17. The nominalization may express an instrument or an object essential in the activity described by the verb, e.g., *tutu* 'to pound', *dutu* 'rice mortar'. It may also result in a "deactualization" of the verb, i.e., it may create a stative counterpart to the verb as in *ahu* 'live' versus derived *-gahu* 'life'.

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Why a folder lies in the basket although it is not lying: the semantics and use of German positional verbs with inanimate Figures[1]

SILVIA KUTSCHER AND EVA SCHULTZE-BERNDT

Abstract

In this paper we will investigate the meaning and use of positional verbs in colloquial Standard German. Positional verbs are defined as those verbs which may appear in the basic construction that functions as an answer to a "where"-question, the so-called Basic Locative Construction (BLC). Within this class of verbs, we focus on those positionals which are used to describe the configuration of inanimate movable objects. We will demonstrate that German exhibits the characteristics of a positional (or "multi-verb") language, i.e., a language that uses a comparatively large set of verbs in the BLC. The ten positionals used most frequently in our data are stehen *'stand'*, liegen *'lie'*, hängen *'hang'*, lehnen *'lean'*, stecken *'be in tight fit, be stuck'*, klemmen *'be stuck, be jammed'*, kleben *'stick by means of glue'*, haften *'adhere'*, schwimmen *'be afloat in liquid', and* schweben *'be afloat'. We will identify the conditions under which the positional verbs are used and provide a semantic characterization for each of them, paying particular attention to alternative categorizations, fuzzy boundaries and prototype effects.*

1. Introduction

In this paper, we examine the meaning and use of positional verbs that are used to describe the location of inanimate, movable objects in colloquial Standard German, in a construction identified as the Basic Locative Construction (BLC; see Section 2). In English, the main verb used in this context is the semantically general locative/copular verb *be*. In German, the corresponding verb *sein* 'be' is also found in the BLC. Its use is even obligatory in certain contexts, to be identified in Section 4 below. Wherever possible, though, speakers of the variety studied here — colloquial Standard German spoken in Germany — employ one of a core set of at

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least ten positional verbs (for an interesting study of rather dramatic differences between regional varieties of German in this respect see Berthele 2004a, b). The positionals that occur regularly in our data are *stehen* 'stand', *liegen* 'lie', *hängen* 'hang', *lehnen* 'lean', *stecken* 'be in tight fit, be stuck', *klemmen* 'be stuck, be jammed', *kleben* 'stick by means of glue' (with its more marginal alternative *haften* 'adhere'), *schwimmen* 'be afloat in liquid', and *schweben* 'be afloat'. We will demonstrate that German exhibits the characteristics of a "positional verb language" or multiverb language, in that the use of these positionals is determined by the perceived configuration of the Figure and the Ground. Consequently, any nominal whose referent can hold more than one configuration with respect to a Ground can occur with more than one of the positional verbs. We will identify the conditions under which each of the positional verbs is used, paying particular attention to alternative categorizations, fuzzy boundaries and prototype effects.

A substantial part of the data on which this paper is based were elicited with the Topological Relations Picture Series (TRPS) and the Picture Series for Positional Verbs (PSPV), stimuli designed specifically for this purpose at the MPI for Psycholinguistics, Nijmegen. These depict Figure-Ground configurations presented in random order. Each presentation of a picture of a Figure and a Ground (e.g., a bottle on a rock, PSPV 10) is accompanied by the question "Where is <Figure>". Although the first, spontaneous answer to this question was taken to be the most prominent for denoting the stimulus situation, the consultants were encouraged to discuss alternative expressions. When a consultant used an alternative expression it was checked whether the expression could also apply to comparable pictures in the stimuli series that had already been discussed. Thus, the average time to complete the whole series per language consultant and picture book (71 stimuli in the TRPS series and 68 in the PSPV series) was two hours. In order not to exhaust the consultant, the tasks were preferably done over several sessions. For comparability of the data, a number of at least three consultants had been recommended in the guidelines. For the TRPS tool we worked with four consultants, for the PSPV tool, with eight.

The picture book stimuli were supplemented by stimuli involving real objects which were designed — often ad hoc — by ourselves to explore aspects of positional use specific to German; in examples, these will be referred to as "Bochum Stimuli" since most of the interviews were conducted in Bochum. Here a less formal elicitation procedure was used and the number and type of stimuli used with the various consultants are not directly comparable; moreover, sometimes more than one consultant was present at the same time and contributed to the answer. Additional data

come from overheard, spontaneous utterances, from the Cologne corpus of spoken German narratives (marked as "Kölnkorpus"), and from the electronic corpus of the Institut für deutsche Sprache (IDS) in Mannheim (URL: http://www.ids-mannheim.de/cosmas2). Examples for which no source is indicated have been constructed based on the native speaker competence of the two authors. As can be gathered from these remarks, the procedures described above were intended as an exploration of the semantic range and limits of applicability of the positional expressions in question rather than as a psycholinguistic experiment allowing for a statistical account of the use of positional verbs in German. Nevertheless, we sometimes give frequency indications if we feel that these point to interesting tendencies deserving further systematic investigation.

The paper is organized as follows. In Section 2 we introduce the basic locative construction in German and distinguish it from several formally or functionally related constructions. In Section 3 we discuss the meaning of each of the positional verbs listed above, i.e., those used with inanimate Figures in the basic locative construction. In Section 4, we examine the conditions under which the locative/copular verb *sein* 'be', rather than one of the more specific positional verbs, is used. The results are summarized in Section 5.

2. The Basic Locative Construction and alternatives

2.1. *The Basic Locative Construction*

The German Basic Locative Construction (BLC), i.e., the construction that is employed in answers to 'where' questions like *wo ist <Figure>* 'where is <Figure>',[2] consists of a subject noun phrase in the nominative representing the Figure, a locative verb, a prepositional phrase, where the NP represents the Ground and is in dative case indicating static location,[3] and, optionally, a locative adverb. The BLC is schematically represented in (1) and illustrated in (2).[4]

(1) $[NP{:}NOM_{Figure}]\ V_{Locative}\ [P_{Top.Rel.}\ [NP{:}DAT_{Ground}]]\ Adv_{Top.Rel.}$

(2) a. Die Kirschen sind in einer Schale drin
the cherries be:3PL.PRS in a bowl inside
'The cherries are in a bowl'

b. Die Bücher liegen auf der Erde
the books lie:3PL:PRS on the ground
'The books are (lit. 'are lying') on the ground'
(Bochum Stimuli)

c. Deine Jacke hängt am Haken
POSS:2SG coat hang:3SG:PRS on:the hook
'Your coat is (lit. 'hangs') on the hook'
(Bochum Stimuli)

As the examples in (2) show, the locative verb as well as the preposition (and possibly the optional adverb) vary according to the configuration and topological relationship between the Figure and the Ground. For example, in (2a), the verb *sein* 'be' encodes a nonspecific locative relationship and the preposition *in* encodes a topological relation of containment.[5] In (2b), the positional verb *liegen* 'lie' encodes a horizontal configuration of the books (a characterization to be refined in Section 3.3 below), and the preposition *auf* encodes a relationship of support from below. The verb *hängen* 'hang' in (2c) is used to indicate that the Figure is supported, but not from below, i.e., its configuration is partly determined by gravity (see further Section 3.4), and the preposition *an* 'at' encodes a nonspecific attachment of the Figure to the Ground. In this paper, we will only be concerned with the contribution of the locative verb to the interpretation of expressions of this type, although, as we will see throughout Section 3, there is a certain interdependence between the choice of a positional verb and the topological relation encoded by the preposition or adverb. As Gerling and Orthen (1979: 69) point out, however, the PP chosen as the Ground does not necessarily correspond to the supporting entity, i.e., the entity that is in contact with the Figure, but can also represent a Ground in the vicinity of the Figure, or a container. This observation is supported by our data; see e.g., example (37).

The Basic Locative Construction may be extended by a secondary predicate which provides more specific information about the configuration between Figure and Ground than the positional verb alone. The secondary predicate can be an underived predicative adjective, an adverb such as *quer* 'diagonally' (see [28]), or a past participle form of a verb functioning as a deverbal adjective, such as *umgekehrt* 'upside down' (see [27]) or *verstreut* 'scattered' (see [33]). This additional predicate tends to be employed if the configuration is nonstereotypical, in accordance with the Manner principle (cf. Levinson 2000) which states that a marked state of affairs requires a more marked expression.

Conversely, in a spontaneous question-answer dialogue, the Figure NP as well as the verbal predicate can be omitted, and the position of the Figure can be expressed via the Ground PP (the focused constituent) only. This abbreviated expression tends to be used only if the configuration is stereotypical, like that described in (3); this is again consistent with the Manner principle.

(3) Q: Wo ist die Kaffeetasse?
where be:3SG:PRS the coffee.cup
A: Auf dem Tisch
on the table
Q: 'Where is the (coffee) cup?' — A: 'On the table'
(Bochum Stimuli, cf. TRPS 1)

If a verb is present in an answer to a 'where' question, the use of a stative locative verb, as in examples (2a)–(2c) above is the most typical. However, dynamic verbs may also be used with the same type of Ground PP, as is illustrated in (4) and (5).

(4) Wo ist Peter? — Der arbeitet im
where be:3SG:PRS Peter DEM work:3SG:PRS in:the
Garten
garden
'Where is Peter?' — 'He is working in the garden'

(5) Wo ist die Fahne? — Die Fahne flattert
where be:3SG:PRS the flag the flag flutters:3SG:PRS
am Mast
on:the mast
'The flag flutters on the mast'
(TRPS 56)

Expressions like those in (4) and (5) convey an additional specification of a state of affairs which goes beyond the purely locative information. The construction employed here can also be distinguished from the BLC on formal Grounds, because with a nonlocative verb, the Ground PP can be omitted (although the resulting expression would not be quite felicitous as an answer to a 'where' question). With a locative verb, on the other hand, the Ground PP is (near) obligatory. It can only be omitted if the verb is accented under contrastive focus (as indicated by capitals in the following and other examples), e.g., if the location is known and the actual configuration of the Figure is at stake, as in (6) (see also [35] in Section 3.3).

(6) C: Also STECKen tut er nicht
well stick(ITR):INF AUX:3SG:PRS 3SG NEG
D: Er LEHNT
3SG lean:3SG:PRS
C: 'Well it does not STICK — D: 'It is LEANing'
(Bochum Stimuli)

Since expressions like that in (6) are also not good answers to a 'where' question, the construction with contrastive focus is distinguished here

from the BLC. In the latter, the verb is unstressed and the nominal in the PP is stressed.

The syntactic status of the obligatory Ground PP has been frequently discussed in the literature. An analysis is made more difficult by a certain gradability of obligatoriness (see the detailed discussion in Maienborn 1990, 1991). For some locative verbs, the Ground PP is claimed to be optional, as e.g., in (7).[6]

(7) Rita liegt (auf dem Bett)
Rita lie:3SG:PRS on the bed
'Rita is lying (on the bed)'
(Maienborn 1991: 52)

However, this (marginal) optionality of the Ground PP only seems to hold for animate Figures with human posture verbs. Even contextual reconstruction of the locative expression does not work for positional verbs with inanimate Figures, as shown in (8).

(8) Ich habe ihr das Buch ins Fach
1SG AUX:1SG:PRS 3SG:DAT the book in:the pigeon:hole
gelegt. *Es liegt immer noch
lie(TR):PTCP.PERF 3SG lie(ITR):3SG:PRS always still
'I put the book in her pigeon hole. It is still lying'
(Maienborn 1991: 58)

Various analyses of the Ground PP have been suggested, which partly reflect the theoretical stance of the authors. What all authors seem to agree upon is the status of the Ground PP as a semantic/conceptual argument of the locative verb, and we will follow this analysis here. The presence of a near-obligatory Ground PP defines the set of stative locative verbs in German. In Section 3, we will define positional verbs as a subset of these locative verbs on semantic grounds.

Finally, German has a number of verbs with locative semantics that take part in constructions distinct from the BLC, although they can also be employed in answers to a 'where' question. The first type are active verbs construed with an accusative NP representing the Ground, e.g., *bedecken* 'cover', *säumen* 'line, skirt, border'. The second type are verbs which take a directional and not a stative locative Ground PP. These can be either reflexive verbs such as *sich schmiegen* 'cling to', *sich spannen* 'stretch across' or nonreflexives such as *ragen* 'project, protrude from' (cf. Kaufmann 1995: 113–115). Except for the last verb, they hardly occurred in our data, and will not be further considered here.

2.2. *Constructions related to the Basic Locative Construction*

There are two constructions in German that correspond to the BLC in that they consist of basically the same constituents, including a locative verb, and only deviate from the BLC in word order. The first of these is the Ground-oriented locative construction, illustrated in (9), which is formally almost identical to the BLC, except that the Ground PP is in sentence-initial position. The consequence of this change in word order is that, unlike in the BLC, the Ground PP functions as topic of the utterance.

(9) (...) und an einem Fenster stand eine Pflanze
and at a window stand:3SG:PST a plant
'(This was in a castle, we had a guided tour of a castle ...)
and at a window there was (lit. standing) a plant'
(Kölnkorpus)

The second construction related to the BLC is the presentational *da*-construction. The presentational construction contains an initial locative pronoun *da* 'there', followed by a locative verb, the subject NP, and a locative PP expressing the Ground, as shown in (10). *Da*-constructions are thetic utterances, i.e., they present all-new information.[7]

(10) (...) denn da hängt eine Jacke am
because there hang:3SG.PRS a coat on:the
Haken
hook
'(I don't know where she is but I think she has already arrived) because there is a coat on the hook' (overheard utterance)

This construction can also be used to form negative presentational clauses, by replacing the indefinite article with the negative indefinite article *kein* (see [11]). In negative statements of this type, positional verbs may be used if the configuration of the Figure and Ground is a stereotypical, expected one; otherwise, the locative/copular verb *sein* 'be' tends to be used (see Section 4.1).

(11) (...) denn da hängt keine Jacke am
because there hang:3SG:PRS no coat on:the
Haken
hook
'(She is certainly gone,) because there is no coat on the hook'

Both the Ground-oriented locative constructions and the presentational *da*-construction differ from the BLC in that the Figure is not topical, but rather part of the focus of the utterance. Correspondingly, the subject NP expressing the Figure is usually indefinite. Therefore, both constructions cannot be used in answers to a 'where' question, but are rather used to introduce new topics into a discourse. Although the choice of positional verb in these constructions seems to be conditioned by the same factors as the choice of verb in the BLC, for the purpose of this study we will restrict ourselves to those positional verbs found in the BLC in our data.

2.3. *The 'full of' construction*

A further construction which is specific to (a subset of) locative verbs is the 'full of' construction, which is used to describe a configuration where a Ground is more or less completely filled or covered with multiple instances of the same type of Figure. The Ground is encoded as the subject, and the Figure is encoded in an adjectival phrase involving *voll* 'full' (variants are *voller* 'full of', *voll von* 'full of', and *voll mit* 'full with'). If the verb functioning as the predicate is the semantically neutral stative verb *sein* 'be', the resulting expression corresponds to its English translation equivalent, as in the example in (12).

(12) (...) da war die ganze Wand nur noch voller
then be:3SG:PST the whole wall only still full.of
Zettel
notes
'(...) then the whole wall was full of notes'
(Kölnkorpus)

In German (and Dutch; cf. Lemmens 2002: 123f.), unlike in English, however, some positional verbs may also function as the predicate in this construction. The resulting expressions are semantically deviant in that the positional appropriate of the Figure is used even though the subject is the Ground (this is somewhat reminiscent of the English *swarm* alternation, cf. Levin 1993: 53–55). Presumably because of this marked argument linking, not all positional verbs are acceptable as the predicate in this construction. Because of its rarity, we do not have spontaneous data employing this construction; the examples in (13) are taken from the IDS corpus.

(13) Der Apfelbaum hing voller Früchte
the apple.tree hang:3SG:PST full.of fruits
'The apple tree was full of fruits' (lit. 'was hanging full of fruits')
(IDS M02/208.62596)

(14) Die Strassengräben lägen voll Unrat.
the ditches lie:3PL:SUBJUNCT full.of rubbish
'The ditches supposedly are full of rubbish' (lit. 'are lying full of rubbish')
(IDS R98/MÄR.19702)

Preliminary investigations revealed a considerable variation in the acceptability of individual verbs in this construction, but suggest that the more basic positional verbs *liegen* 'lie', *stehen* 'stand', *hängen* 'hang' and *stecken* 'be stuck, be in tight fit' are much more readily accepted than the semantically more specific verbs *lehnen* 'lean', *kleben* 'stick by means of glue', *klemmen* 'be stuck, be jammed', *schweben* 'be afloat', and *schwimmen* 'be afloat in liquid'. Moreover, the construction seems to be more acceptable with inanimate than with animate Figures.

2.4. *The Result construction (Zustandspassiv)*

Another construction that is functionally, but not formally related to the BLC is the result construction, called *Zustandspassiv* (lit. 'passive of state') in German traditional grammar writing. It consists of the verb *sein* 'be' and the perfect participle of a dynamic verb. This construction, which depicts a state — in this case, the configuration between the Figure and the Ground — as the result of a dynamic event, is employed relatively frequently in the descriptions elicited with our stimuli. For example, it accounts for roughly 10% of the spontaneous responses to the PSPV tool. Sometimes it is the only possible way to describe a certain configuration; for example, there is no positional in German that would allow one to describe the configuration of a string (or another flexible two-dimensional object) wound around an object serving as the Ground. Expressions such as (15) were therefore regularly used to describe the corresponding stimulus.

(15) Das Band ist um den Stein
the ribbon AUX:3SG:PRS around the stone
gewickelt
wind:PTCP.PERF
'The ribbon is wound around a stone'
(PSPV 15)

In other cases, the result construction was used as a spontaneous alternative to the BLC, by different speakers or by even the same speaker, to describe the same configuration. An example is (16).

(16) a. Die zwei Stöcke stecken in der Erde
The two sticks stick(ITR):3PL:PRS in the ground
'The two sticks "are stuck" in the ground'
(PSPV 9)

b. Die Stöcke sind in den Boden gerammt
The sticks AUX:3PL:PRS in the ground ram:PCTP.PERF
'The sticks are rammed into the ground'
(PSPV 9)

The verbs used in the result construction form an open class; since they are dynamic, they clearly cannot be considered as positionals. They will therefore not be further considered in this study.

3. Semantics of the positional verbs

In the previous section, we have defined the Basic Locative Construction (BLC) as the most basic construction that is ordinarily used in answers to a 'where' question and only conveys the location of an entity. In colloquial Standard German, the BLC consists of a nominative NP representing the Figure, a locative verb, an obligatory (or at least near-obligatory) PP where the preposition encodes the topological relationship between Figure and Ground and the NP represents the Ground, and optionally, a locative adverb. Positional verbs are a subset of the locative verbs found in this construction. The locative verbs also include the semantically general locative/copular verb *sein* 'be' since with this verb, too, the Ground PP is obligatory. We therefore do not consider expressions containing this verb as instantiating a different construction from the BLC, despite the fact that, like its English equivalent, *sein* 'be' has additional functions as a copular verb. The locative verbs found in the BLC — i.e., those demanding a Ground PP, except where the verb is in contrastive focus — form a rather large set. In this section, we will define a subset of these as positional verbs on semantic grounds, and discuss their meaning in some detail.

3.1. *Positionals vs. other stative locative verbs*

Positional verbs in German do not constitute a formally definable class. They do not belong to a separate conjugation class, nor do they show

any other specific morphosyntactic patterns that distinguish them from other stative locative verbs. In the literature on German positional verbs one can find two ways of subclassification. The first is in accordance with traditional German grammar writing and subsumes the positionals under the large group of stative verbs (*Zustandsverben*), with the defining criterion of relating entities to a location (cf. Gerling and Orthen 1979: 63). In contrast, authors in the generative grammar tradition, represented e.g., by Maienborn (1990, 1991) and Kaufmann (1995), regard these verbs as a subgroup of a larger class of locative verbs, containing verbs of position (e.g., *stehen* 'stand', *liegen* 'lie'), verbs of motion (e.g., *gehen* 'walk', *humpeln* 'limp') and of caused location (e.g., *stellen* 'put', *legen* 'lay'). What both approaches agree upon is that stative locative verbs can be defined as the semantic subclass of stative verbs encoding a relation between entities serving as a Figure and a location. As already shown in Section 2.1, this also has a formal correlate, the obligatoriness of a PP representing a location.

A large subset of stative locative verbs are in general restricted to animate Figures and include such verbs as *sitzen* 'sit',[8] *knien* 'kneel', *hocken* 'crouch', and *kauern* 'squat'. All these verbs make reference to a body part which is in contact with a supporting surface, and/or a particular posture or gestalt-like configuration of an animate entity. The use of some verbs of this group marginally extends to inanimates as well, for example, *sitzen* 'sit, perch', illustrated in (17) (see also Fagan 1991: 142) or *thronen* 'be enthroned, sit in majesty'. The verb *balancieren* 'balance' was used by some speakers to describe stimuli such as 26 in the TRPS stimuli, depicting a bottle on a rock in a somewhat unstable position.

(17) Der Hut? Ist aufm, sitzt aufm Kopf
the hat be:3SG:PRS on:the sit:3SG:PRS on:the head
'The hat? Is on the, sits on the head'
(TRPS 5)

Verbs from another subset are restricted to human figures. They denote the location in a place of residence (e.g., *wohnen* 'live in a house', *zelten* 'stay in a tent') or a temporary residence (e.g., *pausieren* 'have a break', *rasten* 'take a rest', *nächtigen* 'spend the night') rather than referring to the position of the Figure with respect to the Ground. There is a special verb denoting residency of animals — *nisten* 'nest' — that can neither be extended to humans nor to inanimates. The verb *wachsen* 'grow' has a stative reading in describing the location of a plant.

Verbs such as *ruhen* 'rest' und *lagern* 'be in store' can also be used for inanimate Figures, as is illustrated in (18) and (19). These verbs denote

the persistence of the location rather than a specific position or orientation of the Figure.

(18) Die Weinflaschen lagern im Keller
the wine.bottles be.stored:3PL:PRS in:the basement
'The wine bottles are stored in the basement'

(19) Die Brücke ruht auf mehreren Pfeilern
the bridge rest:3SG:PRS on several pillars
'The bridge rests/is supported on several pillars'
(Wahrig)

Verbs restricted to animate Figures, and verbs with semantic components other than those pertaining to the spatial configuration of a Figure and a Ground, will be excluded from consideration here. The remaining stative locative verbs that can be used with inanimate Figures and occur in the BLC will be referred to as 'positional verbs'.

In the literature dealing specifically with the semantics of German positionals one can mainly find attempts of a formal representation of the meaning of the verbs, either in terms of componential analysis (Coseriu 1968; Kotschi 1974; Gerling and Orthen 1979), or in terms of a semantic primitives approach (Wunderlich and Kaufmann 1990; Maienborn 1990; Kaufmann 1995). These tend to work with idealized data and leave out of consideration variation and prototype effects in the description of particular, nonconventional configurations. Other analyses are restricted to only a subset of the verbs (Fagan 1991; Serra Borneto 1996).

In the remainder of this section we discuss the meaning of each of those positional verbs which are regularly used in our data to describe the position of inanimate movable Figures in the Basic Locative Construction. We will demonstrate that many configurations allow for multiple categorizations, or show prototype effects. We will also consider the effect of containment, which is often ignored in the literature but has been shown to be the crucial feature determining the use of the Dutch verb *zitten* 'sit' with inanimate Figures (Lemmens 2002).

The positional verbs in our corpus of spoken data correspond to those considered by Kaufmann (1995: 120). Following her subdivision, we assume a major subgrouping according to the nature of the supporting entity. Two specific positionals are used if the supporting entity is a liquid (*schwimmen* 'be afloat in liquid') or a gas (*schweben* 'be afloat'[9]). The majority of positional verbs require a solid supporting Ground; these can be further subdivided into verbs specifying the type of contact (*kleben* 'stick by means of glue', *haften* 'adhere', *stecken* 'be in tight fit, be stuck', *klemmen* 'be stuck, be jammed') and verbs specifying a type of support

acting against gravity, where the support may be from below (*stehen* 'stand', *liegen* 'lie') or not from below (*hängen* 'hang'). *Stehen* and *liegen* are distinguished by the presence of a base, and the orientation of the maximal axis with respect to the Ground. A summary of the semantics of the positionals described in this paper is provided in Figure 1 in Section 5. A more precise characterization of the meaning of each of the verbs will be provided below. The semantically general verb *sein* 'be', which is nonspecific as to the configuration between Figure and Ground, is interchangeable with each of the positional verbs in principle, but in many contexts, the use of a more specific positional verb is preferred over *sein* 'be'. The conditions under which the use of *sein* 'be' is preferred or even required will be discussed in Section 4.

As outlined in Section 2.1, all positional verbs require a prepositional phrase representing a Ground (unless the verb is in contrastive focus), and semantically entail the presence of a supporting entity. With respect to their other formal properties, the members of this semantically defined group of positionals are rather nonhomogenous. Some inflect regularly (i.e., are so called *schwache Verben* 'weak verbs'); these are *lehnen* 'lean', *kleben* 'stick by means of glue', *haften* 'adhere', *stecken* 'be in tight fit, be stuck', *klemmen* 'be stuck, be jammed', and *schweben* 'be afloat'. The positionals *stehen* 'stand', *liegen* 'lie', *hängen* 'hang', and *schwimmen* 'be afloat in liquid', on the other hand, are so called *starke Verben* 'strong verbs' which show ablaut in the past tense and past participle forms.

With the exception of *schweben* 'be afloat' and *schwimmen* 'be afloat in liquid', all of the verbs just listed have transitive counterparts with the meaning 'place into Ving position', where V is the intransitive verb. They also vary concerning the form of those counterparts. The transitive counterparts of *liegen* 'lie' and *stehen* 'stand' are the partially suppletive forms *legen* and *stellen*; for the other verbs the same form can be used intransitively and transitively, although the transitive *hängen* 'hang' follows the regular ('weak') conjugation, while, as just indicated, intransitive *hängen* is a strongly inflected verb with a past tense form *hing*. These transitive verbs are often discussed together with the intransitive verbs in the literature (cf. Gerling and Orthen 1979; Fagan 1991), but, because of the restriction of this paper to positional verbs, they will be left out of consideration here (where they show up in examples they are marked as 'TR' in the glosses). The configuration between a Figure and Ground is the same for the intransitive and transitive verb of a pair, in other words, the conditions of use of the transitive verbs can usually be derived from the conditions of use of their intransitive counterparts which are described here.

3.2. Stehen *'stand'*

The verb *stehen* 'stand' (along with *liegen* 'lie') is one of the most frequent positional verbs both with animate and inanimate Figures. Like *liegen* 'lie', *stehen* also has extended and metaphorical uses, which are left out of consideration here (see Serra Borneto 1996).[10]

With animate Figures, *stehen* is the verb used to describe the — typical — configuration where the Figure is supported from below, and is in contact with the Ground with its feet/legs (cf. the dictionary definition *sich auf den Füßen halten* 'remain on one's feet' in Wahrig). With inanimates, as has been pointed out by Serra Borneto (1996: 463), *stehen* is generally used for Figures which have a "base", defined as a "clearly distinguishable section of their shape (...) through which the contact between the object and the support is realized." The base can resemble the legs/feet of animates, as in the case of pieces of furniture such as tables, beds etc. or the wheels of vehicles, but it can also be defined in functional terms. In this case, the base is the surface on which an entity is canonically deposited, e.g., the bottom of a container. Especially in the latter case, an additional criterion is that the entity "must have a certain amount of rigidity" and "be able to support itself" (Fagan 1991: 138). For example, a carpet has a surface on which it is canonically deposited, but its canonical position can only be described with *liegen*, not with *stehen*.

The presence of a base in the relevant rigid Figures — a cup, a video recorder, and a folding chair — triggers the use of *stehen* in examples (20) to (22) from our data.

(20) Die Tasse steht aufm Tisch
the cup stand:3SG:PRS on:the table
'The cup is (lit. 'is standing') on the table'
(TRPS 1)

(21) Q: Und der Videorekorder, wo ist der?
and the video.recorder where be:3SG:PRS DEM
A: Der steht im Schrank
DEM stand:3SG:PRS in:the cupboard
Q: 'And the video recorder, where is it?' — A: 'It is (lit. 'is standing') in the cupboard'
(Bochum Stimuli)

(22) Der Liegestuhl (...) steht auf dem Balkon
the folding.chair stand:3SG:PRS on the balcony
'The folding chair is (lit. 'is standing') on the balcony'
(Bochum Stimuli)

The use of *stehen* can also be triggered metonymically. For example, in (23) it is not, strictly speaking, the referent of the subject noun phrase (butter) which is the Figure, but the container in which it is conventionally kept (a plate or butter dish), which has a conventionally assigned base (cf. also Fagan 1991: 138; Serra Borneto 1996: 463). If the piece of butter was wrapped in paper only, the configuration of a piece of butter on a fridge would be described with *liegen* 'lie', since the Figure here lacks a distinguishable base.

(23) Die Butter steht auf dem Kühlschrank
the butter stand:3SG:PRS on the fridge
'The butter is (lit. 'is standing') on the fridge'
(overheard utterance)

In the case of Figures lacking a distinguishable base, *stehen* can only be used if the Figure has a greater extension in the vertical dimension than in the other dimensions, i.e., if it is "upright" (cf. Wahrig's dictionary definition and Serra Borneto 1996). This may be regarded as a schematization of the upright posture of humans on their feet. The relevance of the verticality schema as an additional criterion on which the use of *stehen* can be based is illustrated in examples (24) to (26). The Figures in these examples — sticks, a book, and a spoon — do not have a base, but have one saliently extended axis. If this axis is aligned horizontally with the supporting Ground, the verb *liegen* is regularly used with all these Figures (compare examples [28] to [30] in Section 3.3). If this dimension extends vertically, *stehen* is used.

(24) Die Stöcke stehn im Boden
the sticks stand:3PL:PRS in:the ground
'The sticks are (standing) in the ground'
(PSPV 9)

(25) Das Buch steht im Regal
the book stand:3SG:PRS in:the shelf
'The books are (standing) on the shelf'
(TRPS 8)

(26) Q: Wo ist der Löffel
where be:3SG:PRS the spoon
A: Der steht in der Tasse
DEM stand:3SG:PRS in the cup
Q: 'Where is the spoon' — A: 'It is (standing) in the cup'
(Bochum Stimuli)

The criterion of verticality also holds for the categorization of the configuration of a box (*Schachtel*), although Fagan (1991: 140) claims that the

noun *Schachtel* generally occurs with *liegen* 'lie'. In our data, *liegen* was not accepted for a box with a salient vertical axis — e.g., a box holding 10 CDs — and *stehen* was used instead.

That the component of verticality is secondary compared with the component of "base" is shown by the categorization of Figures which in their canonical position have little or no vertical extension but a distinguishable base, such as beds or plates. The verb *stehen* is infallibly used to describe the canonical position of such objects. As soon as they are in noncanonical position, however, *liegen* has to be used instead, e.g., to describe a plate which is upside down. In this case, thus, the presence or absence of vertical extension triggers the use of *stehen* vs. *liegen*. With objects which are vertically extended although in a noncanonical position, *stehen* is generally used (usually modified by a secondary predicate), although there is some variation in the judgment of speakers. Thus, 7 out of 8 speakers used *stehen* for the configuration depicted in PSPV 12 (a vase-shaped clay pot upside down on a tree trunk), i.e., they gave responses similar to (28). However, one speaker used *liegen*, and one used first *liegen*, then *stehen*, and judged both as acceptable. Other stimuli showing an object which was vertically oriented but upside down elicited similar patterns.

(27) Der Topf steht umgekehrt auf dem
the pot stand:3SG:PRS upside.down on the
Baumstumpf
tree.stump
'The pot is (standing) upside down on a tree trunk'
(PSPV 12)

Not only a noncanonical orientation, but also a noncanonical Ground can be responsible for the use of *liegen* rather than *stehen*, although the judgment is even less clear in these cases. For example, in order to complement the data elicited with the PSPV tool, we tested the configuration of a plate placed on top of a cup. The 5 consultants participating in this test disagreed on the appropriate positional to describe this situation: 3 out of 5 speakers used *stehen* (and, when asked, justified this with the canonical orientation of the plate) and the other two used *liegen* (and claimed that *stehen* could not be used because the plate was not in its conventional position). Similarly, for a plate placed on the floor rather than a table, *liegen* is the verb used if the position of the plate is perceived as accidental, but *stehen* is used or accepted if it is construed as purposeful (as in the use of a plate to provide food for a pet dog or cat). Similar observations have been provided for the corresponding Dutch positionals by Lemmens (2002: 119–122).

The effect of a noncanonical Ground also accounts for the variation in the responses to PSPV Stimuli 48 and 29. Both depict a pot on a thin branch in a tree, leaning slightly against the tree or another branch. Even where the pot has its canonical orientation (PSPV 48), only 5 out of 8 speakers used *stehen* (and not without further modification), and one explicitly rejected this verb. Where the pot is turned upside down (PSPV 29), the number of speakers using *stehen* is reduced to three (out of 8), with an additional two who considered it very marginally acceptable.

Containers often also count as noncanonical Grounds — especially in cases where a canonical position is unlikely to be maintained, notably in movable containers like baskets, as opposed to a cupboard. Thus, in our data, the verbs *liegen* 'lie' or *sein* 'be' tend to be used for objects in a container. For example, a plate in canonical orientation in a basket would be referred to with *liegen*, not with *stehen*. Even for the upright bottle in a rather large basket depicted in PSPV 62, one speaker (out of 8) used *liegen* and not *stehen*, although an upright bottle on a table would invariably elicit *stehen*. For PSPV 67, depicting a bottle upside down in a basket, 3 speakers used *stehen* (of which one immediately corrected herself and judged only *sein* as acceptable), 3 used *liegen* (of which one also accepted *stehen*), and 2 used *lehnen* 'lean' (see Section 3.5). The verb *sein* 'be' is the only choice if the container is flexible, e.g., a bag (see Sections 3.3 and 4.3). The variation in the choice of positional thus seems to depend on the perceived stability of the configuration. Moreover, for Figures inside a container the criterion of verticality seems to override the criterion of presence of a base in the choice of *stehen*.

3.3. Liegen *'lie'*

The verbs *stehen* and *liegen* are in direct opposition since both positionals entail configurations of support from below only, and merely differ in the orientation of the Figure with respect to the supporting Ground.[11] According to Serra Borneto (1996), *liegen* is used for inanimate Figures either when the most salient axis of the Figure is aligned horizontally with the Ground, or when the Figure lacks a salient dimension, i.e., is round or otherwise symmetrical or near symmetrical. This characterization is confirmed by our data.

In examples (28) to (30), the most salient dimension is aligned horizontally with the Ground. If it was aligned vertically, *stehen* would be used (compare the use of *liegen* vs. *stehen* in [29], and examples [24] to [26] in Section 3.2 above).

(28) Der Stock liegt quer über dem Baumstumpf
the stick lie:3SG:PRS diagonally across the tree.stump
'The stick is (lit. 'is lying') diagonally across the tree stump'
(PSPV 61)

(29) Das [Buch] liegt auf den Büchern, die im
the book lie:3SG:PRS on the books REL in:the
Regal stehen
shelf stand:3PL:PRS
'The (book) is (lit. 'is lying') on the books which are (lit. 'are standing') on the shelf'
(Bochum Stimuli)

(30) Meiner [Löffel] liegt auf der Untertasse
POSS:1SG spoon lie:3SG:PRS on the saucer
'Mine (i.e., my spoon) is (lit. 'is lying') on the saucer'
(Bochum Stimuli)

The verb *liegen* is also used for two-dimensional, flexible objects such as pieces of cloth or ropes, which may be extended or folded up, as long as they are supported from below. For objects of this type, because of their nonrigid nature, *stehen* is not usually an alternative configuration, although, as one speaker pointed out spontaneously, napkins can *stehen* (if folded up appropriately) as well as *liegen*. If a flexible object extends over the supporting Ground, the verb *hängen* (see Section 3.4) is also appropriate for this portion of the Figure. A configuration of this type in the PSPV Stimuli is typically described with a biclausal expression employing both verbs, as in (31). However, a table cloth in canonical position is usually just described with *liegen*.

(31) Das Seil liegt über dem Korb und
the rope lie:3SG:PRS across the basket and
hängt an den Seiten runter
hang:3SG:PRS on the sides down
'The rope is (lit. 'is lying') across the basket and is hanging down on the sides'
(PSPV 63)

The Figures in examples (32) and (33) lack both a salient dimension and a canonical base. Here too, *liegen* is used, and *stehen* is not available as an alternative. This also holds for small multiple objects like beans.

(32) Der Ball liegt aufm Boden
the ball lie:3SG:PRS on:the ground
'The ball is (lit. 'is lying') on the ground'
(PSPV 7)

(33) Die Bohnen liegen verstreut aufm Boden
the beans lie:3PL:PRS scattered on:the ground
'The beans are lying scattered on the ground'
(PSPV 11)

As also indicated in Sections 3.2 and 3.5, *liegen* serves as a residual positional for Figures in a rigid container which however does not contain the Figure in its canonical, stable position (as is the case e.g., for cupboards where the verbs *stehen* 'stand' and *lehnen* 'lean', which require a stable support relation, may be applied). In other words, *liegen* can be applied to a Figure in a container even if the longest axis of a Figure is not strictly speaking horizontally aligned, which is a necessary criterion for the use of *liegen* with asymmetrical Figures outside containers. This difference is sometimes explicitly commented on by speakers, as in (34) and (35). Example (34) was a response to a stimulus similar to PSPV 22 (a single bottle in a basket in a diagonal configuration), which the speaker judges not to be in a 'proper', i.e., prototypical, *liegen* configuration.

(34) Sie liegt in dem Korb, aber nicht richtig
3SG lie:3SG:PRS in the basket but NEG properly
'It (a bottle) is (lit. 'is lying') in the basket but not properly'
(Bochum Stimuli)

(35) a. Q: der Prospekt?
the folder

b. C: Der liegt auch im Korb
DEM lie:3SG:PRS also in:the basket

c. A: Aber der LIEGT nicht
but DEM lie:3SG:PRS NEG

d. C: Im Zweifelsfall immer: IST im
in:the case.of.doubt always be:3SG:PRS in:the
Korb
basket

e. A: Ich würd sagen, der LIEGT
1SG would:1SG:PRS say:INF DEM lie:3SG:PRS
auch, obwohl er nicht LIEGT
as.well although 3SG NEG lie:3SG:PRS

Q: 'The folder?' — C: 'It is (lit. 'is lying') in the basket' — A: 'But it is not lying' — C: 'If in doubt: (it) IS in the basket' — A: 'I'd say, it is lying, although it is not lying'

Example (35) is the discussion of two speakers elicited with a folder in a basket, also in a diagonal configuration. In line (35b) and in the first clause in line (35e), the speakers use *liegen*, as is appropriate for the actual

configuration of the folder being inside the container, but in line (35c) and the second clause in line (35e), the speaker considers the prototypical use of *liegen*, i.e., the configurations for which this positional would be appropriate outside a container, and therefore states that the folder does not lie.

The issue is further complicated by the fact that *sein* 'be' is also available as an underspecified locative verb in the case of containment (cf. [35d] above), and tends to be used for flexible containers like cloth bags. In a search of a subpart of the IDS corpus, no combination of *liegen* with a PP containing the nouns *Tasche* 'bag', *Beutel* 'cloth bag' or *Sack* 'sack' could be found. In our data, too, *sein* 'be' was preferred for configurations of this type.

3.4. Hängen *'hang'*

In contrast to *stehen* 'stand', *liegen* 'lie' and also *sitzen* 'sit' (not considered here), the verb *hängen* 'hang' cannot be attributed to a typical posture of the human body, although it can be used with both animates and inanimates. The standard use of the verb *hängen* describes the relation of a Figure to its Ground that is only attached at one point — typically the highest part of the Figure — and lacks support from below. As a result, the configuration of the Figure is determined by gravity, i.e., normally from the point of attachment downwards (cf. Kaufmann 1995: 109). Animates, normally human beings, can for instance be said to 'hang' if they are "attached" to a cliff holding on to it with their hands without having support under their feet. Examples of inanimate Figures in our data comprise flexible entities such as ropes, pieces of cloth, or clothing (example (36)), and solid objects such as a picture on a wall (example (37)), or a stick in a tree being attached to a branch and dangling downwards (example (38)).

(36) Die Wäsche hängt an der Leine
the washing hang:3SG:PRS on the line
'The washing is hanging on the (washing) line'
(TRPS 37)

(37) Das Bild hängt im Keller
the picture hang:3SG:PRS in:the basement
'The picture is hanging in the basement'
(Gerling and Orthen 1979: 69)

(38) Ein Stock hängt im Baum
a stick hang:3SG:PL in:the tree
'A stick is hanging in the tree'
(PSPV 55)

The typical configuration for *hängen* also implies that the Figure dangles freely, as several speakers in our corpus stated who did not judge *hängen* to be appropriate for the position of a small earring in the shape of a ring.

(39) (...) also wenn das jetz n Ohrring
well if DEM now a earring
wär der so baumelt, dann
be:3SG:SUBJUNCT REL thus dangle:3SG:PRS then
würd ich sagen hängt
AUX:1SG: SUBJUNCT 1SG say:INF hang:3SG:PRS
'(...) well, if it was an earring which kind of dangles, then I would say "hang"'
(TRPS 70)

However, *hängen* is not restricted to relations of attachment to a single point, nor to dangling objects but can be triggered by a configuration of lack of support from below only. Thus, as shown in (37), in Standard German *hängen* is the only proper positional for describing objects attached to walls (e.g., a telephone fixed to a wall, as in TRPS 25) unless the configuration is one of tight fit or adhesion, and even in those cases *hängen* can be found (cf. examples (64) to (67) in Section 3.8).

A less prototypical use of *hängen* is the one found in (40); the configuration is that of a ball which is stuck between two branches, one third of it being below its point of attachment. For this configuration, only 3 out of 8 speakers chose *hängen*, while others chose *liegen* 'lie' (see Section 3.3), *stecken* 'be in tight fit, be stuck' (see Section 3.6) or *klemmen* 'be stuck, be jammed' (see Section 3.7).

(40) Der Ball hängt zwischen Ästen im Baum
the ball hang:3SG:PRS between branches in:the tree
'The ball is hanging between branches in the tree'
(PSPV 43)

Marginally, the use of *hängen* is also possible in configurations where the Figure is oriented vertically with respect to a Ground below the Figure, as long as the Ground is not conceptualized as supporting the Figure from below. For instance, for a leaf "standing" erect on a branch (TRPS 41), *hängen* was accepted by all four consultants tested for this configuration.[12]

Gas-like Figures such as clouds or smoke, and, metaphorically, also smell can also be seen as lacking support from the Ground, and thus may trigger the use of *hängen*. A search of the IDS corpus also revealed a great many uses of this kind, where the characteristic common denominator seems to be a perceived "heaviness" of the cloud or gas-like Figure

in question (e.g., a rain cloud, smog, a strong smell, or heavy smoke, the latter illustrated in [41]). This appears to confirm the observation that the meaning component of 'configuration being determined by gravity' is the most relevant for the use of *hängen.*

(41) Zwischen den Bürogebäuden hängt beissender
between the office.buildings hang:3SG:PRS stinging
Rauch
smoke
'In between the office buildings is (lit. 'is hanging') stinging smoke'
(IDS E98/AUG.20825)

Clouds as Figures may also trigger the use of *stehen* 'stand' (since for celestial bodies this positional is conventionalized; see Note 10 in Section 3.2) or *schweben* 'be afloat' (see Section 3.10).

As already seen in the discussion of example (40), the use of *hängen* may overlap with that of other positionals such as *klemmen* or *stecken.* In these cases speakers choose to foreground the nature of the attachment of the Figure to the Ground. The pairs of responses in (42) and (43) were elicited with the same stimulus.

(42) a. Die Wäscheklammer hängt am Saum
the peg hang:3SG:PRS at:the hem
'The peg is hanging from the hem'
(Bochum Stimuli)

b. Die Wäscheklammer klemmt an der Bluse
the peg jam(ITR):3SG:PRS at the blouse
'The peg is stuck on the blouse'
(Bochum Stimuli)

(43) a. Es hängt aus'm Regal
3SG hang:3SG:PRS out.of.the shelf
'It (a rope) is hanging from the shelf'
(Bochum Stimuli)

b. Es steckt unter den Büchern
3SG stick(ITR):3SG:PRS under the books
'It (a rope) is stuck under books'
(Bochum Stimuli)

In the noncanonical situation of a flexible object like a rope being horizontally positioned on branches in a tree (cf. PSPV 57) or leaves of a small palm tree (Bochum Stimuli), *hängen* may also be used and alternates with the positional *liegen.* The relation of Figure and Ground is noncanonical for the use of *liegen* as well, since even though the Figure is clearly horizontally oriented, it is only supported by the Ground at some points, while the portions of the Figure between these points lack support from below. In these cases, either the horizontal alignment may be foregrounded leading to the use of *liegen,* or the lack of support for most of the Figure may be emphasized by the choice of *hängen,* as is illustrated in (44) with two responses from the same speaker.

(44) a. Q: wo ist das Seil? (...)
where be:3SG:PRS the rope

b. C: Liegt in der Pflanze (...)
lie:3SG:PRS in the plant

c. hängt in der Pflanze
hang:3SG:PRS in the plant

Q: 'Where is the rope?' — C: '(It) is lying in the plant ... hanging in the plant'
(Bochum Stimuli)

Since some speakers accept *hängen* even for nonflexible Figures such as small sticks positioned on the leaves of the same palm tree, the prototypical meaning component of 'lacking support from below' and not the more secondary component of 'dangling' seems to trigger the use of *hängen.*

3.5. Lehnen *'lean'*

Similar to the verb *hängen* 'hang', *lehnen* 'lean' belongs to the group of positionals which entail contact between Figure and Ground. Unlike *hängen,* however, *lehnen,* at least with inanimates (since these are not able to support themselves in a skewed position with muscular force), is used for configurations where the Figure is in contact with two surfaces which are roughly orthogonal with respect to each other, e.g., a floor and a wall, as in (45), or a floor and a basket, as in (46). That is, this verb cannot be used where a Figure is in contact with a single surface only, even when it is supported in two different places. Thus the configuration of an opened umbrella touching the floor with its handle and with one of its spokes can only be described with the positionals *stehen* 'stand' or *liegen* 'lie'.

Furthermore, a Figure that can *lehnen* 'lean' has to be a solid rigid object, which can bear its own weight without being deformed. The verb therefore does not apply to flexible Figures such as ropes, pieces of cloth or items of clothing. The typical configurations — i.e., configurations for which all speakers agreed that *lehnen* was appropriate — involve rigid objects with a salient two-dimensional orientation.

(45) Die Leiter lehnt an der Wand
the ladder lean:3SG:PRS at the wall
'The ladder is leaning on the wall'
(TRPS 58)

(46) Der Stab lehnt an dem Korb
the stick lean:3SG:PRS at the basket
'The stick is leaning on the basket'
(PSPV 12)

Similarly, round objects, such as balls, cannot be conceptualized as being in a *lehnen* relationship to its Ground. For nonround objects such as cubes, *lehnen* can be used, since they can be tilted such that only the top and the bottom part of the object touch the respective Grounds.

Just like *stehen* 'stand', *lehnen* requires that the configuration be perceived as stable, and is therefore only marginally used or accepted for Figures inside a moveable container. For example, while all speakers agree on using *lehnen* for configurations such as a spoon leaning on a cup when the Figure is outside the container, for an object being inside a cup or a basket leaning on the rim, only one speaker agreed that *lehnen* could be used. In the following example, this use is immediately challenged by a second speaker.

(47) D: Ich würd schon sagen:
1SG AUX:1SG:SUBJUNCT MOD.PTKL say:INF
"der (Löffel) lehnt in der Tasse"
the spoon lean:3SG:PRS in the cup
A: man kann nicht IN etwas lehnen,
one can:3SG:PRS NEG in something lean:INF
man kann nur AN etwas lehnen
one can:3SG:PRS only at something lean:INF
D: 'I would possibly say "it (the spoon) is leaning in the cup".'
— A: 'One cannot lean IN something, one can only lean ON something'
(Bochum Stimuli)

The other speakers described similar configurations with the verbs *stecken* or *stehen* in case of a narrow container such as a cup or a bowl (see (26) and Section 3.6), with *liegen* for a container with a wider opening, e.g., a basket (see Section 3.3), with *stehen* if the Figure was very clearly in an upright position (see Section 3.2), and otherwise with *sein* 'be'. The findings in our elicitation sessions were confirmed by means of the IDS corpus, where a search for *lehnt* + *in* did not return any example with a container as the Ground and the Figure perceived as 'leaning' inside this container.

Overlaps between *stehen* and *lehnen* can also be found for Figures which are not in a container, such as a broom or a ladder leaning on a wall, irrespective of whether they have a base or not. The angle between Figure and supporting Ground seems to be the essential feature. If the angle is rather small and the Figure is seen as being more or less upright, for some speakers *stehen* is preferred over *lehnen*, even if the Figure is supported from the side as well as from below. (Both *liegen* and *lehnen* may be used if the longest axis of the Figure in question has a horizontal extension and its shorter axis is supported from the side, e.g., in the case of a hammer leaning against a box). In the cases of possible overlap *stehen* and *lehnen* may also occur together in secondary predicate constructions. In these cases *stehen* is the main predicate while the past participle of *lehnen* or its particle verb derivation *anlehnen* 'lean against' is the secondary predicate of the construction, as is illustrated in (48).

(48) Der (Teller) steht am Drucker (...)
the plate stand:3SG:PRS at:the printer
angelehnt
lean:PTCP.PERF
'The plate is (lit. 'stands') leaned against the printer'
(Bochum Stimuli)

3.6. Stecken *'be in tight fit, be stuck, stick(ITR)'*[13]

Unlike the other positional verbs discussed so far, *stecken* cannot be defined in terms of support, but rather in terms of a specific containment relation between Figure and Ground: the Figure and the Ground are in a relation of tight fit (as also indicated in the dictionary definition of 'fitting, be fastened' in the DUDEN). Typical examples of a *stecken* configuration are that of a cork in a bottle, a foot in a shoe (see (57) below), a plug in a socket, a CD in its cover, a key in a keyhole, a candle in a candle stand (see (49)), and a stick which is partially embedded in the ground and therefore stays upright. Thus, all 8 speakers used *stecken* to describe the stimulus in PSPV 20; an example is (50).

(49) Die Kerze steckt im Kerzenständer
the candle stick(ITR):3SG:PRS in:the candlestick
'The candle "is stuck" in the candlestick'
(Bochum Stimuli)

(50) Der Stock steckt im Boden
the stick stick(ITR):3SG:PRS in:the ground
'The two sticks "are stuck" in the ground'
(PSPV 20)

As these examples show, the orientation of the Figure is irrelevant, and the containment may be partial or complete. Our findings therefore contradict Coseriu (1968: 9), who assigns the semantic feature of 'invisible position' to *stecken* (an analysis which is also taken over by Kotschi [1974: 138–148] and Gerling and Orthen [1979: 68f.]). That the relation of tight fit is seen as a criterion for the use of *stecken* also becomes apparent from the following statement of a speaker, who was justifying her choice of *stecken* to describe a CD in its cover.

(51) Weil es ganz genau passt, und dann
because 3SG total exact fit:3SG:PRS and then
steckt'-s wie so' n Stecker eben
stick(ITR):3SG:PRS-3SG like just a plug MOD.PTKL
der passt ja auch ganz genau
DEM fit:3SG:PRS MOD.PTKL as.well total exact
'Because it fits exactly, and then it is stuck (*steckt*), just like a plug (*Stecker*), which also fits exactly (into its socket)'
(Bochum Stimuli)

However, *stecken* is not restricted to relations of "exact" fit (as claimed by the speaker in (51)). Rather, this verb displays an interesting prototype effect in that speakers disagree in how far to extend the use of *stecken* to relations of rather loose fit. For example, while *stecken* is accepted by all speakers in descriptions of small objects in a pocket, it is used or accepted by fewer speakers to describe objects in a larger flexible bag, especially if the object or objects do not fill the bag more or less completely. The other speakers only accept the general locative verb *sein* (see Section 4.3). A search of the IDS Corpus for *stecken* with the Ground nominals *Tasche* 'bag, pocket' and *Sack* 'Sack' returned few examples, and these all described configurations of tight fit.

Similarly, multiple extended objects in a rigid container which is open at the top are more readily described as in a *stecken* relation than a single object of the same type in the same container, since the multiple objects are more tightly packaged, as it were (although still not fitting "exactly"). For example, multiple toothbrushes in a glass can be described as in (52) and the configuration in PSPV 60 (four bottles in a basket), can be described as in (53).

(52) Deine Zahnbürsten stecken im
POSS:2SG toothbrushes stick(ITR):3PL:PRS in:the
Zahnputzbecher
toothbrush.glass
'Your toothbrushes "are stuck" in the toothbrush glass'
(Bochum Stimuli)

(53) Kunterbunt stecken die Flaschen im
higg.-piggledy stick(ITR):3PL:PRS the bottles in:the
Korb
basket
'The bottles "are stuck" in the basket higgledy-piggledy'
(PSPV 60)

In contrast, no speaker used *stecken* to describe any of the PSPV stimuli depicting a single bottle in a basket (PSPV 22, 62, and 67). Depending on the actual configuration, *stehen* 'stand', *liegen* 'lie' or *sein* 'be' are preferred in this case. Similarly, speakers disagreed on the appropriate description of a single toothbrush, pen or a spoon placed upright in a cup, mug or small bowl (which was otherwise empty). For these configurations, elicited with real objects, 6 out of 14 speakers used or accepted *stecken*, although two later corrected their own spontaneous use of *stecken* (see example (78)). The others again preferred *stehen* 'stand' (see example (26)), *sein* 'be', or (marginally) *lehnen* 'lean' (see example (47)).

Another interesting observation about *stecken* is that it displays Figure-Ground reversal of the type described by Kita (to appear) for the Japanese verb *sasuru* 'be in piercing relation': both the contained and the containing entity can be construed as the Figure. Examples (49) to (53) above and (56b) below illustrate the first possibility; the second possibility is illustrated in (54) to (56a).

(54) Der Ring steckt am Finger
the ring stick(ITR):3SG:PRS at:the finger
'the ring "is stuck" on the finger'
(TRPS 10)

(55) [Die Wäscheklammer] steckt an deiner
the peg stick(ITR):3SG:PRS at POSS:2SG
Hose
trousers
'(the peg) "is stuck" on your trousers' (the relevant part of the trousers is contained between the two ends of the peg)
(Bochum Stimuli)

(56) a. [Der Apfel] steckt auf diesem spitzen
the apple stick(ITR):3SG:PRS on DEM pointed
Dingens
thing
'(the apple) "is stuck" on that pointed/sharp thing'
(TRPS 70)

b. Der Pfeil steckt in diesem Apfel
the arrow stick(ITR):3SG:PRS in DEM apple
'the arrow "is stuck" in that apple'
(TRPS 30)

It has to be stated, though, that some speakers find the use of the containing entity as the Figure less acceptable. For example, while three out of four speakers spontaneously used *stecken* for the configuration in (54), only two speakers considered the use of *stecken* appropriate for the configuration of a shoe on a foot (and all four speakers mentioned *sein* 'be' as an alternative). As example (57) shows, one of them used *stecken* only after some hesitation, and considered the use of the contained entity as the Figure more typical.

(57) Der Schuh ist am Fuß, steckt
the shoe be:3SG:PRS at:the foot stick(ITR):3SG:PRS
am Fuß nee eigentlich steckt der FUSS
at:the foot no actually stick(ITR):3SG:PRS the foot
im Schuh, naja da steckt der
in:the shoe MOD.PTKL then stick(ITR):3SG:PRS the
Schuh wahrscheinlich auch
shoe probably as.well
'the shoe is on the foot, "is stuck" on the foot, no really the FOOT is stuck in the shoe, oh well then the shoe probably "is stuck" too'
(TRPS 21)

3.7. Klemmen *'be stuck, be jammed'*

In addition to *stecken* 'be in tight fit, be stuck/stick(ITR)', discussed in the previous subsection, German has a second verb pertaining to a relation of tight fit, *klemmen* 'be stuck, be jammed/jam(ITR)'. This verb is semantically more specific and also less frequently used than *stecken*, at least in our data. The semantics of *klemmen* is characterized by Gerling and Orthen (1979: 70) as '<Figure> fastened between two surfaces; this characterization is confirmed by our data.' Etymologically, the verb appears to originate from a transitive verb 'seize (with claws)'.[14] In its current use in Standard German, *klemmen*, just like *stecken*, displays Figure-Ground reversal. In (58) the Figure, i.e., the ball, is in a relation of tight fit with two branches, which exert pressure from each side. A similar expression is *in der Tür klemmen* 'be jammed in the door', i.e., between the door and the doorframe. In (59), on the other hand, it is

the Figure itself which is fastened on a Ground by means of two of its parts which exert pressure on (a part of) the Ground (note that the noun *(Wäsche-)Klammer* is a cognate of *klemmen*).

(58) Ein Ball klemmt zwischen zwei Ästen
a ball jam(ITR):3SG:PRS between two branches
'A ball is stuck between two branches'
(PSPV 44)

(59) Die Wäscheklammer klemmt an der Bluse
the peg jam(ITR):3SG:PRS at the blouse
'The peg "is stuck" on the blouse'
(Bochum Stimuli)

In descriptions of the stimuli used in elicitation for this study, *klemmen* is very marginal. Examples (58) and (59) are the only spontaneous uses as a simple positional in the BLC in our data (the verb was accepted by other speakers for the same stimuli, though). Moreover, *Klemmen* and particle verbs based on *klemmen* were used in the result construction and as a secondary predicate in the BLC with another positional as the main predicate, as in (60) — a response to the same stimulus as in (58) — and in (61).

(60) Ein Fußball hängt in eim Baum zwischen
a football hang:3SG:PRS in a tree between
zwei Ästen eingeklemmt
two branches jam:PTCP.PERF
'A football is hanging in a tree, jammed between two branches'
(PSPV 44)

(61) Es steckt im Drucker //
3SG stick(ITR):3SG:PRS in:the printer
fest-geklemmt
tight-jam:PTCP.PERF
'It (a rope) is stuck in the printer, jammed'
(Bochum Stimuli)

Two factors seem to be responsible for the marginality of *klemmen*. The first is its semantic overlap, already illustrated in (60) and (61), with both *stecken* 'be stuck' (which shares with *klemmen* the component of 'tight fit') and with *hängen* 'hang' (which shares with *klemmen* the component of 'attachment without support from below'). Thus, for the configurations described in (58) and (59), these two verbs were the more frequent alternatives.

The second factor seems to lie in a conventionalized use of *klemmen* without a Ground expression, to express an undesired state of affairs

where parts of an object which are normally movable are jammed, e.g., in *die Schublade klemmt* 'the drawer jams' or *die Maschine klemmt* '(a part of) the machine jams'. This reading of *klemmen* was in fact given by one speaker as the reason for not accepting *klemmen* even for the configurations in (58) and (59).

3.8. Kleben *'stick by means of glue'*, haften *'adhere'*

Our data confirm dictionary definitions according to which the verb *kleben* implies a configuration of contact between Figure and Ground caused by a sticky substance such as glue, like that of a stamp on a letter or adhesive tape on a leg; the latter illustrated in (62) (see also Kaufmann 1995: 118). This verb will be glossed as 'stick (glue)' to distinguish it from *stecken* 'stick(ITR)'.

(62) Das Pflaster klebt am Unterschenkel
the adhesive.tape stick(glue):3SG:PRS at:the shin
kurz über dem Knöchel
just above the ankle
'The adhesive tape sticks on the shin just above the ankle'
(TRPS 35)

More precisely, though, the Figure itself could be a sticky substance, as with chewing gum being stuck at the bottomside of a table (TRPS 53) or jam on a knife, where most of the speakers in our data used *kleben*, as in (63).

(63) Die Marmelade klebt am Messer
the jam stick(glue):3SG:PRS at:the knife
'The jam sticks on the knife'
(TRPS 12)

Some speakers in our data extend the use of *kleben* to configurations of adhesion even where no sticky substance is involved. For example, for the picture in PSPV 68, showing a piece of cloth fixed to the side of a tree stump, 3 out of 8 speakers used or accepted *kleben*; the others used *hängen* 'hang' (downplaying the component of adhesion of the whole piece of cloth), *haften* 'adhere' or *haken* 'get caught'.[15] Two of the eight speakers, however, explicitly rejected *kleben* because it was not apparent that a sticky substance was responsible for attaching the Figure to its Ground.

Another case where speakers only accepted *kleben* with hesitations or not at all is that of a magnet stuck e.g., on a wall or a fridge. Here, of course, magnetism and not a sticky substance is responsible for the maintenance of the configuration. The parenthesis *n Magnet klebt natürlich auch*, in the folk definition of the speaker in (64), shows a certain insecurity about his own definition of *kleben* in that, although he recognizes the semantic component of "stickiness" (hence *Klebstoff* 'glue'), he allows for the possibility of applying this positional to a magnet on an iron wall.

(64) n Magnet klebt natürlich auch, aber
a magnet stick(glue):3SG:PRS of.course as.well but
kleben verbinde ich irgendwie eher
stick(glue):INF associate:1SG:PRS 1SG somehow rather
mit wirklichem Klebstoff, (...)
with real glue
'A magnet sticks as well of course, but with *kleben* I rather associate real glue'
(Bochum stimuli)

In descriptions of the same configuration, other speakers reject *kleben* and use *hängen* 'hang' (see Section 3.4) or *haften* 'adhere' instead:

(65) Die Magnete hängen an der (...) Kühlschranktür
the magnets hang:3PL:PRS at the door.of.fridge
'The magnets hang at the (...) door of the fridge'
(Bochum Stimuli)

(66) Der Magnet haftet an der Wand
the magnet adhere:3SG:PRS at the wall
'The magnet is attached to the wall'
(Bochum Stimuli)

According to dictionary entries for *haften*, this verb is a positional that can be interchanged with *kleben* in case of describing configurations brought about by "stickiness". Thus, the example sentence for *haften* in the Wahrig dictionary (*Das Pflaster haftet gut* 'The plaster adheres well') corresponds to the stimulus in TRPS 35 for which all of the speakers in our sample used *kleben*, as in (62) above. Similarly, the speaker in (67) uses *haften* and accepts *kleben* for the "cloth on a tree stump" configuration in PSPV 68.

(67) Q: Klebt?
stick(glue):3SG:PRS
A: Sieht so aus zum Beispiel ja
look:3SG:PRS like PTKL for example yes
Q: Und befestigt?
and fix:PTCP.PERF

A: Nee der scheint da aus eigenen
no DEM seem:3SG:PRS there out.of own
Stücken zu haften
power INF adhere:INF
Q: 'Sticks?' — A: 'It looks like it, for example, yes' — Q: 'What about "is fixed"'? — A: 'No, it seems to adhere out of its own power'
(PSPV 67)

However, the fact that *haften* is more readily accepted for magnets — a search of a subpart of the IDS corpus returned no uses of *kleben* with a magnet as a Figure, but seven uses of *haften* — suggests that it only entails adhesion as such, not adhesion brought about by a sticky substance, and is thus semantically somewhat less specific than *kleben*. Despite this fact, *haften* is marginal in our data outside the examples just mentioned; our own impression is that it is more or less restricted to written German.

3.9. Schwimmen *'be afloat in liquid'*

The verb *schwimmen* 'be afloat in liquid' in German has two readings. As a motion verb it can be used in constructions with path expressions just like its English translation equivalent and cognate, *swim*. The second reading is that of a stative locative verb (cf. also Kaufmann 1995: 99f.). In Wahrig's dictionary it is glossed as 'be carried (i.e., afloat) in a liquid, not sink'. Our data also clearly show that *schwimmen* does not entail translational motion, but only entails that a Figure is afloat on or in the liquid, i.e., supported by the liquid. It is regularly employed with inanimate, nonmoving Figures, and the orientation or shape of the Figure are irrelevant.

Schwimmen is not applicable if the Figure is immersed in liquid, but touches the Ground rather than being afloat. In this case the positional appropriate for the orientation of the Figure — usually *liegen* — is used. For example, the following brief exchange was elicited by a small object (a tube of cream) which slowly sank to the bottom of a washing bowl filled with water.

(68) A: Die schwimmt (...) die schwamm in der
DEM swim:3SG:PRS DEM swim:3SG:PST in the
Schüssel
bowl
Q: Und jetzt?
and now

B: Liegt sie am Grund der Schüssel
lie:3SG:PRS 3SG at:the bottom of:the bowl
A: 'It swims ... it swam in the bowl' — Q: 'And now?' — B: 'It is lying on the bottom of the bowl'
(Bochum Stimuli)

If the Figure is motionless right on the surface of the water (as in the case of a cork or a boat), *liegen* may also be used as an alternative to *schwimmen*.

3.10. Schweben *'be afloat'*

The verb *schweben* 'be afloat' may take part in constructions with path expressions, but, like *schwimmen*, it is not only a motion verb but is found in the BLC as well, with a stative reading. Like *schwimmen*, it is explicitly classified as a stative locative verb by Kaufmann (1995: 120). Dictionary definitions tend to classify *schweben* as a motion verb meaning 'hover along slowly', etymologically originating in 'moving to and fro' (Wahrig), but usually also include examples with stative readings of the verb. In our data, *schweben* is used for expressing Figure-Ground relations of objects such as clouds, where the Figure is not being supported or attached to its Ground, although, as is illustrated in (69), some speakers reject it as being poetic language:

(69) a. Die Wolke schwebt über dem Berg
the cloud float(ITR):3SG:PRS above the mountain
'The cloud is (lit. 'is afloat') above the mountain'
(TRPS 36)

b. A: Die Wolke steht am Himmel (...)
the cloud stand:3SG:PRS at:the sky
Q: Schwebt?
float(ITR):3SG:PRS
A: Nee würd ich nie sagen!
no AUX:1SG:SUBJUNCT 1SG never say:INF
Da is ja höchstens,
then be:3SG:PRS MOD.PTKL only
ich bin doch kein Dichter!
1SG be:1SG:PRS MOD.PTKL NEG poet
A: 'The cloud is (lit. 'is standing') in the sky' — Q: 'Is afloat?' — A: 'No, I would never say so! That is only, well, I am not a poet, you know!'
(TRPS 36)

Contrary to what is stated by Kaufmann (1995: 99), the use of *schweben* is not restricted to a gas-like medium. Rather, expressions with *schweben* may describe Figures lacking support by a solid Ground, which typically means that they are floating in the air, but could also mean that they are afloat in water, as in (70), or that they are lacking any support at all, e.g., in case of astronauts in the gravity free surrounding of outer space in (71).

(70) Die schwebt irgendwie
DEM float(ITR):3SG:PRS somehow
'it is afloat somehow' (tube afloat in water)
(Bochum Stimuli)

(71) Die Astronauten schweben über der Luke
the astronauts float(ITR):3PL:PRS above the door
des Raumschiffs
of.the space.shuttle
'The astronauts are (lit. 'are afloat') over the door of the space shuttle'

For Figures being afloat in a liquid, the more specific verb *schwimmen* 'be afloat in liquid' (see Section 3.9) overlaps in usage with the less specific verb *schweben.* In case of gas-like Figures, *schweben* is replaced by *hängen* if the gas-like Figure is conceptualized as heavy and subject to gravity (see Section 3.4 for discussion and examples).

4. Conditions of use of the general locative verb *sein* 'be'

As already indicated in Section 1, German has a semantically general locative/copular verb *sein* 'be', in addition to the more specific positional verbs discussed in Section 3. This also has a variant which mainly occurs in the written register and was only occasionally found in our data, *sich befinden* 'be located' (lit. 'be found'). From a structuralist semantic approach, represented e.g., by Kotschi (1974: 146–148) and Gerling and Orthen (1979: 53), *sein* 'be' can be regarded as an archisememe which is semantically underspecified except for the semantic feature "static location", and therefore can be substituted for any of the positional verbs. This analysis can be confirmed in elicitation: speakers readily accept the verb *sein* in the BLC in virtually all contexts. In actual usage, however, the semantically specific positional verbs are strongly preferred (at least in the variety of German examined here). For example, in only 25 of 544 spontaneous first responses elicited with the PSPV Stimuli, *sein* or *sich befinden* were employed. Admittedly, these Stimuli depict rather marked configurations, which are more likely to trigger the use of a specific positional, and the proportion of *sein* responses is somewhat higher for the TRPS Stimuli, depicting mostly unmarked configurations.

There are, however, several contexts where the use of the underspecified verbs appears to be more felicitous, or is even required. These contexts can be divided into three main types: First, the position of the Figure in question may not be known — e.g., in a 'where' question, or if the Figure is invisible. Second, the Figure may be of a type (e.g., a mass) that does not allow for the specification of a position, and hence for the use of a positional verb. Third, and most interesting in the context of this study, there may be no positional that is appropriate to describe a certain configuration, either because the configuration does not have the stereotypical features corresponding to any positional, or because multiple Figures have different positions, i.e., cannot be described by any single verb. These possibilities will be discussed in turn.

4.1. *Unknown configuration*

Since German positional verbs classify referents according to their actual configuration, not according to the canonical configuration that the class of referents normally occur in, it is predicted that the semantically underspecified general locative/copular verb *sein* 'be' should be preferred when the position of the Figure is not known, as for example in 'where' questions, in negative presentational (see Section 2.2) or locative statements, or when the Figure is located in a closed container or otherwise invisible. This is not a strict requirement, however, since many types of Figures have a stereotypical orientation, that is, their configuration can be predicted even in the absence of direct evidence, and in this case the appropriate positional may be used. Note that this does not, strictly speaking, amount to a "presuppositional" use of the positional (as defined by Ameka and Levinson, this issue), since the positional is not automatically associated with a canonical configuration, but is only used if the actual configuration of the referent can be predicted. The following dialogue can serve to illustrate this point. It was uttered during an elicitation session, but can be regarded as more or less natural speech because the Figure, a newly acquired printer, was of real interest to the participants in the dialogue.

(72) a. S: Und der neue Farbdrucker?
and the new color.printer

b. M: Der ist noch in der Kömme,
DEM be:3SG:PRS still in the box
weiß ich nicht, wo ist
know:1SG:PRS 1SG NEG where be:3SG:PRS
der?
DEM

c. S: Nee, der ist schon
no DEM AUX:3SG:PRS already
ausgepackt [...] ist schon
unpack:PTCP.PERF AUX:3SG:PRS already
installiert
install:PTCP.PERF

d. M: Ist schon installiert,
AUX:3SG:PRS already install:PTCP.PERF
ja wo steht der denn?
MOD.PTKL where stand:3SG:PRS DEM then

e. S: Nebenan
next.door

S: 'And (where is) the new color printer?' — M: 'It is still in the box, I don't know, where is it?' — S: 'No, it is already unpacked [...] it is already installed.' — M: '(It) is already installed, well where is it (lit. 'standing') then?' — S: 'Next door'
(Bochum Stimuli)

This dialogue contains two "where" questions by the same speaker inquiring about the same object, a printer. The first time (72b) the speaker assumes that the printer is in a closed container (a box), in an unknown orientation. Correspondingly, the verb used here is the general locative verb (just as in his own response, in the same line, to the 'where' question posed by the investigator). At the time that the speaker asks his question again (72d), he has reason to assume that the printer is in its canonical orientation, that is, placed on its inherent base, since he has been told that it is already unpacked and installed. This time, he uses the positional appropriate for Figures with an inherent base, *stehen* 'stand'. Another example of the latter type is (21), where *stehen* is also used for an object — a video recorder — in a closed cupboard, because it can be expected to be in its canonical position.

Questions about, and descriptions of the location of an object with an unknown configuration, and negative existential or locative statements, are difficult to elicit. In order to present a comprehensive account of the factors influencing the choice of the underspecified verb vs. the specific

positionals, it would therefore be necessary to work with a large corpus of natural speech which is centered around locative descriptions. Such a study is beyond the scope of the present paper. In our elicited materials, there is, however, good evidence that the location of Figures in a closed container is more often described with *sein* (just as in [72b]) than with a positional verb. We also have anecdotal evidence that in "where" questions and negative existential or locative statements, the underspecified locative verb tends to be used. As shown in (72), (21) and also (11), this is no hard and fast restriction; if the configuration is stereotypical, a positional is still appropriate.

4.2. *Nonpositionable Figures*

Even if a Figure and its configuration are visible, the verb *sein* 'be' is the only possibility for locating "figures" that have no clear gestalt-like shape, e.g., liquids, or which are nondetachable parts of the Ground, e.g., handles. The latter category also includes negative Figures like holes. Thus, in (73) to (75), *sein* cannot be replaced with any of the positional verbs.

(73) Das (Wasser) ist (*liegt/*steht)
the water be:3SG:PRS lie:3SG:PRS / stand:3SG:PRS
in der Schüssel
in the bowl
'The water is in the bowl'
(Bochum Stimuli)

(74) Der Griff ist (*steckt/*hängt) an
the handle be:3SG:PRS lie:3SG:PRS / hang:3SG:PRS at
der offenen Tür
the open door
'The handle is on the open door'
(TRPS 61)

(75) Der Sprung ist (*liegt/*steckt)
the crack be:3SG:PRS lie:3SG:PRS / stick(ITR):3SG:PRS
in der Tasse
in the cup
'The crack is in the cup'
(TRPS 26)

The verb *stehen* is acceptable with liquids in combination with a directional phrase or a measure phrase, as in (76). These expressions, however,

are not felicitous as answers to a 'where' question and hence do not fall under the BLC.

(76) Das Wasser steht einen Meter hoch im
the water stand:3SG:PRS one meter high in:the
Keller
basement
Lit.: 'The water stands in the basement one meter high'

Similarly, as one anonymous reviewer has pointed out, *liegen* 'lie' does occur in collocation with 'water'. However, as a search of the IDS corpus confirmed, this use is restricted to large expanses of water such as lakes, or the ground water, and is usually followed by an adverb such as 'calmly', not by a locative phrase. If found with a locative adverbial, this use of *liegen* comes very close to the use of *liegen* with named locations (e.g., *Köln liegt am Rhein* 'Cologne is located on the Rhine'). Both an adverb and a locative adverbial are combined in (77).

(77) Das Wasser liegt inmitten von Bäumen ruhig
the water lie:3SG:PRS amidst of trees calmly
da
there
Lit.: 'The water lies calmly amidst trees'

Masses like butter and granular substances like sand or sugar constitute borderline cases. For substances of this type, *liegen* 'lie' is appropriate when they are supported by a surface, just as for any object lacking a base, including multiple small near-symmetrical objects like beans (see example (33) in Section 3.3). However, when they are in a container, only *sein* can be used for all of these Figures.

4.3. *Inapplicability of positionals*

If, in the case of a "good", moveable, visible Figure, *sein* 'be' rather than one of the positional verbs is used, this is always because none of the positionals applies to the configuration in question. These "difficult" configurations fall into two main types: containment, and multiple Figures assuming different orientations.

It has been pointed out in various places in this paper that the choice of positional verbs is reduced for containers as Grounds. If the container is rigid (e.g., a basket) and the Figure is more or less completely contained

in it, *liegen* 'lie' can often be used as the residual positional verb (see Section 3.3), although *sein* is also frequent, and indeed tends to be used if the containment is not complete. The residual character of *sein* is illustrated in (78), the responses from a single speaker to a configuration of a spoon protruding from a bowl of roughly equal dimensions. The speaker here first considers three positionals as potential candidates, but then decides on *sein* as a last resort since none of the other verbs are judged appropriate: the configuration does not have any of the components of tight fit (required for *stecken*), presence of a base or of clearly vertical extension (required for *stehen*) or horizontal extension or complete containment (required for *liegen*).

(78) a. Der Löffel steckt in der Schale
the spoon stick(ITR):3SG:PRS in the bowl
b. Steht in der Schale
stand:3SG:PRS in the bowl
c. Liegt in der Schale
lie:3SG:PRS in the bowl
d. Liegt? (...) Steckt? (...) ich weiß
lie:3SG:PRS stick(ITR):3SG:PRS 1SG know:1SG:PRS
aber wirklich nicht. Steckt? (...)
but really NEG stick(ITR):3SG:PRS
e. (...) Der Löffel IST in der Schale
the spoon be:3SG:PRS in the bowl
'The spoon "is stuck" in the bowl. Is standing in the bowl. Is lying in the bowl. Lies? Is stuck? I really don't know. Is stuck? The spoon IS in the bowl'
(Bochum Stimuli)

While for objects in rigid containers specific positional verbs may be used under certain conditions, this is not possible for flexible containers like paper or cotton bags (see also the comments in Section 3.3). Some speakers accepted *stecken* 'be in tight fit, be stuck' if the Figure filled the bag more or less completely (see Section 3.6), but most speakers only produced and accepted *sein* 'be' in this case.

Responses to stimuli with multiple Figures in different configurations also show that *sein* 'be' is used as the last resort. For example, for Stimulus 46 in the PSPV stimuli, depicting several bottles on a table, some upright, some on their sides, 5 out of 8 speakers used *sein* 'be' (or its variant *sich befinden*) in one of their spontaneous responses; however, all but two of these speakers in addition also specified the respective positions of the bottles in separate clauses, as in (79).

(79) Die Flaschen (...) sind auf dem Tisch, teilweise
the bottles be:3PL:PRS on the table partly
liegen sie teilweise stehen sie auf dem
lie:3PL:PRS 3PL partly stand:3PL:PRS 3PL on the
Tisch
table
'The bottles are on the table, partly they are lying, partly they are standing on the table'
(PSPV 46)

5. Summary

The discussion of the use of German positional verbs in the Basic Locative Construction (BLC) has shown that colloquial Standard German should be regarded as a positional language (or multiverb language) in the typology proposed by Ameka and Levinson (this issue). It has a set of around ten positional verbs that are regularly used to describe the configuration of moveable inanimate objects. As shown in Section 3.1, a considerable number of additional positional and locative verbs exist which are restricted to animate Figures, or have additional semantic features such as permanence of location, rather than encoding the locative relation as such. All of these stative locative verbs have a common formal property in that they more or less obligatorily take a prepositional phrase representing a location (see Section 2.1). The subset of verbs discussed here, however, could only be delimited from other stative locative verbs by semantic criteria.

As predicted for a positional language, the use of positionals in German always depends on the actual configuration of the entities involved. If the configuration cannot be seen or at least be predicted, a default verb, the unspecified locative/copular verb *sein* 'be', is used. On the other hand, on a scale based on the size of the positional verb class, German occupies a position at the lower end of the range of positional/multiverb languages. It is perhaps for this reason that German also shows a trait predicted for postural verb languages: positionals can be omitted, in which case only the prepositional phrase is used in an answer to a 'where' question, and one of a relatively large set of spatial prepositions conveys sufficient information about the configuration (see Section 2.1).

The flow chart in Figure 1 summarizes the factors influencing the choice of a positional verb in German, which were discussed in Sections 3 and 4. The general locative/copular verb *sein* 'be' (Section 4) functions as a residual positional verb, in that it is used if none of the more specific

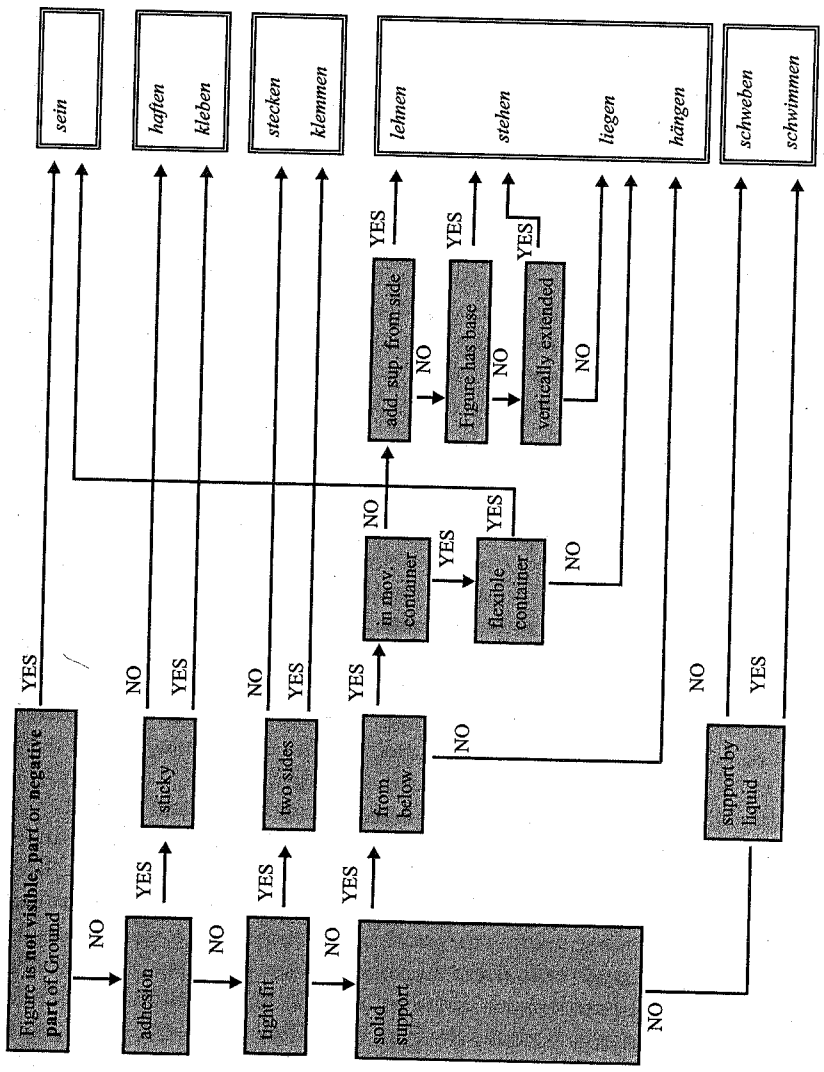

Figure 1. *Factors influencing the choice of German positional vers*

verbs is completely appropriate for the description of a specific configuration (e.g., when multiple Figures have different configurations, or the Figure is in a nonprototypical position), and also if the actual configuration is not known and cannot be predicted. *Sein* 'be' (or its more literary counterpart, *sich befinden* 'be located') is also generally used for nonpositionable Figures, including masses, parts and negative parts.

The semantically specific positional verbs can be subdivided into subgroups according to the type of configuration or contact. Two verbs are restricted to "floating" Figures, i.e., configurations where the Figure is not supported by or contained in a solid entity of any sort. Of these, *schwimmen* 'be afloat in liquid' (Section 3.9) has an additional component of 'liquid medium', whereas *schweben* 'be afloat' (Section 3.10) is neutral in this respect. Both of these verbs have motion readings as well, but do not have transitive counterparts with the meaning 'place into Ving position', while for all remaining verbs, such counterparts exist.

Two further verbs are used to describe configurations of adhesion; the verb *kleben*, which requires adhesion by means of a sticky substance such as glue (or inherent stickiness of the Figure), is more frequent than the semantically more general but less colloquial *haften* 'adhere' (Section 3.8).

Two verbs are restricted to configurations of tight fit; these are *stecken* 'be in tight fit, be stuck' (Section 3.6) and *klemmen* 'be stuck, be jammed' (Section 3.7), which requires tight fit from two sides and can usually be replaced by *stecken.* These two verbs allow for an alternation in argument structure in that both Figure and Ground can be represented by the subject and the noun of the locative phrase, respectively.

Configurations of containment that are not characterized by tight fit are either described with the nonspecific locative verb *sein* 'be' — which is the only option if the container is itself flexible — or with *liegen* 'lie', which in this respect has some properties of a residual verb. As reflected in the title of this paper, the prototypical use of *liegen* is for Figures which do not have a salient vertical extension or a base, but this verb can be generalized to all Figures in a (rigid) container, at least if this is a container such as a basket or a box (see Section 3.3) which is not associated with a canonical position of the Figure. Presumably, in this case, *liegen* is chosen over *lehnen* 'lean' or *stehen* 'stand' because the configuration is not perceived as stable enough to warrant the use of one of the latter verbs.

The four remaining positional verbs share the component of 'support'; three of them require support from below, while *hängen* 'hang' (Section 3.4) is the appropriate verb for any kind of support that is not from below. The verb *lehnen* 'lean' (Section 3.5) entails that a solid Figure is supported both from below and from the side (i.e., from a surface orthogonal to the horizontal surface). The verbs *stehen* 'stand' (Section 3.2) and

liegen 'lie' (Section 3.3), finally, are in direct opposition: both require support from below only, and differ in that *stehen* applies to Figures which either have an inherent base or are vertically extended, and *liegen* applies to all other Figures, e.g., Figures which are horizontally extended or symmetrical. The use of the verb *sitzen* 'sit' with inanimate Figures is restricted to a few idiomatic expressions in German and was not considered here.

Apart from *stehen* 'stand' und *liegen* 'lie', none of the positionals semantically encodes information about the shape of the Figure, and there are no positionals distinguishing between single Figures and aggregates. Apart from the general distinction between 'support by solid Ground' (most positionals), 'support by liquid' (*schwimmen* 'be afloat in liquid') and 'lack of perceived support' (*schweben* 'be afloat'), German positionals do not encode information about the nature of the Ground either — for example, German does not have a specific verb for a fire as the Ground. Thus, as a generalization, German positionals only distinguish between different types of contact and support.

Finally, we will consider the use of the positionals and of the locative/copular verb *sein* 'be' in relation to the BLC hierarchy proposed by David Wilkins, as summarized in the introduction to this issue. As is predicted by the hierarchy, in German, moveable objects (position VI in the hierarchy) allow for the BLC and for a choice of locative verbs which is only restricted by the actual configuration of the Figure. In some points, however, the German data reported here contradict the hierarchy. Thus, the BLC is also used for Figures which are moveable in principle, but attached firmly to the Ground, or in a piercing configuration, although these are judged to occupy the highest positions (I and II) on the hierarchy and therefore should be least likely to allow for the BLC. In German, special positionals occurring in the BLC, such as *kleben* 'stick by means of glue' and *stecken* 'be stuck, be in tight fit' are used for these configurations. For most types of clothing and adornment (position V), likewise, the BLC with a positional verb such as *stecken* 'be stuck, be in tight fit' or *hängen* 'hang' can be used. For part/whole configurations (where the part is not detachable) and negative spaces, the BLC is also used. However, the only locative verb that can be used in these cases is the semantically general locative/copular verb *sein* 'be' (recall that in Section 1 we have argued that there is no evidence for considering expressions involving this verb as instances of a different construction from expressions involving a positional or other locative verb, since the criterion that the Ground PP is obligatory is met by all these verbs). The only configuration considered in the BLC hierarchy which, in German, does not allow for the use of a BLC at all is the configuration of encirclement. As pointed

out in Section 2.4, a configuration of this type can only be described by means of the result construction, which, as shown by the responses to our stimuli, is also an alternative for most other configurations, but is used much less frequently than the BLC.

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University of Cologne
University of Manchester

Notes

1. We would like to thank all students, friends, and family members who agreed to respond (or were coerced into responding) to the various stimuli used in collecting the data for this paper. For comments on a previous draft of this paper, we are grateful to Felix Ameka, James Essegbey, Birgit Hellwig, and an anonymous reviewer. Correspondence address: Silvia Kutscher, Institut fur Deutsche Sprache und Literatur, Universität Köln, Albertus-Magnus-Platz, 50923 Köln, Germany. E-mail: silvia.kutscher@uni-koeln.de.
2. In spoken German there is a second type of 'where' question containing the possession verb *haben* 'have', e.g. *wo hast du X*? 'where do you have X?'. This is used rather frequently in colloquial speech, to inquire about the location of an (inanimate) entity known to be in possession, and under control, of the addressee. In an answer to such a question, a parallel expression involving *haben* can be used, e.g., *mein Werkzeug habe ich im Keller* 'I have/keep my tools in the cellar'. In the latter, no information about the position of the Figure is conveyed. Alternatively, the BLC can also be employed in an answer to such a question.
3. With certain prepositions, the dative is in opposition to the accusative, which is used to indicate motion.
4. Abbreviations used in the schematic representations and interlinear glosses are: ADV — adverbial; AUX — auxiliary; DAT — dative; DEM — demonstrative; ITR — intransitive; MOD.PTKL — modal particle; NEG — negation; NOM — nominative; NP — noun phrase; P — preposition; PL — plural; POSS — possessive pronoun; PTKL — particle; PTCP.PERF — perfect participle; PRS — present tense; PST — past tense; SG — singular; SUBJUNCT — subjunctive; TR — transitive; V — verb. In the interest of readability, glosses are kept to a minimum, e.g., case marking and gender is not glossed.
5. Since *sein* 'be' can take part in the BLC, we consider it a locative verb for the purpose of our paper, even though it functions as a copula as well.
6. In addition, the positional verb without a locative PP may be subject to semantic specialization or stereotypical interpretation. For example, in the case of *sitzen* with a human subject the interpretation is 'be in jail', e.g., "*Wo ist Peter*" — "*Der sitzt*" '"Where is Peter" — "He's in jail"'. An example of a stereotypical interpretation is *der Schlüssel steckt* 'the key is in the keyhole'.
7. The existential construction is distinct from the presentational construction in German. It consists of an expletive pronoun and the invariable 3rd person singular of the verb *geben* 'give'. Typically a locative expression is included, e.g., *Es gibt hier viele Bücher* 'There are lots of books here'. Negative existential expressions are formed with the negative indefinite article, e.g., *Es gibt hier keine Bücher* 'There are no books here'.
8. In this respect German differs strikingly from the closely related Germanic language Dutch, where *zitten* 'sit' is one of the positionals used with inanimate Figures.
9. Marginally, *schweben* can also be used when the Ground is a liquid; see Section 3.9.
10. For example, *stehen* is conventionalized with celestial bodies, e.g., *Die Sonne steht am Himmel* 'the sun is in the sky' (cf. also Serra Borneto 1996: 472).
11. They both contrast with the positional *lehnen* 'lean' which in addition to the semantic component 'support from below' contains the component of 'support from the side' (see Section 3.5).
12. In fact, one speaker directly referred to this non-canonical position as 'standing', although emphasizing that in German the use of the positional *stehen* is not appropriate for referring to leaves: *Es sieht fast so aus, (...) als ob es stehen würde, aber kann man nicht sagen* 'It almost looks (...) as if it was standing but one cannot say that'.
13. For reasons of space, 'stick(ITR)' rather than the more appropriate 'be in tight fit' is used in glosses of the examples. It is important to remember though that *stecken* unlike English *stick* does not extend to configurations of adherence by means of a sticky substance.
14. The German Dictionary edited by W. and J. Grimm (DWb) gives 'seize (with claws)' as the original meaning of *klemmen* and cites the following passage from a middle high German epic by Wernher vom Niederrhein, which deals with an eagle that throws one of its chicks out of the nest.

    (i) *sô clemmit he iz mit sînem vuoze*
    then seized he it with his foot
    'Then he (the eagle) seized it (the chick) with his claw.'
    (DWb vol. 11, col. 1139,5)

15. Semantically *haken* 'get caught' (lit. 'get hooked') refers to the attachment of a Figure to a Ground by means of one or several hooks, but may be metaphorically extended to rough surfaces,. Formally, the verb *haken* is not a positional verb in the sense used in this paper since it does not take a Ground PP obligatorily.

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Laz positional verbs: semantics and use with inanimate Figures*

SILVIA KUTSCHER AND N. SEVIM GENÇ

Abstract

*In this article, we discuss the meaning and use of positional verbs in the South-Caucasian language Laz. Positional verbs are defined as those verbs which — in combination with one of several locational verbal prefixes (preverbs) — may appear in the basic construction that functions as an answer to a "where" question, the so-called basic locative construction (BLC). Within this class of verbs, we pay particular attention to those positionals which are used regularly in our data to describe the configuration of inanimate movable objects. Laz is shown to be a multiverb language, i.e., a language that uses a comparatively large set of verbs in the BLC. The fourteen verbs in question are PRV-*dgun *'stand', PRV-*ren *'stand', PRV-*zun *'lie', PRV-*xen *'sit, stay', PRV-*bɣun *'be located as mass', PRV-*mpiy *'be spread', PRV-*sun *'be smeared', PRV-*tun *'cover', PRV-*bun *'hang', PRV-*nʒoy *'stick, be stuck', PRV-*nŭun *'be dipped', PRV-*çabun *'stick to, be sticky', PRV-*ǩorun *'be bound', PRV-*gzun *'burn'. The semantics and the use of these verbs are described in some detail including nontypical configurations, which trigger variation among speakers due to alternative categorizations and prototype effects.*

1. Introduction

This article deals with the semantics of those positional verbs that are used to describe the location of inanimate movable objects in Laz in a construction identified as the Basic Locative Construction (BLC) in this issue. As a sister language of Georgian spoken on the southeastern coast of the Black Sea, Laz is the only member of the South Caucasian family which is spoken primarily outside of Georgia. The vast majority of its speakers live in Turkey and are bilingual. Laz is a severely endangered

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The Typology and Semantics of Locative Predicates: Posturals, Positionals, and Other Beasts

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FELIX K. AMEKA
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STEPHEN C. LEVINSON