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AD HOC CONSTRUCTIONS. MORPHOSYNTACTIC CREATIVITY AS A SYNCHRONIC PHENOMENON

The paper argues with two case studies for a number of related grammar theoretical assumptions: it is essential to keep the social and the individual dimension distinct in grammatical analysis, in order to account for the grammatical creativity that speakers display when necessary. Such newly created constructions are termed *ad hoc constructions*. Two examples from German are discussed. It is shown with some empirical measures that the constructions are no conventionalised parts of the language system of German, but are nevertheless accepted by speakers – as if they *did* belong to the German grammar. On the basis of these analyses, it is argued for a differentiated notion of grammaticality that distinguishes between grammaticality at the social dimension (the tradidtional notion of grammaticality) and grammaticality for the individual speaker (including all deviations from the language system that still can be used in conversation).

Key words: German, syntax, grammatical innovation, grammaticality, generalised conversational implicature, constructional blending.

1. Introduction

The topic of this paper are phenomena from the grammar of German which, to my mind, thus far have not received a satisfactory analysis. The reason for the limits of previous attempts lies in a failure to understand these phenomena as

instances of *creative language use*. Before I turn to my reanalysis of these phenomena, I will briefly introduce the basic assumptions of the model of language and particularly of creative language use that I am assuming.

The view on language that I rely on has the Saussurean conception of language, and some modern interpretations of it, as a major inspiration [1; 2; 3]. In my neo-Saussurean conception – Fig. 1 illustrates this model – I am making the following assumptions:

- There is a dialectical relationship between the language system and language use, according to which the language system is used by competent speakers as a *tool* in communication, while at the same time the language system is the *result* of the on-going communicative activities of the speech community.
- The language system is a **social** entity, a large ensemble of conventions that is learned by individual speakers from the input provided through communication.
- *Linguistic innovation* begins in language use as **systematic deviation** from the language system by individual speakers.
- Innovations that pass a certain threshold in frequency of use in the community will become part of the language system.
- The *discourse* is the totality of all speech acts carried out in the speech community's communicative activities.
- The discourse is the data source from which the learner acquires the conventions of the language system due to their sufficiently high frequency in the discourse.

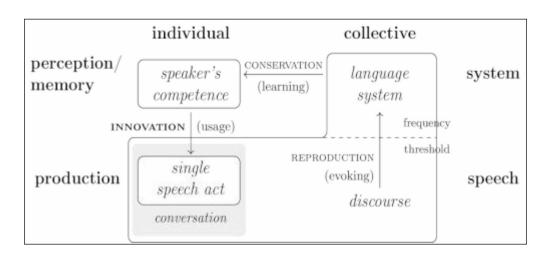


Fig. 1. Language, decomposed into five distinct, interdependent phenomena, after de Saussure [1]

The central component in this conception of language is the *conversation*. I am using this notion in a broad sense, ranging from sequences of multi-party communicative interaction to texts. Conversations consist of speech acts of individual speakers. Only these speech acts are under the intentional control of speakers, and they are therefore the place where creative language use can occur.

Speakers are *free* to choose, whether and how they make use of the language system in their speech acts. While sticking to the units, patterns and rules of the language system improves communicative efficiency, certain types of deviations from the system do not seem to cause problems.

An important part of the speaker's competence is the ability to make linguistic innovations – to produce and understand new or different units, patterns, rules etc. A general research issue is the question what characterises those deviations/innovations that speakers seem to accept seamlessly.

When speakers are successful in their creations, their communication partners accept the innovations seamlessly and might not even notice that they have been presented a newly created linguistic unit.

To capture these insights, we need to distinguish *two notions of grammaticality*, related to system and speech, characterising *different types of acceptable expressions*:

- **l-grammaticality** Acceptable expressions are *l-grammatical* if they conform to the conventions of the language system in its present state. ("1" for *langue*);
- p-grammaticality Acceptable expressions are p-grammatical if they can be used and understood without difficulty in conversation. ("p" for parole);
- Newly created units are p-grammatical, but not l-grammatical. This means that the l-grammatical units are a subset of the p-grammatical units. Inventions are *n-grammatical*;
- **n-grammaticality** Acceptable expressions are n-grammatical, if they are p-grammatical, but not 1-grammatical. They are derived in a systematic way on the basis of the language system and general properties of linguistic competence. ("n" for *new*).

If we use the letters L, P, N to denote these different sets of expressions. respectively, then P is the union of L and N. Our main interest here lies in the elements of N. These elements can be identified by the following properties:

- 1. They are types of (complex) constructions that can be found occasionally in corpora, but whose frequency is below the threshold for grammaticalisation. They might therefore occur on a par with equally rare alternative constructions.
 - 2. They are accepted (to a sufficient degree) by speakers.
 - 3. They have unexpected or irregular properties.

Corpus studies provide evidence for the first property. The second property can be verified with psycholinguistic methods, for instance by acceptability studies. Close linguistic analysis will have to provide arguments concerning the third property.

Below, I will discuss two candidates for grammatical constructions of this kind. I am using the term *ad hoc construction* for such phenomena.

2. Case study 1: German complex reflexives

German has a reflexive pronoun, *sich*, which cannot be inflected. It is used for third person, singular or plural, in accusative or dative case. Being a reflexiviser, it has to be coreferent with a clause-mate constituent, cf. (1a) vs. (1b):

(1) a. Maria wäscht sich.

M.₁ washes SELF₁

b. *Paul möchte dass ich sich wasche

P. 1 wants that I SELF1 wash

- (1b) is ungrammatical, because the antecedent for *sich* is from the main clause, and not within its own subordinate clause. About the precise formulation of the binding rule for *sich*, there has been some debate. It is centered around examples like (2):
 - (2) ??Ich zeigte den Patienten sich im Spiegel I showed the patient₁ SELF₁ in.the mirror

Example (2) is well-formed according to the standard assumption that reflexive binding follows a *hierarchy of grammatical functions* [4; 5], which for German is assumed to be as in (3) [5].

(3) Grammatical function hierarchy for German:

Subject < accusative object < dative object < prepositional object

According to this account, the antecedent must be to the left of the reflexive in the hierarchy. This account predicts that a dative *sich* can be bound by an accusative antecedent, as in (2) (cf. [5]).

This empirical claim has been under dispute from the beginning. As discussed by S. Featherston and W. Sternefeld [7], many authors find example (2) odd, if not ungrammatical. M. Reis [6] already observed that *sich* is often accompanied by the intensifier *selbst* 'self' in such cases.

- S. Featherston and W. Sternefeld [7] report an acceptability study on such object-to-object binding relations, using 16 different possible variants. It has two clear results: a) the antecedent should have dative case and the reflexive accusative case; b) the reflexive expression may use *sich* or a personal pronoun, but it should be accompanied by the intensifier *selbst*, as in (4).
 - (4) Ich zeigte dem Patienten ihn / sich selbst im Spiegel.

I showed the DAT patient PRON.MASC.3SG.ACC / REFL self in the mirror

Result a) is unexpected, given the hierarchy in (3). R. Vogel [8], referring to R. Jackendoff [9], notes that there is a further semantic factor, namely that the antecedent must not be the "copy", while the reflexive is the "original". This would be the case if the accusative object (referring to the mirror image) were the antecedent for the reflexive in dative case (referring to the real person).

With respect to the second observation, R. Vogel [8] argues that the intensifier *selbst* marks the exceptional use of the reflexive or pronoun.

This could be confirmed in a corpus study: we extracted a random sample of 2000 occurrences of *sich* in the corpus research system COSMAS II, provided by

the IDS Mannheim.¹ In this sample, not a single item was found where *sich* was bound by a non-subject. The antecedent always was a subject or an implicit subject (as in infinitival clauses).

Because *sich* is used quite frequently, this does not mean that binding of *sich* by an object does not occur. But it must be extremely rare, so that one can safely assume that an occurrence of *sich* is strongly expected to be bound by its clause-mate subject.

An account of this can be given in terms of S.C. Levinson's theory of generalised conversational implicature [10], using, in particular, his M-implicatures.²

M-implicature (modality). The use of unusual expressions signals a deviation from the stereotype.

The reasoning goes as follows: the stereotypical use of *sich* is binding by subject; for a personal pronoun, it is binding from outside of its clause. The addition of the intensifier signals a deviation from these stereotypes (binding by non-subject or from within the clause, respectively).

Because this happens extremely rarely, it is unlikely for either *sich selbst* or *ihn selbst* to grammaticalise into the object-bound reflexive in the language system. Therefore, the two variants co-exist. Still, as shown in [7], speakers accept these patterns and prefer them over alternatives.

3. Case study 2: "wrong" participles in German verbal complexes

The inflection for tense, mood and aspect of the German verb is dominantly analytic. A particularly widespread construction is the perfect construction which consists in the perfective participle of the inflected verb plus an auxiliary that serves as finite verb in finite clauses and is realised as an infinitive otherwise. The auxiliary can be a form of *sein* 'be' or *haben* 'have'.

This construction is exemplified in (5a). (5b) displays the perfect of a modal verb accompanied by an accusative object. Modal verbs like *können* 'can' usually embed another verb in the infinitive, as exemplified in (5c).³ In this case, the modal verb is realised as an infinitive instead of a participle in the present perfect construction ("infinitivus pro participio", IPP [11]).

a. Maria hat das Lied gesungen.
M. have.3sg.pres the.neut.sg.acc song sing.partcp "Maria sang the song."
b. Maria hat es nicht gekonnt.
M. have.3sg.pres pron.neut.sg.acc not can.partcp

¹ The sample was collected from their archive W-ALL which contains all publically available parts of the IDS's corpus of written German language.

² S.C. Levinson [10] himself used the history of the English reflexivisation patterns as a test case for his theory of generalised conversational implicature.

³ A corpus search with random samples of 100 sentences with each of the German modal verbs revealed a proportion of 90+% for their use with a verbal complement as in (5c), as compared to a nominal complement as in (5b), for each verb.

"Maria was not able to do it."

c. Maria hat das Lied nicht singen können.

M. have.3SG.PRES the.NEUT.SG.ACC song not sing.INF can.INF

"Maria was not able to sing the song."

The exception exemplified in (5c) is used quite frequently and can safely be assumed to be conventionalised in the language system of German. Verbs that are also used with IPP are causative *lassen* 'let' and, optionally, the perception verbs *sehen* 'see' and *hören* 'hear'.

Infinitival variants of the present perfect constructions can occur with or without the infinitival marker zu 'to':

(6) a. *Maria könnte das Lied gesungen haben*.

M. can.3SG.PAST.SUBJ the.NEUT.SG.ACC song sing.PTCTP have.INF

"Maria might have sung the song."

b. *Maria behauptet, das Lied gesungen zu haben*.

M. claim.3SG.PRES the.NEUT.SG.ACC song sing.PTCP to have.INF

"Maria claim that she sang the song."

Infinitival variants of structures like (5c), the perfect construction of a modal verb that embeds another verb, are extremely rare. Variants that can be found are illustrated in (7).

... ohne das Lied ... (7)without the.NEUT.SG.ACC song a. haben singen zu können have.INF sing.INF to can.INF (Aux-V-Mod/IPP) b. singen haben zu können sing.INF have.INF to can.INF (V-Aux-Mod/IPP) c. singen gekonnt zu haben sing.INF can.PTCP to have.INF (V-Mod-Aux) d. gesungen haben zu können sing.PTCP have.INF to can.INF (V-Aux-Mod/PPI) "... without having been able to sing the song."

The variants (7a,b) are analogous to the patterns that are preferred, when the auxiliary is finite, showing IPP. (7c) is a variant that conforms best to standard perfective infinitives like (5b), without IPP. But surprisingly, (7d) is the variant that is most often used. It has a property that is truly exceptional and can be found nowhere else in the German grammar: the verb that is embedded by the modal verb, normally an infinitive, is realised as a participle (participium pro infinitivo, PPI). (7d) thus has PPI on the lexical verb in addition to IPP on the modal verb.

The grammaticality status of this construction has been subject to a controversy with R. Vogel [12] and, similarly, S. Wurmbrand [13] arguing in favour of an integration of this construction into the German grammar, whereas

H. Haider [14] cites it as an example of a "grammatical illusion". My classification of this construction as n-grammatical might be able to inegrate the positive aspects of both positions.

In R. Vogel [12], I found the frequencies displayed in Table 1 in a corpus search for infinitival perfect constructions with four groups of embedding verbs. The search was carried out on the "Deutsches Referenzkorpus" (German reference corpus) from the IDS Mannheim.

Table 1

Distribution of infinitival 3-verb complexes in the archive *W-public* of the "Deutsches Referenzkorpus", IDS Mannheim [12]

X =	V-Aux-X / PPI+IPP	V-Aux-X / IPP	Aux-V-X / IPP	V-X-Aux
causative lassen 'let'	12	4	0	2
modal verbs	62	0	1	6
non-causative lassen	3	2	0	19
perception verbs	0	0	0	32

From these rather small figures, the size of the inspected corpus and the average daily language experience,¹ we can estimate that an average speaker will experience 4–5 of such verbal complexes per year, 2–3 of which would have the preferred structure (7d). This is presumably too rare for the construction to become grammaticalised. Still, within these small numbers, the preferences are clear: for modal verbs and causative *lassen* it is (7d), for perception verbs and non-causative *lassen*, it is (7c).

The preferences for infinitival complexes are the reversal of those for finite complexes. This could also be confirmed in an acceptability rating experiment for finite and infinite verbal complexes with modal verbs. In this experiment, 48 subjects (students from the University of Bielefeld) rated the four verbal complex patterns illustrated in 3, in finite and infinite versions, on a 7-point rating scale. The mean ratings are displayed in Fig. 2.

The fact that the contrasts between the finite variants are larger than those of the infinite variants might also be indicative of a lack of conventionalisation in the case of the infinitival variants. According to [15], the range between 0.2 and 0.5 on the rating scale – where each of the four infinite variants is located – is the area of stronger markedness, but not of ungrammaticality.

¹ The inspected IDS archive W-public (Cosmas II), by the time of the corpus search, contained 1.15 billion word forms [12]. The average linguistic input of English speakers is 100 500 words per day, according to a consumer study by R.E. Bohn and J.E. Short [16].

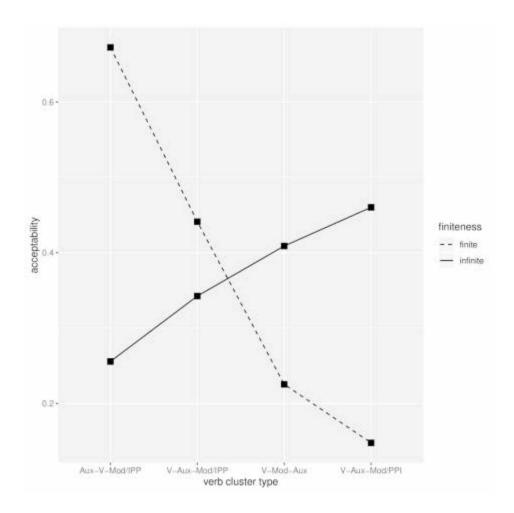


Fig. 2. 4 variants of finite and infinite verbal complexes, mean ratings, 7-point rating scale; 1 = maximal, 0 = minimal acceptability

4. Summary

The mechanisms that are applied in creating the two discussed ad hoc constructions are the following:

- in the case of object-bound reflexives, the mechanism of the M-implicature is exploited, a complex unit was created by attaching the emphatic marker *selbst*, signalling the unusual interpretation of the reflexive or pronoun to which the marker is attached;
- in the second case, the ad hoc construction that is formed to fill the gap of an infinitival perfect of the modal verb construction is created by using the salient properties of closely related constructions, the participle for ordinary perfect constructions and IPP for the finite perfect of the modal construction. The resulting constructional blend has the surprising PPI property.

These mechanisms, implicature and constructional blending, can both be considered as general options which are possible for all speakers irrespective of their native language. They are, on the other hand, based on the inventory provided by the German language system.

We have seen, on the other hand, that the two ad hoc constructions occur too rarely too assume that they are part of the conventionalised grammar of German, and we saw that they are nevertheless accepted to a sufficient degree. Additionally, they co-occur with alternative structures which are equally rare, but not ungrammatical.

Therefore, the two constructions meet the criteria for *n-grammaticality* that we set out at the beginning of this paper, and, therefore, we have sufficient evidence for n-grammaticality as a concept derived from our neo-Saussurean conception of language which, likewise, is confirmed by this finding.

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