

# Motivating grammatical and conceptual gender agreement in German

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## 1. Introduction

In the early days of Cognitive Linguistics Ronald Langacker (1991: 290) argued that the dogma of the autonomy of (formal) grammar is founded on a *type/predictability fallacy* that confuses the issues of “what KINDS of linguistic units there are” and “the PREDICTABILITY of their behavior”. Full predictability of grammatical structure is obviously not possible; but, in line with Langacker, we contend that much of grammar and “deviation” from grammar is conceptually motivated (see Radden and Panther 2004 for some discussion of the notion of motivation). A grammatical phenomenon that illustrates the age-old controversy over the conceptual motivation of grammar in an exemplary fashion is the category of gender. We touch only briefly on the problem of whether grammatical gender *per se* is a motivated category. Our main focus here is *gender agreement*, in particular, the question as to the circumstances under which the gender of the *target* of an agreement relation is conceptually motivated. Given that in German grammatical gender agreement often competes with conceptual gender agreement, and that the choice of one of the agreement patterns hinges on a variety of complex morphosyntactic, conceptual, and discourse-pragmatic factors, some of our explanations will, by necessity, be rather tentative.

The overall organization of this chapter is as follows: In Section 2, we provide some evidence that gender assignment in the German lexicon is, to a considerable extent, governed by non-arbitrary principles. In Section 3 we discuss gender agreement, concentrating on a group of nouns that denote female humans, such as *Mädchen* ‘girl’ and *Weib* ‘woman’, but are grammatically NEUTER. Such nouns, at first sight, seem to defy the claim that grammatical gender is motivated. However, motivation sneaks in through the back door, because these nouns, under certain circumstances, exhibit agreement patterns that are conceptually based. We propose a hierarchy

that relies on an extension of the propositional act categories developed by Searle (1969) and extended by Croft (1990) in the frameworks of speech act theory and linguistic typology, respectively. We suggest that one of the crucial factors influencing gender agreement in German is the *pragmatic function* of the agreement target. The pragmatic functions we suggest are *specifying* (grounding), *modifying*, *predicating*, and *referent-tracking*. Section 4 considers formal factors such as linear distance between controller and target and their impact on agreement. In Section 5 we briefly discuss discourse pragmatic factors that presumably exert some influence on gender agreement. Section 6 summarizes the results and formulates some conclusions.

## 2. Grammatical gender: A motivated category

A fairly widespread view among autonomist grammarians is that gender, and in particular, gender in German, is mostly a purely grammatical category, not motivated in any way by conceptual factors. Among the few nouns whose grammatical gender is acknowledged as being determined by the feature SEX (or NATURAL GENDER) are lexemes such as *Mann* 'man' (MASC), *Frau* 'woman' (FEM), *Tante* 'aunt' (FEM), *Onkel* 'uncle' (MASC), *Stier* 'bull' (MASC), *Kuh* 'cow' (FEM), etc. Apart from such rare cases, grammatical gender in German is considered by many to be a totally arbitrary category.

Köpcke and Zubin (e.g. 1996) have shown, however, that much of the German grammatical gender system is conceptually motivated in that certain semantic fields tend to be marked by a specific gender. Here are a few examples that illustrate the point that gender in German is, at least partially, motivated by conceptual factors:

- *Fruit*: mostly FEMININE: *Orange*, *Birne* 'pear', *Kirsche* 'cherry', *Erdbeere* 'strawberry', *Mango*, *Papaya*, *Melone*, *Kiwi*, etc. (exception: the very frequent noun *Apfel* (MASC)).
- *Beers*: NEUTER (including brand names): *Alt*, *Dortmunder*, *Kölsch*, *Märzen*, *Radeberger*, *Weizen*, *Bit*, *König* (commercial: "das König der Biere"), *Warsteiner*, *Pils*, *Löwenbräu*, *Jever*, *Holsten*, *Spaten*, etc.
- *Wines*: MASCULINE: *Riesling*, *Elbling*, *Bordeaux*, *Chardonnay*, *Müller-Thurgau*, *Burgunder*, *Dornfelder*, *Gewürztraminer*, *Blaifränkischer*,

- Sylvaner, Sauvignon, Muskateller, Sekt* ('sparkling wine'), *Champagner, Crémant, Bocksbeutel*, etc.
- **Soft drinks** (including brand names): FEMININE: *Brause, Limonade, Bionade, Cola, Afri, Fanta, Pepsi, Sprite*, etc.<sup>1</sup>
  - **Automobiles**: MASCULINE: *Rolls Royce, Mercedes, BMW, Honda, Toyota, VW, Rover, Mini Austin, Fiat, Ford; Corolla, Siesta, Tuareg, 300 SL*, etc. .
  - **Motorcycles**: FEMININE: *Harley Davidson, BMW, Honda, Kawasaki, Suzuki*, etc.

Especially interesting is a subsystem with nouns ending in the suffix *-mut* whose grammatical gender (MASC vs. FEM) seems to be motivated by the features INTROVERTED and EXTROVERTED, respectively (Zubin and Köpcke 1984):

- "Extroverted": MASCULINE: *Mut* 'courage', *Hochmut* 'arrogance', *Unmut* 'displeasure, resentment', *Wankelmüt* 'vacillation', *Wagemüt* 'audacity'.
- "Introverted": FEMININE: *Wehmut* 'nostalgia', *Schwermut* 'melancholy', *Anmut*, *Sanftmut* 'gentleness', *Demüt* 'humility', *Langmut* 'forbearance'.

However, not every noun in the German lexicon is conceptually motivated. In addition to conceptual motivation one finds *morphological* and *phonological* motivation.<sup>2</sup> Examples of morphological motivation are nouns with the diminutive suffixes *-chen*, *-lein*, which are NEUTER (e.g. *Mädchen* 'girl', *Fräulein*, *Mäuschen* [diminutive form of *Maus* 'mouse']); nouns with the nominalizing suffixes *-ung*, *-heit/-keit*, which are FEMININE (e.g. *Schöpfung* 'creation', *Achtung* 'respect'; *Verschiedenheit* 'difference, dissimilarity', *Einheit* 'unit', *Eitelkeit* 'vanity'). Phonological motivation of grammatical gender in German is exemplified by words beginning with /kn-/, which are mostly MASCULINE, such as *Knall* 'bang' *Knick* 'sharp bend, hedge', *Knast* 'jail', *Knauf* 'knob', *Knopf* 'button', *Knilch* 'bastard', *Knatsch* 'trouble', *Knust* 'crust' (exception: *Knie* 'knee' (NEUTER)). Monosyllabic words in /-u:r/ or /-y:r/ are FEMININE: *Uhr* 'watch, clock', *Ruhr* 'dysentery', *Kur* 'cure', *Kür* 'free program', *Tür* 'door', *Schur* 'shearing', *Tour* 'tour, trip'.

### 3. A pragmatically based gender agreement hierarchy

Since *conceptual* motivation is not the only source of gender assignment to German nouns and since some of the regularities found by researchers such as Köpcke and Zubin (2003, in press) are tendencies rather than rules, it is not too surprising to find cases in which the grammatical gender of a noun is in potential conflict with its conceptual gender. A non-exhaustive list of such nouns whose grammatical gender clashes with the natural gender of their referent is given below:

- Grammatically NEUTER vs. *conceptually* FEMALE: *Mädchen* ‘girl’, *Fräulein* ‘unmarried woman’, *Weib* (often derogatorily for) ‘woman’, *Frauenzimmer* ‘woman’ (literally ‘women’s room’), *Luder* ‘bitch’, *Sternchen* ‘starlet’, *Pin-up*, *Model*, *Girl*, *Groupie*, *Starlet* (however: *der Star*), *Centerfold*, *Video-Chick*, *Bunny*.
- Grammatically MASCULINE vs. *conceptually* FEMALE: *Vamp*, *Besen* (derogatorily for ‘battleaxe’; literally ‘broom’), *Hausdrachen* (derogatorily ‘dragon’), *Blaustrumpf* ‘bluestocking’.
- Grammatically FEMININE vs. *conceptually* MALE: *Memme* ‘coward’, *Tunte* ‘homosexual man, queen’.<sup>3</sup>

On the morphosyntactic level, the conflict between grammatical gender and natural gender manifests itself in constructions that require agreement between two linguistic elements. Agreement in a broad sense can be viewed as a relation of dependence between two linguistic units, where one unit requires the occurrence of another unit. An often-cited definition of agreement (see e.g. Corbett 2003), which we adopt here, is found in Steele (1978: 610): “Agreement commonly refers to some systematic covariation between a semantic or formal property of one element and a formal property of another.”

We call the linguistic unit (word, morpheme) that determines the agreement properties of the dependent element *controller* and the dependent unit *target*.<sup>4</sup> Steele’s definition explicitly refers to the possibility that agreement may be formal or semantic. We use the terms ‘grammatical’ and ‘conceptual’, respectively, for these two kinds of agreement.

As a first example illustrating the phenomena to be investigated, we quote a text from the German women’s magazine *Brigitte* (cited in Zubin and Köpcke n.d.):

- (1) *Das ehemalige Chanel-Mannequin [NEUT] Inès de la Fressange hat jetzt eine Boutique in Paris eröffnet. [...] Gerade für die Generation der 15- bis 40-Jährigen Französinen ist das ehemalige Top-Model [NEUT] eine Art Referenz- und Identifikationsfigur, weil sie [FEM] selbständig, aktiv, erfolgreich, humorvoll, schlagfertig, elegant und glücklich verheiratet ist. Natürlich kennt man sie [FEM] als Laufsteg-Repräsentantin des Modehauses Chanel. Aber das allein hätte für ihren [FEM] Ruhm nicht genügt. [...] Inès de la Fressange war nicht einfach ein austauschbares Fotomodell [NEUT], sondern eigentlich das erste Mannequin [NEUT] der 80er Jahre, das [NEUT] mit seiner [NEUT] starken Persönlichkeit Karriere machte.* (Brigitte 4/92: 46)
- 'The former Chanel model [NEUT] Inès de la Fressange has now opened a boutique in Paris. [...] Especially for the generation of French women between the ages of 15 and 40 the former top model [NEUT] is a kind of role model because she [FEM] is independent, active, successful, humorous, quick-witted, elegant, and happily married. Of course, she [FEM] is well-known as a catwalk representative of the House of Chanel. This fact alone wouldn't have been sufficient to establish her [FEM] fame [...]. Inès de la Fressange was not simply an exchangeable photo model [NEUT], but the first model [NEUT] who [NEUT], in the 1980s, created a career based on her [NEUT] (lit. its) strong personality.'*

The above passage nicely illustrates the contrast between grammatical gender agreement and natural (conceptual) gender agreement in German. The lexical nouns *(Chanel)-Mannequin*, *Top-Model*, and *Fotomodell* belong to an open class of nouns referring to females that are grammatically neuter (notice that many of them are loanwords). The following points, some of which we discuss in more detail later, are noteworthy:

- (i) The model Inès de la Fressange is anaphorically referred to as *sie* ('she'); there is not a single use of the grammatically "correct" pronoun *es* ('it') in this passage. In fact, although the use of *es* seems in principle possible, in the present context, where the model is described by a number of attributes, including the one that she is "happily married", the use of the neuter anaphoric pronoun *es* would be highly infelicitous.
- (ii) We find both the possessive pronouns *ihr-* [FEM] and *sein-* [NEUT]; the former agreeing in natural gender with its controller, and the latter exhibiting grammatical agreement.

Note that in the above text the author develops a character portrait of Inès de la Fressange as an endearing *female* human being: she is described as an independent, active, successful, humorous, quick-witted, elegant, and happily married woman. These attributes seem to motivate the use of feminine pronouns.

### 3.1. Gender agreement vs. metonymic agreement

Before exploring the issue of conceptual gender agreement in more detail, a brief look at a related phenomenon, i.e. *metonymic* agreement, is in order.<sup>5</sup> To see how metonymic agreement compares to conceptual gender agreement consider first the classified ad (2):

- (2) *Gitarre gesucht, die\* der sich nicht zu schade ist, auch mal den Bass in die Hand zu nehmen.* (example from: Egg 2004: 45)  
 ‘Looking for a **guitar** [i.e. player] **who/\*which** could stand in as bass.’

In (2) the noun *Gitarre* ‘guitar’ metonymically refers to ‘guitar player’. At least in German, the adjacent relative pronoun agrees with the grammatical gender of the metonymic source *Gitarre* rather than with the metonymic target meaning ‘guitar player’. Figure 1 diagrams this configuration.

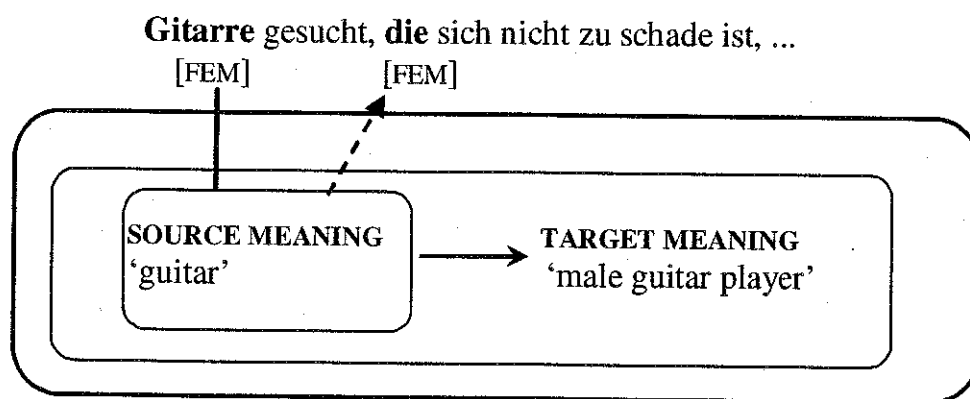


Figure 1. Source induced metonymic agreement.

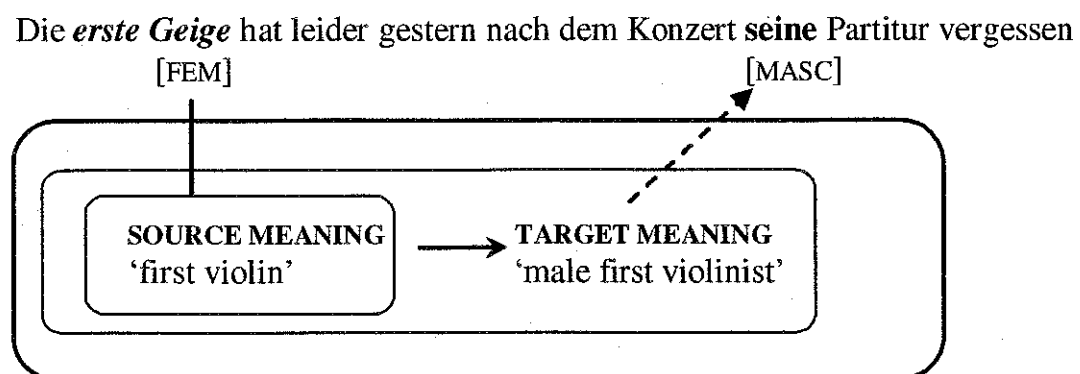
Suppose that it is clear from the context that the bandleader is looking for a male guitarist. The metonymic target meaning of *Gitarre* would thus be 'male guitar player'. It is not acceptable to use the masculine relative pronoun *der* in this case. It would however be possible (and even obligatory) in the subsequent discourse to refer to the intended metonymic referent 'male guitar player' by means of the personal pronoun *er* 'he'. Consider a continuation of (2) along the lines of (3):

- (3) *Gitarre* gesucht, **die** [FEM]/**\*der** [MASC] sich nicht zu schade ist, auch mal den Bass in die Hand zu nehmen. **Er** [MASC] sollte auch Schlagzeug spielen können.  
 'Looking for a **guitar** [i.e. player] **who/\*which** could stand in as bass. **He** should also be able to play the drums.'

Consider next a case where the anaphoric pronoun agrees with the metonymic target of the metonymic vehicle:

- (4) *Die erste Geige* [FEM] hat leider gestern nach dem Konzert **seine** [MASC] Partitur vergessen.  
 'The **first violin** unfortunately forgot **his** score yesterday after the concert.'

In (4) it is obviously the *conceptual gender* of the metonymic target 'male first violinist' that determines the grammatical gender of the possessive pronoun. This case is represented in Figure 2.



'The **first violin** unfortunately forgot **his** score after the concert yesterday'

Figure 2. Target induced metonymic agreement

To conclude, there are some parallelisms between gender agreement and metonymic agreement. As we have seen in examples (3) and (4), metonymic agreement can involve gender: the pronoun agrees with the grammatical gender of the metonymic vehicle (source) or with the (natural) gender of the metonymic target. There is however a *crucial* difference between the metonymic cases and cases of conceptual gender agreement as exemplified in (1). The difference is that conceptual gender agreement does not involve a shift in reference. To see this, consider (5), which is an excerpt from a very popular television broadcast in the 1990s (“Das literarische Quartett”) where new works of fiction were discussed by four journalists and literary critics:

- (5) Darf ich die Geschichte von **dem kleinen Mädchen**, das mit **ihrem** Vater nach Venedig geht, als Beispiel nehmen?  
 ‘May I take as an example the story of **the little girl** who [NEUT] travels to Venice with **her** father?’

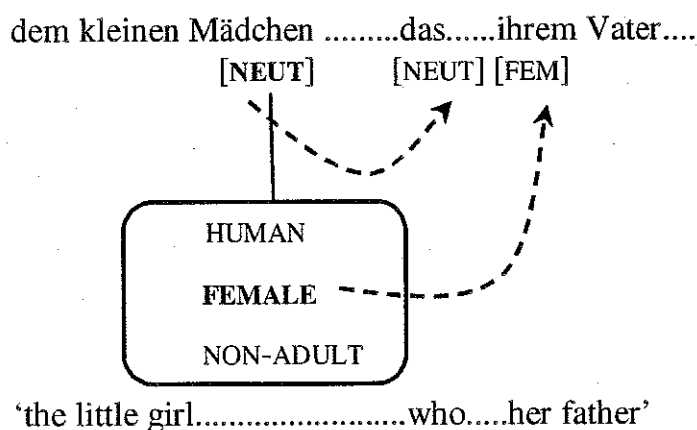


Figure 3. Conceptual gender agreement.

As can be seen from Figure 3, the relation between the controller *Mädchen* and the possessive pronoun *ihrem* is a clear example of conceptual gender agreement. The referent of the noun phrase *dem kleinen Mädchen* is not shifted but remains constant. In fact, the speaker of (5) could also have chosen the neuter possessive pronoun *seinem* (grammatical gender agreement) instead of *ihrem* (conceptual gender agreement). Note that the relative pronoun *das* in (5) agrees grammatically with *Mädchen*. We will discuss the gender agreement behaviour of pronouns in more detail in Section 4.



### 3.2. An Agreement Hierarchy for gender agreement?

The data for German are basically consistent with the Agreement Hierarchy proposed by Corbett in various publications (e.g. 1991, 2003, 2006). For our purposes it is sufficient to present the agreement hierarchy assumed by Corbett (2003: 115), which is represented in Figure 4.

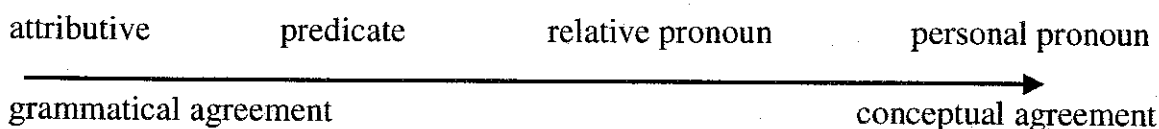


Figure 4. Corbett's gender agreement hierarchy.

This hierarchy is supposed to represent general tendencies in the world's languages to code the target on a conceptual basis: "For any controller that permits alternative agreement forms, as we move rightwards along the Agreement Hierarchy, the likelihood of agreement with greater semantic justification will increase monotonically (that is, with no intervening decrease)" (Corbett 2003: 115).

We claim that Corbett's hierarchy can be reinterpreted as a scale of *pragmatic functions*. The advantage of this reinterpretation is that Corbett's hierarchy, which is purely descriptive, can be simplified and possibly gain in explanatory power. As is well known, philosophers of language such as Searle (1969) distinguish between illocutionary acts and propositional acts, the latter being subdivided into *referring* and *predicating acts*. Croft (1990: 248) provides good reasons to add to these categories the act of *modifying*. We suggest that a fourth category should be acknowledged, viz. the act of *specifying*, which is comparable to what Langacker (2000: 22 et passim) calls *grounding*. This conceptually-pragmatically based agreement hierarchy is represented in Figure 5:

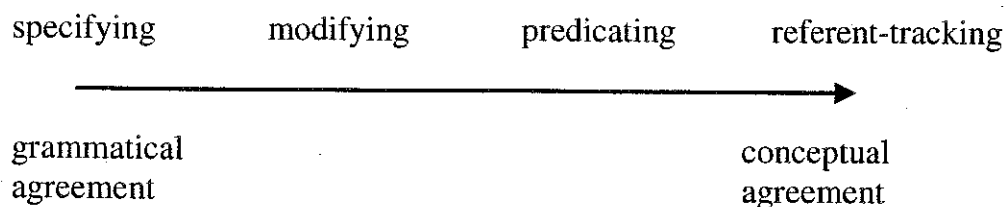


Figure 5. A pragmatically based agreement hierarchy.

Our basic hypothesis is the following: The more *referential* the target, the more likely conceptual agreement will occur.<sup>6</sup> Following Croft (1990), we consider noun phrases to be the vehicles of reference. In this section, we show how the pragmatically-based agreement hierarchy (Figure 5) applies to gender agreement in German.

The act of *specifying* is typically associated with the grammatical category of determiners. We assume that determiners do not have a referring function *per se*, but that they are essential components in the process of referent identification. Determiners are the elements most resistant to conceptual agreement, i.e., the following noun phrases are virtually excluded: \**die* [FEM] *Mädchen* [NEUT] / *Weib* / *Mannequin* / *Model*, etc.

*Modifying* elements (e.g. adjectival, participial modifiers) usually also show grammatical gender agreement:

(6) a. *ein klein-es Mädchen*  
 [NEUT] [NEUT] [NEUT]  
 'a little girl'

b. \**ein klein-e Mädchen*  
 [NEUT][FEM][NEUT]

As far as *predicational* elements are concerned, no specifications of gender occur in the *verbal* component of the predicate – hence the question of gender agreement does not arise. Also, there is no gender agreement between the controller (e.g. subject) and the predicate *adjective* in German since the adjective remains invariant in these cases:

(7) *Die Frau / das Mädchen / der Mann ist intelligent.*  
 'The woman/the girl/the man is intelligent.'

In German, the issue of predicational agreement can only arise with predicate *nominals*. For example, a sentence like

(8) a. *Die Frau*                            *ist*            *Ärzt-in.*  
 The woman.FEM                            is            doctor-FEM  
 'The woman is a female doctor.'

is better than

- b. ?*Die Frau* ist *Arzt*.  
 The woman.FEM is doctor.MASC  
 'The woman is a doctor.'

The higher degree of acceptability of (8a) over (8b) is probably due to a tendency in present-day German to specify the natural gender of human referents, especially when the noun denotes a profession. In fact, it is plausible to assume that the agreement pattern in cases like (8a) is socioculturally motivated – here with the emancipation of women in German society.

When the subject contains a noun whose grammatical gender is in conflict with its conceptual gender, as in

- (9) *Das Mädchen* ist *Studentin* der *Medizin*.  
 The girl.NEUT is student-FEM of.the medicine  
 'The girl is a medical student.'

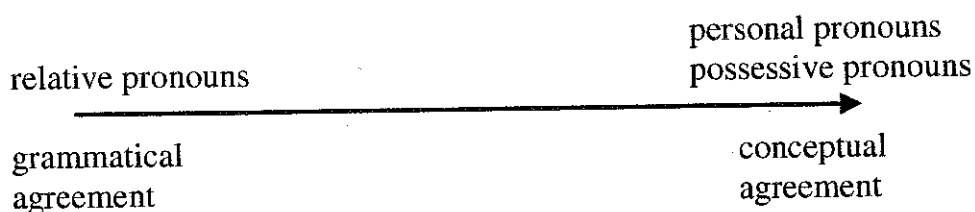
the natural gender FEMALE of the controller *das Mädchen* is most likely to determine the grammatical gender FEMININE of the predicate nominal (conceptual gender agreement). In many cases, the question of agreement between the subject and the predicate nominal does not even arise – e.g. when the predicate nominal is not semantically specified according to gender:

- (10) *Seine Freundin / der Junge / das Mädchen* ist *Lehrling* bei BMW.  
 His girlfriend.FEM / the boy.MASC / the girl.NEUT is apprentice.MASC  
 with BMW

The propositional act category that is most amenable to conceptual gender agreement in comparison to specification, modification and predication is the *referent-tracking* function, which is essential for identifying referents in discourse. The referent-tracking elements we are going to discuss are *relative pronouns*, *possessive pronouns*, and *personal pronouns*. As an example of conceptually-based pronominal coreference, consider:

- (11) *In diese traurige Geschichte von dem kleinen Mädchen [NEUT] und ihrem [FEM] Vater kommt auch noch die Szenerie Venedig, morbid, schwankend. (Literarisches Quartett, 13/05/1993)*  
 'In the sad story about a little girl [NEUT] and her [FEM] father there also appears the scenery of Venice, morbid and vacillating.'

That personal pronouns are referent-tracking devices is obvious and needs no further justification. Possessive pronouns are a hybrid category. On the one hand, they can be likened to determiners, which have a specifying function. On the other hand, they are clearly also referent-tracking devices, as can be seen in utterance (11), where *Mädchen* 'girl' and the dative form *ihrem* 'her' refer to the same person – a case of conceptual gender agreement. We treat relative pronouns also as referent-tracking devices that either grammatically or conceptually agree with their controller, i.e., a noun phrase located in the matrix clause. We will show that personal pronouns and possessives have a stronger tendency to exhibit conceptual agreement patterns than relative pronouns (see *Figure 6*).



*Figure 6.* The referent-tracking hierarchy.

#### 4. Formal constraints on gender agreement

We propose that the pragmatic functions of *specifying*, *modifying*, *predicating*, and *referent-tracking* interact in ways that are poorly understood at present with *formal constraints* of the following kind:

- (12) a. the *linear distance* between the controller and the target;  
 b. the respective *syntactic domains* of controller and target; and  
 c. the *grammatical category* and/or *function* of the target; and its degree of *syntactic embeddedness* relative to the controller.

As pointed out above, the focus of our study is on referent-tracking devices and their agreement behaviour. We deal only briefly with the other pragmatic functions. Suffice it to say that linear distance seems to exert an influence on the agreement patterns of specifiers, modifiers, and predicational elements. In the case of specification and modification, the linear distance between controller and target is usually very small, and grammatical

agreement is therefore the most likely option. With predication the distance between controller and target is typically greater than with specification and modification. One would therefore expect a stronger tendency towards conceptual agreement. As we have seen above, the existence of agreement between the subject and a predicative element is rather restricted in German, and predicative adjectives show no agreement morphology at all in this language. However, agreement between the subject and the predicative adjective is obligatory in Slavic (Wechsler and Zlatic 2003) and Romance languages (Corbett 2003, 2006), and it is in these languages that cases of conceptual agreement can be found, although they are probably not always tolerated by normative grammarians. In what follows we focus mostly on the agreement patterns of targets that have a referent-tracking function.

#### 4.1. The Linear Distance Principle

The Linear Distance Principle can be stated as follows:

- (13) The target is more likely to exhibit conceptual gender agreement as its distance from the controller increases.

Consider the following authentic example that contains two coordinated relative clauses:

- (14) *Und er liebt Henriette Vogel, das Mädchen, das in derselben Nacht wie er geboren wurde und die mit ihm im Bordell aufwächst.* (<[www.kaspar-hauser-buchladen.de](http://www.kaspar-hauser-buchladen.de)>)  
 ‘And he loved Henriette Vogel, the girl [NEUT] who [NEUT] was born the same night as he was and who [FEM] grew up with him in a brothel’

In the first relative clause, in which the controller *das Mädchen* immediately precedes the relative pronoun *das*, grammatical agreement is virtually obligatory. However, since the distance between the controller and the relative pronoun in the second clause has increased, conceptual agreement (*die*) becomes quite natural. In general, as Köpcke and Zubin (in press) have shown, growing distance between controller and target correlates with an increasing tendency to use conceptual agreement (see Figure 7).

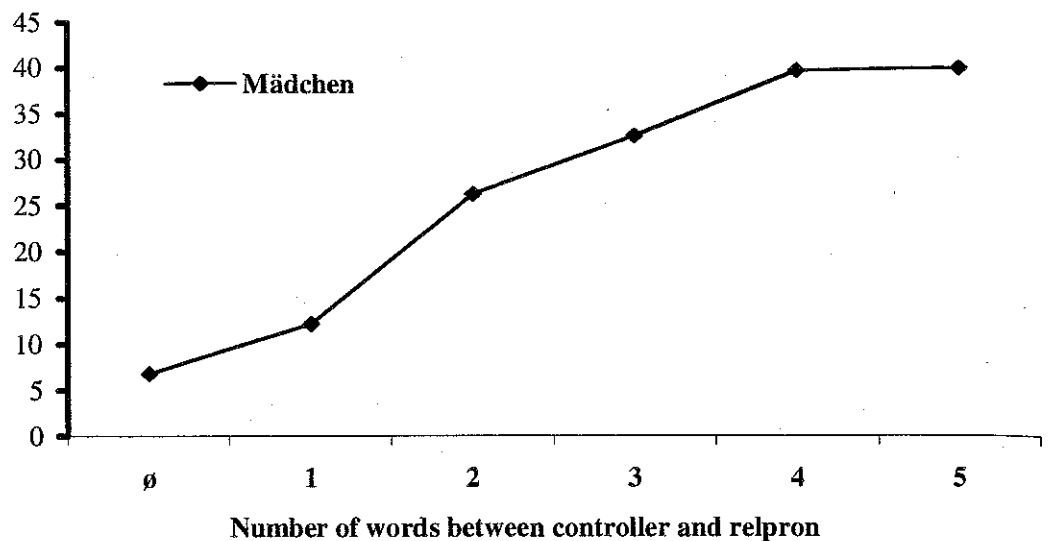


Figure 7. Grammatical vs. conceptual agreement as a function of the distance between controller and target (relative pronoun).

Another set of examples that demonstrates the relevance of the Linear Distance Principle is given in (15a–c), see Zubin and Köpcke (in press):

- (15) a. *Eines/\*eine der Mädchen liegt im Krankenhaus.* (1.4%)  
 ‘One [NEUT]/\*one [FEM] of the girls is in the hospital’  
 b. *Eines/\*eine der beiden Mädchen liegt im Krankenhaus.* (6.8%)  
 ‘One [NEUT]/\*one [FEM] of the two girls is in the hospital.’  
 c. *Eines/eine der beiden schwer verletzten Mädchen liegt im Krankenhaus.* (32.9%)  
 ‘One [NEUT]/\*one [FEM] of the two badly injured girls is in the hospital.’

The percentages in parentheses are based on Google counts of the neuter noun *Mädchen*, conducted by Zubin and Köpcke (in press). Examples (15a–c) strongly suggest that the grammaticality of the feminine form of the quantifier *ein-* is a function of the amount of intervening lexical material between the quantifier and *Mädchen*. In (15a) the lexical gender of *Mädchen* (neuter) strongly induces the occurrence of the neuter quantifier *eines*. The more distant the controlling element is from the target, the more likely speakers will resort to conceptual gender agreement. This can be seen in (15b), and even more so in (15c), where 6,8% and 32,9%, respectively, of the data show the selection of the feminine form.

Let us finally quote an example of the frequently observable conceptual gender agreement patterns involving personal pronouns:

- (16) *Er fasste das Mädchen und zog es mit sich ins Wasser. Erschreckt und vor Angst schrie sie auf und rief um Hilfe.* (<[www.hekaya.de/txt.hx/ahewauwen-und-das-maedchen--maerchen--suedamerika](http://www.hekaya.de/txt.hx/ahewauwen-und-das-maedchen--maerchen--suedamerika)>)  
 'He grabbed the girl [NEUT] and pulled her [NEUT] with him into the water. Terrified and frightened, she [FEM] screamed and shouted for help.'

In conclusion, the choice of the target in sentences (14) and (16) is a function of the distance between controller and target. In general, the greater the linear distance, the more acceptable (and even natural) conceptual gender agreement becomes.

#### 4.2. Syntactic Domain Principle

Linear distance is obviously a very important factor that has an impact on gender agreement. The influence of syntactic factors, in particular what we call the *Syntactic Domain Principle* and the *Principle of Syntactic Embeddedness*, are of a more speculative nature. Nevertheless, there are some indications that syntactic structure plays a role in the selection of agreement markers.

##### *Syntactic Domain Principle*

- (17) If controller and target are dominated by the same phrasal node, grammatical agreement tends to be preferred over conceptual agreement. If however, controller and controllee are dominated by distinct phrasal nodes, conceptual agreement becomes more likely. Conceptual agreement is most likely when controller and controllee occur in different coordinated clauses or even in different sentences of a discourse. This principle competes with the *Linear Distance Principle* and the *Principle of Syntactic Embeddedness*.

Consider the following example:

- (18) *Der junge Mann sah in der Straßenbahn das berühmte Fotomodell [NEUT]. Sie [FEM] lächelte ihn an.*

'On the tram, the young man noticed the famous fashion model [NEUT]. She [FEM] smiled at him.'

In (18) the controller *Fotomodell* immediately precedes the pronominal target *sie*. The Linear Distance Principle would predict grammatical gender agreement in this case, i.e. the neuter pronoun *es*. However, conceptual gender agreement is perfectly natural. We surmise that the occurrence of controller and target in two different syntactic domains, here in two distinct sentences, cancel the effect of the Linear Distance Principle.

The existence of the Syntactic Domain Principle is as yet not sufficiently supported. However, it is clear that linear distance cannot be the only factor determining the choice of the type of agreement. Zubin and Köpcke (n.d.) conducted a corpus study (Google search) with examples where the controller *das Mädchen* is separated by at most one word from its target (pronominal pronoun). They found that, despite the close distance between controller and target, there is a strong preference (almost 90%) for conceptual agreement over grammatical agreement in naturally occurring discourse.

#### 4.3. Principle of Syntactic Embeddedness

In Section 4.1, in connection with sentences like (14), we claimed that relative pronouns that immediately follow their controller usually show grammatical agreement. Increasing distance from the controller enhances the likelihood of conceptual agreement. The Principle of Linear Distance thus predicts that (19) would be preferred to (20). The possessive relative pronoun in (19) is immediately adjacent to the controller *Mädchen*. Therefore one would expect the grammatically agreeing form *dessen* in the relative clause. However, sentences such as (20), which are frequently used in German, even in written discourse, exhibit conceptual agreement, despite the fact that the pronoun immediately follows its controller. This fact cannot be accounted for by the Linear Distance Principle.

- (19) *Das Mädchen* [NEUT], *dessen* [NEUT] *Mutter auf der anderen Stra-  
ßenseite gestanden hatte, war vom Außenspiegel des PKW erfasst  
worden.* (*Tagesspiegel*, 12/09/2000)

'The girl [NEUT] whose [NEUT] mother had been standing on the other side of the street had been hit by the outside mirror of the car.'



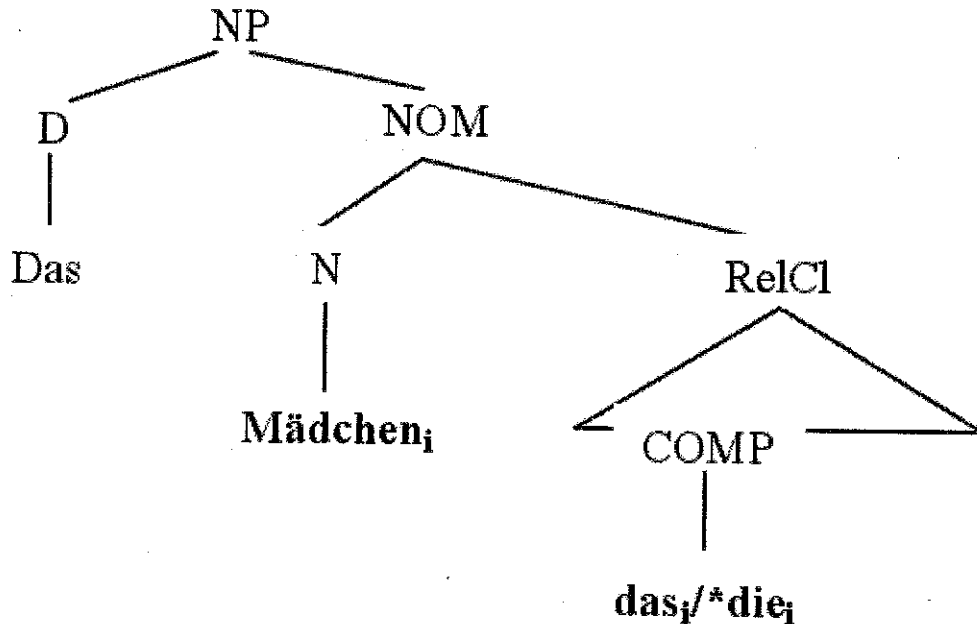
- (20) *Das Mädchen* [NEUT], *deren* [FEM] *Leben nach Auskunft ihrer* [FEM] *Ärzte nur mit einer Operation in Deutschland gerettet werden kann, soll in der Göttinger Uniklinik untersucht und behandelt werden.* (Berliner Zeitung, 03/08/1995)  
 'The girl [NEUT] whose [NEUT] life, according to her doctors, can only be saved only by means of surgery in Germany ...'

We tentatively suggest a second syntactic principle, which we call the *Principle of Syntactic Embeddedness*, to account for cases like (20). It can be formulated as follows:

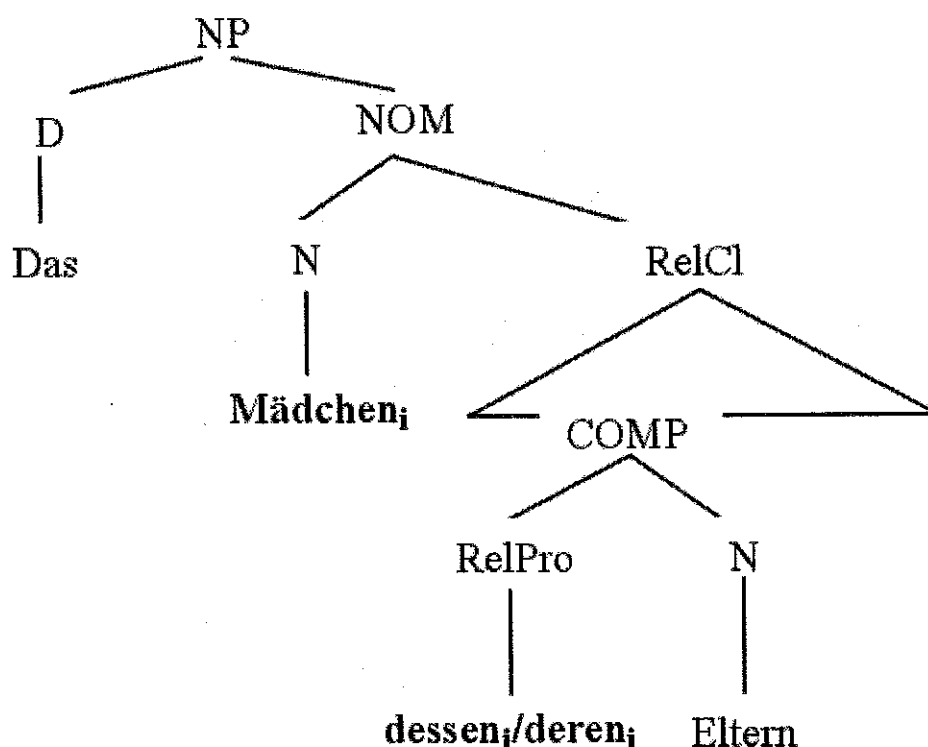
- (21) The more embedded the target is relative to the controller, the more likely conceptual agreement will occur.

The principle can best be illustrated by contrasting the syntactic structures of the minimal pair *das Mädchen, das/\*die...* 'the girl who...' vs. *das Mädchen, dessen/deren...* 'the girl whose...', which are syntactically diagrammed in (22) and (23), respectively.

(22)



(23)



As can be seen from a comparison of the tree structures in (22) and (23), the relative pronouns *dessen/deren* in (22) are more deeply embedded relative to their controller *Mädchen* than *das/\*die* in (21). The embeddedness hypothesis is consistent with quantitative data we have collected from the *Digitales Wörterbuch der Deutschen Sprache* (DWDS), which contains a subcorpus of online texts from the newspaper *Berliner Zeitung*, dating from March 1, 1994 through December 31, 2005. The size of the corpus is 252 million word forms and can be considered to be fairly representative of contemporary written German usage in the print media. Our aim was to find out

- (i) to what extent the frequencies of relative pronouns are dependent on their syntactic function within the relative clause, and
- (ii) more importantly, whether there is any correlation between the syntactic function of the relative pronoun and the type of agreement (grammatical vs. conceptual) between the controller and the pronoun.

As the controller of the relative pronoun we chose the noun *Mädchen* and considered only cases where the pronoun is immediately adjacent to its controller. The results of this investigation are given in Table 1.

Table 1. Distribution of relative pronouns according to syntactic function and agreement patterns.

Relative pronoun	GramAgr	GramAgr	ConcAgr	ConcAgr	TOTAL	TOTAL
	N	%	N	%	N	%
Subj.	654	99.7%	2	0.30%	656	86.7%
Direct Obj.	45	100%	0	0%	45	5.9%
Ind. Obj.	18	100%	0	0%	18	2.5%
Possessive	27	73%	10	27%	37	4.9%
TOTAL	744	98.4%	12	1.6%	756	100%

Table 1 shows that the overwhelming majority of relative pronouns are subjects (86,7%). Direct objects, indirect objects and possessive relative pronouns are rare.<sup>7</sup> What is interesting for our purposes is the distribution of relative pronouns in terms of grammatical and conceptual agreement. The pronouns with the syntactic functions Subject, Direct Object, and Indirect Object hardly ever exhibit conceptual agreement. However, interestingly, in our corpus almost 30% of the tokens of possessive relative pronouns exhibit conceptual agreement with the controller *Mädchen* (i.e. *deren* N instead of *dessen* N). Since the linear distance between controller and target is zero for all relative pronouns, we surmise that the crucial factor determining the propensity of possessive relative pronouns towards conceptual gender agreement might be their higher degree of embeddedness relative to their controller.

## 5. Discourse factors

As can be seen from Table 1 above, only two subject relative pronouns, i.e. a mere 0,3%, show conceptual agreement with the controller. One example is given in (24):

- (24) *Eigentlich war seine Reise nach Amerika auch eine Flucht vor einem Mädchen* [NEUT], *die* [FEM] *ihn zu schnell und zu heftig erobert hat.*

'In reality, his trip to America was an escape from a girl who [FEM] had conquered him too fast and too vehemently.'

(*Berliner Zeitung*, 11/11/2001)

Sentence (24) violates the Linear Distance Principle, which would predict the occurrence of the neuter relative pronoun *das*. Nevertheless, conceptual agreement seems completely natural in this case. None of the principles that we have discussed so far is capable of accounting for this example. We have no definitive solution for data like the above, but we tentatively suggest that the naturalness of *die* in (24) is related to the fact that its controller differs very markedly in its syntactic function (prepositional object) from that of the target (subject). We assume that the cognitive effort needed to process examples of the kind of (24) is greater than in cases that involve identity or, at least, similarity between the syntactic relations coded by the controller and its target. The disparity of the syntactic relations frequently signals a shift in discourse perspective, and it is this shift that might lead language users to a conceptual resolution of the agreement problem.

Furthermore, another factor that we briefly touched upon in connection with our textual example (1) appears to be relevant here. (24) is part of a narrative about a sexual relationship, a context that contributes to a reading of the girl as female, which additionally motivates the selection of the feminine pronoun *die*.

A particularly compelling example of this type of conceptualization of a young female is the following narrative text from Wolfgang Koeppen's novel *Tauben im Gras* (English translation: *Pigeons on the Grass*).

- (25) *Was für ein junger Kerl er ist, was für ein junger Ami, dachte das Fräulein, es ist sein erster Abend in Deutschland, und schon habe ich ihn kennengelernt. Das Fräulein war hübsch. Es hatte dunkle Locken und blanke Zähne. Das Fräulein hatte sich von Richard in der Hauptstraße ansprechen lassen. Es hatte gesehen, daß Richard Lust hatte, ein Mädchen anzusprechen, und daß er zu schüchtern war, es zu tun. Das Fräulein hatte es Richard leichtgemacht.[...] Richard merkte, daß sie es ihm leichtmachte. Sie gefiel ihm, aber er dachte, wenn sie nun krank ist? Man hatte ihn in Amerika gewarnt. [...] Aber er dachte, ich will ja gar nichts von ihr, und vielleicht ist*

*sie auch gar nicht krank. Sie war nicht krank. Sie war auch kein Straßenmädchen. Richard hatte Glück gehabt.*

'What a nice young guy he is, this young American, thought *the young woman* [NEUT]. It's his first evening in Germany, and I have already made his acquaintance. *The young woman* [NEUT] was pretty. *She* [NEUT] had dark curls and pearly teeth. *The young woman* [NEUT] had been chatted up by Richard on the main street. *She* [NEUT] had been aware that Richard was keen on chatting up a girl [NEUT] but he was too shy to do so. [...] Richard noticed that she [FEM] made it easy for him. He liked her [FEM], but was worried that she [FEM] might be not be healthy. He had been warned in America. [...] But he thought that he didn't want anything from her [FEM]; and perhaps she [FEM] didn't have any disease. She [FEM] did not have any disease. She [FEM] was not a prostitute either. Richard was lucky.'

As long as the young woman is described from an auctorial perspective, grammatical agreement, i.e. NEUTER, is chosen by the author. As soon as the perspective of the figure Richard is taken and his erotic attraction towards the young woman is described, the target pronouns switch to conceptual agreement, i.e. FEMININE. In this novel, Koeppen exploits the agreement options available in German in a highly artful way.

## 6. Conclusion

In this chapter we have argued that the agreement patterns of neuter nouns denoting females are sensitive to a hierarchy of pragmatic act functions that we have called specifying (grounding of reference), modifying, predicating, and referent-tracking. Conceptual gender agreement occurs most frequently with referent-tracking targets. We have focused on this last category and have demonstrated that additional formal factors play an important role in the assignment of agreement patterns. We identified factors such as the linear distance between controller and target, their respective syntactic domains, the word class of the target, and the degree of syntactic embeddedness of the target relative to its controller. Finally, quoting a passage from a literary text, we suggested that the agreement pattern is also determined by discourse pragmatic parameters, such as the narrative context and the conceptualization of the female protagonist.

## Notes

1. Hans-Jörg Schmid has pointed out to us that in Southern German the grammatical gender of soft drinks like Cola, Sprite, and Fanta is neuter.
2. Köpcke (1982) investigates the phonological motivation of monosyllabic nouns in German in some detail.
3. Susanne Handl has drawn our attention to examples of this kind.
4. This is also the terminology used by Corbett (2006).
5. On the notion of metonymy as a conceptual relation see e.g. Panther (2005) and Panther and Thornburg (2007).
6. A terminological clarification is perhaps in order here. The term *reference* in its broadest sense is often used for 'denotation', i.e. for the relation between linguistic expressions and what they stand for in 'reality'. What we have in mind here is a more restricted use of the term *reference* – approximately in the sense of Searle's notion of 'referring act'.
7. From a typological perspective, Comrie (1981:148–153) points out that languages differ in the availability of syntactic positions (functions) for relativization. German and English allow all four positions listed in Table 1 to be relativized, whereas, according to Comrie (1981: 149), a language like Malagasy allows only the subject position to be relativized. The subject relative pronoun seems to have a privileged status in German too since, as Table 1 shows, it is by far the most frequently occurring option in authentic discourse.

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