studenten* take the masculine form.

The examples in (2) involve so-called *quantified partitives*, in which a quantifier refers to the subset. By contrast, a superlative denotes the subset in the French examples in (1); hence the label *superlative partitives*. These two partitive types exist in French and in German. In this dissertation, I investigate both quantified and superlative partitives because the existing study by Sleeman & Ihsane (2016) suggests that the choice for either grammatical or semantic agreement depends on the type of partitive. Furthermore, agreement may also be influenced by the specific noun involved in a partitive construction, a factor that I take into account as well.

The competition between grammatical and semantic agreement becomes particularly intriguing in light of the ongoing discussions on inclusive language, which resulted from the earlier strive towards feminisation of language. As a consequence, speakers may become increasingly aware of the semantic background of a language's gender system. That is, gender values such as masculine or feminine are no longer seen as arbitrary categories, but directly map onto male and female biological sex. Such changes could influence the underlying agreement system too. I shed more light on this issue by investigating which factors determine the choice for

either grammatical or semantic agreement in partitives. The structure of this dissertation is described in more detail in Chapter 1.

In Chapter 2, I start off by looking at the current situation regarding feminisation and inclusive language for French and German, especially in France and Germany. This provides the societal background to the study of agreement in partitives. First, I discuss the historical development of feminisation and inclusive writing in the two languages. A brief comparison of the situation in both countries indicates that the feminisation of nouns was less controversial for German than for French, at least in France.[1] Consequently, the debate could more quickly shift towards the broader aspect of inclusive writing for German than for French (cf. Hergenhan, 2015). This discrepancy between the two languages might lead us to expect differences in terms of gender agreement too.

Second, I zoom in on the feminisation of profession nouns and investigate their integration in two monolingual dictionaries, the *Petit Robert* for French and the *Duden Universalwörterbuch* for German. For two samples of profession nouns, each carefully composed as to represent the available feminisation strategies in each language, I observe an increase in the number of feminine noun forms present in different editions of both dictionaries. This indicates that dictionaries follow ongoing changes in society. Yet, I also observe differences between French and German, in that the integration of feminine noun forms turns out to have passed faster for German than for French. This corresponds to the slightly different developments of the feminisation debates in France and Germany, as already reported in the first part of the chapter.

In Chapter 3, I investigate gender agreement in partitive constructions in French. First, I discuss the earlier study by Sleeman & Ihsane (2016). Based on a limited number of informants' judgements, Sleeman & Ihsane (2016) observe that semantic agreement is not accepted in quantified partitives. Speakers accept semantic agreement in superlative partitives, but only with class C nouns (e.g. *le/la ministre* 'the.M/.F minister') and to a lesser extent also with class B nouns (e.g. *le directeur – la directrice* 'the.M director.M – the.F director.F'). Semantic agreement is ungrammatical with class D nouns (e.g. *la victime* 'the.F victime.F'). To account for these observations, Sleeman & Ihsane (2016) propose a theoretical analysis of gender agreement in partitives, which attributes the contrast between quantified and superlative partitives to

[1] The situation is slightly different in other francophone regions, such as Québec (cf. Arbour & de Nayves, 2014; de Nayves & Arbour, forthcoming).

a syntactic difference. The noun class differences are explained by assuming that some nouns are unmarked for grammatical gender in a speaker's lexicon, which allows them to be further specified in course of the derivation.

Second, I discuss the results of a grammaticality judgement task with 62 native speakers of French, which I carried out within the present research project to verify Sleeman & Ihsane's (2016) findings on a larger scale. On the one hand, the results confirm Sleeman & Ihsane's (2016) findings, as I observe both a difference between quantified and superlative partitives, as well as between nouns of different noun classes. Grammatical agreement is preferred in quantified partitives, whereas speakers accept semantic agreement in superlative partitives, at least with class C nouns and to a lesser extent also with class B nouns. On the other hand, the results also show considerable variation between participants. Nevertheless, I conclude that Sleeman & Ihsane's (2016) analysis of agreement can capture the findings of my larger-scale study.

In Chapter 4, I turn to agreement in partitives in German, for which this phenomenon has not been investigated yet. Therefore, I base my predictions on the results from French, reported in the previous chapter. To check whether partitive type and noun class influence the acceptability of semantic agreement in German too, I conducted a grammaticality judgement task with 74 native speakers, using the same methodology as for the task on French. The results partly overlap with the findings on French, in that there appears to be a partitive type effect: semantic agreement is judged significantly more acceptable in superlative than in quantified partitives. Yet, speakers of German turn out to prefer semantic over grammatical agreement in both partitive types. When turning to the noun class differences, the results show that semantic agreement is more widely accepted in German than in French, not only with class B (e.g. *der Lehrer – die Lehrerin* 'the.M teacher.M – the.F teacher.F') and class C nouns (e.g. *der/die Studierende* 'the.M/.F student'), but also with part of the class D nouns, the masculine and feminine ones (e.g. *der Flüchtling* 'the.M refugee.M'). Only neuter class D nouns (e.g. *das Kind* 'the.N child.N') show a clear preference for grammatical agreement. Finally, I briefly discuss partitives in relation to other agreement contexts that may show semantic agreement in German, based on what other studies reported (e.g. Audring, 2009; Braun & Haig, 2010; Kraaikamp, 2017).

In Chapter 5, I summarise and compare the observations from the two separate experiments on French and German. This comparison allows me to determine which factors influence the acceptability of semantic agreement in partitives, both from a language internal, as well as from a cross-linguistic

perspective. Despite the apparent differences between French and German, I show that two key factors influence agreement in partitives: (i) partitive type and (ii) noun class. In a next step, I also place the findings in the context of the topic of Chapter 2, feminisation and inclusive language. I briefly discuss the results of two gap filling tasks on the feminisation of profession nouns, which were also a part of the linguistic experiments. Specifically, I investigate whether there is a correlation between the use of feminine noun forms to refer to females and the acceptance of semantic agreement in partitives. For French, I indeed observe an effect: speakers who use more feminine noun forms (e.g. *une professeure* 'a.F teacher.F' instead of *un professeur* 'a.M teacher.M') are also more inclined to accept semantic agreement. For German, I do not find this effect, a contrast that may be related to the fact that the feminisation of nouns appears more common in Germany than in France. The final part of the chapter serves as an introduction to the second part of the dissertation, which focusses on the theoretical analysis of agreement in partitives.

In Chapter 6, I start by diving into the syntactic structure of partitive constructions. Although the syntax of partitives received considerable attention in the literature (for an overview, see, e.g. Sleeman & Kester, 2002; Cardinaletti & Giusti, 2017; Falco & Zamparelli, 2019), most studies focussed on quantified partitives. To the best of my knowledge, superlative partitives have only been addressed in more detail by Sleeman & Ihsane (2016), who developed an analysis of both quantified and superlative partitives. Yet, it is not clear how their analysis could be extended to German, since this language appears to slightly diverge from French with respect to agreement in partitives. Sleeman & Ihsane's (2016) proposal raises some further questions too, especially considering the non-overtness of the subset nominal, for which they adopt the copy theory of movement (cf. Nunes, 2004).

Therefore, I propose a novel analysis, which includes both quantified and superlative partitives. I adopt a derivation that involves a small clause, as proposed by Sleeman & Kester (2002), who build on an analysis of possessive constructions by Hulk & Tellier (2000). I propose that partitive constructions can be seen as nominal predicates, following Den Dikken (2006). Under this analysis, the set and subset are linked by a nominal relator, which spells out as the preposition *de* in French, or realises genitive case marking on the set DP in German. Furthermore, I argue that partitives involve a silent nominal classifier with a *token* interpretation, which denotes an element selected from the larger set. Finally, I account for the differences between quantified and superlative partitives by assuming that both partitive types differ with respect to the upper part of their structure, which selects the small clause. For

quantified partitives, I propose that the structure is rather simple, only involving a quantifier, which denotes a quantity of tokens selected from the set. For superlative partitives, instead, the structure is more complex and involves at least two projections, hosting a superlative adjective and a determiner. This superlative refers to a specific referent, which is also part of the larger set.

In Chapter 7, I return to the issue of gender agreement. I propose that for all nouns, grammatical gender is stored in the lexicon and located on the N-head in syntax (cf. Kramer, 2016). I assume that for animate nouns, the syntax contains an additional feature, labelled *referent feature*, which is located on D.[2] Combined with the proposed syntactic analysis of partitive constructions, I show that this allows me to account for the differences between quantified and superlative partitives. In addition, I demonstrate that the differences between French and German can be attributed to a more general discrepancy in gender agreement between the two languages: plural agreement in German is subject to syncretism and, therefore, does not mark gender differences.

Next to the syntactic explanation that accounts for the partitive type difference, I adopt a lexical explanation for the noun class differences. I propose that nouns for which semantic agreement is accepted are marked with underspecified grammatical gender in a speaker's lexicon. This underspecified gender may either be underspecified masculine or underspecified feminine. Specifically, I assume that for French, grammatical gender is underspecified with class B (the *directeur-directrice*-type*)* and class C nouns (the *ministre*-type), but not with class D nouns (the *victime*-type). For German, instead, I take masculine and feminine grammatical gender to be underspecified, irrespective of noun class. This amounts to saying that grammatical gender is underspecified for class B nouns (the *Lehrer-Lehrerin*-type) as well as for masculine and feminine class D nouns (the *Flüchtling*-type). By contrast, grammatical gender is specified for neuter class D nouns (the *Kind*-type), an assumption that I relate to the special status of neuter gender on animate nouns. Finally, Class C nouns (the *Studierende*-type) are somewhat special in German too; I propose that for these nouns, grammatical gender is unspecified in the lexicon. I motivate the differences in underspecification of grammatical gender in the lexicon between speakers of French and German by taking into account the different situations regarding

[2] Other scholars also proposed that with animate nouns, a special (gender) feature is located on D (e.g. Wechsler & Zlatić, 2003; Steriopolo & Wiltschko, 2010).

inclusive language in France and Germany, described in Chapter 2, as well as the observed influence of noun feminisation on the acceptance of semantic agreement for French, reported in Chapter 5.

In sum, I establish three conditions that mediate the possibility of semantic agreement. First, there should be a silent nominal classifier, which is present in partitives under my analysis. Second, the DP containing the silent classifier should bear a referent feature, which is the case for superlative, but not for quantified partitives. Third, the set noun of the partitive should be marked with underspecified grammatical gender in the lexicon. Crucially, I propose that it is the interplay between these three conditions that regulate the likelihood of semantic agreement, which accounts for the observed variation.

In Chapter 8, I discuss the main findings from a broader perspective. I also provide suggestions for future research. Based on the findings, I hypothesise that the increasing presence of feminine noun forms and inclusive language may lead to a growing awareness of the semantics of the gender system, which, in turn, may influence the acceptance of semantic agreement when human referents are involved. In a next step, I further discuss the two linguistic factors that are shown to influence agreement in partitives, partitive type and noun class, and discuss the crucial role of both syntactic and lexical factors in accounting for the acceptability of semantic agreement. I end by formulating a model of society-driven language change, which shows how social factors, via individual language users, can lead to language change.

In conclusion, this dissertation (i) gives insight into an understudied phenomenon, gender agreement in partitives; (ii) provides a novel syntactic analysis of partitive constructions, including both quantified and superlative ones; (iii) proposes an account that explains the competition between grammatical and semantic agreement in partitives; and (iv) contributes to our understanding of how social factors may influence language and eventually could cause language change.

Samenvatting (in het Nederlands)

Congruentieproblemen in partitiefconstructies in het Frans en het Duits

De invloed van sociale factoren op taal

In dit proefschrift onderzoek ik congruentie in partitiefconstructies in het Frans en het Duits. Partitiefconstructies verwijzen naar een groep, waaruit één of meerdere elementen geselecteerd worden. In *de jongste van de nieuwe studenten* wordt bijvoorbeeld één student, *de jongste* (de subset), uit de groep *nieuwe studenten* (de set) gehaald. Wanneer zulke partitiefconstructies naar personen verwijzen, kunnen deze in sommige talen aanleiding geven tot congruentieproblemen. Stel dat je over een gemengde groep van studentes en studenten praat en wilt zeggen dat een van de studenten, Marie, de intelligentste student van je groep is. In het Frans wordt standaard de mannelijke meervoudsvorm *des nouveaux étudiants* 'van de nieuwe studenten' gebruikt om naar een gemengde groep te verwijzen. Aangezien Marie, de studente die uit de groep gehaald wordt, een vrouw is, lijkt het logisch om hiervoor de vrouwelijke superlatiefvorm *la plus intelligente* te gebruiken, zoals in (1a):

(1) a. *La plus intelligent-e des nouveau-x*
de.F SUP intelligent-F van.de.PL nieuw.M-PL
étudiant-s est Marie.
student.M-PL is Marie

b. *Le plus intelligent des nouveau-x*
de.M SUP intelligent.M van.de.PL nieuw.M-PL
étudiant-s est Marie.
student.M-PL is Marie
'De intelligentste van de nieuwe studenten is Marie.'

Het gebruik van *la plus intelligente* in (1a) zorgt echter voor een mismatch tussen deze vrouwelijke vorm en de mannelijke meervoudsvorm *des nouveaux étudiants*. Een tweede mogelijkheid is om de mannelijke vorm van de superlatief *le plus intelligent* te gebruiken zoals in (1b), in overeenstemming met het grammaticale geslacht van *des nouveaux étudiants*. Hoewel deze optie

een mismatch voorkomt, kan je hier je vraagtekens zetten bij het gebruik van de mannelijke superlatiefvorm om naar een vrouw te verwijzen.

De situatie met een mismatch zoals in (1a), waarbij de vorm van de superlatief wordt bepaald door het biologische geslacht van de referent, wordt meestal met de term *semantische congruentie* aangeduid. De term *grammaticale congruentie* wordt gebruikt wanneer verschillende woorden in de zin dezelfde vorm aannemen qua grammaticaal geslacht, zoals in (1b) (cf. Corbett, 1991). Er bestaan geen duidelijke regels om te kiezen tussen de verschillende mogelijkheden voor congruentie in de partitiefconstructies in (1). Toch lijken moedertaalsprekers van het Frans intuïties te hebben over welke optie ze beter vinden: semantische congruentie (1a) of grammaticale congruentie (1b). Dat wordt in dit proefschrift onderzocht.

Congruentie in partitiefconstructies is tot dusverre nog niet op grote schaal onderzocht. Slechts één studie, Sleeman & Ihsane (2016), heeft congruentie in partitieven onderzocht voor het Frans. Hoewel de studie van Sleeman & Ihsane (2016) interessante resultaten laat zien, zijn deze slechts gebaseerd op de intuïties van een beperkte groep informanten. Dit proefschrift wil deze lacune verder opvullen door niet alleen meer inzicht te krijgen in congruentie in partitieven voor het Frans, maar ook voor een andere taal, het Duits. In het Duits kunnen partitiefconstructies voor vergelijkbare congruentieproblemen zorgen als in het Frans. De Duitse voorbeelden in (2) illustreren dit:

(2) a. *Ein-e* *der* *neu-en* *Student-en* *ist Marie.*
een-F de.GEN.PL nieuw-PL student.M-PL is Marie
b. *Ein-er* *der* *neu-en* *Student-en* *ist Marie.*
een-M de.GEN.PL nieuw-PL student.M-PL is Marie
'Een van de nieuwe studenten is Marie.'

Voorbeeld (2a) laat wederom een geval van semantische congruentie zien (net als 1a), waarbij een mismatch optreedt tussen het vrouwelijke telwoord *eine* en het mannelijke zelfstandig naamwoord (substantief) *Studenten*. In voorbeeld (2b) is er grammaticale congruentie tussen het mannelijke telwoord *einer* en het mannelijke substantief *Studenten*, waardoor er geen mismatch is, maar waardoor wel een mannelijk telwoord verwijst naar een vrouw, Marie.

In de Duitse voorbeelden in (2) zien we een zogeheten *quantified partitive* (telwoordpartitief), een partitiefconstructie waarin een telwoord naar de subset verwijst. In de Franse voorbeelden in (1) verwijst echter een superlatief naar de subset. Daarom wordt dit type *superlative partitive* (superlatiefpartitief) genoemd. Deze twee types partitieven bestaan zowel in

het Frans als in het Duits. In dit proefschrift onderzoek ik zowel telwoord- als superlatiefpartitieven, omdat het eerdere onderzoek van Sleeman & Ihsane (2016) heeft aangetoond dat er verschillen tussen beide types partitieven zijn voor wat betreft de acceptatie van mismatches in het Frans. Daarnaast lijkt congruentie ook beïnvloed te worden door het specifieke substantief dat in de partitiefconstructie aanwezig is.

De keuze voor hetzij grammaticale, hetzij semantische congruentie, die kan leiden tot mismatches in partitiefconstructies, is vooral interessant in het licht van de huidige discussies omtrent genderneutraal taalgebruik, die voortborduren op het streven naar gelijke representatie van mannen en vrouwen in taal. Deze ontwikkelingen kunnen invloed hebben op de manier waarop sprekers naar het congruentiesysteem van hun taal kijken en kunnen er bijvoorbeeld voor zorgen dat het verschil tussen mannelijk en vrouwelijk woordgeslacht niet langer als een arbitrair, betekenisloos classificatiesysteem wordt gezien, maar juist direct in verband gebracht wordt met biologisch geslacht. Met andere woorden: mannelijke woorden verwijzen naar mannen, vrouwelijke woorden naar vrouwen. Het is mogelijk dat zulke veranderingen uiteindelijk ook doorwerken in het congruentiesysteem van een taal. Daarom onderzoek ik welke factoren de keuze voor grammaticale of semantische congruentie in partitiefconstructies beïnvloeden. Hoofdstuk 1 geeft een gedetailleerd overzicht van de structuur van dit proefschrift.

In hoofdstuk 2 bestudeer ik de situatie omtrent het gebruik van vrouwelijke beroepsnamen (feminisatie) en genderneutraal taalgebruik in het Frans en het Duits, voornamelijk voor Frankrijk en Duitsland. Dit geeft meer inzicht in de maatschappelijke achtergrond en de interactie tussen sociale factoren en taal. Eerst beschrijf ik de historische ontwikkeling van feminisatie en genderneutraal taalgebruik in beide talen. Het vergelijken van de situatie in beide landen laat zien dat de feminisatie van beroepsnamen minder controversieel was voor het Duits dan voor het Frans, specifiek in Frankrijk.[1] Het is dan ook niet verwonderlijk dat de discussie voor het Duits sneller naar het algemenere thema van genderneutraal taalgebruik kon verschuiven dan voor het Frans (cf. Hergenhan, 2015). Dit verschil tussen beide talen zou ook kunnen leiden tot verschillen op het gebied van congruentie.

In het tweede deel van het hoofdstuk onderzoek ik de feminisatie van beroepsnamen en specifiek de integratie van deze vormen in ééntalige woordenboeken van het Frans en het Duits. Voor beide talen heb ik vooraf een

[1] In andere Franssprekende gebieden is de situatie gedeeltelijk verschillend. Zo is bijvoorbeeld Québec in Canada over het algemeen vooruitstrevender in feminisatie en genderneutraal taalgebruik (cf. Arbour & de Nayves, 2014).

lijst te onderzoeken beroepsnamen samengesteld, die substantieven van verschillende morfologische subtypes omvat, met elk hun eigen feminisatiestrategie. Vervolgens kijk ik of de vrouwelijke vormen van deze beroepsnamen aanwezig zijn in verschillende uitgaves van de laatste 40 à 50 jaar van de Franse *Petit Robert* en het Duitse *Duden Universalwörterbuch*. Voor zowel het Frans als het Duits zien we dat het aantal vrouwelijke vormen van beroepsnamen toeneemt, wat laat zien dat woordenboeken veranderingen in de maatschappij volgen. Bij nadere bestudering blijken er echter ook verschillen tussen het Frans en het Duits te zijn. De integratie van vrouwelijke beroepsnamen in woordenboeken is sneller gegaan voor het Duits dan voor het Frans, hetgeen ook overeenkomt met het verloop van de discussies omtrent feminisatie in Frankrijk en Duitsland, zoals omschreven in het eerste deel van het hoofdstuk. Ook hier lijkt Frankrijk achter te lopen op Duitsland.

In hoofdstuk 3 bestudeer ik congruentie in partitieven in het Frans. Eerst introduceer ik de belangrijkste resultaten en de theoretische analyse van de eerdere studie van Sleeman & Ihsane (2016). In het tweede deel onderzoek ik door middel van een grammaticaliteitstaak of sprekers van het Frans inderdaad mismatches accepteren in partitiefconstructies en zo ja, welke factoren deze acceptatie beïnvloeden. De resultaten laten zien dat de acceptatie van mismatches mede bepaald wordt door twee factoren, het type partitiefconstructie en het type substantief, hetgeen grotendeels overeenkomt met de initiële resultaten van Sleeman & Ihsane's studie. Sprekers van het Frans accepteren geen mismatches in telwoordpartitieven (*een van de studenten*). In superlatiefpartitieven (*de jongste van de studenten*) worden mismatches door de meeste sprekers geaccepteerd, behalve wanneer de constructie een woord bevat dat uitsluitend een mannelijke of een vrouwelijke vorm heeft, zoals het vrouwelijke woord *victime* 'slachtoffer'. Met dit soort woorden wordt een mismatch niet geaccepteerd.

In hoofdstuk 4 onderzoek ik vervolgens congruentie in partitieven in het Duits. Verschillende studies hebben al naar het verschijnsel van semantische congruentie in het Duits gekeken (cf. Braun & Haig, 2010; Kraaikamp, 2017; de Vogelaer et al., 2020). Deze studies laten zien dat de mogelijkheden voor semantische congruentie afhangen van verschillende factoren, waaronder de specifieke syntactische context waarin congruentie plaatsvindt. Tot nog toe heeft geen enkele studie aandacht geschonken aan mismatches in partitieven. Door middel van een grammaticaliteitstaak met moedertaalsprekers van het Duits, op dezelfde manier opgezet als de taak voor het Frans, probeer ik hierin meer inzicht te krijgen. Sprekers van het Duits accepteren mismatches in zowel telwoord- (*een van de studenten*) als

superlatiefpartitieven (*de jongste van de kinderen*), hoewel de acceptatie van mismatches sterker is voor het laatste type. Daarnaast zien we voor het Duits een verschil tussen types substantieven, waarbij, anders dan voor het Frans, er vooral een verschil blijkt te zijn tussen de mannelijke en vrouwelijke woorden enerzijds – bijvoorbeeld *Lehrer* 'leraar' en *Lehrerin* 'lerares', waarmee een mismatch geaccepteerd wordt, onafhankelijk van het feit of deze woorden alleen een mannelijke of een vrouwelijke vorm hebben, of beiden – en anderzijds onzijdige woorden, zoals *Opfer* 'slachtoffer'. Voor onzijdige woorden accepteren sprekers van het Duits geen mismatch.

In hoofdstuk 5 vat ik de belangrijkste resultaten van de beide grammaticaliteitstaken samen en vergelijk ik het Frans met het Duits. Het doel van deze vergelijking is om vast te stellen welke factoren congruentie in partitieven vanuit taalvergelijkend perspectief beïnvloeden. Ondanks het feit dat Frans en Duits in eerste instantie gedeeltelijk lijken te verschillen, laat ik zien dat bij nadere beschouwing voor beide talen twee factoren van invloed zijn op de acceptatie van mismatches: (i) het type partitiefconstructie en (ii) het type substantief. Vervolgens bekijk ik de resultaten vanuit het oogpunt van feminisatie en genderneutraal taalgebruik, zoals beschreven in hoofdstuk 2. Ik bespreek kort de resultaten van twee invultaken over de feminisatie van beroepsnamen, die ook deel uitmaakten van de uitgevoerde taalkundige experimenten. Hierbij onderzoek ik of er een verband is tussen het gebruik van vrouwelijke vormen van beroepsnamen en de acceptatie van mismatches in partitiefconstructies. Voor het Frans lijkt er inderdaad een verband te zijn, aangezien sprekers die meer vrouwelijke vormen van beroepsnamen gebruiken (bijvoorbeeld *une professeure* 'een.F leraar.F' in plaats van *un professeur* 'een.M leraar.M') ook eerder mismatches in partitieven accepteren dan sprekers die minder vrouwelijke vormen gebruiken. Voor het Duits daarentegen lijkt er geen verband tussen het gebruik van vrouwelijke vormen van beroepsnamen en de acceptatie van mismatches in partitieven te zijn. Dit verschil lijkt voort te komen uit het feit dat de feminisatie van beroepsnamen al sneller wijdverbreid was in het Duits dan in het Frans. Het laatste deel van het hoofdstuk dient ook als inleiding voor het tweede deel van het proefschrift, waarin ik mij richt op de theoretisch analyse van congruentie in partitiefconstructies.

Hoofdstuk 6 behandelt de syntactische structuur van partitiefconstructies. De structuur van partitieven is al in verschillende studies besproken (zie voor een overzicht bijvoorbeeld Sleeman & Kester, 2002; Cardinaletti & Giusti, 2017; Falco & Zamparelli, 2019), maar deze studies richtten zich vrijwel exclusief op telwoordpartitieven. Voor zover ik weet is

de structuur van superlatiefpartitieven uitsluitend besproken door Sleeman & Ihsane (2016), die een gecombineerde analyse voor beide partitieftypes voorstellen. Het is echter niet duidelijk of de syntactische analyse van Sleeman & Ihsane (2016) ook voor het Duits gebruikt kan worden, aangezien we gezien hebben dat het Duits gedeeltelijk verschilt van het Frans voor wat betreft de acceptatie van mismatches in partitiefconstructies. Daarnaast roept de theoretische analyse van Sleeman & Ihsane (2016) nog andere vragen op, vooral met betrekking tot het gebruik van de zogeheten *copy theory of movement* (cf. Nunes, 2004).

Om deze problemen te omzeilen stel ik een nieuwe syntactische analyse voor, die ook zowel telwoord- als superlatiefpartitieven omvat. Mijn analyse is gebaseerd op een eerdere analyse van partitiefconstructies door Sleeman & Kester (2002), die weer voortbouwt op een analyse van possessiefconstructies (bijvoorbeeld *le livre de Jean* 'het boek van Jan') van Hulk & Tellier (2000). Centraal in mijn analyse staat een zogeheten *small clause*, waarbij ik aanneem dat de beide delen van een partitiefconstructies (respectievelijk verwijzend naar de set en de subset) onderdeel zijn van een nominale predicatieve constructie. Voortbordurend op Den Dikken (2006) neem ik aan dat de beide delen van een partitief door middel van een speciale koppelaar, een *linker*, verbonden worden. Deze linker wordt of direct zichtbaar in de vorm van het voorzetsel *de* in het Frans, of zorgt voor genitieve naamvalmarkering in het Duits op de nominale constituent die naar de set verwijst. Daarnaast stel ik dat partitiefconstructies een *silent nominal classifier* bevatten, een onzichtbare classificeerder die verwijst naar een subset van de grotere set.

In principe gebruik ik dezelfde basisanalyse voor zowel telwoord- als superlatiefpartitieven. De verschillen tussen beide types partitieven komen voort uit een syntactisch onderscheid in het bovenste deel van de hiërarchische structuur van de twee types partitieven, het deel dat de small clause selecteert. Bij telwoordpartitieven bestaat het bovenste deel van de structuur uit slechts één projectie, een QP met als hoofd het telwoord, dat het aantal elementen aangeeft dat geselecteerd wordt uit de set. Superlatiefpartitieven hebben een wat uitgebreidere structuur, die bestaat uit tenminste twee projecties, één voor het superlatieve bijvoeglijk naamwoord en één voor het bepaald lidwoord. De superlatief verwijst naar een specifiek individu (persoon of object) dat deel uitmaakt van een set.

Hoofdstuk 7 gaat verder vanuit de syntactische structuur van hoofdstuk 6 en verbindt deze met de observaties omtrent congruentie. Ik neem aan dat voor alle substantieven grammaticaal geslacht gemarkeerd wordt in het lexicon en in de syntaxis als kenmerk (*feature*) gerealiseerd wordt op het N-

hoofd (cf. Kramer, 2016). Daarnaast stel ik dat er bij substantieven die naar mensen verwijzen een extra feature aanwezig is in de syntactische structuur. Dit feature noem ik het *referent feature*, dat ik lokaliseer op het D-hoofd.[2] Vervolgens laat ik zien dat met behulp van deze beide aannames, samen met de door mij voorgestelde syntactische analyse van partitiefconstructies, de congruentieverschillen tussen telwoord- en superlatiefpartitieven verklaard kunnen worden. De observatie dat een mismatch in telwoordpartitieven wel lijkt te worden geaccepteerd in het Duits, maar niet in het Frans, voer ik terug op een veel algemener verschil tussen beide talen: In het Duits wordt congruentie met verschillende woordgeslachten in het meervoud niet morfologisch gemarkeerd, wat ervoor zou kunnen zorgen dat een mismatch minder weerstand oproept in het Duits.

Naast deze syntactische verklaring voor het verschil tussen telwoord- en superlatiefpartitieven stel ik een lexicale verklaring voor de verschillen tussen substantieven voor. Ik neem aan dat er een verschil is in de lexicale specificatie van grammaticaal geslacht. Grammaticaal geslacht is op een bepaalde manier minder gespecificeerd in het lexicon voor substantieven waarvoor sprekers een mismatch accepteren dan voor substantieven die geen mismatch toestaan. Als grammaticaal geslacht minder gespecificeerd is, is het later nog mogelijk om het geslacht verder te specificeren via semantische congruentie. Specifiek veronderstel ik dat voor het Duits grammaticaal geslacht vrijwel altijd minder gespecificeerd is in het lexicon, behalve voor onzijdige substantieven, zoals *Opfer* ‘slachtoffer’. Voor het Frans ga ik ervan uit dat grammaticaal geslacht in principe alleen minder gespecificeerd is in het lexicon voor substantieven die zowel een mannelijke als een vrouwelijke vorm hebben (bijv. *directeur* – *directrice* ‘directeur.M/.F’), maar niet voor substantieven die net zoals vrouwelijk *victime* ‘slachtoffer’ maar één geslacht hebben. Ik verklaar deze verschillen tussen het Frans en het Duits aan de hand van de verschillende situaties met betrekking tot gender neutraal taalgebruik in Frankrijk en Duitsland, zoals in hoofdstuk 2 beschreven, en de mogelijke invloed van de feminisatie van beroepsnamen op de acceptatie van mismatches in partitieven, zoals we in hoofdstuk 5 hebben gezien.

Samenvattend stel ik dat drie condities de acceptatie van een mismatch reguleren. Ten eerste moet er in de constructie een lege nominale classificeerder aanwezig zijn, zoals ik heb voorgesteld voor partitiefconstructies. Ten tweede moet de constructie met de nominale

[2] De aanwezigheid van een speciaal feature op het D-hoofd voor substantieven die verwijzen naar levende wezens wordt ook in andere studies voorgesteld (bijv. Wechsler & Zlatić, 2003; Steriopolo & Wiltschko, 2010).

classificeerder een referent feature bevatten, wat het geval is voor superlatiefpartitieven, maar niet voor telwoordpartitieven. Ten derde moet voor het substantief dat naar de groep verwijst het grammaticaal geslacht in het lexicon minder gespecificeerd zijn, wat latere specificatie via semantische congruentie mogelijk maakt. Een belangrijk aspect van mijn analyse is dat de mogelijkheden voor een mismatch afhangen van het samenspel van deze drie condities, hetgeen verklaart waarom we variatie in de resultaten aantreffen.

In hoofdstuk 8 bespreek ik de belangrijkste resultaten in een breder kader en geef ik ook suggesties voor toekomstig onderzoek. Ik veronderstel dat het groeiende gebruik van vrouwelijke vormen van beroepsnamen en genderneutraal taalgebruik kan leiden tot een groter besef van de semantische connotatie van het congruentiesysteem van een taal. Dit kan vervolgens invloed hebben op de acceptatie van semantische congruentie wanneer er naar mensen verwezen wordt. Vervolgens keer ik terug naar de twee belangrijkste talige factoren die congruentie in partitiefconstructies blijken te beïnvloeden, het type partitiefconstructie en het type substantief. Zoals ik heb laten zien, zijn zowel syntactische als lexicale factoren van belang om de verschillen in acceptatie van semantische congruentie te kunnen verklaren. Aan het einde van het hoofdstuk formuleer ik een model voor taalverandering vanuit de maatschappij. Dit model laat zien dat sociale factoren, via individuele taalgebruikers, uiteindelijk kunnen leiden tot taalverandering.

Dit proefschrift draagt op verschillende manieren bij aan onze kennis over de relatie tussen taal en gender. (i) Het biedt inzicht in congruentie in partitiefconstructies, een fenomeen dat voorheen vrijwel niet onderzocht is. (ii) Het stelt een nieuwe syntactische benadering voor partitiefconstructies voor, voor zowel telwoord- als superlatiefpartitieven. (iii) Het omvat een verklaring voor de keuze voor hetzij grammaticale, hetzij semantische congruentie in partitiefconstructies. (iv) Het draagt bij aan ons begrip van de invloed van sociale factoren op taal en de manier waarop deze zouden kunnen leiden tot taalverandering.

Curriculum vitae

Thom Westveer was born on the 15th of January 1992 in the district of Oostburg (actually, in the small costal village of Nieuwvliet-Bad). In 2010, he completed the VWO at the Zwin College in Oostburg and moved to Amsterdam to start with the bachelor's programme *Franse taal & cultuur* at the Universiteit van Amsterdam. In the next year, he also enrolled in the bachelor's programme *Duitse taal & cultuur* at the same university. After graduation, he continued with master's programmes in French linguistics, German literature, as well as the research master in Linguistics, from which he consecutively graduated between 2014 and 2016.

In November 2016, Thom started as external PhD candidate at the Universiteit van Amsterdam with a project entitled *How society shapes language: feminisation and gender mismatches in French and German*, under the supervision of Enoch Aboh and Petra Sleeman. This dissertation is the result of Thom's PhD project. He presented his work at several national and international conferences and workshops. In 2019, he stayed at the Université de Genève for a month and a half. Next to his PhD, he taught several courses in (French) linguistics and French language proficiency at the Universiteit van Amsterdam, the Universiteit Leiden, and the Hogeschool van Amsterdam.