

JOINING THE IDEATIONAL AND THE INTERPERSONAL METAFUNCTION – A SYSTEMIC FUNCTIONAL DESCRIPTION OF LEXICOGRAMMATICAL RESOURCES FOR PROJECTION IN GERMAN

by
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This article examines a range of lexicogrammatical resources for projection, i.e. grammatical devices that can be deployed in order to attribute an utterance to someone other than the current speaker. The aim of the present paper is to examine these phenomena in German (where they are well-described; cf. Zifonun *et al.* 1997) from a systemic functional point of view and to demonstrate how systemic functional concepts such as semantic domain, and the different linguistic metafunctions defined in systemic functional linguistics, in particular the ideational and the interpersonal metafunctions, can shed new light on the phenomena in question. Based on newspaper analyses, it is demonstrated how the resources involved are ideational (clause complex, Angle) and interpersonal (modal Adjunct, modal auxiliary, mood) and how they – individually and in combination – emphasize different aspects of projection meaning. A specific status is ascribed to the subjunctive mood of the verb (the *Konjunktiv* in the German terminology), whose special instructive function places it in both metafunctions. The article is a pilot study focusing on the linguistic potential of projection, and should be seen as a contribution to the ongoing description of German grammar in terms of systemic functional linguistics (e.g. Steiner & Teich 2004). It may furthermore serve to open a window on research dealing with register-specific variation.

1. Introduction

The aim of this article is to show how a grammatical model based on systemic functional linguistics (SFL) can be used in describing the lexicogrammatical resources that are available in German for

projection, i.e. the linguistic technique by which an utterance is attributed to someone other than the current speaker.

SFL offers a framework of theoretical concepts that are relevant for all languages and on the basis of which grammatical models for single languages can be developed. At present, the most thoroughly described language is English (e.g. Halliday & Matthiessen 2004), but other languages have been described within the framework as well. As regards the grammar of German, SFL-descriptions are still a fairly recent enterprise. Some SFL-descriptions of German are in fact available (cf. Teich 1999, Teich 2003, Steiner & Teich 2004), but none of these can be seen as exhaustive descriptions of the grammatical system of German and none of them deal specifically with the lexicogrammatical resources for projection. The present article is thus the first systematic description from an SFL-perspective of resources of projection in German and as such it should be seen as an addition to the existing SFL-treatments of German and as a contribution to the ongoing work of providing a description of German projection resources in terms of SFL.

The lexicogrammatical phenomena in question are the following:

- i. the projection clause complex:
 - (1) Die Eltern sagten, dass Peter krank sei.
(‘The parents said that Peter was ill’)
- ii. the circumstantial element of Angle:¹
 - (2) Den Eltern zufolge ist Peter krank.
(‘According to the parents, Peter is ill’)
- iii. the modal Adjuncts of projection:
 - (3) Peter ist angeblich krank.
(‘Peter is reportedly ill’)
- iv. the epistemic use of the modal auxiliaries *sollen* and *wollen*:
 - (4) Peter soll krank sein.
(‘Peter is said to be ill’)

- (5) Peter *will* krank sein.
(‘Peter claims to be ill’)
- v. the subjunctive mood (the *Konjunktiv*):
- (6) Peter *sei* krank.
(‘[someone says] Peter is ill’)

These resources have been the subject of much investigation and have been treated both normatively and descriptively in a number of accounts of German grammar (cf. e.g. Zifonun *et al.* 1997 and *Duden Grammatik* 2005). By comparison, SFL seems well fitted for a description and explanation of this area, especially due to its theoretical concepts of the metafunctions (cf. section 2). The fact that different parts of the grammar are used for realizing different kinds of meaning is highly relevant for the description of projection phenomena and the grammatical resources in question.

In brief, projection implies two central aspects of utterance meaning, paraphrasable as (a) and (b), where x stands for ‘that which is being said’:

- (a) someone utters x
- (b) I am not the one who utters x

Whereas (a) is connected to the representation of a specific situation, (b) is related to the speaker’s attitude; in SFL, these meaning types are accounted for by the ideational and the interpersonal metafunctions respectively. In the following, I will show how the grammatical resources used here can be seen as belonging to these two metafunctions. While the lexicogrammar of English shows similar projection resources of the ideational and interpersonal kind, German displays a larger range of grammatical distinctions and interpersonal resources; both of these must, of course, be accounted for in the grammatical model.

Whereas the data presented and the phenomena discussed will not be new or controversial to linguists of German, what is novel

here is the suggestion that the SFL-model offers a new way to look at and discuss these phenomena.²

As the use of projection resources is largely register specific, some of the resources treated here may be rare or even non-occurring in other registers. Since the aim of this study is a system description and since the register of mass media shows the greatest variety in this area, newspaper examples were considered best fitted for the purpose; consequently, most of the authentic examples used in the article originate from online newspapers. The German examples will be paraphrased in English, although in many cases, the particular grammatical feature at play may be untranslatable.

The article is structured as follows: After a brief introduction of a number of systemic functional key concepts of relevance to the study (Section 2), I will present a brief survey of the grammatical manifestation of projection in English (cf. Halliday & Matthiessen 2004) (Section 3). This description will serve as the point of departure for my analysis in Sections 4.1.-4.3. of the projection phenomena in German, described one by one in accordance with the metafunctional principle. Here, it will also be demonstrated how each of these resources can realize projection meaning by itself; in addition, in Section 4.4, I will examine to what degree they allow for combinations. While some combinations are highly conventionalized (e.g. the clause complex and the *Konjunktiv*), others result in double projections or ambiguous constructions. In the final Section 5, the resources are discussed in terms of their metafunctions; in particular, it will be demonstrated how the ideational resources can also achieve an interpersonal status.

2. Systemic functional linguistics (SFL) – a brief introduction to relevant central concepts

SFL provides a holistic model of language in the sense that it both aims at a systematic description of the linguistic resources of a given

language and at a description of how contextual factors influence the way those resources are used. We are thus dealing with a grammatically founded model which can be used both for text analysis and for the description of different genres and registers. This latter, discourse-oriented aspect plays an important role in SFL-investigations in several languages since it allows for a systematic description of how the situational context determines language use.

The SFL model rests on the assumption that four main *strata* are relevant for the description of language: a stratum of *context* where we may identify extra-linguistic factors that are realized as meanings at the *semantic* stratum; these meanings are worded at the *lexicogrammatical* stratum, both in grammatical structures and in lexis; finally, the meanings are attached to particular soundings at the stratum of *phonology*.

Whereas the *functional* aspect of the model is reflected in its focus on meaning, its *systemic* aspect is based on the idea that (among other things) the grammar of a language can be presented as *systematic networks* of grammatical choices, each choice realizing a specific meaning. A classic example is the system network of clause mood in English, where one chooses between declarative and interrogative, each choice generating a specific grammatical structure and the choices congruently³ realizing the semantic utterance functions of respectively statement and question.

A central concept of SFL theory is that of the *metafunction*. The meanings realized through the lexicogrammar are different in nature and therefore belong to different metafunctions. We may thus identify a functional component of language that has to do with the representation of our experience of the world (the *ideational* metafunction that comprises the logical and the experiential metafunction); one that has to do with the speaker's attitude and the interaction between the participants of the communication (the *interpersonal* metafunction); and one that has to do with the organization of the two other metafunctions in terms of e.g. cohe-

sion (the *textual* metafunction). In a simplex clause (which is the grammatical domain of main interest), these types of meaning are realized through choices in grammatical system networks, and every clause is thus a simultaneous realization of the three types of meaning (cf. Table 1).

	<i>Peter</i>	<i>probably</i>	<i>kissed</i>	<i>his wife</i>	<i>in the bathroom.</i>
Experiential	Actor		material Process	Goal	Location (circumstantial element)
Inter- personal	Subject	modal Adjunct	Finite/ Predicator	Complement	
Textual	Theme	Rheme			

Table 1: SFL clause analysis

The ideational metafunction is split up into an *experiential* and a *logical* metafunction in order to account not only for the experiential meaning of the clause as a configuration of a process and its participant(s), but also for the clause as a complex where those configurations are connected in terms of logico-semantic relations (addition, causality, temporality, etc.) Peter probably kissed his wife in the bathroom after he ate his breakfast and in terms of structural relations of either parataxis or hypotaxis, by which a semantic weighting of the configurations as equal or unequal is realized.

The grammatical resources are grouped, in accordance with the metafunctions, into logical, experiential, interpersonal and textual systems. The assumption is that system networks that belong to different metafunctions are essentially independent of one another – the interpersonal choice between declarative and interrogative (*he loved her/he pushed her – did he love her/did he push her*) places no constraints on the choice in the experiential transitivity system between a mental process (*love*) and a material process (*push*). On

the other hand, systems that belong to the same metafunction are to some degree interdependent: thus, there is a dependency between the interpersonal mood system and the interpersonal system of modalization (also known as 'epistemic modality') which obstructs some combinations (*he certainly loves her* – **love her certainly!*). The phenomena of independency, respectively interdependency, between grammatical systems are seen as strengthening the metafunctional hypothesis.

Another argument in favor of the theory is based on the description of contextual features using the terms of *field*, *tenor* and *mode*. A text always occurs in a situation which can be described in terms of what is being done (the field), as a set of socially meaningful relations between the interactants (the tenor), and in accordance with the text's function in the situation and relative to the medium that is being used (the mode). Variations in each of these factors have their corresponding linguistic variations in the ideational (i.e. logical and experiential), interpersonal and textual metafunctions. We may thus linguistically describe different registers that comply with different types of situations and media.

The model described here consists of a set of theoretical concepts that are considered universal (e.g. strata and metafunctions) and a set of descriptive categories that are derived from these concepts but must be formed on the basis of the resources available in any particular language (e.g. declarative and interrogative, mental vs. material process type, and so on). Still, similarities and overlaps are to be expected in the way resources are available and organized in different languages, and it is therefore not surprising that grammatical resources such as the ones for projection in German that are described and discussed in this article are similar, in many respects, to those obtaining for English. However – as the present study intends to show – German makes more grammatical distinctions in the area of projection than does English, while it realizes projection using a larger range of (especially interpersonal) resources.

2.1. Grammatical metaphors and semantic domains

Although the metafunctional hypothesis implies that the lexicogrammatical systems of the different metafunctions are to a large degree separated, two concepts of the theory allow us to establish a (dis)so-ciation between a metafunction and a particular grammatical system.

One is the *grammatical metaphor*, whereby a congruent relationship of realization between a semantic feature and a grammatical unit is ignored. Here, a sequence of configurations which is congruently realized as a clause complex (7) may be realized metaphorically as a simplex clause (8):

- (7) He liked her because she helped him. (hypotactic clause complex; causal relation between clauses) (congruent)
- (8) He liked her because of her help. (simplex clause with prepositional phrase functioning as the circumstantial element Cause) (metaphorical)

In these two examples, we may – semantically – identify two processes with participants. In (7), each process is realized by a separate clause; in (8), one of the processes is realized by a prepositional phrase. In this case, we see a transfer between the logical and the experiential metafunction.

Similarly, a metaphoric transfer between the interpersonal and the logical metafunction is assumed to be the case in (9) vs. (10):

- (9) He probably loves her. (simplex clause with modal Ad-junct) (congruent)
- (10) I think he loves her. (projection clause complex; modality expressed through projecting clause) (metaphorical)

Here, (9) is considered the congruent case, since only one configuration is realized, with the modalization meaning realized by the

Adjunct *probably*. In (10), the modalization is realized by a separate clause.

Grammatical metaphors facilitate a semantic expansion of the system whereby we are able to make new distinctions and create new meanings. In (8), we are able to grammatically treat a process as if it were a thing (e.g. by adding Premodifiers to it); in (10), it is made explicit that the speaker is the source of the modalization (cf. Halliday & Matthiessen 2004:614ff.).

The second concept is that of a *semantic domain* that ranges over more than a single grammatical unit; in other words, a meaning category can be construed in different grammatical environments. While for instance the semantic domain of the utterance is realized in the clause, a semantic domain like expansion (e.g. via temporality) can be realized by several grammatical units (clause complex, simplex clause, connections between grammatically independent clauses) of which none is considered more congruent than the other. Even so, realizations sharing a semantic feature cannot be considered synonymous, since the choice of a particular structure allows other kinds of meaning to be deployed as well.

3. *Projection as a semantic domain*

Projection is an example of a 'transgrammatical semantic domain' (Halliday & Matthiessen 2004:593). The semantic term 'projection' covers the phenomenon that an utterance is seen as belonging to a semiotic order of reality as opposed to a material one; through the deployment of lexicogrammatical resources, the clause comes to function as a representation of a representation, not as a direct representation of a (non-linguistic) experience (Halliday & Matthiessen 2004:441). This displacement of the utterance can stay unspecified (implying only that the source is speaker-external) or it can be accompanied by an attribution to a specific source, in the following

labelled 'the projector' (cf. Matthiessen 2004:654); the displacement may also involve the naming of a verbal/mental process. Both 'projector' and 'verbal/mental process' are thus semantic terms which can be manifested grammatically in different ways.⁴ Dependent on whether the process is verbal or mental, the projected utterance has the status of a locution or of an idea. In this article, the focus is on locutions, but ideas are generally realized in the same way.

The definition of projection involves two separable semiotic processes, where 'separable' will almost always imply either a temporal dissociation between the two processes or a personal dissociation between the current speaker and the projector, or even both. Hence, constructions like (10) are considered non-projecting, since there is no personal or temporal dissociation.

Projection is transgrammatical in the sense that it is manifested in different grammatical units (such as group,⁵ clause, clause complex) and thus is the result of choices made in different systems; for instance, in English projection is achieved through choices in the systems of logicosemantic relations, experiential transitivity, and interpersonal modalization.

3.1. Projection in the clause complex

The SFL-model makes a fundamental distinction between complex and simplex units that are described as univariate and multivariate structures, respectively. A simplex clause is composed of different kinds of units, whereas a clause complex consists of units of the same kind.⁶

Projection clause complexes are traditionally labelled 'direct' and 'indirect speech', whereas SFL uses the terms 'quote' (11) and 'report' (12):

(11) Peter said: "It is raining".

(12) Peter said (that) it was raining.

In this type of grammatical unit, choices are made in two systems belonging to the logical metafunction:

- a. The system of taxis: there is a choice between two interdependency relations, parataxis, as in (11) and hypotaxis, as in (12). The two are congruent realizations of semantic equality and inequality (cf. Halliday & Matthiessen 1999).
- b. The logicosemantic systems: here we choose between projection, as in (11) and (12), and expansion (which covers phenomena like addition, adversativity, temporality, causality etc.).

A third system, which is relevant only for projection and which is seldom taken into consideration in SFL-descriptions of English is that of orientation (offering a choice between the speaker (i.e. the sender of the text) oriented 'report' and the Sayer oriented 'quote'). Usually, 'quote' is treated as identical to paratactic, 'report' as identical to hypotactic projection. Only in connection with the so-called free indirect speech in English, a dissociation of orientation and taxis is suggested (cf. Halliday & Matthiessen 2004:466). As shall be seen in Section 4.1, such a dissociation is highly relevant when it comes to accounting for German projection.

The projection clause complex is composed of a projecting and a projected clause. A projecting clause is a lexicogrammatical realization of a configuration of a verbal/mental process and a projector. While the projecting clause must meet certain requirements, as regards process type, the projected clause is subject to no such constraints and is in itself neither grammatically nor lexically marked as projected. Thus, a 'quote', such as in (11), represents the utterance in what could be its original form; as to the 'report' clause in (12), even though it may be introduced by a subordinating conjunction, this does not signal projection, but rather hypotaxis.

The consequences of this can be seen in the analysis proposed by Halliday and Matthiessen (2004:447) of the following text excerpt:

- (13) (13.1) "I'm not so sure," replied the Fat Controller.
 (13.2) "We can't lift you out with a crane, the ground's not firm enough."

While the quote in (13.1) is grammatically projected, due to its interdependency with the projecting clause, (13.2) is not grammatically projected; it is enclosed in quotation marks, but these are punctuation features, not a feature of the lexicogrammar. From a semantic point of view, (13.2) is, of course, a projection, but this is not signalled through the lexicogrammar, since there is no interdependency relation to a projecting clause.

3.2. Projection in the simplex clause

In the simplex clause, we can identify resources of experiential, interpersonal and textual kinds. A clause is, in brief, the result of choices in the experiential systems of transitivity (between different kinds of Process types, such as material, mental, verbal, existential and relational, each connected with particular Participant types) and of Circumstantial elements (non-participants that specify circumstances of the process), interpersonal choices in the mood system and modality system, and textual choices, whereby one part of the clause comes to function as the Theme, another part as the Rheme. An example of an SFL clause analysis can be seen in Table 1.

3.2.1. Experiential resources for projection

In the simplex clause, projection can be realized by choices in the experiential system of circumstantial elements, by means of

a circumstantial element henceforth called Angle (cf. Halliday & Matthiessen 2004:276f.):

(14) *According to the police*, two people were missing.

The typical form is a prepositional phrase with Prepositions like *according to*, *in the words of*.

3.2.2. Interpersonal resources for projection

For English, the SFL-model shows that projection can be realized interpersonally by means of particular modal Adjuncts. Unlike circumstantial elements, modal Adjuncts do not realize experiential aspects of a situation, but rather express the present speaker's assessment in terms of probability (*perhaps*, *certainly*) or the assessment of a non-specified projector (so-called evidential modal Adjuncts like *reportedly*, *allegedly*):

(15) The ferry was *reportedly* carrying about 40 passengers when it capsized.

The type illustrated in (15) is projecting, since it refers to a projector, whereas the probability type (*the ferry was certainly carrying about 40 passengers when it capsized*) only involves the current speaker.

3.3. Summary

In English, projection can be regarded as a transgrammatical semantic domain, since it can be realized in different kinds of lexicogrammatical units and by choices in systems that belong to different metafunctions. According to Matthiessen (2004:652ff.), such a variation can be observed both within, and across languages. Even though

projection as a semantic category can be identified in all languages, the manifestation of this domain varies from language to language; some languages make use of logical resources, some of experiential, some of interpersonal ones; other languages, such as English and German, have projection resources of different kinds and some, such as German, even combine resources from different metafunctions. Although this kind of metafunctional variation is fairly uncommon as regards other meaning categories (cf. Teich, 2003), with respect to projection it can be considered a reflection of the two aspects mentioned in section 1.

4. Projection in German

Projection resources in German can be described in terms of the logical, the experiential and the interpersonal metafunctions. In the description and discussion below, I will focus on the functional distinctions between ideational and interpersonal resources on the one hand, and logical and experiential resources on the other. The first distinction has to do with whether the projector is specified or not, the second with the potential of the projecting structure.

In the following sections, 4.1 through 4.4, I will first account for the resources with regard to their typical metafunctions; following that, I discuss how the different types allow for combination. Finally, section 5 compares and discusses the types, also in relation to modalization with speaker source. Section 6 offers a brief Conclusion to the whole article.

4.1. Logical projection

Logical projection in German is by and large realized in the same way as is logical projection in English, i.e. as a clause complex consisting

of a projecting and a projected clause. While there is no restriction on the process type occurring in the projected clause, the projecting clause normally contains either a mental or a verbal Process; the projection itself is either quoting or reporting. In this section, I shall not elaborate further on these rather uncontroversial issues; instead, I shall discuss the areas where German displays grammatical distinctions that are not easily captured by Halliday & Matthiessen's grammatical model (2004). This should, of course, not be seen as a deficiency of the original model (which was elaborated on the basis of English). However, the fact that the model, when applied to German, needs to account for other meaning making structures may of course raise the question whether parallel meaning distinctions are made in English by means of non-grammatical features or whether these are left non-distinguished; in the present article, I will leave this issue aside due to space restrictions. The grammatical features in question are the clause structure of reports and constructions involving projecting clauses with *so* and *wie*.

4.1.1. Clause structure

German and English differ in respect to a clear formal distinction between the main clause and the subordinate clause. Except for the case of the optional subordinating conjunction *that*, English reported clauses are formally identical to main clauses:

(16) Peter said (*that*) *he had been ill*.

Both with and without *that*, the reported clause is treated as hypotactically related to the projecting clause, and this analysis is, as mentioned, based on the fact that the projected clause is a report.

In German, by contrast, a reported clause can have two distinct clause forms:

- (17) Peter sagte, *er sei krank gewesen*.
 (18) Peter sagte, *dass er krank gewesen sei*.

The two forms differ with respect to the subordinating conjunction *dass* and with respect to the word order. In (17), the Finite *sei* is placed immediately after the first clause constituent (a so-called 'verb-second' (V2) clause structure), in (18), it is placed at the end of the clause (a 'verb-final' (VF) clause structure). Generally, the V2 structure is associated with main clauses, whereas the VF structure is the typical form of a subordinate clause. From a structural point of view, there is a choice between a potentially independent report clause (V2) and a report clause that is explicitly marked as dependent (VF) in a projection clause complex.

The two structures also differ with respect to their positional potential. A projecting clause may precede, follow, or be enclosed in, a V2 clause. In the VF case, the projecting clause typically precedes the report, whereas a projecting clause following the report is highly marked, and an enclosed clause is impossible:

- (17a) Er sei krank gewesen, sagte Peter.
 (17b) Er sei, sagte Peter, krank gewesen.
 (18a) Dass er krank gewesen sei, sagte Peter.
 (18b) *Dass er, sagte Peter, krank gewesen sei.

These structural differences suggest that the German V2 projection is more adequately treated as parataxis than as hypotaxis. Furthermore, the structural differences seem to reflect a functional difference. Thus Zifonun *et al.* (1997:1765), Steube (1986:357ff.), Pütz (1989:194ff.) and Vliegen (2010) argue that the VF form is a signal of loyalty only to the meaning of the original utterance, whereas the V2, except for the deictic elements, signals a loyalty also to the original wording, i.e. the two represent a choice between a *de re* and a *de dicto* rendering of the original utterance (cf. Coulmas 1984).⁷

Thus, (18) could be a report of both (19) and (20), whereas (17) could only be an adequate report of (19):

- (19) Peter: Ich bin krank.
- (20) Peter: Ich habe Halsschmerzen.
(‘I have a sore throat’)

As a consequence, the VF clause is more easily interpreted as a condensation of larger stretches of text than is the case for the V2 structure.

In order to account for these differences, we need to uncouple the systematic association, valid in English, of taxis and orientation (cf. section 3.1). In German, VF and V2 reports share a speaker orientation (as opposed to the Sayer orientation of the quote), but they differ with respect to taxis, since the V2 report shares the independence potential of a quote clause.⁸

4.1.2. The *so/wie* construction

Projection can also be realized by a clause complex in which a projecting clause is introduced by the conjunctive Adjunct *so* or the subordinate unit *wie*:

- (21) Ende 2004, *so* versprach US-Präsident Bush im Wahlkampf, werde eine rudimentäre Raketenabwehr aktiviert. (wortschatz.uni-leipzig.de)
(‘In the election campaign, US President Bush promised that a rudimentary missile defense would be activated at the end of 2004’)
- (22) Ein Angriff auf eine Polizeipatrouille im benachbarten Samarra kostete weitere vier einheimische Polizisten das Leben, *wie* die US-Streitkräfte mitteilten. (www.fr-aktuell.de)

('An attack on a police patrol in close-by Samarra took the life of four domestic police officers, *as* reported by the US armed forces')

A *so*-clause can also be elliptical, with an implicit verbal process:

- (23) Die Bahn plant nun, ab 1. Februar die Zusatzkarte kostenlos abzugeben [...], *so* *Stauß*. (www.spiegel.de)
('The [German] Railway Company now plans to give the supplementary ticket away for free, *Stauß* said')

In terms of taxis (cf. section 3.1), (22) is hypotactic and (21) and (23) are paratactic. The constructions are, however, not parallel to the paratactic and hypotactic projection clause complexes treated above, since in the hypotactic case it is the projecting clause that is dependent on the projected one. Furthermore, *so* and *wie* indicate a resuming function that cannot be recognized in ordinary projection clause complexes; they could be paraphrased as 'in this way' (*so*) or 'in which way' (*wie*), whereby the manner meaning becomes more obvious. This suggests that, as regards their logico-semantic character, these constructions are expanding (of the enhancement type) rather than projecting. What establishes the projection meaning is the fact that the *so/wie* clauses include a verbal Process. As to the difference between paratactic projection clause complexes and *so*-constructions, the latter have a restricted positional potential: they must either follow the projected clause (as in (23)), or be enclosed in it (as in (21)), and they are therefore typically treated as parenthetical (cf. Pittner (1996)).

Characteristic for logical projection is the presence of a projecting clause in which verbal process and projector are realized as clause functions. This implies that the projecting feature has the full functional potential of a clause: it can be temporally and modally manipulated (*Peter sagt...* vs. *Peter sagte...*); we can add Circumstances and/or

a Receiver (*Peter hat gestern seiner Mutter erzählt...*); and so on. At the same time, it means that the projected utterance is attributed to a specific projector that is realized as the clause function Sayer.

4.2. Experiential resources

The experiential projection resource in German is the Angle. This is typically a prepositional phrase with either *nach*, *laut* or *zufolge* (as Prepositions, *laut* and *nach* are placed in front of their Complements, whereas the Postpositions *nach* and *zufolge* are placed after their Complements). The Complement is either the name of the projector (24) (*López*) or a noun phrase designating a verbal (or mental) process (25) (*einem Bericht*); in these cases the projector may occur as a Postmodifier (*der Tageszeitung*):

- (24) *López zufolge* hatte das Lokal eine Betriebsfläche von 1500 Quadratmetern [...]. (www.fr-aktuell.de)
('According to López, the room had a working area of 1500 square meters')
- (25) Doch *einem Bericht der Tageszeitung "The Nation" zufolge* seien die Mitarbeiter des Meteorologischen Amtes zu dem Schluß gekommen, daß ein möglicher Fehlalarm in den zur Hochsaison voll ausgebuchten Hotels "unnötige Angst" ausgelöst hätte. (www.welt.de)
('However, according to a report in the newspaper "The Nation", the employees of the Meteorological Institute had come to the conclusion that a possible false alarm in the hotels that were fully booked for the high season would have led to "unnecessary anxiety."')

As does logical projection, experiential projection, too, has the possibility of grammatically realizing both projector and verbal

process. Since the grammatical domain is a phrase, not a clause, experiential projection does however lack the clausal potential that is connected to the logical resource; while for instance temporal and modal meaning may in principle be realized as Premodifiers (e.g. *laut der vermuteten gestrigen Aussage der Kanzlerin* ('according to the [Federal] Chancellor's alleged statement of yesterday'), such constructions are seldom seen and will in any case not be allowed to unfold the full potential of a projecting clause.

4.3. Interpersonal resources

Three resources for projection, associated with three different grammatical structures, can be said to be of the interpersonal kind. Firstly there are a few modal Adjuncts that imply that the utterance should be attributed to someone other than the present speaker. Secondly, the modal auxiliaries *sollen* ('shall') and *wollen* ('will') in their epistemic use imply that the information comes from a different source. And thirdly, the verb mood *Konjunktiv* signals projection.

In all three cases, the grammatical features are closely related to features implying modalization (speaker's own evaluation in terms of different degrees of possibility). In the case of modal Adjuncts and the modal auxiliaries, the use of certain lexical items may express modalization, while others express projection; as regards verbal mood, this can also realize modalization in terms of irrealis.

4.3.1. Modal Adjunct

For German, the SFL model shows that two units can function as a modal Adjunct of projection: *angeblich* and *vorgeblich* ('reportedly', 'allegedly'):

- (26) Unterdessen drohten *angeblich* irakische Extremisten im Internet damit, demnächst Terroranschläge in den USA zu verüben. (www.n-tv.de)
 ('Meanwhile on the internet, Iraqi extremists *reportedly* threatened to soon mount terrorist attacks in the US')
- (27) Die Gefahr, dass durch die Exzellenzförderung Hochschulen erster und zweiter Klasse entstehen, wie Hessens Landeschef Koch *vorgeblich* fürchtet, sieht Herrmann nicht [...]. (www.spiegel.de)
 ('The danger that the elite programs should result in first and second class universities, as the Minister President of Hessen Koch *allegedly* fears, is not seen by Herrmann')

In both cases, the meaning realized by the modal Adjunct can be paraphrased as "some people say that...", i.e. the modal responsibility is attached to a non-specified projector.

4.3.2. *sollen* and *wollen*

Another interpersonal projection resource is the epistemic use of the modal auxiliaries *sollen* and *wollen*. It is generally claimed that German disposes of six modal auxiliaries (*dürfen*, *können*, *mögen*, *müssen*, *sollen*, *wollen*) and that all six have both a deontic and an epistemic use. In the deontic use, all six verbs express modulation (i.e. obligation, inclination or permission); in the epistemic use, *dürfen*, *können*, *mögen* and *müssen* have modalization meaning, whereas *sollen* and *wollen* express projection meaning.⁹ In particular, *sollen* indicates that the information realized in the clause comes from a source that is neither identical to the Subject nor to the speaker:

- (28) Kokain-Gerüchte gibt es allerdings seit Jahren in der Königsklasse des Motorsports. Edda Graf, Sprecherin

von Ralf Schumacher, bestätigte einen Fall, der sich in dieser Saison zugetragen haben *soll*: "Es gab vor einigen Monaten das Gerücht, dass Spuren von Kokain gefunden wurden. Damals rätselten alle, von welchem Fahrer sie stammen könnten." (www.spiegel.de)

('Rumours of cocaine have existed for several years in the 'royal league' of motorsports [Formula 1 racing]. Edda Graf, spokesperson for Ralf Schumacher, confirmed an incident that *is said* to have taken place this season: "For months, there was a rumour that traces of cocaine had been found. Back then, everybody was guessing which driver they might have come from"')

There is some disagreement in the literature as to whether the speaker conveys a sceptical evaluation of the utterance when using the *sollen*-construction. According to the *Duden Grammar* (2006:535), the speaker's attitude is neutral – the construction simply implies that the information comes from a non-specifiable source. Zifonun *et al.* (1997:1892), Colliander (2002:249) and Helbig & Buscha (2001:122), in contrast, interpret *sollen* as a distancing expression, implying that the speaker cannot – and is not inclined to – vouch for the truth of the information.

The epistemic use of *wollen* implies that the projector is identical to the Subject of the clause. Example (29) is a headline, with a follow-up clause in parentheses:

- (29) US-Einheit will wichtigen Fang gemacht haben. (Die US-Armee meldet einen Erfolg in ihrem Bemühen, die Gewalt im Irak einzudämmen.) (www.spiegel.de)
 ('[A] US unit reports having made an important catch. (The US Army announces a success in its effort to stem the violence in Iraq)')

It is generally claimed that this construction implies a certain amount of scepticism towards the information (Zifonun *et al.* 1997:1892; Helbig & Buscha 2001:122); thus Colliander (2002:249) interprets the above examples as parallel to 'Subject claims', rather than to the neutral 'Subject says'.

The two constructions, the modal Adjunct on one hand and the *sollen*-construction on the other, can to some degree be said to be synonymous. As they both present information that is attributed to an unspecified source not identical to the speaker, they differ in this respect from the ideational projection resources. Even so, *wollen* does in fact attribute the information to a specific source.

4.3.3. Mood of the verb: the *Konjunktiv*

The third interpersonal resource for projection in German is the *Konjunktiv*; its use represents the most striking difference between projection in English and in German. The *Konjunktiv* occurs in the projected clause of a clause complex, but also in the simplex clause, which it then marks as unambiguously projected. Due to the way the *Konjunktiv* is deployed, it differs from the other interpersonal resources of projection because it instructs the addressee to look for a specific source in the co-text.

Mood (along with person, number and tense) is an inflectional category of the finite verb. In German, it covers three terms: indicative (30), *Konjunktiv* (31) and imperative (32):

- (30) Peter *holt* das Auto.
('Peter fetches the car')
- (31) Peter *hole* das Auto.
('[someone says] Peter fetches the car' / 'Let Peter fetch the car!')
- (32) *Hol* das Auto, Peter!
('Fetch the car, Peter!')

While the *Konjunktiv* and the imperative each serve particular functions, the indicative is considered the unmarked mood.

Generally, two systems of *Konjunktiv* are assumed: *Konjunktiv I* and *Konjunktiv II*. Both include four different forms that morphologically are strictly parallel to the respective indicative forms – the former forms' temporal meaning does however differ fundamentally from that of the corresponding indicative tense forms. In both systems, *Konjunktiv I* and *II*, we may identify a synthetic form that expresses simultaneity (*wäre* in (33)), a periphrastic form using the auxiliaries *haben* or *sein*, that expresses anteriority (*gewonnen hätte*) and another periphrastic form with the auxiliary *werden*, that expresses posteriority (*würde fahren*):

- (33) Wenn ich gestern in der Lotterie *gewonnen hätte*, *wäre* ich jetzt reich und *würde* morgen nach Italien *fahren*.
(‘If I had won the lottery yesterday, I would be rich by now, and would leave for Italy tomorrow’)

Basically, the two systems are used for the expression of two modal meanings: *Konjunktiv I* for *potentialis* and *Konjunktiv II* for *irrealis*:

- (34) Es *lebe* der König. (*Konjunktiv I*)
(‘Long live the king!’)
- (35) Wenn er hier *wäre*, *wäre* alles gut. (*Konjunktiv II*)
(‘If he were here, everything would be fine’)

In *potentialis* (34), *Konjunktiv I* cannot be replaced by *Konjunktiv II* without changing the modality from *potentialis* to *irrealis*. Likewise, *irrealis* (35) cannot be expressed by *Konjunktiv I*.

Both systems are however deployed in order to realize projection:

- (36) Peter sagte, dass seine Mutter ein Auto *habe*. (*Konjunktiv I*)
(‘Peter said that his mother has a car’)

- (37) Peter sagte, dass seine Eltern ein Auto *hätten*. (*Konjunktiv II*)
('Peter said that his parents have a car')

As regards the temporal and modal meaning, (36) and (37) are identical.

The principles behind the choice between *Konjunktiv I* and *II* have to do with register on the one hand and explicitness on the other. In colloquial German, *Konjunktiv II* forms are typically used as signals of projection, while the *Konjunktiv I* forms are used only in connection with certain very frequent verbs, e.g. *sein* ('to be') and *haben* ('to have') (cf. Bausch 1975). In non-colloquial registers, the typical pattern, which in normative grammars is often formulated as a principle or rule (e.g. Lauridsen & Poulsen, 1995), is that a *Konjunktiv I* occurs only when it is morphologically distinct from the indicative. Thus *haben* has a distinct *Konjunktiv I* in 3^d person singular (*habe*, cf. (36)), whereas the 3^d person plural has no distinct form (both indicative and *Konjunktiv I* would be *haben*), for which reason *Konjunktiv II* (*hätten*) is used in (37), also in formal registers. For most strong verbs, a distinct form can be found in *Konjunktiv II*, while weak verbs are non-distinct in all *Konjunktiv II*-forms.

It should be stressed that this replacement principle ("choose *Konjunktiv I* if this form is distinct, if not, then choose *Konjunktiv II*") is not always deployed, even in non-colloquial registers. Sometimes, *Konjunktiv II* forms are used although the *Konjunktiv I* is morphologically distinct:

- (38) ("Keiner von uns hätte gedacht, daß wir so lange zusammenbleiben", sagte sie.) Doch da gäbe es immer wieder "diese Momente, in denen das Verliebtsein einfach wieder da" sei. (www.welt.de)
('("None of us would have thought that we would stay together for so long", she said.) Still, [according to her]

again and again there were "those moments where being in love simply was back")

There is an ongoing debate in the literature (cf. Helbig 2007:147ff) as to whether this 'unnecessary' use of the *Konjunktiv II* is due to a meaning difference, namely that *Konjunktiv II* should convey a sceptical speaker's attitude towards the proposition, whereas the speaker's attitude is neutral when the *Konjunktiv I* is used (cf. e.g. Marinos, 2001). That a *Konjunktiv II* in itself should realize a sceptical attitude is rejected in most modern grammars (e.g. Zifonun 1997:1775), since projected clauses with *Konjunktiv II* also occur in contexts where it is obvious that the speaker does not question the projected content. A further problem for this interpretation is the fact that the syncretism in this area would, in fact, only allow us to be explicitly sceptical or neutral in clauses with 3^d person singular Subjects.¹⁰

In the examples above, the *Konjunktiv* occurs in projected clauses of clause complexes. In these cases, we cannot ascribe an independent function to the *Konjunktiv*, since the projection meaning is already established by the projecting clause. The *Konjunktiv* can thus be considered an internal marking of the projected clause – a marking which is strictly redundant as regards the realization of projection meaning, and which might be replaced by the indicative mood without a change in this respect. Again, this is largely a question of register: in colloquial German, the indicative frequently occurs in the projection clause complex, whereas the *Konjunktiv* occurs rather consistently in more formal registers.¹³ An exception is the apparent projection clause complex with 1st person Subject and present tense:

- (39) Ich behaupte, dass 70 Prozent der Autofahrer nur unter dem Motto 'sehen und gesehen werden' dort fahren [indicative]. (www.all-in.de)
('I claim that 70 % of the drivers only go there under the motto 'see and be seen')

Such a construction implies no temporal or personal dissociation and is therefore treated as non-projecting, i.e. as a grammatical metaphor, parallel to example (10) above. In other words, the distinction between projection and (metaphoric) non-projection is supported by the choice of mood in German.¹⁴

In the examples above, the use of the *Konjunktiv* may arguably be considered redundant. However, it may also occur in a simplex clause, in which case it is the only realization of projection meaning:

- (40) (40.1) Aktivisten sagten der Nachrichtenagentur dpa, Bewohner *seien* unter Treppen und in Schutzräume geflüchtet. (40.2) Rauch *bedecke* [*Konjunktiv I*] die Innenstadt von Hama. (www.spiegel.de)
 ('Activists told the dpa [Deutsche Presse Agentur] news agency that residents had taken shelter under stairs and in air-raid refuges. [they say] Smoke covers the inner city of Hama')

Here, (40.1) is a projection clause complex, while (40.2) is a simplex clause that is marked off as projected due to the *Konjunktiv entspreche*. This could be seen as parallel to the other interpersonal resources, since the *Konjunktiv* does not in itself give us information about a specific projector. Unlike the other interpersonal resources, however, the use of the *Konjunktiv* does imply that a specific projector can be identified, and it instructs the addressee to look for the projector in the co-text. In (40), it would be the activists, since they have already been assigned the projector role in the preceding. In general, in order to interpret a simplex clause like (40.2), we always need to look at the co-text. By contrast, in English a similar grammatical resource is unavailable; the closest grammatical counterpart is perhaps the addition of a projecting clause like the one that has been added in the translation of example (40): (*they say*).

The German *Konjunktiv* can mark off a clause as projected in its own right, regardless of its status (either as a clause in a clause complex or as a simplex clause). In other words, the feature 'projected' is realized in the grammar of the German clause and the same feature can be assigned to any finite clause of the non-imperative type in German. An adequate system network for the clause should thus contain a projection system along with the other interpersonal choices.

It follows that the feature 'projected' can also apply to an expanding VF clause:

- (41) Bundestagspräsident Wolfgang Thierse (SPD) bewertete [indicative] den Stand der Wiedervereinigung positiv, auch wenn alles noch nicht erreicht sei [*Konjunktiv I*]. (www.welt.de/print)

('The speaker of the parliament, Wolfgang Thierse (German Social Democratic Party), evaluated the state of the reunification process positively, even though (as he said) "everything has not been accomplished yet"')

In these examples of expanding clause complexes, the expanded clause contains a (non-projecting) verbal Process. This establishes a 'projection environment' that motivates the *Konjunktiv* of the expanding clause, which again marks the expanded clause as something the Sayer of the expanded clause has uttered. Here, the best way to translate this particular meaning into English is by using quotation marks; accordingly, the central difference is that in English the projection meaning may be realized using punctuation, whereas German uses lexicogrammatical resources.

The common feature of the three interpersonal resources presented in sections 4.3.1 through 4.3.3, is that they imply a displacement of the modal responsibility for the utterance by attributing this responsibility to a speaker external projector which cannot be named by means of the resource itself. Both from a formal and a functional

point of view, all three are closely related to the resources used to express modalization, in particular the speaker's own evaluation, as this, too, is expressed by means of modal Adjuncts, modal auxiliaries, and the mood of the verb. Here, the use of *wollen* differs from the other uses in that it assigns the modal responsibility to the Subject of the clause. The use of the *Konjunktiv* has a particular status, since it implies a specifiable projector.

In section 5, below, I will discuss the relations between the logical, experiential and interpersonal resources. Before I do so, the next section 4.4, will consider in which ways and to what degree the resources mentioned above may be combined.

4.4. Combinations

Sections 4.1-4.3 have demonstrated – by means of a systemic-functional description – how the different grammatical resources occur in the simplex clause, respectively the clause complex. With the exception of the clause complex and the *Konjunktiv*, only one resource has been discussed at a time, in order to illustrate that each of them has an independent semantic function. The question discussed in the present section is whether these resources are combinable, and if so, whether such a combination would result in a double projection, as in (42):

- (42) Peter *said*: "The President has *reportedly* solved the problem".

Here, the simultaneous presence of the logical and the interpersonal resources implies something like 'Peter said that people say that...'.

What we find in German is that the combination of clause complex and *Konjunktiv* is highly conventionalized and will always result in a single projection:

- (43) Vergangene Woche *behauptete* der ehemalige Ferrari-Teamarzt Benigno Bartoletti, dass jeder dritte Formel-1-Pilot Kokain *konsumiere* [*Konjunktiv I*]. (www.spiegel.de)
 ('Last week, the former Ferrari team physician, Benigno Bartoletti, *claimed* that every third Formula One driver uses cocaine')

In the case of the *so* and *wie* clause complexes, the mood choice is less conventionalized. However, the combination with the *Konjunktiv* carries with it only a single projection:

- (44) Etwa 100 Passagiere seien [*Konjunktiv I*] gehfähig, so Debus. (www.n-tv.de)
 ('About 100 passengers are able to walk, according to Debus')

By contrast, combining the logical resources with *Angle* or the other interpersonal resources leads to a double projection:

- (45) Letzte Woche wurden wir zum Chef zitiert, der uns *sagte*, dass das [Küssen] *angeblich* gewisse Kollegen stört [...]. (www.urbia.de)¹¹
 ('Last week, we were summoned to the boss' office who *told* us that our kissing *allegedly* disturbed some of our colleagues')

The implication of this example is 'the boss says that people say that...'. This is due to the fact that the projected and the non-projected content are realized by two different clause structures.

As regards *Angle*, this can be combined with the *sollen* constructions without resulting in a double projection (cf. Kaufmann 1976:141; Pütz 1989:193):

- (46) *Palästinensischen Quellen zufolge sollen sie jedoch bereit sein, keine Terroranschläge in Israel während des Wahlkampfes durchzuführen.* (www.welt.de)
 ('According to Palestinian sources, they are said to be willing nonetheless not to conduct any terrorist attacks in Israel during the election campaign')

Although in its origin, the *sollen* construction is impersonal, it is nevertheless deployed also in this case, where the projector is actually specified. And even though the combination here is less conventionalized than in the case of the clause complex with the *Konjunktiv*, the two are comparable, since both involve a combination of an ideational and an interpersonal resource.

Combining Angle and the *Konjunktiv* results in an ambiguous construction. In more normatively oriented grammars (e.g. Lauridsen & Poulsen 1995; Bernhardt & Bennick Pedersen 2007), it is claimed that this combination will always lead to a double projection, as in the following example (47):

- (47) [Christophs Rechtsanwältinnen] erklärten, dass nicht mehr zu rekonstruieren sei, wie das Fahrzeug der Halterin Lipski am Abend des 17. Juni in Brand geriet. Zwar sei [Konjunktiv I] laut dem Brandsachverständigen Rabes ein technischer Defekt im Bereich der Klimaanlage nicht unwahrscheinlich, dennoch müsse die Ursache ungeklärt bleiben, weil das LKA keine hinreichende Brandursachenermittlung durchgeführt hatte. (de.indymedia.org)
 ('[Christoph's attorneys] stated that it was impossible to reconstruct how car owner Lipski's's vehicle caught fire in the evening of June 17th. Although it was likely, according to fire expert Rabes, that there had been a technical error in the air conditioning unit, the cause

[of the fire] could not be definitely determined because the investigation conducted into the matter by the LKA [*Landeskriminalamt*, State Office of Criminal Investigation] had been insufficient')

Here the *Konjunktiv, sei*, instructs us to look for a projector. Since the clause occurs in a projection context, the projector of the preceding clause, *Christophs Rechtsanwältinnen*, is a plausible candidate: it does, in fact, seem likely that the attorneys were reporting the assessment of the expert ('they say that the fire expert says that...').

According to Carlsen (1998:485), however, one may also find cases where this combination is used, although only a single projection is intended:

- (48) Am Vortag waren in Aden fünf Männer unter dem Verdacht des Mordes an einem irakischen Professor festgenommen worden. *Nach Darstellung der jemenitischen Nachrichtenagentur hätten* [*Konjunktiv II*] die Täter – bei denen es sich um irakische Sicherheitsbeamte handele [*Konjunktiv I*] – in der Botschaft ihres Landes Schutz gesucht, sich später aber freiwillig gestellt. (example from Carlsen 1998:485)

('On the day before, five men had been arrested in Aden, suspected of killing an Iraqi professor. *According to a statement issued by the Yemenite news agency*, the offenders – who were Iraqi security agents – had sought sanctuary in the embassy of their country, but had later voluntarily surrendered')

In this case, the *Konjunktiv hätten* cannot be explained as an independent projection resource, since there is no adequate projector in the preceding text. Neither the five men nor their victim could reasonably be considered the projector in this case. Therefore, the

only explanation is that the *Konjunktiv* is triggered by – and thereby cooperating with – the Angle.

The reason that the status of the *Konjunktiv* in such combinations can be considered less clear may be contingent on its instructive function. The *Konjunktiv* generally implies an identification of a projector outside the simplex clause in which it occurs. Hence, we only tend to identify the Angle as a representation of the projector if we cannot find a suitable candidate in the preceding text.

While the combinations mentioned above are discussed (more or less intensively) in the literature on German grammar, the following combinations have not been subject to any investigation. Below, I present a tentative analysis of the phenomenon; however, the entire area covering these cases ought to be examined closer in future research.

The combination of Angle and a modal Adjunct leads to an ambiguous construction:

- (49) Auch US-Sängerin Jennifer Lopez wird *laut Medienberichten angeblich* am Wochenende in der Stadt erwartet.
(www.n-tv.de)
(‘Also the American singer Jennifer Lopez is, *according to the media, reportedly* expected in the city this weekend’)

The most plausible interpretation in this case is that only a single projection is intended, whereby the modal Adjunct supports the projection established by the Angle and stresses the displacement of the modal responsibility. However, the interpretation that a double projection takes place (‘the media say that people say that...’) cannot be ruled out.

While the combination of an interpersonal resource with an ideational one generally implies that the displacement of modal responsibility is combined with an attribution to a specific source, the combination of interpersonal resources involves no attribu-

tion. Thus, the combination of *sollen* and a modal Adjunct can be observed in (50):

- (50) Im Dezember hörte der französische Geheimdienst ein Telefongespräch einer terroristischen Vereinigung ab, die *angeblich* Kontakte zu Al-Qaida haben *soll*. (www.welt.de)
 ('In December, the French intelligence services had listened in on a telephone conversation of a terror consortium that reportedly was said to have contact with Al-Qaeda')

In principle, example (50) could imply: 'it is said that it is said that they had connections to Al-Qaeda'. This, however, seems less meaningful, due to the doubling of the indefinite projector. Rather, the report is emphasising the fact that the source of this information is speaker external and that the projector cannot be named. If one disregards this possible emphatic meaning, then the use of *sollen* in addition to *angeblich* is redundant, since the speaker could have realized the projection by using only one of the forms.

An emphatic meaning may also be observed in (51), where three projection resources are realized at the same time:

- (51) *Nach Informationen von Bild sollen* Dresdner Spieler im Juni 2003 von der Wett-Mafia *angeblich* 15 000 Euro für einen 3:2-Sieg im Regionalliga-Spiel gegen Münster erhalten haben. (www.fr-aktuell.de)
 ('According to information in *Bild* [a German tabloid], players from Dynamo Dresden *are said* to have received 15,000 Euro from the betting mafia in June 2003 for a 3:2 victory in the Regional League game against Preußen Münster')

There is no reason to assume a double or even triple projection in this example; rather, the construction should be interpreted as a single

projection. The effect of this accumulation of projection resources seems to be that the responsibility of the speaker is explicitly elided.

As mentioned in Section 4.3.3, a much debated issue has been whether an 'unnecessary' use of the *Konjunktiv II* signals a distancing on the part of the speaker from, or even disbelief towards, the projected utterance; as likewise mentioned earlier, this hypothesis is seldom advocated in modern grammars of German. The examples cited above may be seen as indicating that the possible sceptical attitude, on the contrary, is preferably realized through an accumulation of projection resources.

When the *Konjunktiv* is combined with the other interpersonal resources, different results emerge. The combination with *sollen*, viz., the cases where *sollen* is in the *Konjunktiv*, leads to a double projection:

- (52) Das Presseamt der irakischen Übergangsregierung teilte mit, der 26-jährige Fadil Hussein Ahmed al-Kurdi, genannt Ridha, sei kürzlich verhaftet worden. Er *solle* [*Konjunktiv I*] für den Nachrichtenaustausch zwischen dem Netz von Abu Mussab al-Sarkawi im Irak und Osama Bin Laden[s] internationaler Organisation al-Qaida verantwortlich gewesen sein. (www.spiegel.de) ('The press office of the Iraqi interim government reported that the 26-year-old Fadil Hussein Ahmed al-Kurdi, known as Ridha, had recently been arrested. [According to the press office] he is said to have been responsible for the communication between Abu Mussab al-Sarkawi's network in Iraq and Osama Bin Laden's international organization al-Qaeda')

The example shows a projected simplex clause in the *Konjunktiv* that contains the projecting *sollen*. The *Konjunktiv* instructs us to look for a projector, and here the press office from the preceding clause serves

as a plausible candidate. The epistemic use of *sollen* indicates that the press agency got its information from another, unnamed, source and hence the construction must be interpreted as a double projection.

Whether this is also the case when the *Konjunktiv* occurs along with a modal Adjunct is less clear:

- (53) Selena Gomez scheint Beobachtern zufolge immer näher an einen Burnout zu gelangen. Sie *habe* [*Konjunktiv I*] *angeblich* Probleme mit der Verdauung und muss immer häufiger ärztlichen Rat in Anspruch nehmen. (www.loomee-tv.de)
 ('According to observers, Selena Gomez seems to get closer and closer to a burnout. She has *reportedly* digestion troubles and more and more often she needs medical advice')

The *Konjunktiv* (*habe*) indicates that the clause is projected, and a projector can be identified in the preceding clause (*Beobachtern zufolge*). *Angeblich* could have been included in the original utterance ('observers say: "Reportedly, SG has digestion troubles"'), but it could also be that the current speaker is signaling that he will not vouch for this information – an ambiguity which may be seen as parallel to the one in example (49)).

The examples analyzed above show that, even when the co-text is taken into consideration, it still is difficult to decide whether combinations result in a single or a double projection. In cases where an ideational resource is involved, the characteristics of the projector may be of importance in this connection. Thus, in examples like (49), (51) and (53), the projector (even when explicitly mentioned) remains to a large degree impersonal (see further section 5, below) – a fact which could influence the interpretation of the interpersonal resource as supportive, rather than projecting in its own right. A thorough investigation of the combination patterns would be highly relevant for the description of German, whether in SFL or non-SFL terminology.

5. *Comparison and discussion*

In the previous sections, the projection resources of German have been described and discussed under a metafunctional heading, as occurring in the logical, experiential and interpersonal systems of the lexicogrammar.

By describing the resources in terms of different metafunctions, we are able to show how these realizations emphasize different aspects of the projection meaning, as this had been defined in the introduction as the attribution of an utterance to someone other than the current speaker.

The projection meaning can be split up into two parts that can be paraphrased as follows:

- a. someone says something
- b. I do not say this

The (a) part focuses on the attribution of the modal responsibility of the utterance to someone other than the speaker, whereas part (b) focuses on the displacement of the modal responsibility. The (a) meaning is ideational since it involves a configuration of process and participant(s); in contrast, the (b) meaning is interpersonal as it implies the speaker's attitude towards the validity of the projected utterance. This meaning difference is lexicogrammatically reflected in the fact that the ideational units in question all have an open slot where the projector can be manifest (the grammatical function Sayer in the projecting clause in a clause complex; the Complement (or Postmodifier of a Complement) in the prepositional phrase).

The difference between the logical and the experiential kind of projection has to do with the projecting figure's¹² potential: logically, this is realized by a projecting clause with a specific experiential, interpersonal and textual potential, whereas its experiential realization (as a prepositional phrase functioning as an Angle) is more restricted as

regards e.g. modal and temporal variation. Thus, in a clause complex, we are able to explicitly realize temporal relations between the clauses (through the system of tense); likewise, we can realize modality by means of verb mood, modal auxiliaries and modal Adjuncts, and so on. Thus, while the temporal difference between (54) and (55) may be identified as becoming explicit in the paraphrases, this difference is not grammatically coded, and the interpretation rests on the context and our contextual knowledge. Compare:

- (54) Der Historiker geht in einer neuen Untersuchung davon aus, dass während des Bürgerkriegs etwa 500.000 Menschen ihr Leben verloren. In den folgenden Jahrzehnten kamen *dem Historiker zufolge* in der Diktatur von Francisco Franco tausende weitere Menschen ums Leben. (diepresse.com)
 ('The historian [NN] assumes in a new study that about 500,000 people died during the Civil War. *According to the historian*, in addition, thousands of people lost their lives in the following decades under Francisco Franco's dictatorship.)
 → The historian says (now), that additional thousands of people lost their lives (back then).
- (55) *Winston Churchill zufolge fanden im Sowjet-Kreml die Machtkämpfe "unter dem Teppich" statt.* (www.web-news.de)
 ('*According to Winston Churchill*, the power struggles in the Soviet Kremlin took place "under the rug"')
 → Winston Churchill said (back then), that the power struggles in the Soviet Kremlin took place "under the rug" (back then).

In some sense, the Angle can be considered a grammatical metaphor, scil. a nominalization of a projecting clause. A nominalization of a

verbal process is, however, not obligatory, since the Complement can also be the projector alone.

Ideational resources are fundamentally associated with the (a)-meaning mentioned earlier, while interpersonal resources refer to the (b)-meaning. However, variations can be observed, some of which are incorporated in the system itself, while others are due to a conventionalized use, and others again represent enhancements of the system.

Thus, the *wollen*-construction differs from the other interpersonal resource in that it in fact attributes the modal responsibility to a specified projector, viz. the Subject of the clause. SFL-analyses of English show that a similar interpersonal resource is not available for English, where ideational resources must be deployed in order to achieve this goal (*he says that he is...; according to himself, he is...*). This could be seen as an argument in favor of an ideational analysis – however, certain aspects seem to support the treatment of the *wollen*-construction as interpersonal. Firstly, the ideational resources allow for a free combination of projector and Subject – there is no restriction whereby the projector must be identical to a specific clause function of the projected clause. Secondly, as already mentioned, in the case of *wollen*, the projector is tied to the Subject, which is considered an interpersonal clause function, not to an experiential Participant function (e.g. Actor of a material Process (as opposed to Goal)):

- (56) Er will seine Frau verlassen haben. (*er* = projector; Subject; Actor)
 ('He says he has left his wife')
- (57) Er will von seiner Frau verlassen worden sein. (*er* = projector; Subject; Goal)
 ('He says he has been left by his wife')

An additional – but purely lexicogrammatical – argument in favor of interpersonal affiliation would of course be that the form in question (modal auxiliary) is part of an interpersonal system of verbs.

Another resource that displays variation with regards to the basic differentiation between ideational and interpersonal is the *Konjunktiv*. As a category of verbal mood, it is by definition a part of the interpersonal lexicogrammar, where grammatical mood is the classical expression of modalization. The way the projecting *Konjunktiv* is used does, however, point in another direction.

The *Konjunktiv* shares with the other interpersonal resources the semantic feature of displacement. However, due to the fact that its use is subject to strong conventions, a use that to a large degree is determined by register, this resource differs in an important way from the other interpersonal resources. Inside the clause complex, the *Konjunktiv* works together with the logical resources in establishing a single projection. In this way, we may postulate, the meanings (a) and (b) referred to earlier are combined in one structure – the speaker displaces responsibility and attaches it to a projector. In the simplex clause, however, the *Konjunktiv* cannot adequately be described as signalling meaning (b) alone; it implies also meaning (a) and instructs us to look for a projector in the preceding text. The *Konjunktiv* thus implies an identifiable projector, and is therefore comparable to the ideational resources. At the same time, since it bears in it an instruction to look beyond the clause, we could assign to it even a textual function. Because of this, the *Konjunktiv*, in addition to its grammatical projection function, can be seen as a cohesive device which connects clauses by assigning them to a semiotic layer of reality.

As we see, the fundamental feature of a specified projector in relation to the ideational resources, as described above, is typical, but not obligatory. As regards the logical resources, the fact that the projecting process is realized in a clause of its own means that it may also occur in the passive voice:

- (58) Ein Anwalt der Schauspielerin stellte nun ein ausführliches Dokument vor, in dem *behauptet wird*, Aubry

habe [*Konjunktiv I*] seine Sorgerechtsvereinbarungen verletzt. (www.gala.de)
 ('One of the actress' lawyers now presented a detailed document, in which it is claimed that Aubry has violated his child custody agreement')

Because the passive generally allows us to leave an Agent unnamed, the Sayer participant can likewise be left out. In this case, where the projecting clause is unmodalized and uses the present tense, the construction can be considered on a par with parallel, interpersonal ones (e.g. *angeblich*). Even so, we always have to acknowledge a clause potential inherent in the use of logical resources; this would allow for e.g. a temporal manipulation as in (59), where the projecting clause is in the past tense:

- (59) Sie erinnern sich an diese Pressekampagne, in der *behauptet wurde*, Juden seien [*Konjunktiv I*] am Bau der Pyramiden beteiligt gewesen? (Mannheimer Morgen, 23.09.2003)
 ('Do you recall that press campaign where it was claimed that Jews had been involved in the building of the pyramids?')

Also in the case of an Angle, the projector can be impersonal:

- (60) *Einem Medienbericht zufolge* hat Strauss-Kahn mittlerweile "einvernehmlichen Sex" eingeräumt. (<http://www.rp-online.de>)
 ('According to a media report, Strauss-Kahn has meanwhile admitted to having had "consensual sex"')

Also in these cases, the structure always allows for the specification of the projector. Hence, both resources, the passive projecting clause and the Angle, are fundamentally ideational, since leaving a projector unspecified is always the result of a choice.

There is one exception to this in respect to Angle, viz. the expression *dem Vernehmen nach* ('according to reports'):

- (61) Schröders Unzufriedenheit mit seinem Minister hat *dem Vernehmen nach* in den vergangenen Wochen einen Höhepunkt erreicht. (www.spiegel.de)
 ('Schröder's unhappiness with his minister has *according to reports* reached a climax in the past weeks')

Here, we cannot add the projector as a Postmodifier, as in *... *einen Höhepunkt erreicht dem Vernehmen der Journalisten nach* ('... reached a climax according to reports [received] by the journalists'), and the meaning of the construction is therefore comparable to that of modal Adjuncts like *angeblich, vorgeblich*. In this perspective, this specific construction is most adequately analyzed as using an interpersonal resource.

A more fundamental question has to do with the status of ideational resources with a 1st person projector. As stated in the introduction, the definition of projection demands two separable communication situations, which again almost always implies a temporal and/or personal dissociation, such that projector and current speaker are separable. In cases where only one communication situation is at hand, the speaker's attitude (and thereby a modalization meaning) is realized by the clause complex (cf. example (39)) and the Angle, rather than through projection:

- (62) *Meiner Meinung nach* ist das vor allem eine Wahlkampfstrategie. (www.berlinonline.de)
 ('*In my opinion*, this is first of all an election campaign strategy.')

As mentioned, the SFL-model treats such constructions as grammatical metaphors. Such metaphors come into existence whenever

there is an open slot in the system and they contribute to a general expansion of its meaning potential. In terms of a 1st person projector in ideational projection resources, this means that it becomes possible to differentiate between implicit and explicit speaker source modalization (cf. Halliday & Matthiessen 2004:626ff).

The way the different projection resources are deployed and enhanced is illustrated in Table 2; [+] represents the typical meaning, [(+)] represents derived meanings.

lex.=gr.resource	speaker source	unspecified (non-speaker) source	specified (non-speaker) source		projecting feature with clausal potential
			Subject only	non-restricted	
projecting clause in clause complex	(+) Ex: 39	(+) Ex: 58		+ Ex: 43	+ Ex: 43
Angle in simplex clause	(+) Ex: 62	(+) Ex: 60		+ Ex: 24	
Modal Adjunct: <i>angeblich, vorgeblich, dem Vernehmen nach</i>		+ Ex: 26, 27, 61			
modal auxiliary: <i>sollen</i> (epist. use)		+ Ex: 28			
modal auxiliary: <i>wollen</i> (epist. use)			+ Ex: 29		
projecting <i>Konjunktiv</i>		(+); e.g. when used in a passive clause: Ex: 58		+ Ex: 40.2	

Table 2: Projection resources in German

Other lexical items that function as Modal Adjuncts (e.g. *vielleicht* ('perhaps'), *wahrscheinlich* ('probably')) realize a speaker source, just as do the epistemic use of the other modal auxiliaries and the non-projecting *Konjunktiv* (cf. section 4.3). Structurally, both the grammatical item realizing a projecting clause (i.e. a clause) and an Angle (i.e. a prepositional phrase) may either leave the projector unmentioned or let it be a 1st person; however, the basic function of these structures is to name the projector.

6. Conclusion

The primary aim of this article has been to give a systemic functional description of a grammatical phenomenon in German which had not been the subject of investigation in the existing SFL-treatments of German. More specifically, the article has shown how German, like English, realizes the semantic domain of projection in terms of logical, experiential and interpersonal lexicogrammatical resources. However, in German, projection is to a larger degree coded in the interpersonal grammar (mood and modal auxiliaries) than is the case in English; also, the specific instructive function of the German *Konjunktiv* has no grammatical counterpart in English. In addition, German grammar seems to code the functional difference between *de dicto* and *de re* meanings in terms of clause structure; however, this is so far only an hypothesis which needs to be investigated further. At any rate, a grammatical model of German has to be designed so as to be able to account for these phenomena.

Based on the assumption that mass media discourse displays the broadest use of projection resources, the data of the present study has been taken from this register. It might be of interest to examine the use of projection resources in other registers as well. As mentioned, current research shows that colloquial German differs in this area with respect to its use of mood (cf. Bausch 1975); an examination

of the other projection resources – and their possible combinations – in different registers could be highly interesting as well.

A secondary aim has been to show how the SFL-model allows us to look at a thoroughly described area of the grammar in another light, namely by deploying the SFL concepts of metafunction, grammatical metaphor and semantic domain. By considering projection as a semantic domain, we have been able to identify a semantic feature that is common to a range of resources being used at different places in the lexicogrammatical system. The concept of *metafunction* allows us to describe the differences between the resources in terms of different meanings. This aspect is interesting, not only when the resources occur alone, but also when they are combined. The idea of *grammatical metaphor* allows us to look at certain constructions as expansions of the meaning potential of the lexicogrammar. As to *meaning*, while the interpersonal resources are – both from a functional and a structural point of view – closely related to the kind of meaning modalization that has been described as speaker internal, the ideational resources are structurally designed for the naming of the projector. However, by cancelling their personal and temporal dissociation, these constructions can come to be used for modalization purposes as well.

We conclude that fundamentally, the semantic domain of German projection may be realized by means of either the interpersonal or the ideational grammar – the choice between the two resources is motivated by the speaker's wish to emphasize one or the other aspect of meaning.

Notes

1. In accordance with SFL conventions, clause functions (such as Subject, Complement, Adjunct and so on) are written with an upper case letter.
2. The scope of this article does not allow me to give a systematic account of how the German clause is analyzed following the SFL-model. Readers should consult the above mentioned titles for a systematic overview.

3. The SFL-term 'congruent' is the terminological counterpart of 'metaphorical'; a declarative clause is a congruent realization of a statement and a metaphorical realization of a question (cf. Halliday & Matthiessen, 2004: 586ff.).
4. We do, in this area, have a terminological overlap as regards the verbal process. A verbal Process (with a capital P) is a clause function, typically occurring in a projecting clause; in *he says*, the projector is realized as the clause Function 'Sayer' (*he*), whereas the verbal process (lower case p) is realized as a verbal Process (*says*).
5. A projecting clause in a group functions as Postmodifier of a projection noun (cf. Halliday & Matthiessen, 2004: 469), as in:

The Israelis have rejected Mr. Clinton's *proposal that they give up control of the Temple Mount*.

Due to space considerations, this type will not be discussed any further.

6. This analysis has been much debated, but a discussion is beyond the scope of the current work. For discussion of the analysis inside the SFL-paradigm, see Huddleston (1988), Matthiessen & Martin (1991), Fawcett (2000); for a discussion of the analysis of direct and indirect speech in terms of clause complexes, cf. Vliegen (2010).
7. It should be stressed that the hypothesis of a grammatical distinction between the V2 as *de dicto* and a VF as *de re* has not yet been subjected to empirical investigations.
8. One restriction has to be mentioned as regards speaker-oriented parataxis: while utterances of all forms can be quoted, reports have to be clauses. And although they can be declarative as well as interrogative, e.g.:
 - (a) Müsse man nun immer "daß" mit "ss" schreiben, fragten die Schüler. (hypermedia2.ids-mannheim.de)
(‘Does one now always have to write "daß" with "ss", the pupil asked’),
they cannot be imperative:
 - (b) Der Vater sagte: "Hilf deiner Mutter".
(‘The father said: Help your mother’)
 Imperative clauses must be rephrased as V2 or VF by means of the modal auxiliary *sollen*:
 - (c) Der Vater sagte, er solle seiner Mutter helfen.
(‘The father said he should help his mother’)

9. The SFL-terms 'modulation' and 'modalization' are semantic and refer to two types of modality. 'Modulation' covers the inclination and obligation meanings, whereas modalization has to do with probability (cf. Halliday & Matthiessen, 2004: 146f.).
10. Of course, the question both here and in relation to *sollen* and *wollen* (cf. Section 4.3.2, above) is not whether the speaker attitude can actually be sceptical when these resources are employed, since this is always possible, even when the *Konjunktiv I* is used. The question is whether the forms contribute with this meaning on their own or whether the meaning 'is already there', i.e. can be deduced from the co-text.
11. This is not a complete description of the mood of the verb in the clause complex. On the one hand, there are assumptions (cf. Zifonun *et al.* 1997:1769) that the indicative in the projected clause signals that the speaker actually vouches for the content (according to Zifonun, speaker text and projector text overlap in such cases). On the other hand, mood may serve to determine whether the verbal Process of the projecting clause should be interpreted as factive or as non-factive (cf. Eisenberg 2006:118f., *Duden Grammar* 2005:539). Compare:
 - (a) Einstein kritisierte, dass Bohr voreilig die Erhaltungssätze und damit die Kausalität aufgegeben *habe* [*Konjunktiv I*]. (example from *Duden Grammar*, 2005: 539)
 - (b) ...dass Bohr...die Kausalität aufgegeben hat/hatte [indicative]. ('Einstein criticized that Bohr had prematurely given up the laws of conservation [of mass, energy and momentum] and thereby causality [itself]')

According to the *Duden Grammar*, the paraphrase of (a) would be 'Einstein said in a criticizing manner that...' and of (b): 'Einstein criticized the fact that...'
12. This topic may need some further discussion in terms of SFL. In some cases, e.g. where different Sayers/Sensors are contrasted, analyzing the example as projection may seem more adequate:
 - (a) Es gibt viele, die glauben, dass diese Krankheit [AIDS] Gottes Rache ist. Ich aber glaube, dass sie geschickt wurde, damit die Menschen lernen, einander zu lieben und zu verstehen und Respekt voneinander zu haben. (www.spiegel.de/kultur/kino/0,1518,213536,00.html)

- (‘There are many people who believe that this illness is God’s revenge. I, however, believe that it was sent to us, so that people could learn to love each other and to understand and have respect for each other.’)
13. This combination seems only to occur in informal register. The example is from an internet discussion forum.
14. A ‘figure’ is a semantic element defined as a configuration of a process and one or more participants. Grammatically, a figure is congruently realized as a clause.

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