



# Besser wie als

The acceptance of *wie* as a comparative particle in German

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## Chapter 1: Introduction

The current research project focuses on an ongoing process of language variation and possible change in German comparative constructions. In a comparative constructions two objects are compared on the basis of the degree to which they possess a certain property, also denoted in the construction. In Standard German the comparative construction, as illustrated in example (1) below, is marked by the addition of the affix *-er* to the (predicatively used) adjective, which denotes the property on the basis of which the objects are compared. The adjective is directly followed by the comparative particle *als* ‘than’.

(1) German comparative construction

*Der Junge ist größer als sein Bruder.*  
the boy is taller than his brother  
‘The boy is taller than his brother.’

However, in (informal) spoken German, this is not the only variant observed. Also commonly used in comparative constructions is the particle *wie* ‘as’, which in fact is the Standard German particle for equative constructions. The use of the particle *wie* ‘as’ in both types of comparison constructions is illustrated in the following examples:

(2) German comparative construction, particle *wie*

*Der Junge ist größer wie sein Bruder.*  
the boy is taller as his brother  
‘The boy is taller as his brother.’

(3) German equative construction

*Der Junge ist so groß wie sein Bruder.*  
the boy is as tall as his brother  
‘The boy is as tall as his brother.’

An utterance as in (2) is used in the same way and to communicate the same meaning (i.e. inequality) as utterance (1). The comparative construction with the particle *wie* is known as a regional variant of the Standard German comparative construction, but over the course of (at least) the last decade the variant has also spread into informal spoken as well as informal written German (e.g. on internet fora). Its occurrence in these substandard variants of German however suffers from severe social criticism as the following example serves to show.

The following excerpt shows an entry to [wer-weiss-was.de](http://wer-weiss-was.de) in which a native speaker of German states to be ‘appalled’ that the use of *wie* as a comparative particle is no longer judged incorrect in schools. She asks if the variant is now accepted as a Standard German variant. In the displayed response to this entry another user states that, although it sounds ‘terrible’, the use of *wie* as a comparative particle is allowed by Duden, the leading grammar in Germany. A screenshot of both the main entry and the response entry can be found in appendix 1.

Although the latter statement is incorrect (*wie* as a particle in comparatives is not accepted by Duden), the example does illustrate that native speakers themselves are conscious of the increased spread and acceptance of the variant, but at the same time are conscious of the fact that it is a violation of the Standard German norm on the basis of which they disapprove of comparative-*wie*.

**‘Größer wie ich’ – jetzt auch korrekt?!?’**

Liebe Expertinnen und Experten,

*Am Wochenende erzählte mir eine Mutter zweier schulpflichtiger Kinder, dass es nun auch nicht mehr als Fehler gilt, wenn man sagt/schreibt: “Er ist dummer \*wie\* ich”. Vormalig hätte das ja zwingend “\*als\* ich” heißen müssen.*

*Aber das ist doch eine grammatikalische Sache und kann nicht einfach per Handstreich mit der Rechtschreibreform legalisiert worden sein! Ich bin entsetzt.*

*Eine Hoffnung hab ich noch: dass es sich dabei um ein Gerücht handelt. Sind Lehrerinnen an Board? Oder weiss sonst jemand mehr darüber?*

Schon jetzt schönen Dank!  
LG  
Edith

**‘Taller as I – now also correct?!?’**

‘Dear experts,

This weekend a mother of two children with compulsory attendance at school told me that it no longer counts as an error, when one says/writes: “He is dumber \*as\* I.” In former times it would strictly have had to be “\*than\* I”.

But that would be a grammatical issue and cannot simply, suddenly have been legalized during the spelling reform! I am appalled.

I still have one hope: that it is a rumor. Are there any teachers on board? Or does anybody else know more about this?

Thank you in advance!  
Kind regards,  
Edith’

(Wer-weiss-was, 2002)

**Re: ‘Größer wie ich’ – jetzt auch korrekt?!?’**

*So furchtbar es sich anhört-aber es ist korrekt. Das ging nicht mit der Rechtschreibreform einher, sondern wurde bereits 1991 heimlich, still und leise vom Duden legalisiert, durch einen Eintrag im Duden und ohne größere Bekanntmachungen, deshalb fiel es bisher nicht so stark auf. In der Schule lernen Kinder allerdings nicht mehr der Unterschied zwischen als und wie beim Komparativ.*

Gruß, Miriam

**‘Re: Taller as I – now also correct?!?’**

‘As terrible as it sounds-but it is correct. It didn’t happen during the spelling reform, but it was already legalized secretly and quietly by *Duden* in 1991, by an entry in the *Duden* and without any big announcements, therefore it did not stand out as much until now. In school though children no longer learn the difference between than and as in the comparative.

Regards, Miriam’

(Wer-weiss-was, 2002)

The increased spread of *wie* as a comparative particle combined with speakers’ high consciousness raises the suggestion that there might be a process of language change at hand whereby the Standard German equative particle replaces the comparative particle. As will be elaborated upon in chapter 3 of the current study, this would be a repetitive process in German as such a process of change has occurred before (Jäger: 2010, 2013).

To investigate the possibility of a process of language change happening in German, the current research focuses on how both variants of comparative constructions – *wie* ‘as’ and *als* ‘than’- are processed by native speakers of German. This question is investigated by means of a sentence matching experiment with native speakers of German at the university of Cologne (chapter 4). In this experiment, participants were shown pairs of sentences. The participant’s task was to determine, whether both sentences were identical or not, whereby their reaction times were measured.

If comparative structures with *wie* are accepted by native speakers, the reaction times for these sentences should resemble those of the sentences with comparative structures with *als* (Bley-Vroman & Masterson, 1989). If not, a significant difference in reaction times of these two variants is to be expected, whereby reaction times for *als*-constructions are expected to be smaller (because grammatically correct constructions are processed easier than ungrammatical ones) than the reaction times for the *wie*-sentences.

In the following chapter, I will first elaborate upon the crosslinguistic characteristics of constructions of comparison to create a thorough understanding of the type of constructions at hand. Chapter 3, as mentioned, will focus on comparison in German, addressing the standard language norm, diachronic change and synchronic variation. The sentence-matching task will be elaborated upon in chapter 4. Chapter 5 concludes the current research project.

## Chapter 2: Crosslinguistic Comparison

### 2.1 Introduction

Comparison is the general term in grammar used to describe those constructions in which two or more objects are compared to each other on the basis of the extent to which they possess a certain property. A lot of possible distinctions can be made regarding grammatical comparison and how a language chooses to express comparison. Well known are e.g. the degrees of comparison (positive, comparative and superlative), but there are also languages that make use of different comparison markers when quantities are compared, compared to when non-quantities are compared (Haspelmath & Buchholz, 1998: 298 ff.).

Several of these possibilities will be explored and discussed in the current chapter. We will address different constructions of comparison, starting with the comparative construction (section 2.2), followed by the equative construction (section 2.3) and finally similitive constructions (section 2.4). This specific order for addressing the different types of constructions of comparison was chosen, because comparative constructions are the main focus of the current research, but also because they are the most marked of the constructions to be described. This is stated by Ultan (1972: 117), who refers to the so-called ‘markedness hierarchy’: the higher the degree of comparison, the more marked the form will be. As will be illustrated in chapter 3, equative and similitive constructions are of special significance in explaining the diachronic and synchronic variation in German.

In describing the crosslinguistic possibilities in formally expressing comparative constructions the focus lies on the typological work by Stassen (1984). Stassen (1984) collected, studied and categorized the comparative constructions in a sample of 110 genetically different languages on the basis of which he was able to distinguish 6 types of possible comparative constructions. Equative and similitive constructions are less often the subject of research, as these forms are less marked than comparative constructions. The leading work in the description of these constructions will be Haspelmath & Buchholz’ (1998) typology of comparisons of equality in the languages of Europe.

### 2.2 Comparatives

The comparative or comparison of inequality is a form of comparison that has been subject in a lot of research worldwide. In this area of research Stassen (1984) is often referred to for his typological research: he used a sample of 110 languages from several different language families to compare and categorize their comparative constructions based on the way the language chooses to formally express a comparative. On the basis of this categorization he was able to distinguish 6 types of comparative constructions.

Before elaborating on these comparative construction types and their characteristics, it is important to have a clear understanding of a basic comparative construction. In order not to rule out any possible formal manifestations, Stassen (1984: 145) uses a semantic definition, stating that “a construction counts as a comparative construction [...], if that construction has the semantic function of assigning a graded (i.e. non-identical) position on a predicative scale to two (possible complex) objects.” In addition to this definition, it should be noted that for his typology Stassen (1984) only included such comparisons of inequality in which the objects compared are expressed as nominal phrases (NPs). This means that Stassen (1984) included only such comparative constructions as displayed in (4) and (5) below, and left out constructions that are either comparisons of equality (example (6) below, also section 2.3 of this thesis) or comparatives as displayed in example (7) and (8), which either don’t compare two objects or the objects in question are not expressed by NPs:

#### (4) German

<i>Peter</i>	<i>ist</i>	<i>größer als</i>	<i>Marie.</i>
Peter	is	taller than	Marie

‘Peter is taller than Marie.’

(5) German

*Das Mädchen ist schöner als meine Nachbarin.*  
 the girl is prettier than my neighbor  
 'The girl is prettier than my neighbor.'

(6) German

*Das Mädchen ist so schön wie meine Nachbarin.*  
 the girl is as pretty as my neighbor  
 'The girl is as pretty as my neighbor.'

(7) German

*[...] die sind sowieso klüger als hübsch.*  
 [...] they are anyway smarter than pretty  
 '[...] they are smarter than pretty anyway.'  
 (Greifenstein, 2015)

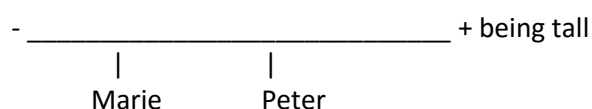
(8) German

*Peter ist klüger als du denkst.*  
 Peter is smarter than you think  
 'Peter is smarter than you think.'

Traditionally, the above defined semantic function of comparative constructions is represented graphically, as if the compared objects are in a spatial relation. The two objects compared are placed on a semantic scale that represents the property on the basis of which the objects are compared. This semantic scale or axis has a positive and a negative pole. The relative distances between the objects and these poles and between the objects themselves represent the relative degree to which they possess this property (Stassen: 1984). An example of such a graphic representation can be seen in example (9):

(9) German

*Peter ist größer als Marie.*  
 Peter is taller than Marie  
 'Peter is taller than Marie.'



A basic comparative construction can be said to exist of three basic components (Stassen, 1984), which will be described in the following and illustrated by distinguishing these components in example (9).

'being tall' is the so-called *comparative predicate*. The predicate defines the property on the basis of which the objects in the comparison are compared (to which extent do the objects possess this property?). Predicatively used adjectives often function as the predicate in comparative constructions.

In this context Henkelmann (2006) notes that only so-called relative or degree adjectives can occur in comparisons, because these are gradable (one can be e.g. tall to a greater or lesser degree). There are also so-called absolute adjectives. An absolute adjective denotes a property that is either present or absent, e.g. *dead* (any natural object is either dead or alive, one can't be more dead than the other). Henkelmann (2006: 373) names complementary and color adjectives, as well as adjectives referring to one's nationality and some adjectives used in mathematics as absolute adjectives. However, it is very difficult to find truly absolute adjectives. Even in seemingly clear-cut cases the

gradability of an adjective is still debatable, e.g. when comparing a person with German nationality to a person who has one German and one Dutch parent, one could say that the former is *German-er* or *more German* than the latter.

The other two basic elements of a comparative construction are the two objects compared. Note, as was also mentioned in the above, that in accordance with Stassen (1984) we focus on objects of comparison in the form of NPs only. One of these objects, 'Marie' in example (9), is called the *standard NP*. The standard NP is the object which provides the standard or extent to which an object is assumed to possess a certain property. In the case of example (9) 'Marie' is assumed to be tall (to a certain extent). The other object, 'Peter' in example (9), is the object being compared to the standard NP with regard to the extent in which it possesses the property at hand and is hence called the *comparee NP*. The extent to which the comparee NP possesses the property, 'being tall' in example (9), can be either greater or smaller than the standard NP. In the case of example (9): 'Peter' is said to possess the denoted property 'being tall' to a greater extent than 'Marie', and is hence referred to as being 'taller'.

Ultan (1972: 126) refers to the comparative predicate, the comparee NP and the standard NP as the *primitives* and distinguishes two additional components to be considered as basic constituents in a comparative construction: the *standard marker* and the *degree marker*. The *standard marker* - which occurs with the standard NP - marks the relationship between the standard NP and the comparative predicate, whereas the *degree marker* - which occurs with the comparative predicate - marks the relationship between the comparee NP and the comparative predicate with respect to the assumed degree provided by the standard NP. In example (9) above, the standard marker is formed by the particle *als* 'than', the comparative predicate by the affix *-er* in the predicatively used *größer* 'taller' (the positive form of this adjective is *groß* 'tall').

The three primitives and the standard marker are stated to be obligatory components of a comparative construction, in any given language, whereas the degree marker can be either obligatory, optional or not overtly marked at all. In the latter case the degree marker might not be formally realized in the particular language, but its function is often included in the comparative predicate's semantics (Ultan, 1972). Also, although the standard marker is said to be obligatory, it is not formally expressed in the same way in each language, as will be displayed below in the examples of Stassen's (1984, 2006) comparative types. What Ultan (1972) refers to as the standard marker seems to be equal to what Stassen (1984, 2006) refers to as the way in which a language assigns case to the standard NP. Case assignment to the standard NP is also the basis upon which Stassen (1984, 2006) distinguishes the first differences between languages with regard to their way of formally expressing comparative constructions.

The standard NP either has a fixed case, meaning that it is always assigned the same case form independently of the case assigned to the comparee NP, or the standard NP has derived case, meaning that the case of the standard NP matches the case of the comparee NP (they are the same).

Four out of the six types of comparative constructions distinguished by Stassen (1984) are fixed-case comparatives. Fixed-case comparatives can be further divided into adverbial comparatives on the one hand and direct-object comparatives on the other hand. Characteristic for the former category of comparative constructions with regard to their formal characteristics is that the standard NP is encoded as an adverbial phrase and its case is assigned according to the rules of the particular language for case assignment in adverbial phrases. Adverbial comparatives are also called locational comparatives due to their semantic characteristics, specifically their locational interpretation. On the basis of these possible interpretations adverbial comparatives can be further subdivided into three subcategories, which are also the first three types of comparatives described by Stassen (1984).

The first type of comparative constructions is called the *separative comparative*. It marks the standard NP as the source or starting point of a movement. To do so, the standard NP is marked with an affix or postposition with a meaning equivalent to English 'from'. This type of comparatives most commonly appears in languages that have SOV as their basic word order. The separative comparative is very common crosslinguistically, as is noted by Stassen (1984) and Ultan (1972). The latter notes that close to half of the languages in his sample (consisting of 123 genetically diverse languages) mark the standard NP with a separative component (that implies a movement away from the standard NP).

The second comparative type is called the *allative comparative*. Just like in case of a separative comparative there is the suggestion of movement in the interpretation, but the standard NP in an allative comparative is marked as the goal instead of the source of the movement. The standard NP's marker has a meaning equivalent to English 'to'. On the basis of their locational interpretations, the separative and allative comparative can be considered (semantically) opposite. The allative comparative construction type is not very frequent and only seems to occur in languages with VSO basic word order.

The third and final type of adverbial comparatives is called the *locative comparative*. As opposed to the separative and the allative comparative, the locational interpretation of this type of comparative construction does not suggest any movement. Instead, it suggests a situation in which both objects compared are at rest while standing in contact to one another (Stassen, 1984: 152). The marker for the standard NP in this type of construction commonly means 'on' or 'at'. This type of comparative is not associated with a specific basic word order type, although it never appears to occur in languages that have SVO word order.

These three types of adverbial comparative constructions are illustrated in example (10) to (12) below, in the order in which they have been described above:

(10) Comparative type #1: the separative comparative

Japanese  
*Nihon-go wa doits-go yori muzukashi.*  
 Japanese TOP German from difficult  
 "Japanese is more difficult than German."  
 (Stassen, 1984: 151)

(11) Comparative type #2: the allative comparative

Maasai  
*Sapuk ol -kondi to I -kibulekeny.*  
 is-big the -deer to the -waterbuck  
 "The deer is bigger than the waterbuck."  
 (Stassen, 1984: 152)

(12) Comparative type #3: the locative comparative

Latvian  
*Anna smukaka aiz Trinas.*  
 Anna-NOM prettier-Fem. on Trina-GEN  
 "Anna is prettier than Trina."  
 (Stassen, 1984: 152)

As mentioned above, the other category of fixed-case comparatives is called the direct-object comparative, which is also referred to as the *exceed-comparative* (Stassen, 2006: 687). These comparative constructions form the fourth type of comparatives in Stassen's (1984) typology. Characteristic for this type of construction is its additional predicate - besides the comparative predicate described above as one of the basic comparative construction components - formed by a

verb with the basic meaning ‘to exceed’. The comparee NP forms the subject of this second predicate whereas the standard NP is encoded as its direct object, as can be seen in example (13) below. This type of comparative seems to only occur with languages that have SVO word order.

(13) Comparative type #4: the exceed comparative

Duala

*Nin ndabo e kolo buka nine*  
 this house it big exceed that

‘This house is bigger than that’

(Stassen, 1984: 151)

The final two types of comparative constructions are instances of derived-case comparatives. Having a derived-case comparative means that the case of the standard NP depends on the case of the comparee NP, since it is always assigned the same case.

The first type of derived-case comparatives, the fifth type of Stassen’s (1984) typology, is called the *conjoined comparative*. The main formal characteristic of this comparative type is that the construction exists of two structurally parallel, independent clauses. One of these clauses contains the comparee NP, the other the standard NP. That the clauses are structurally parallel means that the clause containing the comparee NP is principally reduplicated whereby the comparee NP is replaced by the standard NP in the second clause. This reduplication also implies that the comparative predicate is expressed twice, which according to Stassen (1984: 153) can happen either by means of using antonymous predicates (e.g. ‘big’ – ‘small’) or by expressing a positive-negative polarity on the predicates (e.g. ‘big’ – ‘not big’). This way of formally encoding the comparative construction means that semantically, the comparee NP and the standard NP are not compared in a direct way, but that their inequality with regard to a certain property has to be derived from what Stassen (1984: 153) refers to as “adversative coordination [...] ‘A is *p*, but B is *q* (c.q. *not-p*)’.” Two examples of the conjoined comparative are shown below. Example (14) shows two conjoined clauses with antonymous predicates, example (15) contains a conjoined comparative displaying a positive-negative polarity on its predicates:

(14) Comparative type #5: the conjoined comparative

Amele

*jo i ben, jo eu nag*  
 house this big, house that small

‘This house is bigger than that house’

(Roberts, 1987: 135, in Stassen, 2006: 688)

(15) Comparative type #5: the conjoined comparative

Menomini

*Tata’hkes-ew, nenah teh kan*  
 strong-3SG, I and not

‘He is stronger than me’

(Bloomfeld, 1962: 506, in Stassen, 2006: 688)

The sixth type of comparative constructions is the *particle comparative*. Its most prominent formal characteristic is that the standard NP is marked by an element that can be referred to as the *comparative particle*. This element should not be mistaken for a case marker, because it does not assign case to the standard NP or any other constituent in the comparative construction. Except for having the presence of such a comparative particle in common, this category of comparative constructions is very heterogeneous, because the particles employed by different languages differ widely with regards to their etymological origin. Stassen (1984: 154-55) names several types of linguistic constituents that have been observed to be employed as or have developed to be used as

comparative particles: some of the particles find their origin in connective items, e.g. a conjunction with a meaning equivalent to English 'and'. Other languages may use an adverbial subordinating conjunction (meaning 'like'). Temporal adverbs (see example (16)), personal and interrogative pronouns (example (17)) and negative elements (example (18)) are also used as particles in comparative constructions. Negative elements that are used as comparative particles are a particularly remarkable phenomenon, because comparative constructions with a negative element as a standard marker are referred to by Ultan (1972: 131) as the second most important category (of comparative construction types based on standard marking). In this context Ultan (1972) refers to the semantic relation between the marking of the standard NP with a negative particle, the separative comparative and the conjoined comparative (due to its antonymous predicates and adversative coordination).

(16)Comparative type #6: the particle comparative

Dutch

*Jan is slimmer dan Marie.*  
 Jan is smarter than Marie  
 'Jan is smarter than Marie.'

(17)Comparative type #6: the particle comparative

French

*Tu es plus jolie que ta soeur.*  
 you are more pretty than your sister  
 'You are prettier than your sister.'

(B. Bichakjian, personal communication, in Stassen, 2006: 688)

(18)Comparative type #6: the particle comparative

Lithuanian

*Jie yra labiau energingi nei gabus.*  
 they are more energetic nor gifted  
 'They are more energetic than gifted.'

(Ultan, 1972: 131)

A language's basic word order does not seem to be a factor of importance for both types of derived-case comparatives. It does however seem that both types of comparative constructions are linked to specific areas of distribution. The conjoined comparative seems to only occur in Australian, Papuan and Polynesian languages and otherwise languages spoken on the American continent (Stassen, 1984: 158). The particle comparative seems to be an almost entirely exclusive feature of the European languages. As the languages spoken in Europe do not belong to the same language family, it is suggested that this type of comparative construction is an areal phenomenon.

As a final note on the crosslinguistic possibilities regarding the formal expression of comparative constructions, it is of importance to discuss the possibility of comparative marking on the comparative predicate. Although the majority of languages only uses the unmarked form of the predicatively used adjective, the possibility seems to exist to additionally mark this predicate by means of an affix or special adverb. The additional marking on the adjective marks the adjective itself as a comparative form. As an illustration of such additional marking on the adjective, the following example (19) shows the forms of a Dutch adjective in positive, comparative and superlative form of comparison:

(19)Dutch

*mooi* 'pretty'  
 positive: *mooi* 'pretty'

comparative:	<i>mooi-er</i>	‘prettier’
superlative:	<i>mooi-st</i>	‘prettiest’

Interestingly, this phenomenon too, seems to be limited to the European languages and mostly those languages who also mark their standard NP by means of a comparative particle (Stassen, 2006: 689).

## 2.3 Equatives

There has been considerably less research on equatives than on comparatives, as such constructions are usually less marked (Jäger, 2013; Ultan, 1972). Haspelmath & Buchholz (1998) are known for their typological work on equatives. They studied the formal expressions of equative constructions in the languages of Europe. They chose to focus on the European languages because they hypothesize the European languages to form a language group – to which they refer as a “European Sprachbund” (Haspelmath & Buchholz, 1998: 282) – with several linguistic features in common. On the one hand one could say their sample choice is limiting, on the other hand the languages of Europe are not genetically related (they do not belong to the same language family), meaning that a certain degree of linguistic diversity is to be expected. Yet, in addition, also the work by Henkelmann (2006) will be taken into account in this section. Henkelmann (2006) also did typological work on equative constructions, but deliberately chose a genetically and geographically more diverse sample.

Contrary to comparative constructions or comparisons of inequality described in section 2.2, equatives, which are also known as comparisons of equality, describe two or more objects to possess a certain property to the same degree. Haspelmath & Buchholz (1998: 279) identify five constituent parts that can be used to describe an equative construction. An example of an equative in which the individual constituents are pointed out is shown in (20) below. Note that not all parts are obligatory in all European languages.

(20) German

<i>Peter</i>	<i>ist</i>	<i>so</i>	<i>groß</i>	<i>wie</i>	<i>Marie.</i>
Peter	is	as	tall	as	Marie
‘Peter is as tall as Marie.’					
(1)		(2)	(3)	(4)	(5)

(1) Comparee

(2) Parameter marker

(3) Parameter

(4) Standard marker

(5) Standard

These constituents resemble the ones distinguished by Stassen (1984) and Ultan (1972) for comparative constructions. Haspelmath & Buchholz (1998) did not have the criterion to include only those comparisons in which the objects compared are expressed by NPs. They refer to the object compared as the *comparee*, ‘Peter’ in example (20), and the object that provides the assumed measure of the property possessed as the *standard*, ‘Marie’ in example (20). What Stassen (1984) referred to as the *comparative predicate*, denoting the property on the basis of which the objects are compared (‘being tall’ in example (20)), is referred to as the *parameter* by Haspelmath & Buchholz (1998). It also goes for equatives that the parameter is usually expressed by gradable adjectives (Henkelmann, 2006). Just like Ultan (1972), Haspelmath & Buchholz (1998) distinguish two markers. The *standard marker* (*wie* ‘as’ in example (20)) – as its name implies – occurs with the standard and provides information on the relation between the standard and the parameter, whereas the *parameter marker* (or *degree marker*, *so* ‘as’ in example (20)) marks the relationship between the

parameter and the comparee on the basis of the measure of the property at hand denoted by the standard of the construction.

When it comes to differences in the formal expressions of equative constructions, the most common differences regard the kind of markers used (Haspelmath & Buchholz, 1998).

A parameter marker as well as a standard marker in a language can be either synthetic or analytic. Having a synthetic marker means that the marker is expressed on the parameter or the standard morphologically by means of a prefix or a suffix. A synthetic parameter marker is called an *equative degree*, illustrated in example (21). In case a language has a synthetic standard marker this is referred to as having *equative case* (Haspelmath & Buchholz, 1998: 283, 285). An example of an equative case is illustrated in example (22). Synthetic markers are however quite rare in the languages of Europe.

(21) Estonian

*Minu õde on minu pikke-une.*  
 my sister is me tall-EQD  
 'My sister is as tall as me.'

(Haspelmath & Buchholz, 1998: 283)

(22) Ancash Quechua

*Pani-i-mi qam-naw shumaq.*  
 sister-1SG-DIR you-EQC pretty  
 'My sister is as pretty as you.'

(Haspelmath & Buchholz, 1998: 285)

Analytic markers are most common in European languages. They can be divided in several subtypes. The equative construction with a correlating parameter marker and standard marker is typical for European languages. One encounters this type of equative in most Slavic and Romance languages, the Balkans, the Germanic languages with the exception of Scandinavian, Hungarian, Romani and Georgian (Haspelmath & Buchholz, 1998: 290). An example is shown below in (23):

(23) Portuguese

*A minha irmã é tão bonita quanto você.*  
 the my sister is so pretty how you  
 'My sister is as pretty as you.'

(Haspelmath & Buchholz, 1998: 286)

Such a correlative construction is called a *relative-based equative construction* (Haspelmath & Buchholz, 1998: 287 ff.). This construction is formed on the basis of correlative free relative clauses (an example of such a clause can be found in (24) below). Yet, when comparing the relative clause to its equative equivalent, one notices that all elements but the standard are omitted. This is due to the fact that the full relative clause contains redundant information and therefore sounds odd, as can be seen in example (25). For a hearer the phrase *Claudia ist so klug wie Julius* 'Claudia is as smart as Julius' contains enough information to correctly interpret the phrase.

(24) German

*Wer das weiss, der bekommt einen Preis.*  
 Who that knows, he gets a prize  
 'Whoever knows that will get a prize.'

(Haspelmath & Buchholz, 1998: 288)

(25) German

*?? Claudia ist so klug, wie Julius klug ist.*

?? Claudia is as smart as Julius smart is  
 'Claudia is as smart as Julius is smart.'  
 (Haspelmath & Buchholz, 1998: 288)

The parameter marker is formed by an adverbial demonstrative pronoun. The standard marker is formed by an adverbial relative pronoun, which in turn commonly stems from an interrogative pronoun. The correlating pronouns are most recognizable in the Balto-Slavic languages, Greek and Armenian, because they have the same shape except for the initial element (example (26)).

(26) Modern Greek

*I adhefí mu íne tóso ómorfi óso kj esí.*  
 the sister my is so pretty how also you  
 'My sister is as pretty as you.'  
 (Haspelmath & Buchholz, 1998: 287)

Looking at the examples of the relative-based construction provided by Haspelmath & Buchholz (1998) it is noticeable that all correlative parameter markers translate to English 'so' and all correlative standard markers to English 'how'. One of these examples has been cited in this section in example (26). The markers used in German (compare example (25)) also match this observation, as the standard marker *wie* translates to both English 'as' as well as 'how'. For further examples see Haspelmath & Buchholz (1998: 287-288, 291).

Although the relative-based equative construction is prone to have both a parameter marker and a standard marker, Haspelmath & Buchholz (1998:290-91) note that as an exception the Balkan languages as well as Italian employ a variant of the relative-based equative construction that is characterized only by a standard marker. This variant is illustrated in example (27) below.

(27) Italian

*Mia sorella è carina comme te.*  
 my sister is pretty how you  
 'My sister is as pretty as you.'

The relative-based equative construction is one of the three main types of equative constructions that Haspelmath & Buchholz (1998) found in the languages of Europe. The other two are equative constructions primarily characterized by a parameter marker and equative constructions characterized by a standard marker (Haspelmath & Buchholz, 1998: 290). In the former type of equative construction, the parameter marker appears on its own in the form of an adverb. The chosen adverbs in these constructions usually have a rather transparent meaning ('equally, to the same extent'). That this type of construction is primarily characterized by a parameter marker, does not mean that there is no standard marker present at all. The standard markers that are used in this type of constructions have little meaning of their own. They are usually conjunctions.

The latter type of equative constructions is marked by a standard marker only, which is expressed in the form of a particle or postposition. Haspelmath & Buchholz (1998: 295) report to have found such constructions only in some peripheral European languages as for example Turkish, Lezgian and Abkhar. As these are all head-final languages, the standard precedes the parameter. Therefore, the hearer is already prepared to interpret a comparison and the adjective denoting the feature on the basis of which the comparison is drawn (a.k.a. the parameter) does not need to be additionally marked.

The following examples illustrate the equative construction primarily marked by a parameter marker (28) and the parameter-marker-less equative (29):

(28) Icelandic

*Systir min er jafn stór og ég.*  
 sister my is equally tall as I  
 'My sister is as tall as I.'  
 (Haspelmath & Buchholz, 1998: 294)

(29) Kalmyk

*Endr öskldür šing kiitn.*  
 today yesterday STM cold  
 'Today it is as cold as yesterday.'

In addition to these three main subtypes distinguished by Haspelmath & Buchholz (1998), Henkelmann (2006) found a total of 46 types of equative constructions in his sample of 25 languages. He organized these types into 5 main categories: *constructions with equative markers*, *constructions with an equative predicate*, *possessive constructions*, *"be-of constructions"* and *paratactic constructions* (Henkelmann, 2006: 380-381). The second to fifth category will not be discussed in any detail in this section, due to a lack of relevance for the current research. For a detailed description of these categories and their subtypes see Henkelmann (2006: 381-95).

The first category distinguished by Henkelmann (2006) - equative constructions characterized by equative markers - is the largest of the five categories, containing 24 out of 46 types. It contains four subtypes, three of which were also distinguished by Haspelmath & Buchholz (1998). The fourth subtype is referred to as a construction "with unification of comparatum and standard" (Henkelmann, 2006: 380), which means that the comparee and the standard are referred to as a combined unit, formulated as coordinated constituents in the construction, that are attributed a certain property to the same extent. Example (30) shows an example of such a construction.

(30) German

*Der Junge und das Mädchen sind gleich groß.*  
 the boy and the girl are equally tall  
 'The boy and the girl are equally tall.'

As a final note on equative constructions, one should be made aware that the constructions discussed in this section are all instances of specific equative constructions. It is important to distinguish these specific constructions from generic equatives, because – although both construction types are equatives – many languages express generic equatives in a formally different way than specific equative constructions (Henkelmann, 2006). The standard in a generic equative often does not have a specific referent. Instead the standard refers to a general class. The objects in this class possess a certain property to a very high degree. The generic has often been conventionalized in the language and there exist an idiomatic relation between this standard and the parameter. *Lions*, as in example (31), have been attributed the quality of *being strong*, which has been conventionalized to a point where *being like a lion* could be interpreted as *being strong*. Therefore, it is not necessary to additionally mark the parameter in generic equative constructions (Haspelmath & Buchholz, 1998).

(31) Generic equative, English

*He is strong like a lion.*  
 (Henkelmann, 2006: 373)

## 2.4 Similatives

In the final section of this chapter, the simulative construction will be addressed. This form of comparison does not take a central place in the current study, but similatives are very closely related to equatives both in their formal expression and in their semantics.

As was explained in the previous section, equative constructions are used to express that the comparee and the standard possess a certain property, denoted by the parameter, to the same degree. Simulative constructions on the other hand, do not express equal degree, but equal manner (Haspelmath & Buchholz, 1998). The comparee is also compared to the standard of the construction, but not on the basis of a denoted property, rather on the basis of an implied, not further explicated, modality of an action, which is denoted by the predicate (Thumair, 2001: 169).

(32) German, equative construction

<i>Er</i>	<i>ist</i>	<i>so</i>	<i>schnell</i>	<i>wie</i>	<i>meine Schwester.</i>
he	is	as	fast	as	my sister

'He is as fast as my sister.'

(33) German, generic simulative construction

<i>Er</i>	<i>schwimmt</i>	<i>wie</i>	<i>ein</i>	<i>Fisch.</i>
he	swims	like	a	fish

'He swims like a fish.'

Example (32) shows an equative construction in which the comparee 'he' and the standard 'my sister' are both attributed the same property 'being fast' to the same extent. To illustrate the contrast between an equative and a simulative construction, the latter is illustrated in example (33). In this case, the comparee 'he' and the standard 'a fish' are not attributed with a mutual characteristic. Rather, 'he' is compared to 'a fish' on the basis of the way in which both swim. The specifics with regard to what this particular way of swimming entail are not included in the construction, which is stated to be typical for simulative constructions (Thumair, 2001).

Also note the resemblance in formal expression between the examples (32) and (33). The same components as have been listed under (20) can be used to describe a simulative construction. The only difference being that a simulative construction does not contain an overtly expressed parameter (marker). The parameter in simulative constructions is implied, in example (33) the parameter would be the way in which 'he' and 'a fish' swim (Haspelmath & Buchholz, 1998).

With regard to the European languages, the formal similarity between equatives and similatives is enhanced by the fact that most languages use the same particle to mark the standard in both types of constructions (Haspelmath & Buchholz, 1998), as can also be seen when comparing (32) and (33): both use *wie* 'as' as their standard marker.

However, there are three major exceptions to the common overlap between the equative and the simulative standard marker. These three exceptions concern, among others, English and French, which are two of the most studied European languages. The exceptions have in common that they use a more marked form to mark the standard in simulative constructions than in equative constructions. Haspelmath & Buchholz (1998) state that the reason behind using a more marked form for the standard in simulative constructions is due to the fact that a simulative construction does not contain an additional (overtly marked) parameter marker to help a recipient identify the construction. An equative construction on the other hand often already contains two markers (the standard marker and the parameter marker) to help a recipient identify the type of construction at hand.

The first type of exception to the common overlap in equative and similitive standard markers is referred to as *reinforcement through the correlate* (Haspelmath & Buchholz, 1998: 316). Certain languages place the demonstrative correlate ‘so’ or the equative parameter marker ‘equally’ directly in front of the standard marker. Because the element is placed directly in front of the standard marker it cannot be referred to a parameter marker. It is a reinforcing element. This strategy is illustrated in example (34) below:

(34) Dutch

<i>Hij schrijft zo-</i>	<i>als</i>	<i>zijn</i>	<i>zus.</i>
he writes so	like	his	sister

‘He writes like his sister’

The second exception occurs in French, Friulian and Sardinian. These three languages use a general subordinator (French: *que*, Friulian: *che/come* and Sardinian: *che*) as their equative standard marker instead of a relative pronoun (Haspelmath & Buchholz, 1998: 315), although the latter is typical for most European languages (section 2.3). The standard marker based on a relative pronoun is instead reserved for marking the standard in similitive constructions. Haspelmath & Buchholz (1998: 315) list *comme* (French), *come* (Friulian) and *comente/che* (Sardinian) as similitive standard markers for these languages.

As third and final exception, Dutch and English mark the similitive standard with an adjective meaning ‘equal’ (Dutch: *gelijk*, English: *like*) instead of using the equative standard marker (example (35) and (36)). Haspelmath and Buchholz (1998: 316) call this strategy to provide a more marked form as a standard marker in similitive constructions *reinforcement through an adjective*. It should be noted, as has been illustrated in example (34), Dutch also makes use of another strategy when expressing similitive constructions in which case the equative standard marker is used in combination with a demonstrative correlate as similitive standard marker.

(35) English, equative construction

*He is as fast as his sister.*

(36) English, similitive construction

*He swims like a fish.*

As a final note on similitive constructions it should be mentioned that one can distinguish between specific and generic similitives. The distinction is the same as for equative constructions (section 2.3), but the main formal difference between specific and generic constructions, i.e. the lack of a parameter marker, is less noticeable in similitive constructions, because they already lack a parameter marker. Example (33) is an example of a generic similitive. A possible specific equivalent to example (33) (containing a specific referent, instead of referring to a general class) is illustrated in example (37):

(37) German, specific similitive construction

<i>Er schwimmt</i>	<i>wie</i>	<i>seine</i>	<i>Schwester.</i>
he swims	like	his	sister

‘He swims like his sister.’

## Chapter 3: Comparison in German

### 3.1 Introduction

In the previous chapter various possibilities in the formal expression of comparison constructions – specifically comparative, equative and similitive constructions – in genetically different languages were explored, on the basis of which one should have acquired a solid understanding of the kind of constructions dealt with in this study. We have seen that there exists a lot of variation across languages in the way these constructions can be formally expressed.

In the current chapter the focus will be on the pattern of variation in formally expressing comparison in one specific language, namely German. With regard to its comparison constructions German not only shows a pattern of variation and change throughout its language history, but also displays a solid amount of synchronic variation. Diachronically, German comparison shows a cyclical pattern of replacing the comparative particle by the equative particle and then grammaticalizing a new form to replace the previous equative particle (Jäger, 2010). Synchronically, there exists variation in the particles as well: German dialects differ with regard to which particle they use in comparison. In colloquial, spoken German the equative particle *wie* ‘as’ is being used in comparative constructions as well, replacing the Standard German comparative particle *als* ‘than’. The latter pattern is not as recent as might seem, as *wie* was already (occasionally) used as a comparative particle in the eighteenth century (Grebe, 1966; Jäger, 2010). Comparative-*wie* is under social criticism, but nevertheless its persistent occurrence for several decades gives rise to the suggestion that the pattern of change might reoccur, whereby the current comparative particle *als* is replaced by the current equative particle *wie*.

In the following section 3.2 the Standard German comparative, equative and similitive constructions will be described in light of the types distinguished by Stassen (1984) and Haspelmath & Buchholz (1998) in the previous chapter. The addressed patterns of variation will be elaborated upon in sections 3.3.1 (diachronic change) and 3.3.2 (synchronic variation), on the basis of which the research question for the current study will be motivated in section 3.4.

### 3.2 Comparison constructions in Standard German

#### 3.2.1 Basic comparative construction in German

German comparative constructions belong to the sixth type of comparative constructions distinguished by Stassen (1984): the particle comparative. This entails that its main characteristic is the presence of a particle marking the standard. The fact that German comparative constructions belong to this category is in accordance with Stassen (1984), who described the particle comparative to be a specifically European phenomenon. In order to recall the details about the (particle) comparative construction, example (38) illustrates such a construction in German. In addition, the different constituents of the constructions are numbered.

(38) Basic comparative construction

<i>Das Mädchen</i>	<i>ist</i>	<i>klüg</i>	<i>- er</i>	<i>als</i>	<i>der Lehrer.</i>
the girl	is	smart	- er	than	the teacher
(1)		(2)	(3)	(4)	(5)

‘The girl is smarter than the teacher’

The primitive or basic elements of the comparative construction, i.e., the comparee (1), the standard (5) and the comparative degree (2), are all present in the construction. As the particle comparative is a subcategory of the derived-case comparative, the comparee and the standard have the same case, in example (38) they are both in the nominative case. The main characteristic of the construction, the so-called comparative particle *als* ‘than’ is marked in the example phrase by the number (4).

As Stassen (2006) pointed out, another characteristic of European languages – especially those which employ the particle comparative – is the additional marking of the predicate as a comparative form by means of a special adverb or affix. The latter form of marking is common in German, which has a special affix to be attached to the predicatively used adjective in both the comparative and the superlative degree (example (39)). Constituent (3) in example (38), the affix *-er*, should be interpreted as the degree marker (Ultan, 1972).

(39) Degrees of comparison

<i>klug</i>	'smart'		
positive:	<i>klug</i>	'smart'	
comparative:	<i>klüg-er</i>	'smarter'	
superlative:	<i>klüg-st</i>	'smartest'	

The above description of the comparative construction is in line with the prescriptive rule found for German grammar (Duden, 2009).

### 3.2.2 Expressing equality in German

Just like in case of the comparative construction, all five basic components described in the previous chapter are present in a basic German equative construction, an example of which is shown in (40).

(40) Basic equative construction

<i>Das Mädchen</i>	<i>ist</i>	<i>so</i>	<i>schön</i>	<i>wie</i>	<i>eine Prinzessin.</i>
the girl	is	as	beautiful	as	a princess
(1)		(2)	(3)	(4)	(5)
'The girl is as beautiful as a princess.'					

The comparee is marked by (1), the standard is numbered (5) and the predicate – or parameter, as it is called by Haspelmath & Buchholz (1998) – is marked (3).

In contrast to the comparative construction, German uses two particles as markers in its equative constructions. The parameter or degree marker, (2) in example (40), is formed by the particle *so* 'as'. It is referred to as a *Gradpartikel* 'degree particle' in the Duden Grammar (2009: 371). The standard marker in equative constructions is formed by the particle *wie* 'as', marked by number (4) in the example above. The predicatively used adjective in the equative construction is used in its positive, unmarked form, unlike the predicatively used adjective in the comparative construction as pointed out above.

In terms of the different types of equative constructions distinguished by Haspelmath & Buchholz (1998), the German equative constructions belong to the category of relative-based equative constructions. As shown in chapter 2, such equative constructions are formed on the basis of correlative relative clauses by omitting all redundant information from the relative clause. Had it contained a full relative clause, the phrase from example (40) would have looked as in (41) below.

(41)

<i>Das Mädchen</i>	<i>ist</i>	<i>so</i>	<i>schön,</i>	<i>wie</i>	<i>eine Prinzessin</i>	<i>schön</i>	<i>ist.</i>
the girl	is	as	beautiful	as	a princess	beautiful	is
'The girl is as beautiful as a princess is beautiful.'							

The parameter marker in a relative-based equative is said to be formed by a demonstrative pronoun, the standard marker by a relative pronoun, based on an interrogative pronoun (Haspelmath & Buchholz, 1998). In the most clearly identifiable cases the particles only differ in their initial elements, as was illustrated by example (23) in chapter 2. Clearly, the equative particles in German do not correlate to this extent and neither is the parameter marker formed by a demonstrative pronoun. This however is already addressed by Haspelmath & Buchholz (1998: 293), who explain that

the parameter markers in the West Germanic languages – Dutch, English and German – are idiosyncratic cases, which are not based on the demonstrative stem of these languages (German *d-*). Neither is *wie* a pronoun in German – it can be used as an adverb or a conjunction – but it can be used both relatively (example (41)) and interrogatively (example (42)).

(42) Interrogative use of *wie*

<i>Wie</i>	<i>spät</i>	<i>ist</i>	<i>es?</i>
how	late	is	it

‘What time is it?’

The final construction type addressed in chapter 2 was the similitive construction. As is common for European languages, German uses the same standard marker in similitive constructions as in equative constructions (example (43)). The difference with equative constructions lies in the semantics of both constructions: as was previously explained, equatives express equality of degree or possessing of a certain property (e.g. ‘being beautiful’ in example (40)), whereas similitives (e.g. example (43) below) express similarity of manner, the way in which something is done.

(43) Basic similitive construction

<i>Maria</i>	<i>läuft</i>	<i>wie</i>	<i>eine Ente.</i>
Maria	walks	as	a duck

‘Maria walks like a duck.’

### 3.3 Variation and change

Having elaborated upon comparison in Standard German in the previous section, the following section serves to show the multiple instances of variation in the addressed comparison constructions. Hereby the focus will be primarily on deviations in comparative constructions.

Jäger (2010) states that deviations from Standard German in comparison constructions mainly occur in the marking of the comparative standard. In spoken language the particles *als wie* ‘than as’ or *wie* ‘as’ are often used instead of the Standard German standard marker *als* ‘than’. Not only are both these spoken language variants in conflict with the normative rule that prescribed the use of ‘*als*’, *als wie* ‘than as’ is degradingly evaluated as archaic and *wie* ‘as’ is stated to be a regional variant (Duden, 2009). As mentioned in the introduction to this chapter, comparative *wie* as well as *als wie* are under severe social criticism.

Besides comparative *wie* and *als wie*, comparative *denn* ‘than, because’ is mentioned in the Duden (2009) grammar as an outdated, archaic form that is only used in certain fixed constructions (example (44)) or to avoid using a double *als* (example (45) and (46)) (Ten Cate, 2008).

(44) Comparative *denn*

<i>Besser</i>	<i>denn</i>	<i>je</i>
better	because	ever

‘better than ever’

(45) Double use of *als*

?? <i>Seine</i>	<i>Arbeit</i>	<i>als</i>	<i>Maler</i>	<i>ist</i>	<i>schöner</i>	<i>als</i>	<i>als</i>	<i>Schriftsteller.</i>
?? his	work	as	painter	is	more beautiful	than	as	writer

‘His work as [a] painter is more beautiful than [his work] as [a] writer.’

(46) Comparative *denn*

<i>Seine Arbeit</i>	<i>als</i>	<i>Maler</i>	<i>ist</i>	<i>schöner</i>	<i>denn</i>	<i>als</i>	<i>Schriftsteller.</i>
his work	as	painter	is	more beautiful	because	as	writer

‘His work as [a] painter is more beautiful than [his work] as [a] writer.’

There is also some mention of variation in the equative standard markers. Both *als* ‘than’ and *als wie* ‘than as’ are mentioned as possibly substandard variants of the equative standard marker *wie* ‘as’,

but both of these variants are also stated to be archaic. Equative-*als* ‘than’ is said to still occur as a regional variant (Duden, 2009).

As a final note on the possible variation in German particles of comparison in this section, dialectal usage of comparative-*wie* and equative-*als* do indeed occur, but the variation is not limited to regional language use. Comparative-*wie* has been making its way into (standard) spoken language as well, which was already being noticed by researchers at the beginning of the previous century (e.g. Grebe, 1966; Lerch, 1942) and it also occurs in the works of some of German’s great writers, which suggests it to be a very persistent variant that might spread further than only regional or spoken language usage. Grebe (1966: 41) for example cites from German poet and play writer Bertolt Brecht:

“*Einige Leute, die dies erfahren, lachten nun über Herrn Keuner, da seine armselige Möbel teurer geworden **wie** die lackierten.*“

‘Some people, who heard about this, now laughed about mister Keuner, as his paltry furniture had become more expensive **as** the lacquered [furniture].’

In the following (section 3.3.1), the history of German comparison particles will be elaborated upon by illustrating a change that has already occurred. Section 3.3.2 is devoted to synchronic variation – dialectal and substandard – in German with regard to these particles of comparison.

### 3.3.1 Diachronic change

Comparative *denn* ‘because, then’ is mentioned to be an outdated variant in its usage as a comparative particle. Looking back at *Althochdeutsch* ‘Old High German’ *thanne*, *denn*’s Old High German’s form, was the standard comparative particle. During the different stages in German’s language development it was replaced by the current standard comparative particle *als*, which was first used in Old High German and *Mittelhochdeutsch* ‘Middle High German’ as an equative marker. This pattern of change, whereby the comparative particle is replaced by the equative particle, is referred to as the *comparative cycle* (Jäger, 2010, 2013). This comparative cycle is the subject of this section.

For her study of the diachronic variant in German comparison constructions Jäger (2010: 472-473) collected examples of comparative and equative constructions from different written sources, such as for example the *Älteren Physiologus* ‘Physiologus’, which is a collection of animal stories translated to (Old High) German in the Middle Ages, and the Early New High German Corpus of Bonn.

Old High German’s comparison is characterized by the use of *thanne* ‘than’ as a particle (standard marker) in comparative constructions, which is illustrated in example (47). In case of a preceding negation the particle *wan* had to be used instead. Also possible, but only rarely used, was the so-called comparative dative (Jäger, 2010), an instance of a fixed-case comparative in which case the standard of the comparative is always assigned dative case. The comparative dative is illustrated in example (48).

(47) Comparative with *thanne*

*Eno ni birut ir furirun **thanne** sie sin?*

‘Are you not worth more than they are?’

(Tristan, p. 70, line 17, in Jäger, 2010: 470)

(48) Comparative with dative case

*dhazs ir chihoric uuari gote endi furiro uuari **anderem** gotes chiscaftim*

‘that he would be obedient to God and over the other creatures of God’

(Isidor chapter 5, line 9, in Jäger, 2010: 470)

For comparison constructions expressing equality – for both equative and similitive constructions – there were multiple possibilities for marking the comparison, two instances of which are illustrated in examples (49) and (50). All the possible markers had in common that they had to at least contain

the particle *so*, which appears in various forms in Old High German: *so*, *soso*, *sama so*, *so selb so*, *solih so*, *also* (Jäger, 2010:470). One may think to recognize this particle as the parameter marker *so* ‘as’ that is still used in equative constructions in modern day Standard German, but it is important to note that the Old High German form *so* (and its equivalents) is the etymological basis for present day *als* ‘than’ (Eggs, 2006). Used as a particle in Old High German its meaning is equivalent to present day *wie* ‘as’, expressing equality of either degree or extent.

(49) Equative construction with *(al)so*

*uueset uūise **samaso** nátrun inti lúttare **sósó** tubun*

‘be wise as the snakes and honest as the doves’

(Tatian, p. 77, line 20-22, in Jäger, 2010: 470)

(50) Similitive construction with *(al)so*

*Endi sn hohsetli ist **solih so** sunna azs minera antuuerdin endi in aeuuin **so sama so** foluuassan  
mano*

‘and his throne is like the sun in my present and in eternity like the full moon’

(Isidor chapter 9, line 1, in Jäger, 2010: 471)

The following stage in German language development, *Mittelhochdeutsch* ‘Middle High German’, shows the same forms of marking for comparative constructions as described for Old High German. The particle *so* was also still used in Middle High German equative constructions. Additionally, but at the same time not very frequent, Jäger reports the use of the particle *unde* in Middle High German equatives. Interestingly within the framework of the current study, an additional particle that occasionally occurs in Middle High German similatives is the particle *swie* (Jäger, 2010).

The variation in the similitive particles persists and Jäger (2010, 2013) reports that in the beginning of the period of *Frühneuhochdeutsch* ‘Early New High German’ *wie* has become the new standard particle in similitive constructions. In Early New High German equative constructions *als* is still dominant as standard marker, but the occasional use of *wie* is also documented. This is also the time in which the first variation in the comparative particles starts to occur. *Denn/dann*, the Early New High German variants of *thanne*, still has a strong dominance, but *als* also occasionally occurs as a comparative particle.

From these first occasional occurrences on, developments in Early New High German comparative particles move fast. On the basis of an evaluation of samples from the last years of this stage in the German language (approximately 1650-1700) Jäger (2010: 474) reports that *denn* has been completely replaced by *als* as comparative particle. The process of language change in the equative standard markers takes a bit longer, but the replacement of *als* by *wie* is stated to have been completed in the beginning of the 18<sup>th</sup> century, which is called the stage of *Neuhochdeutsch* ‘New High German’. It wasn’t until the 19<sup>th</sup> century that the prescriptive norms were adjusted to fit with the changed language use.

**Table 1 schematic display of the comparative cycle**

Language area		Equality		Inequality
		Similitive	Equative	comparative
I	Old High German/ Middle High German	<i>so/als(o)</i>	<i>so/als(o)</i>	<i>denn</i>
Ila	Early New High German/ New High German	<i>wie (/als)</i>	<i>als</i>	<i>als</i>
IIb	New High German	<i>wie</i>	<i>wie</i>	<i>als</i>
III	(many) Dialects	<i>wie</i>	<i>wie</i>	<i>wie</i>

(Jäger, 2013: 291)

Table 1 shows the previously explained process of language change in German comparison constructions. The overview serves to illustrate how the process of language change starts at the least marked form, the similitive construction, and expands to changes in the other construction forms, first the equative, then the comparative construction. Jäger (2013) states, that the order of the constructions in which change occurs is of importance, because of the fact that if speakers accept a certain variant in one construction type, this does not necessarily mean they will do so in another construction type. She distinguishes a hierarchy in line with Ultan's (1972) markedness hierarchy directed from similitives to equatives to comparatives. She states that if speakers accept a variant in their similitive construction, they may also be inclined to accept this form in an equative and after that in a comparative construction. A variant that is accepted in comparative constructions first is less likely to spread to constructions that are less marked (equatives and similitives).

It is also important to note that the similitive and equative particle *wie* and the comparative particle *als* first spread through the regional variants and substandard German before pervading Standard German. Jäger (2010) states that deviations from the standard language such as regional and substandard variants, should not be taken as random errors by the language users. Rather such deviations provide useful insight about the directions in which a particular language phenomenon – in this case the type of particle used in the different constructions of comparison – is developing. The current regional variation with regard to the particles of comparison in German will be addressed in the next section 3.3.2.

The comparative cycle sketched above, suggests that comparative *wie* may form the next shift in German particles of comparison, as it has entered German comparisons through the similitive construction to the equative construction and now occurs in several substandard and regional variants of German.

The question remains as to why the particle change has occurred in German (and might reoccur). There are several possible incentives behind this phenomenon.

The first possible incentive to the change in particles in comparison constructions is a reduction of the number of grammatical forms (Jäger, 2010). In their function as markers of comparison, *wie* and *als* do not differ semantically (Lohstoeter, 1933; Bäuerle, 1997; Jäger, 2010). The difference between a comparison of inequality versus a comparison of equality can be derived from the additional marking on the predicatively used adjective, which is marked as a comparative by adding the affix *-er* (section 2.2 and 3.2.1). Therefore, it could be considered to be more economical to use one grammatical form (one particle) to mark a construction as a comparison construction – as the specific type of comparison (equality versus inequality) is expressed by the marking on the predicate – instead of using different grammatical forms depending on which type of comparison construction is used.

A second possible incentive mentioned is the reduction of multiple functions of the particles. Hereby Jäger (2010) refers to Lerch (1942), who explains that in the 15<sup>th</sup> century *denn* was no longer merely used as a comparative particle, but also gained meaning as a causal conjunction. This shift in *denn*'s function allegedly aided the replacement of comparative *denn* by *als*, whereby *als*'s move from equative to comparative made room for *wie* as an equative marker. Arguments against this line of reasoning would be that *wie* carries more grammatical functions than *als* and therefore it would not be logical to ban *als* from comparison and replacing it by *wie*. Also, all particles used in comparatives have had multiple grammatical functions since Old High German, therefore their specific function has been ambiguous since before the comparative cycle set into motion.

Thirdly, Jäger (2010) argues that movements in their respective syntactic positions have caused the particles to shift. She states that *als* and *wie* occupy two different syntactic positions in Standard German. Both are commonly analyzed as subordinating conjunctions, but instead *als* should be

considered to be more like a coordinating conjunction, connecting the comparee-CP to the standard-CP. It should be considered a conjunctive head that syntactically stands above the standard of comparison (Jäger, 2010: 482-483). *Als* was able to move to a higher syntactic position, because in Early New High German it also became the particle of comparison in so-called *hypothetical comparisons* (example (51)), in which the head of the standard-CP is occupied by the finite verb, *ob* 'or' or *wenn* 'if'. *Wie* should be analyzed as the head of the standard CP, which is due to its origin as a conjunction in free relative clauses (section 3.2) (Jäger, 2010: 488).

In spoken German many speakers only use the particle *wie* as a particle of comparison, leaving the syntactic position for *als* unoccupied (Jäger, 2010: 483).

(51) Hypothetical comparison, German

<i>Tilla</i>	<i>läuft,</i>	<i>als</i>	<i>liefe</i>	<i>sie</i>	<i>um</i>	<i>ihr</i>	<i>Leben.</i>
Tilla	walks,	than	walks	she	for	her	life

'Tilla walks, as if she is walking for her life.'

(Jäger, 2010: 480)

A final possible explanation for the German comparative cycle is provided by Reinartz, de Vos & de Hoop (to appear), who argue that the cyclical movement of particles is due to two conflicting constraints. They state that the alternation in German between having one particle of comparison and having a separate particle for comparisons of equality versus comparisons of inequality (table 1) is due to a conflict between the principle of Economy and the principle of Iconicity. The principle of Economy is satisfied when the number of grammatical forms is reduced to its minimum. The principle of Iconicity is satisfied when as many of the possible distinctions between constructions are made, to produce a construction that is as unambiguous as possible. In the context of German comparative particles, this means that the principle of Economy is satisfied when the number of particles of comparison is reduced to one, e.g. in Early New High German, when *als* was used to mark the standard in both equative and comparative constructions. The principle of Iconicity on the other hand requires a meaningful distinction between comparisons of equality and comparisons of inequality. In comparatives Iconicity is satisfied by adding the affix *-er* to the predicatively used adjective, inherently marking the constructions as a comparative or comparison of inequality (section 3.2.1). Equative constructions lack such an additional marking on the adjective (section 3.2.2) and hence require a meaningful (equative) particle to satisfy Iconicity. Reinartz et al. (to appear) explain that Old and Middle High German *als(o)* carried the meaning of equality due to its use as a particle in equative constructions, but with the use of *als* as a comparative marker as well the form was grammaticalized and lost its equative meaning (it is common for a form to lose its meaning when it becomes grammaticalized). Therefore, a new particle needed to be introduced as a marker in equative constructions to specifically convey the meaning of equality (*wie* 'as').

Standard German currently has two particles of comparison: *wie* 'as' to mark comparisons of equality and *als* 'than' to mark comparisons of inequality. The principle of Iconicity is satisfied, but the principle of Economy is not. The latter fact is stated to have triggered the use of the current equative particle *wie* to be used as a comparative particle as well in substandard variants of German (Reinartz et al., to appear).

Because Economy and Iconicity are inherently in conflict, this alternation between having one versus two particles of comparison is expected to continue until either one of the principles is completely beaten, or until a way is found to satisfy both principles at the same time.

Although there are several explanatory theories for the comparative cycle, as described above, there is no definite answer to the question of why the change in particles of comparison has occurred in German. Nevertheless, cyclical change is not an uncommon phenomenon. E.g. Jäger (2010: 476) mentions the subject-agreement-cycle in which a demonstrative pronoun develops to a personal

pronoun, which in turn is grammaticalized until it is no more than an agreement morpheme that can be added to a verb. The verb with the added agreement morpheme has to be used in combination with a new pronoun. As the agreement morpheme disappears entirely, the new pronoun develops into a new agreement morpheme. This cyclical change keeps repeating itself.

However, a language change is not always completed. In Dutch, German's sister language, the same tendency for change in particles of comparison exists as in German. The prescriptive rule dictates that in Dutch equative constructions the particle *als* 'as' (example (52)) should be used and in comparative constructions the particle *dan* 'than' (example (53)) should be used. However, in substandard variants of Dutch the tendency exists to use the particle *als* 'as' in comparative constructions as well (example (54)) (Hubers & de Hoop, 2013).

(52) Equative construction, Standard Dutch

*Peter is even groot als Marie.*  
Peter is equally tall as Marie  
'Peter is as tall as Marie.'

(53) Comparative construction, Standard Dutch

*Peter is groter dan Marie.*  
Peter is taller than Marie  
'Peter is taller than Marie.'

(54) Comparative construction, substandard Dutch

*Peter is groter als Marie.*  
Peter is taller as Marie  
'Peter is taller than Marie.'

Just like the change in German particles of comparison, the tendency in Dutch to use the equative marker in comparatives as well dates back several decades (it is said to have emerged in the second half of the sixteenth century). However, a mere decade after the rise of Dutch comparative-*als*, a countermovement emerged. This countermovement, which opposes the comparative use of *als*, has been successful in at the very least slowing down the process of comparison particle change in Dutch.

Although *als* is used in almost all Dutch dialects as a marker in comparisons of inequality, it still gives rise to strong resistance in present-day Standard Dutch. Hence it is (still) not accepted as a standard variant (Hubers & de Hoop, 2013).

Hubers & de Hoop (2013) conducted a corpus study of *dan* and *als* as comparative markers in the Spoken Dutch Corpus to find out why speakers choose either the standard or substandard comparative particle. They found a correlation between a speaker's level of education and comparative particle choice. Speakers with a high or middle level of education generally use more *dan* than *als* in comparatives, whereas speakers with a low education generally use more *als* than *dan*. On the basis of these results, Hubers & de Hoop (2013) reason that the Dutch prescriptive rule to use *dan* as a comparative particle, which native speakers of Dutch are taught in school, has a very strong influence on speakers' language use. They state that without this influence of the normative rule, the (equative) particle *als* might have already replaced *dan* as the Standard Dutch comparative particle.

### 3.3.2 Synchronic variation

The German language area can be roughly divided into three geographical subareas of regional language variants. Note that the boundaries between these areas are not as clear cut as they may seem on the basis of the description in this section and also that within these broader areas multiple dialectal variants exist.

In map 1 below, one can see the border between the first of the three subareas of regional German variants marked as the *Hochdeutsche/niederdeutsche Sprachscheide* 'High German/Low German language border'. The regional variety spoken above this border is referred to as *Niederdeutsch* 'Low German'. Its main characteristic is that the variants in this regional group have not undergone the *hochdeutsche Lautverschiebung* 'High German consonant shift', which occurred around 500 and changed the (Old High) German consonants *p*, *t* and *k* to *pf*, *z* and *ch* when they are the first phoneme of a word, when they appear after another consonant or when they are doubled (Academic, 2000-2014).

*Hochdeutsch* 'High German' can be further divided into *Mitteldeutsch* 'Central German' and *Oberdeutsch* 'Upper German'. In Upper German, as opposed to Low German, the consonants changed according to the High German consonant shift. In map 1 the Upper German area comprises the southern areas. It includes *Südfränkisch*, *Ostfränkisch*, *Alemannisch* and *Bairisch*. *Mittelfränkisch*, *Rheinfränkisch*, *Thüringisch*, *Obersächsisch*, *Schlesisch* and *Hochpreussisch* all belong to the category Central German. The High German consonant shift affected Central German's dialects partially, meaning that in the different variants some consonants have shifted according to this change pattern, whereas others have not. For example, *Mittelfränkisch* has shifted *k* to *ch* in words like *machen* 'make, do', but did not shift *p* to *pf* in *appel* 'apple' (Academic, 2000-2014).



Map 1: Regional language variants of German (Universität Salzburg, 2011a)

It goes beyond the scope of the present thesis to discuss these regional variants in any further detail with regard to their specific characteristics. The division into the three regional areas will be sufficient.

Unlike the standard language, regional variants are not subjected to any prescriptive norms, which gives room to all kinds of possible variation.

With regard to the particles used in constructions of comparison Weise (1918), focusing on comparisons of equality versus comparisons of inequality, describes the use of *als* 'than' and *wie* 'as' in the above distinguished main areas of regional language use in Germany. Note that these are not the only regional variants of particles of comparison. Weise (1918) also reported the use of *als wie* 'than as', *sam* 'same', *was* 'what', *wann* 'when', *weder* 'neither', *oder* 'or', *denn* 'because, than', *of/ob* 'or' and *daß* 'that'.

In the Low German area the particle *als* is used exclusively in both types of comparison. In Central German both *als* and *wie* are used. *Wie* is hereby stated to be the dominant form in both comparisons of equality and inequality in Schlesien, Upper Saxony and Thuringia, which are all on the east side of the Central German language area. In the western parts of the Central German area *wie* also occurs, but it is not as dominant as in the eastern domain (Weise, 1918).

Weise (1918) notes that, with regard to the particle use in comparison constructions in Central German, the expression of a comparative clause is often avoided by speakers. In addition, it is noted that *als* is also avoided in other types of constructions, e.g. in appositions. Weise (1918: 172) illustrates this by the example that instead of saying *Er ist als Direktor nach Berlin versetzt worden* 'He has been transferred to Berlin as director' a speaker from the Central German would be much more likely to say *Er is Direktor geworden und nach Berlin gekommen* 'He has become a director and has come to Berlin'.

In Upper German, the use of a comparative subordinate clause is also often avoided. Instead, a main clause is used without any particle. When a particle is used in Upper German comparison, *als* 'than' and *wie* 'as' do occur, but neither of them can be stated to be a dominant variant. Comparative *wie* is stated not to occur at all in *Baierisch* and *Alemannisch-Schwäbisch*. Additionally, *als* is also used in several other grammatical functions, e.g. in reported speech in order to emphasize it as being someone else's words (Weise, 1918).

Weise's (1918) account on the use of the comparative particles in Upper German however seems to be outdated as becomes clear when looking at map 2 below. Map 2 shows the spread of *als*, *wie* and *als wie* as comparative particles based on an online-questionnaire for the *Atlas zur deutschen Alltagssprache* 'Atlas for German everyday language' in which participants had to fill out the missing element in the phrase *Mein Bruder/Er ist größer... ich* 'My brother/He is taller...I' (Jäger, 2013: 269). One can clearly see in this map that comparative *wie* is predominantly used in the Upper and Central German regions and occasionally occurs in Low German, although comparative *als* is clearly the mostly used variant in the latter.

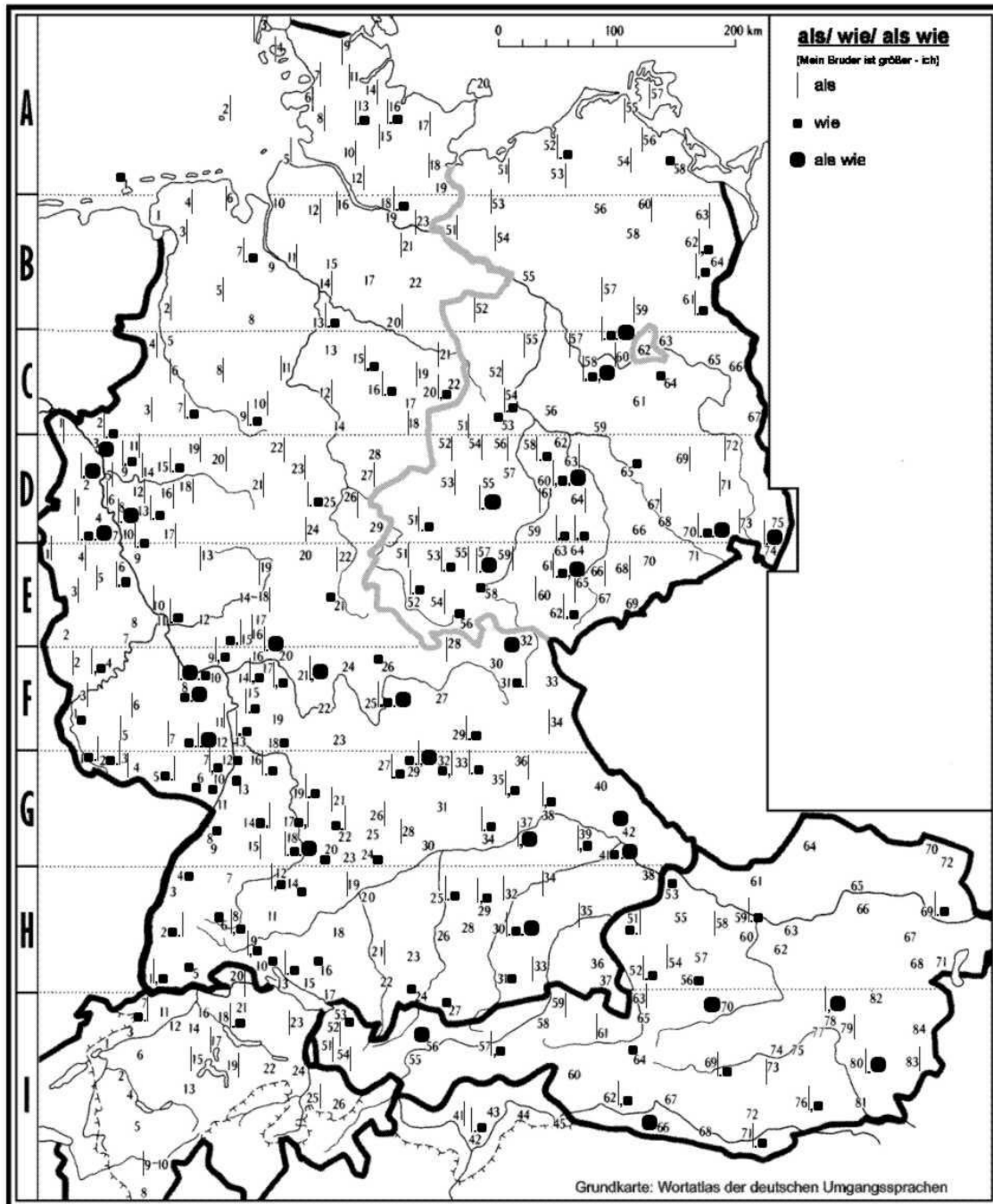
It should be noted that map 2 is based on more recent data than Weise's work. Whereas the latter dates back to 1918, the data for map 2 were collected in 2012, which means that the German language has had about a century to further develop.

In accordance with the distribution of the comparative particles shown on map 2, Jäger (2013) states that comparative *als* is (still) the dominant variant in the north of Germany expanding to the western areas of *Rheinfränkisch* and *Alemannisch*, whereas comparative *wie* mostly occurs in the east of Germany.

Bäuerle (1997) states that *wie* is the dominant particle of comparison (of equality and inequality) in the southern German dialects, which is not entirely in accordance with the more recent pattern of distribution illustrated by map 2. Bäuerle's (1997) statement is in contrast with Weise (1918), who states that the southern dialects do not use comparative-*wie* at all. If Weise's (1918) statement at the time was true, the contrast between these linguists' statements emphasizes the rapid spread of

*wie* as a comparative particle in the regional variants of German, because in that case *wie* apparently made its way into the southern German dialects in less than a century.

The other dialectal forms of comparative particles mentioned by Wiese (1918) are reported to still exist, but they are rarely used.



Map 2: Distribution of comparative particles in the German language area (Universität Salzburg, 2011b)

The variant *als wie* ‘than as’ is mentioned as a third, upcoming variant of importance, spreading throughout the German language area. *Als wie* was already mentioned in section 3.3 of the current thesis as a variant that is used as a particle of comparison in comparative and equative constructions. Duden (2009) states that it is an archaic form. However, as can be seen in map 2, *als wie* is still used as a regional variant in comparative constructions. It also occurs in equative and similitive

constructions in regional variants of German (Jäger, 2013). *Als wie* is often analyzed as a mere combination of the comparison particles *als* and *wie*, that occurs in the border areas between the areas where *als* is dominantly used as a particle of comparison and the areas where *wie* is dominantly used as a particle of comparison. This is opposed by Jäger (2013), who states that *als wie* is an independent particle of comparison, which developed on the basis of the particle *so* ‘as’ (which was mentioned in section 3.3.1 to provide the etymological basis for present-day *als*) and the particle of comparison *wie* ‘as’. It also shows its own pattern of distribution, as can be seen in map 2, and clearly does not exclusively occur in the border areas between the *als*- and *wie*-area.

### 3.4 Research question

The data on diachronic variation and change in the German comparative particles show a pattern in which the particle *als*, that used to mark the standard in similitive and equative constructions in Old and Middle High German, spreads through regional and substandard variants as a comparative particle during the stage of Early New High German. At the end of this stage in German language development, *als* had completely replaced the former comparative particle, i.e. *denn*. At approximately the same time *als* was replaced as a marker of equality by a new particle, i.e. *wie*. This process of change, during which the comparative particle is replaced by its equative counterpart, which in turn is replaced by a new particle of comparison, is referred to as the *comparative cycle* (Jäger, 2010).

The prescriptive rule in current Standard German still dictates the use of *als* as a standard marker in comparisons of inequality and the use of *wie* as a standard marker in comparisons of equality (Duden, 2009). The norm regarding which particle to use in what type of comparison construction is in accordance with the outcome of the (completed) comparative cycle, as summarized above.

However, the tendency exists to use the particle *wie* in comparisons of equality as well as in comparisons of inequality. This deviation from the prescriptive norm occurs in substandard varieties of German (e.g. regional and spoken language use).

The use of *wie* as a comparative particle dates back to the eighteenth century, in which it already occasionally occurred (Grebe, 1966; Jäger, 2010). From these first occasional occurrences on, comparative-*wie* shows a diachronic spread in its regional language use (Universität Salzburg, 2011b). The use of *wie* in comparisons of inequality should not be regarded as an exclusively regional variant, as it also occurs in (other) substandard varieties of German, e.g. (informal) spoken language and informal written language.

The development and spread of *wie* as a comparative particle resembles the development and spread of *als* in the comparative cycle. Just like *als* in Old/Middle High German, *wie* was first used as a marker in similitive constructions in Early New High German, spreading to the equative constructions in New High German, and eventually spreading to comparative constructions in substandard varieties of modern day German. Entering at the lowest, most unmarked form is a precondition for spreading to higher degrees of comparison, as was noted by Jäger (2013).

*Wie*’s development from a similitive marker to a (substandard) comparative marker equal to *als*’ development, in combination with comparative-*wie*’s diachronically increasing distribution, suggest that the comparative cycle might be repeating itself.

*Wie* has already met two conditions to realize a new change in comparative particles in German. First, it has spread from the least marked to the most marked form of comparison (Jäger, 2013) and it has become a common variant in substandard German (standard language change is always preceded by changes in nonstandard variants, where they have to be accepted by the speakers).

In order for the comparative cycle to be completed again, comparative-*wie* must also be accepted by native speakers as a (possible) standard variant. However, comparative-*wie* is heavily criticized not

only by language purists, but by most native speakers. The native speakers of German appear to be very conscious of the standard language norm, which prohibits the use of *wie* in comparative constructions and prescribed *als* as a comparative particle instead. This influence of the prescriptive rule on language use can be strong enough to prohibit or at least slow down the completion of a language change (Hubers & de Hoop, 2013).

We believe that native German speakers' overt judgements of comparative-*wie* are strongly influenced by their consciousness of the normative rule, on the basis of which they disapprove of *wie* as a comparative marker. These judgements therefore do not necessarily provide information about native speakers' subconscious preference for one or the other variant (substandard comparative-*wie* or standard German comparative-*als*).

This raises the question of how native speakers of German process comparative-*wie*.

If native speakers of German process *als* and *wie*, used as comparative particles, in the same way, comparative-*wie* can be considered an acceptable comparative particle variant that is present in speakers' internal language system (Clahsen et al., 1995). However, if *als* and *wie* are processed in different ways, comparative-*wie* is not present in speakers' internal language system and indeed considered unacceptable or ungrammatical.

In order to answer the question how native speakers of German process comparative-*wie*, a sentence-matching experiment (to be elaborated upon in chapter 4) was conducted in which the reaction times of native speakers' decision-making in case of three different comparative particles – *als*, *wie* and *wer*, the latter being a nonsense variant – were measured.

If the response times for comparative-*wie* do not significantly differ from the response times to comparative-*als*, this indicates that both particles are processed similarly by native speakers. Such a result will serve in support of the assumption that comparative-*wie* is accepted as a grammatical variant by native speakers of German. In this scenario, the response times for *wie* and *als* are expected to differ significantly from the non-sense variable comparative-*wer*. There is no variety of German in which *wer* is used as a particle of comparison. Therefore (in this specific use) it can be considered inherently ungrammatical.

If we do find a significant difference between the response times for comparative-*wie* and comparative-*als*, *wie* is not processed as an accepted variant and can therefore not be considered to be accepted by native speakers of German. If so, the response times for comparative-*wie* are expected not to show a significant difference to the response times for the non-sense variable *wer* (used as a comparative particle). *Als* is expected to show a significant difference to *wer* in this case as well.

## Chapter 4: Methodology

### 4.1 Sentence matching task

German has already once undergone a change in its comparative particles. As was described in the previous chapter, the Old/Middle High German comparative particle *denn* was replaced by the Old/Middle High German particle for comparisons of equality *als* in Early New High German. During this change *als* was replaced as a particle in comparisons of equality by *wie*. The change in comparison particles spread to Standard German, for which the prescriptive rule nowadays still dictates that *als* is used in comparisons of inequality and *wie* in comparisons of equality (Jäger, 2010).

However, *wie* is also used in comparisons of inequality in substandard varieties of German. The occurrence of comparative-*wie* dates back to the eighteenth century. Just like *als* in earlier stages of the German language, *wie* has spread through the language system from the least marked form of comparison (similatives) to its most marked variant (comparatives). The areal distribution of comparative-*wie* increases diachronically. The combination of both of these characteristics of comparative-*wie*'s development suggest a repetition of the particle change in German (Jäger, 2013).

The final step to completing the comparative cycle a second time is the acceptance of comparative-*wie* as a (possible) standard language variant by native speakers of German.

Traditionally, linguists determine the grammaticality or acceptability of a certain construction on the basis of their own intuitions possibly in combination with the intuitions of their colleagues (Dąbrowska, 2010; Bley-Vroman & Masterson, 1989).

This method of *introspection* has several disadvantages. First of all, individual judgments are considered to be unreliable. Judgements should rather be averaged over a group of participants. A second disadvantage of this method would be the *observer's bias*, which means that the researcher's individual beliefs and expectations are prone to influence his observations. Finally, the judgements of expert versus naive judges (linguists versus non-linguists) can be very different, due to the fact that a linguist is confronted with the constructions he studies very frequently. Exposure to an ungrammatical structure can make it seem more acceptable as the frequency of exposure increases (Dąbrowska, 2010).

Another method to assess speakers' grammaticality judgements is the (grammaticality) judgement task (Bley-Vroman & Masterson, 1989; Duffield et al., 2002). Native speakers of a language are often able to determine the (un)grammaticality of a construction on the basis of their (conscious and unconscious) knowledge of their native tongue (Bley-Vroman & Masterson, 1989). The main disadvantage of this method for the current research is that there is no telling whether the judges base their judgement on the knowledge within their internal language system or on metalinguistic knowledge (Duffield et al., 2002).

The use of *wie* as a comparative particle in German is disapproved of by most native speakers. As mentioned in section 3.4, native speakers are highly conscious of the prescriptive rules concerning particle use in constructions of comparison. We have seen that the influence of a language norm on language use can be as strong as preventing a language change from being completed, e.g. in case of the particle change in Dutch (Hubers & de Hoop, 2013). When asked to give their overt judgements about the grammaticality or acceptability of comparative constructions containing the particle *wie*, it is to be expected that most native speakers of German will judge the constructions as ungrammatical, due to this same influence of the prescriptive norm. In other words, in an overt grammaticality judgement task, comparative-*wie* is expected to be rejected on the basis of metalinguistic knowledge, and not on speakers' unconscious knowledge of natural language.

At this point, it is important to address the difference between the *grammaticality* and *acceptability* of a linguistic form. Comparative-*wie* is supposedly an ungrammatical form as it does not conform to

the prescriptive rule in Standard German. *Acceptability* on the other hand concerns whether or not native speakers consider a form to be permissible in their language (Dąbrowska, 2010).

A sentence can be perfectly grammatical, e.g. *Colorless green ideas sleep furiously*, but also be considered unacceptable based on e.g. its semantics or because it is difficult to process. At the same time, a sentence or construction that is ungrammatical, can still be considered acceptable by native speakers (Dąbrowska, 2010). This means that even if a construction would be considered incorrect on the basis of normative grammar (as is the case with comparative-*wie*), it is not automatically rejected by the native speakers of the language.

In any judgement task acceptability and grammaticality are operationalized in the same way. There is no way of determining whether a judgement is made on the basis of grammaticality or acceptability, but the outcome for acceptable and grammatical variants is the same (Dąbrowska, 2010). For the current study this means that the outcome for the grammatical (and acceptable) comparative particle *als* can be compared to the outcome for the ungrammatical, but possibly acceptable, comparative particle *wie*, without having to distinguish between judgements made on the basis of grammaticality and judgements made on the basis of acceptability.

In order to avoid the influence of the prescriptive rule for the choice of comparison particles on native speakers' judgements of the grammaticality/acceptability, the method of choice is a sentence matching task. In contrast to a grammaticality judgement task, which is an explicit method that requires participants' overt judgements of the grammaticality of a certain type of construction, the sentence matching task is an implicit method (Duffield et al., 2002) in which a participant is not asked for any grammaticality judgements at all. Rather, by measuring response times the sentence matching tasks provides a way to determine whether a particular type of construction is processed by a participant as grammatical/acceptable or not.

In a sentence matching task participants are presented several pairs of sentences (one pair at a time), and for each pair they must decide as quickly as possible, whether both sentences match or not, i.e. whether or not the sentences are identical or not. The time it takes for the participant to make his/her decision is measured. The decision making process is – among other things – affected by the grammaticality/acceptability of the sentences presented. When a sentence (pair) is grammatical/acceptable, the decision making process is facilitated, which shows in faster response times. When a sentence (pair) is ungrammatical/unacceptable, it takes a participant longer to respond (Bley-Vroman & Masterson, 1989; Duffield et al., 2002).

Grammatical or acceptable sentences are processed significantly faster than ungrammatical/unacceptable sentences. This is due to the fact that, that a (native) speaker's internal language system can immediately recognize and categorize a grammatical/acceptable sentence, which also makes it easier to compare the sentence to another sentence. When presented with an ungrammatical sentence, the internal language system first and automatically produces a corrected version of the phrase, slowing down the recognition process before any comparing or decision-making (about whether or not the sentences match) can proceed (Bley-Vroman & Masterson, 1989).

Measuring reaction times in a sentence-matching task for different variants of a construction – in this case the comparative construction in German – and comparing these response types, should therefore provide information about whether or not a variant is internalized in the processor's (language user's) internal language system (Clahsen et al., 1995). As was addressed in section 3.4, if comparative-*wie* is processed in the same way as comparative-*als*, meaning that it is subconsciously considered to be permissible and possibly grammatical in German, the results of a sentence matching task should show no significant difference in the reaction times for these variables. The possible outcomes of the sentence matching task used for this thesis are elaborated upon in section 4.4.

Duffield et al. (2002) used the sentence matching task in their study of clitic placement in L2 French. They wanted to know whether L2-learners of French have unconscious knowledge of which clitic orders are grammatical and which are not. Because of the focus on the learners' unconscious grammaticality judgements, Duffield et al. (2002) refrained from an explicit judgement task. The implicit method of the sentence matching task provided a way to avoid participants basing their judgements on any of the metalinguistic knowledge (about clitic placement) that they might have been taught in L2-classrooms.

The results of the sentence matching task for the control group of native speakers of French showed a significant difference between the response times for sentences with correct clitic placement and the sentences with incorrect clitic placement. The results for the L2-learners, although they responded slower than the native speakers in general, also showed that they responded faster to sentences with correct clitic placement than to sentences with incorrect clitic placement. These results confirm that grammaticality is indeed a factor of influence and that a sentence matching task can be used to assess which sentences are processed as grammatical and which as ungrammatical (Duffield et al., 2002).

De Vos (2015) used a sentence matching task to investigate whether Dutch comparative constructions containing the substandard particle *als* 'as' behave as grammatical constructions. As was described in section 3.3.1, the prescriptive rule in Dutch dictates that the particle *als* is used in comparisons of equality and the particle *dan* 'than' is used in constructions of inequality. However, the tendency exists to use *als* in both types of comparison constructions. This tendency dates back to the sixteenth century. However, the use of *als* in comparisons of inequality is still considered a substandard variant of Dutch and its use is often criticized (Hubers & de Hoop, 2013).

To determine whether *als* as a comparative particle in Dutch is processed by native speakers as a grammatical or ungrammatical variant, de Vos (2015) compared the reaction times from a sentence matching experiment for sentences containing a comparative construction with *als* to the reaction times for sentences containing a comparative construction with the particle *dan* and to the reaction times for sentences containing a comparative construction with the particle *wie* 'who'. Comparative-*als* is the substandard variant and the variable of interest, comparative-*dan* is the Standard Dutch variant and comparative-*wie* is a nonsense variant.

The basic analysis of the data from the sentence matching task showed a significant difference in response times between comparative-*dan* versus comparative-*als* and comparative-*wie*, whereby comparative-*dan* had the fastest response times. There was no significant difference between the reaction times for comparative-*als* and comparative-*wie*. These results indicate that the Dutch substandard comparative variant is processed as ungrammatical by native speakers.

It should be noted that the sentence matching task as conducted by de Vos (2015) served as the model for the sentence matching task conducted for the present thesis. De Vos (2015) illustrates that it is possible to investigate whether a substandard construction is a part of the native speakers' internal language system by means of a sentence matching task.

In the following sections, the specifics of the sentence-matching task on variants of German particles used in comparative constructions will be described in detail. Section 4.2 contains a description of the materials for the experiment (test items, fillers and additional questionnaire), in section 4.3 the experimental procedure is elaborated upon. In Section 4.4 the possible outcomes of the sentence matching task will be specified. Section 4.5 contains a description of the participant sample. The results are to be found in section 4.6, followed by the discussion in section 4.7.

## 4.2 Materials

### 4.2.1 Test items and fillers

As was mentioned in section 4.1 the sentence matching task for this thesis was modelled upon the sentence matching task constructed by de Vos (2015). The test items and the filler items used by de Vos (2015) were translated to German.

For the sentence-matching task a total number of 54 test items was used. All test items were sentences containing a comparative construction. The 54 test items can be divided into 18 sets of three sentences each. These three sentences in each of the 18 sets were identical except for the comparative particle used. For his experiment, de Vos (2016) alternated between the Standard Dutch comparative particle *dan* ‘than’, the substandard comparative particle *als* ‘as’, and the nonsense variable *wie* ‘who’. In the German translation of the test items, the particle of the comparative constructions alternates between Standard German *als* ‘than’, substandard *wie* ‘as’ and the nonsense variable *wer* ‘who’. The latter variant was added to the test items in order to be able to compare the reaction times for comparative *wie* not only to the standard, grammatical variant *als*, but also to a clearly ungrammatical variant. *Wer* does not occur as a comparative particle in German in any variety, which makes it a good choice for an ungrammatical variable.

An example of a set of test items is shown in the examples (55) to (57), all of the test items are to be found in appendix 2.

(55) Test item *wie*-variant

<i>Hannah</i>	<i>ist</i>	<i>netter</i>	<b><i>wie</i></b>	<i>meine</i>	<i>letzte</i>	<i>Nachbarin.</i>
Hannah	is	nicer	<b>as</b>	my	previous	neighbor
‘Hannah ist nicer <b>as</b> my previous neighbor.’						

(56) Test item *als*-variant

<i>Hannah</i>	<i>ist</i>	<i>netter</i>	<b><i>als</i></b>	<i>meine</i>	<i>letzte</i>	<i>Nachbarin.</i>
Hannah	is	nicer	<b>than</b>	my	previous	neighbor
‘Hannah ist nicer <b>than</b> my previous neighbor.’						

(57) Test item *wer*-variant

<i>Hannah</i>	<i>ist</i>	<i>netter</i>	<b><i>wer</i></b>	<i>meine</i>	<i>letzte</i>	<i>Nachbarin.</i>
Hannah	is	nicer	<b>who</b>	my	previous	neighbor
‘Hannah ist nicer <b>who</b> my previous neighbor.’						

All test items are formulated on the basis of the description of the basic comparative construction in German as described in the previous chapter (section 3.2.1). The main difference between the (different variants of) the test items exist in the comparative particle used. With the exception of the item *Nichts ist schöner wie/als/wer ein Sonnenuntergang am Strand* ‘Nothing is more beautiful as/than/who a sunset at the beach’ all of the objects compared are expressed either as NPs or as personal pronouns. In 36 out of 54 items, the predicate is formed by a combination of ‘to be + adjective’. In some items a different verb than ‘to be’ is used, however always in combination with an adjective expressing comparative degree, so the basic comparative construction remains intact. The vocabulary in the test items was kept simple and the length of the test items was limited to 12 to 13 syllables. In the experiment the test items always occurred in matching pairs, because the main interest of this study are the reaction times for each of the separate variants (in order to compare them).

To distract participants from discovering the main subject of the study, we added filler items to the matching task. The filler items were the same as the ones used by de Vos (2016). For the current sentence matching task they were translated into German. In total there were 103 filler items, which were also controlled for length (although not as strictly as in the case of the test items) and simple vocabulary. The filler items contained several different types of constructions, such as constructions

with prepositions, reported speech or sayings. Several filler items were purposefully altered to contain errors. These errors could concern either the item's spelling or grammar. In the experiment, filler items would occur in both matching and non-matching pairs.

Both the test items and the filler items were randomly distributed over three sentence-matching tasks as is illustrated in table 2.

**Table 2 Distribution of items over the sentence-matching task versions**

		Version 1	Version 2	Version 3
<b>Trial</b>	Fillers	6	6	6
<b>Set 1</b>	Fillers	32	38	32
	<i>Wie</i> -comparative	5	3	6
	<i>Als</i> -comparative	5	3	6
	<i>Wer</i> -comparative	5	3	3
	<b>Total</b>	<b>47</b>	<b>47</b>	<b>47</b>
<b>Set 2</b>	Fillers	32	38	32
	<i>Wie</i> -comparative	5	3	6
	<i>Als</i> -comparative	5	3	6
	<i>Wer</i> -comparative	5	3	3
	<b>Total</b>	<b>47</b>	<b>47</b>	<b>47</b>
<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>

#### 4.2.2 Questionnaire

In addition to the sentence matching task, participants were asked to fill out an additional questionnaire. For the current study, the purpose of this questionnaire was twofold. On the one hand participants were asked what they thought was the goal of the experiment and they were asked to provide additional information about their demographics (where in Germany were they born? In which federal state have they lived for the most part of their lives? Do they or their parents speak a dialect?). On the other hand the questionnaire served to elicit some overt grammaticality judgements with regard to the use of different comparative particle variants. The questionnaire is included in appendix 3.

In the second part of the questionnaire participants were shown a sample of items from the sentence- matching task and they were asked to judge whether or not the sentence was correct and, if the participant marked the sentence to be incorrect, what about the sentence was considered incorrect. The participants were asked to judge 9 items in this way, three of which included a comparative construction. These items are listed in examples (58) to (60) below.

(58)Test item questionnaire *als*-comparative

*Kein      Gemälde      ist      schöner      als      die      Mona Lisa.*  
no      painting      is      more beautiful than      the      Mona Lisa  
'No painting is more beautiful than the Mona Lisa.'

(59)Test item questionnaire *wie*-comparative

*Hannah    ist      netter      wie      meine    letzte      Nachbarin.*  
Hannah    is      prettier      as      my      previous      neighbor  
'Hannah is nicer as my previous neighbor.'

(60)Test item questionnaire *wer*-comparative

*Nichts    ist      schöner      wer      ein      Sonnenuntergang      am      Strand.*  
nothing    is      more beautiful who      a      sunset      at the      beach  
'Nothing is more beautiful who a sunset at the beach.'

Not only is it interesting to see, what participants state about the correctness or grammaticality of these phrases when asked for their overt judgement, but also whether the approval or disapproval of these sentences matches their results on the sentence-matching task. For instance, if there is no significant difference in the response times for the *wie*-comparative and the *als*-comparative, would the sentence containing the *wie*-comparative in the questionnaire also be considered correct?

After the judgement task the participants were asked whether there were particular standard language norm violations they find annoying. As the use of comparative-*wie* is socially stigmatized this question was included in the questionnaire to see how many participants mention this substandard comparative particle as an annoying norm violation.

The questionnaire concluded with a question asking the participants to list any peculiarities they had noticed in the experiment.

### 4.3 Procedure

The experiment was conducted in a sound proof room in the laboratory for experimental linguistics (*XlinC Lab*) of the University of Cologne<sup>1</sup> to ensure that the participants would not be bothered by any outside influences. After a brief instruction about the procedure by the researcher, participants were seated at a computer and followed the further instructions on the screen. The researcher could monitor the participants' progress on a second screen outside the room.

The participants were first shown the following introductory text, containing instructions for the sentence-matching task:

#### Introductory text

*Gleich wird Ihnen einen Satz gezeigt. Anschließend erscheint an einer anderen Stelle im Bild ein neuer Satz. Ihre Aufgabe besteht darin, schnellstmöglich zu beurteilen ob beide Sätze gleich sind. Wenn dies der Fall ist, drücken Sie auf die 'A'. Sind die Sätze einander nicht gleich, dann drücken Sie auf die 'L'. Drücken Sie auf die Leertaste um anzufangen.*

'In a moment you will be presented with a sentence. Shortly after another sentence will appear at another spot on the screen. It is your task to judge as quickly as possible whether the two sentences are identical. If they are, press A. If the sentences are not identical, press L. Press space to start the experiment.'

It should be noted at this point that of each of the three versions of the task (table 2), there were two sub-versions. We accounted for hand-preference by constructing a subversion for left-handed as well as for right-handed participants, whereby the key to mark the sentences as identical was closest to the dominant hand. The instructions displayed in the above are for a left-handed participant. Right-handed participants had to press 'L' in case they rated the displayed sentences as identical and 'A' in case they were not. The researcher inquired about the participant's hand preference before the start of the experiment.

After the participant had pressed 'space' a trial of six items (which always contained filler items only) began, to familiarize the participant with the procedure.

After the trial, the following text was displayed, providing the participant with a final chance to address anything that was not yet clear before the actual start of the experiment.

---

<sup>1</sup> I would like to thank the colleagues at the University of Cologne for the use of their lab and for their help in recruiting student participants for my experiment.

## **Trial end**

*Das war die Proberunde. Jetzt fängt das Experiment an. Wenn Sie noch Fragen haben, stellen Sie sie jetzt. Drücken Sie auf die Leertaste um anzufangen.*

‘This was the trial. The experiment will start now. If you have any more questions, ask them now. Press space to start.’

The experiment consisted of two sets of 47 sentence-pairs. After the first set was completed, the participants were allowed a short recess (they were not allowed to leave the room). The display of the sentence-pairs went as follows: as stated in the introduction to the experiment, first one of the sentences of the pair appeared on the computer screen. After 3000 milliseconds, giving the participant enough time to read the first sentence, a fixation element (‘+’) appeared at a random point in the screen and after another 750 milliseconds the second sentence also appeared on the screen. Both sentences were on display for 3000 milliseconds (together, after the second sentence had been displayed), in which time the participant had to compare them and judge whether or not they are identical. When the time was up for a pair of items, participants received feedback on their answer, which could either be *korrekt* ‘correct’, *falsch* ‘false’ or *nicht rechtzeitig gedrückt* ‘did not press [a key] in time’. The feedback was computer-generated. A participant received the feedback ‘correct’, if he/she had correctly identified the sentence pair as (un)identical. A participant received the feedback ‘false’, if he/she had identified a non-matching sentence pair as a matching sentence pair or vice versa. The participant received the feedback ‘did not press [a key] in time’, if he/she failed to identify the sentence pair as (un)identical within the 3000 milliseconds after the second sentence appeared on the screen. The feedback to their answers served the purpose to keep participants alert and motivated to achieve good results (the feedback being their positive enforcer).

After the second set of sentence-pairs, the participants were shown a thank you text on the screen, in which they were also told that they would be given a concluding questionnaire by the researcher. The concluding text is displayed below:

## **End of the task**

*Vielen Dank für Ihre Teilnahme. Anschließend werden Sie gebeten einen kurzen Fragenbogen auszufüllen.*

‘Thank you very much for your participation. You will now be asked to fill out a short questionnaire.’

In total, including the time the participants needed to fill out the questionnaire, the experiment took 20 up to 30 minutes per participant.

## **4.4 Possible outcomes**

Having described the materials and procedure, it is appropriate at this stage to elaborate on the possible outcomes of the sentence matching task before discussing any results. In section 3.4 the research question was presented: ‘how do native speakers of German process comparative-*wie*?’.

The expected answer to this question is either one of the following two scenarios. Either the results of the sentence matching task show a significant difference between the reaction times for sentences containing the Standard German comparative particle *als* and the sentence containing the substandard comparative particle *wie* on the one hand, and the reaction times for sentences containing the ungrammatical comparative particle *wer* on the other hand. There is no significant

difference between the reaction times for comparative-*als* and comparative-*wie*. This outcome would indicate that comparative-*wie* is processed in the same way as the Standard German comparative *als*, meaning that *wie* is accepted by native speakers as a possible variant of the particles of comparison.

In the second scenario, the results of the sentence matching task show a significant difference between the reaction times for comparative-*als* on the one hand and for comparative-*wie* and comparative-*wer* on the other hand. There is no significant difference between the response times for comparative-*wie* and comparative-*wer*. Such results would indicate that *wie* as a comparative particle is processed in the same way as the ungrammatical variant *wer*, meaning that comparative constructions containing the comparative particle *wie* are not accepted by native speakers.

In a third possible, yet unexpected, scenario the results of the sentence matching task would show a significant difference in reaction times between all three comparative particle variables. De Vos (2015) also mentions this scenario and states that in this case the results of the experiment are inconclusive, because the substandard variant *wie* would neither be processed as a grammatical nor as an ungrammatical variant.

#### 4.5 Participants

A total of 34 native speakers of German participated in the sentence-matching task. All participants were adult students at the University of Cologne. No participants were admitted to the study that majored in a language or linguistics, or that were dyslectic participants.

7 participants were male, 27 were female. Most participants (25) were born in the federal state North Rhine Westfalia, 2 were born in Lower Saxony. For each of the following federal states, 1 participant reported to be born there: Baden-Württemberg, Bavaria, Berlin, Bremen, Mecklenburg-Vorpommern and Saxony. 1 participant was born outside of Germany, in Kasachstan, but her native tongue is German.

25 participants state that they have lived in North Rhine Westfalia for the longest period of time. 3 participants state to have lived in Lower Saxony for the longest period of time and 2 in Bremen. 1 participant states to have lived in Baden-Württemberg for the longest period of time, 1 in Bavaria, 1 in Saxony and 1 in Saxony-Anhalt.

Only few participants reported to speak a dialect themselves or to have parents that are dialect speakers. The distribution of dialects spoken among participants and their parents, in the combinations in which participants stated them to exist in their respective households, is illustrated in table 3.

It is important to note that although the other participants have not reported to be dialect speakers, one cannot automatically assume that they have not been influenced by the regional variety that is dominant in the federal states where they live or have lived for the longest period of time. Therefore, an overview is provided: North Rhine Westfalia and Saxony belong to the regional area of Central German, whereas Lower Saxony, Berlin, Bremen and Mecklenburg-Vorpommern are situated in the Lower German area. Bavaria is part of the Upper German region. Baden-Württemberg and Saxony-Anhalt are spread across two regional areas. Baden-Württemberg lies between the Central and the Upper German region and in Saxony-Anhalt both Lower German and Central German variants exist.

**Table 3 Dialects spoken among participants and their parents**

Dialect	Dialect father	Dialect mother
Kölsch	Kölsch	-
-	Pfälzisch, Hessisch	Kölsch

Schwäbisch	Schwäbisch	Schwäbisch
-	-	Hessisch
Rheinfränkisch	Rheinfränkisch	Rheinfränkisch
-	-	Platt (Niederdeutsch, regional)
-	-	Schwäbisch
Kölsch	Kölsch	Kölsch
-	Pfälzisch	-

## 4.6 Results

### 4.6.1 Descriptive statistics

The first step in the analysis of the data existed of an evaluation of the participants' overall achievements in the sentence-matching task. On the basis of their scores, one participant was removed from the sample, because he had answered incorrectly in case of 46 pairs, which is more than twice the second highest number of errors (17) made by any of the participants and is also almost equal to the total number of test items presented in one session (47).

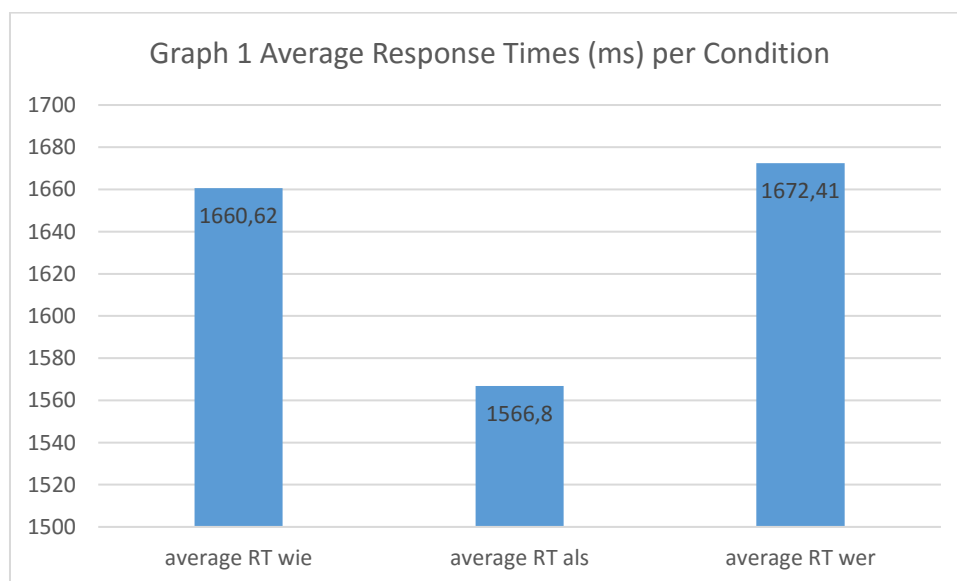
Only the response times for the test items were taken into account in the analysis. Of those responses, only the cases in which the participants had correctly identified the items as matching pairs (as mentioned, the test items only occurred in identical pairs) were included in the analysis.

As a final step before the actual analysis, the data were averaged per condition per variable. This overview of average response times is to be found in appendix 4. All response times are in milliseconds.

Table 4 and graph 1 show the average response time for each of the test variables.

**Table 4 Descriptive Statistics**

	Mean	Std. Deviation	N
<b>Average RT <i>wie</i></b>	1660,62	257,05	33
<b>Average RT <i>als</i></b>	1566,80	252,45	33
<b>Average RT <i>wer</i></b>	1672,41	272,95	33



#### 4.6.2 ANOVA

A repeated-measures ANOVA was used to test the possible significance of the differences between the average response times of the three variables.

The results show that the assumption of sphericity has been met. Mauchly's test of sphericity is insignificant  $\chi^2(2) = 4.4, p > .05$ , meaning that the variances of differences between these variables are equal (Field, 2009: 474).

The results for the main ANOVA show that the response times were significantly affected by the variant of comparative particle used,  $F(2, 66) = 5.4, p < .05$ .

Post hoc pairwise comparisons provide a more detailed account of the ways in which the average response times of the variants of comparative particles differ from one another. The difference between the mean response time for comparative-*wie* differs significantly from the mean response time for comparative-*als* at  $p < .05$ . The difference between the mean response time for comparative-*als* and the mean response time for comparative-*wer* is also significant at  $p < .05$ . The mean response time for comparative-*wie* and the mean response time for comparative-*wer* do not differ significantly,  $p = .984$ .

#### 4.6.3 Judgement task (Questionnaire)

In this section, the responses to the questionnaire's judgement task are reported. Table 5 below shows a schematic overview of the answers the participants provided when asked to judge several sentences each containing a comparative construction, but differing with regard to the comparative particle used to mark the standard in said construction.

The sentences that had to be judged are listed under section 4.2.2 above.

All participants judged the sentence containing a comparative construction with the particle *als* as its standard marker as correct.

The judgements of the sentence containing a comparative construction with the particle *wie* as its standard marker show some variation. Whereas most of the participants corrected the comparative particle *wie* to *als* (30 participants), 1 participant only labeled the variant *wie* as 'incorrect' without offering any corrections and 2 participants judged the comparative-*wie* construction to be correct.

All participants corrected the use of *wer* as a comparative particle in the third sentence. Most participants stated *wer* has to be replaced by *als* (25 participants). 1 participant marked the variant as incorrect, but did not offer any possible corrections. Another participant stated that *wer* should be replaced by either *als* or *wie*. Remarkably, a total of 6 participants corrected the use of *wer* as a comparative particle by replacing it by *wie*.

**Table 5 Participants' responses in the judgement task**

Condition	Judgement	Count
<b>ALS</b>	Correct	33
	Incorrect (no correction offered)	0
	<i>wie</i>	0
	<i>wer</i>	0
	<b>Total</b>	<b>33</b>
<b>WIE</b>	Correct	2
	Incorrect (no correction offered)	1
	<i>als</i>	30
	<i>wer</i>	0
	<b>Total</b>	<b>33</b>

<b>WER</b>	Correct	0
	Incorrect (no correction offered)	1
	<i>als</i>	25
	<i>wie</i>	6
	<i>als</i> or <i>wie</i>	1
	<b>Total</b>	<b>33</b>

Of the 8 participants who accepted *wie* as a comparative particle or used it to correct *wer*, none reported to speak a dialect. 6 of these participants were born in the Central German language area and also lived in a federal state in this area for the longest period of time (North Rhine Westfalia and Saxony). One participant was born in Berlin and lived in Lower Saxony for the longest period of time. Both Berlin and Lower Saxony belong to the Lower German language domain. One participant reported to be born abroad and lived in Bremen (Lower German) for the longest period of time.

19 out of 33 participants reported the use of *wie* as a comparative marker as an annoying standard language norm violation.

#### 4.7 Discussion

The main ANOVA showed a significant effect of the type of comparison particle used on average reaction times. This result is in accordance with the result of de Vos (2015) on the Dutch data.

The fastest response times were elicited for *als*, indicating that this comparative particle is processed the easiest by native speakers. The participants needed the longest time to process comparative constructions containing *wer*. This indicates that one can successfully distinguish the grammatical variant *als* from the ungrammatical variant *wer* (Bley-Vroman & Masterson, 1989; Duffield et al., 2002).

A further exploration of the data by means of post hoc pairwise comparison supports the second possible outcome of the experiment, described in section 4.4. There is a significant difference between the average reaction times for *als* and the average reaction times for *wie*. There is also a significant difference between the average reaction times for *als* and the average reaction times for *wer*. The average reaction times for *wie* and *wer* do not differ significantly. These results indicate that comparative-*wie* is not (yet) considered an acceptable variant by native speakers, as they process *wie* in the same way as the ungrammatical variant *wer*.

The fact that comparative-*wie* is processed as an ungrammatical/unacceptable variant by native speakers also implies that the final condition for the comparative cycle to be completed again in German is not met.

The results for the judgement task showed that all speakers accepted the sentence containing a comparative construction with *als* as grammatically correct. The sentence containing a comparative construction with *wie* is approved by only two participants. So far, these results for overt judgements on the use of comparative particles is in accordance with the fact that the prescriptive norm in German has a strong influence on speakers' grammaticality judgements. Native speakers are very conscious of the language norm, which dictates the use of *als* in comparative constructions and limits the use of *wie* to comparisons of equality.

On the basis of the influence of the prescriptive rule, native speakers of German are also expected to correct the use of *wer* by replacing it with *als*. Most participants (25) do so accordingly. However, 6 participants correct the use of *wer* by replacing it with *wie*, one participant states *wer* can be corrected by the use of either *wie* or *als*.

The fact that participants use *wie* to correct an ungrammatical comparative particle seems to be in support of the suggestion, that there exists a tendency in native speakers of German to use (and prefer?) *wie* as a comparative particle. Hence, there must also exist a tendency to accept *wie* as a possible comparative particle variant.

Even more remarkable is the fact that of the 8 participants who accepted *wie* as a comparative particle or used it to correct *wer*, 2 are from the Lower German area and 6 from the Central German area. In Lower German, *als* is dominant as a particle of comparison (Jäger, 2013), which makes it even more surprising that two speakers from this area would use *wie* to correct for an ungrammatical particle of comparison. In the Central German language area both *als* and *wie* are used as markers of comparison, but *wie* is stated to be dominant in Schlesien, Upper Saxony and Thuringia only (Weise, 1918). As neither one of the 6 participants from the Central German language area have reported to have resided in either one of these federal states, one would not expect their choice for *wie* to correct *wer*. These results as well suggest that there is some uncovered tendency in native speakers of German to use *wie* as a particle in comparative constructions.

It would require further research to determine the strength of this tendency and to uncover its underlying motivational factors. The results from the main ANOVA suggest that the tendency to use *wie* in both types of comparison constructions (equality and inequality) is not supported by a language-internal factor, as they indicate that comparative-*wie* is processed as an ungrammatical/unacceptable comparative particle variant. The language external factors of influence *birth region*, *region of residence* and *level of education* (Hubers & de Hoop, 2013) cannot account for the variation in the results of the judgement task either. All participants are highly educated (they are students at the University of Cologne). As was explained above, on the basis of their regional origin and longest residence, one would expect these participants to show a preference for the use of *als* as a comparative particle.

19 out of 33 participants reported the use of *wie* instead of *als* as a comparative marker as an annoying standard language norm violation. On the one hand this shows once more that speakers are highly conscious of norm violations in comparative constructions with regard to particle use. However, right before the participants were asked what kind of ungrammaticalities they find annoying, they were asked to judge several sentences. Incorrect elements included in the judgement task, among which deviant use of comparative particles, might have activated this consciousness in the participants.

To further explore the spreading tendency in speakers using *wie* as a comparative particle in both substandard and the standard variety of German and the possible acceptance of this variant, it is recommended to conduct a follow-up experiment, using a sentence-matching task to monitor the way in which comparative-*wie* is processed by native speakers. Hereby it is recommendable to repeat the study on a larger scale, including more participants, preferably from different regions. As was described for the current project, most participants are from the Central German language area. A larger participant sample (the current only just exceeded  $n > 30$ ) that contained more participants from other language areas might show different results in response times for different comparative particle variants.

A final suggestion to optimize the test items for the sentence-matching times concerns the differences between these sentences. In the task used for the current project, there existed some differences in the predicates used (as described in section 4.2.1), which might have influenced the acceptance of the construction. Using only 'to be + adjective' predicates is therefore recommended.

## Chapter 5: Conclusion

The German particles of comparison have undergone a change during the earlier stages of the German language's development, referred to as the *comparative cycle* (Jäger, 2010, 2013). In Early New High German, the then similitive and equative particle *als* replaced the comparative particle *denn*. In turn, *als* was replaced by *wie* as similitive and equative particle in (Early) New High German. This change in (the use of) particles of comparison is still reflected in the current prescriptive rule for the marking of comparison constructions in Standard German.

However, there is a tendency to use *wie* as a particle in comparisons of inequality as well as in comparisons of equality in substandard varieties of German. The development and spread of comparative-*wie* resembles the development and spread of comparative-*als* in the earlier stages of German's development. As a particle of comparison *wie* has spread from the least marked form of comparison (similitive) to the most marked comparison construction type (comparatives). We have also seen a diachronic increase of comparative-*wie*'s distribution across the different areas of German's regional language use.

The combination of *wie*'s development from a similitive to a comparative marker equal to the way *als* developed in earlier stages of German language development (Jäger, 2013) and comparative-*wie*'s increasing distribution over substandard varieties of German suggests that the change in particles of comparison might reoccur.

In order for the language change to be completed (again), comparative-*wie* must be accepted as a possible (standard) language variant by native speakers of German.

The possible acceptability of comparative-*wie* by native speakers of German was explored by means of a sentence matching task. The main results of this sentence matching task showed that *wie* is not accepted as a possible standard language comparative marker. Comparative-*wie* is processed as an ungrammatical form.

The results of the additional (overt) grammaticality judgement task still reflected native speakers' tendency to use *wie* as a comparative particle. There were 8 participants who either accepted the use of *wie* as a comparative particle (did not correct it by *als*) or used *wie* to correct *wer* (as a comparative particle, used as an ungrammatical variable in the current study).

Due to the results for the main experiment, this tendency cannot be explained by a language-internal factor. Neither do the language-external factors birth region, region of residence or level of education apply as explanatory factors, because on the basis of these factors, one would expect to find a preference for comparative-*als* (section 4.7).

Further research on possible factors motivating native speakers' tendency to use *wie* as a comparative particle is necessary, whereby both language-internal and -external variables should be taken into account.

A repetition of the sentence matching task to investigate the possible acceptance of comparative-*wie* is also recommended, if conducted on the basis of a larger and more diverse (regarding participants' birth region and region of residence) participant sample. In addition, the test items should be optimized to only contain 'to be + adjective'-type of predicates.

## Literature

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### Examples & images

Example (7): comparative construction

Greifenstein, P. (2015). *Talk im Tipi – Der radioeins-Kommentatoren-Talk*. Last viewed on August 16, 2016, at <http://spaetschau.philipp-greifenstein.de/wordpress/tag/brigitte-fehrle/>.

Screenshot 1: wer-weiss-was.de

Wer-weiss-was. (2002). *'Größer wie ich' - jetzt auch korrekt?!?*. Last viewed on August 8, 2016, at <http://www.wer-weiss-was.de/t/groesser-wie-ich-jetzt-auch-korrekt/1167178>.

Map 1: Regional language variants of German

Universität Salzburg. (2011a). *Atlas zur deutschen Alltagssprache. Karte der deutschen Dialekten*. Last viewed on August 1, 2016, at [http://www.atlas-alltagssprache.de/wp-content/uploads/2012/05/Dialekt-Karte\\_neu.jpg](http://www.atlas-alltagssprache.de/wp-content/uploads/2012/05/Dialekt-Karte_neu.jpg)

Map 2: Distribution of comparative particles in the German language area



Universität Salzburg. (2011b). *Atlas zur deutschen Alltagssprache. als/wie/als wie (Vergleichspart.)*. Last viewed on August 1, 2016, at [http://www.atlas-alltagssprache.de/wp-content/uploads/2012/05/groesser\\_als-wie-als\\_wie.jpg](http://www.atlas-alltagssprache.de/wp-content/uploads/2012/05/groesser_als-wie-als_wie.jpg)

## APPENDICES

1. Screenshot
2. Test items
3. Questionnaire
4. Average response times per participant per condition
5. Glossary

## Appendix 1: Screenshot wer-weiss-was.de

wer-weiss-was.de/t/groesser-wie-ich-jetzt-auch-korrekt/1167178

[Alle Kategorien](#) > [Sprachen](#) > [Deutsche Sprache](#)

### 'Größer wie ich' - jetzt auch korrekt?!?

Erziehung & Beruf

Computer & Digital

Essen & Trinken

Freizeit & Hobby

Geld & Sparen

Gesundheit

Haus & Garten

Kinder & Familie

Kultur & Gesellschaft

Liebe & Partnerschaft

Mode & Beauty

Musik & Medien

News & Aktuelles

Reisen & Urlaub

**Sprachen**

Sport, Outdoor & Fitness

Tiere & Natur

Wissenschaft & Technik

Funfacts

Hilfe

Wir über uns

Netiquette

Abzeichen

Nutzungsbedingungen

Datenschutz

Impressum




Liebe Expertinnen und Experten,

Am Wochenende erzählte mir eine Mutter zweier schulpflichtiger Kinder, dass es nun auch nicht mehr als Fehler gilt, wenn man sagt/schreibt: "Er ist duemmer \*wie\* ich". Vormal's haette das ja zwingend "\*als\* ich" heissen muessen.


Aber das ist doch eine grammatikalische Sache und kann nicht einfach per Handstreich mit der Rechtschreibreform legalisiert worden sein! Ich bin entsetzt.

Eine Hoffnung hab ich noch: dass es sich dabei um ein Geruecht handelt. Sind LehrerInnen an Board? Oder weiss sonst jemand mehr darueber?

Schon jetzt schoenen Dank!  
LG  
Edith

 0   [Antworten](#)

#### 3 Antworten



Antwort von @Anonym

05.06.2002, 14:14 Uhr

**Re: 'Größer wie ich' - jetzt auch korrekt?!?**

So furchtbar es sich anhört - aber es ist korrekt. Das ging nicht mit der Rechtschreibreform einher, sondern wurde bereits 1991 heimlich, still und leise vom Duden legalisiert, durch einen Eintrag im Duden und ohne größere Bekanntmachungen, deshalb fiel es bisher nicht so stark auf. In der Schule lernen Kinder allerdings nicht mehr den Unterschied zwischen als und wie beim Komparativ.

Gruß, Miriam

Source: wer-weiss-was (2002)

## Appendix 2: Test items

condition 1	condition 2	condition 3
Hannah ist netter wie meine letzte Nachbarin.	Hannah ist netter als meine letzte Nachbarin.	Hannah ist netter wer meine letzte Nachbarin.
Hannah isst mehr wie ihre jüngere Schwester.	Hannah isst mehr als ihre jüngere Schwester.	Hannah isst mehr wer ihre jüngere Schwester.
Die Hamster essen weniger wie die Kaninchen.	Die Hamster essen weniger als die Kaninchen.	Die Hamster essen weniger wer die Kaninchen.
Nichts ist schöner wie ein Sonnenuntergang am Strand.	Nichts ist schöner als ein Sonnenuntergang am Strand.	Nichts ist schöner wer ein Sonnenuntergang am Strand.
Ihr seid angenehmer wie die andere Gruppe.	Ihr seid angenehmer als die andere Gruppe.	Ihr seid angenehmer wer die andere Gruppe.
Wir sind besser wie der fanatische Sportler.	Wir sind besser als der fanatische Sportler.	Wir sind besser wer der fanatische Sportler.
Ich habe am Donnerstag mehr Zeit wie am Freitag.	Ich habe am Donnerstag mehr Zeit als am Freitag.	Ich habe am Donnerstag mehr Zeit wer am Freitag.
Warum schreiben sie schneller wie das andere Team?	Warum schreiben sie schneller als das andere Team?	Warum schreiben sie schneller wer das andere Team?
Der Hund ist schöner wie der Hund meiner Nachbarn.	Der Hund ist schöner als der Hund meiner Nachbarn.	Der Hund ist schöner wer der Hund meiner Nachbarn.
Max macht weniger Hausaufgaben wie sein Bruder.	Max macht weniger Hausaufgaben als sein Bruder.	Max macht weniger Hausaufgaben wer sein Bruder.
Uwe ist klüger wie die anderen Lehrer.	Uwe ist klüger als die anderen Lehrer.	Uwe ist klüger wer die anderen Lehrer.
Hugo ist langsamer wie die meisten Männer.	Hugo ist langsamer als die meisten Männer.	Hugo ist langsamer wer die meisten Männer.
Eine Jeanshose ist teurer wie ein Pullover.	Eine Jeanshose ist teurer als ein Pullover.	Eine Jeanshose ist teurer wer ein Pullover.
Die Prüfung ist anders wie das letzte Mal.	Die Prüfung ist anders als das letzte Mal.	Die Prüfung ist anders wer das letzte Mal.
Kein Gemälde ist schöner wie die Mona Lisa.	Kein Gemälde ist schöner als die Mona Lisa.	Kein Gemälde ist schöner wer die Mona Lisa.
Peter will immer besser wie sein Nachbar sein.	Peter will immer besser als sein Nachbar sein.	Peter will immer besser wer sein Nachbar sein.
Der Espresso ist stärker wie der Gestrige.	Der Espresso ist stärker als der Gestrige.	Der Espresso ist stärker wer der Gestrige.
Paul tut weniger wie die anderen Studenten.	Paul tut weniger als die anderen Studenten.	Paul tut weniger wer die anderen Studenten.

### Appendix 3: Questionnaire

Fragenbogen (nachher auszufüllen)

Worum denken Sie, dass es sich in dieser Studie handelt?

.....

.....

.....

In welchem Bundesland sind Sie geboren?

.....

In welchem Bundesland haben Sie die längste Zeit gewohnt?

.....

Sprechen Sie einen Dialekt? Wenn ja, welchen?

.....

Spricht Ihr Vater einen Dialekt? Wenn ja, welchen?

.....

Spricht Ihre Mutter einen Dialekt? Wenn ja, welchen?

.....

Sind folgende Sätze korrekt?

Satz	Korrekt Ja/nein	Was ist falsch?
Der Möbelräumer hat gestern den Schrank zerstört.		
Kein Gemälde ist schöner als die Mona Lisa.		
Die Ansichtskarten heften an der Pinnwand.		
Nach jeder Runde wird Ihnen gezeigt, wie viele Antworten korrekt waren.		
Hannah ist netter wie meine letzte Nachbarin.		
Ihr sind ins Kino gewesen.		
Nichts ist schöner wer ein Sonnenuntergang am Strand.		
Der Andenkenladen verkauft Kühlschranksmagneten.		
Ich habe die Dusche gerade wieder abgestellt.		

Gibt es sprachliche Fehler die Sie ärgern? Welche?

.....  
 .....

Ist Ihnen sonst noch etwas aufgefallen?

.....  
 .....

Herzlichen Dank für Ihre Teilnahme!

#### Appendix 4: Average response times per participant per condition

Participant	AvRTWIE	AvRTALS	AvRTWER
1	2066,5	1735,5	1594,83
2	1568,33	1484,17	1808,17
3	1872,67	1559,17	2063,83
4	2025,83	1864,67	1568,67
5	1207,17	1108,33	1100,33
6	1719,83	1570,83	1889,33
7	1992	1767,33	1987
8	1693,83	1663,5	1862,83
9	1604,67	1882,67	1568
10	1379,33	1410,17	1205,5
11	1631,17	1851,33	1601
12	1144,17	1129	1129,17
13	1691	1623,67	1959,33
14	1403,83	1276,33	1286,33
15	1535,67	1854,67	1905,5
16	2001,33	1768,33	2181,17
17	1901,83	1757,67	1897,17
18	1263	923,33	1340,33
19	1442,5	1263,17	1621
20	1794	1481,67	1609,67
21	1462,5	1386,67	1455,33
22	1971,33	1869,5	1997,17
23	1757,17	1450,5	1701
24	1634,83	1537	1719,5
25	1431,17	1534,17	1888,17
26	2110,33	1965,17	1660,5
27	1766,33	1703,83	1682,83
28	1582,83	1567,67	1491,67
29	1564	1625,17	1698,17
30	1333,67	1320,67	1302,17

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Master Thesis

31	1658,33	1469,67	1761,5
33	1940,67	1865,67	1918,17
34	1648,67	1433,17	1734,33

## Appendix 5: Glossary

1SG	1 <sup>st</sup> person singular
3SG	3 <sup>rd</sup> person singular
CP	Complementizer phrase
DIR	Directive case
EQC	Equative case
EQD	Equative degree
Fem.	Feminine
GEN	Genitive case
NOM	Nominative case
NP	Nominal phrase
STM	Standard marker
TOP	Topic marker