ON THE SO-CALLED *ABSENTIVE* – IN *GERMAN**

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Abstract. This investigation targets a syntactic phenomenon of German which is commonly referred to as the *absentive construction*. The absentive is considered a universal grammatical category denoting absence. Its syntax is characterised by the occurrence of an auxiliary or copula verb accompanied by a non-finite VP containing a main verb. The expression of absence, predicated over the clausal subject, is assumed to be based on a constructional meaning. Reviewing a wide range of syntactic and interpretive properties of this structure in German, we will demonstrate that certain empirical claims about the construction are not well founded and that its seemingly idiosyncratic properties are indeed available for compositional analyses. We will propose a structural analysis of its core syntactic and interpretive properties: The predication expresses the localisation of the subject at the location of the event, denoted by the infinitival verb. The interpretation of absence, then, can be explained by an implicature.

0. The setting

In recent years a construction, which is exemplified by clauses in German like (1), has attracted the attention of linguistic research.¹

- (1) Theo ist arbeiten.
Theo is work_{INF}

Ever since de Groot (2000) the term *absentive* has been used to refer to this type of construction. The terminological choice was originally inspired by a facet of its interpretation (cf. (2)). Meanwhile, the term *absentive* has achieved the status of a linguistic typological universal grammatical category which constitutes a specific type of construction associated with a specific meaning.

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¹ The term *construction* is used in a theory-neutral sense, especially without any allusion to its conception in construction grammar, if not indicated otherwise.

Sentences like (1) are indeed peculiar with respect to their syntax and interpretation. The predicate is formed by a finite form of *sein* (*be*) with a verbal infinitive. The finite element, due to its form, may either be categorized as an auxiliary or as a copula.

With respect to syntax, (1) is also peculiar. Apart from nominalized infinitives, bare infinitives usually only occur with modal verbs in German, *accusativus cum infinitivo* verbs (*hören, lassen*) (*hear, let*), or in the formation of future tense, then, selected by the auxiliary *werden* (*will*). In addition to these occurrences, there are a small number of verbs such as *kommen, gehen, helfen, brauchen* (*come, go, help, need*) which may also be accompanied by a bare infinitive. An *absentive* construction has the superficial form NP+*sein*+V_[INF].

The interpretation of (1) is peculiar because of the properties that cannot be immediately deduced from the meaning of the lexical elements forming the predicate and the conditions on meaning composition by syntactic rules. According to de Groot, an utterance as in (1) usually conveys the following information:

- (2) An individual denoted by the subject-NP is engaged in an action denoted by the infinitival verb at some place which is different from a contextually given location; the latter is preferably determined by the location of the speech act.

A construction like (1) is understood in the sense of (2) especially if (1) is uttered in the context of a question such as *wo ist Theo?* (*where is Theo?*). A rough and ready paraphrase of this reading is given in the repetition of (1):

- (1) Theo ist arbeiten.
 Theo is work_{INF}
 ‘Theo is off working.’

We would like to emphasise that English paraphrases of individual examples of the *absentive construction* are a delicate matter because its utterance meaning wrt. *absence* varies. Differing from suggestive examples like (1) there are cases in which absence is not related to the location of the speech act but to some other place, which, then, is properly expressed by a locative adverbial. As we want to demonstrate, the determination of the place of absence crucially depends on pragmatic factors – cf. Section 3.8.

What is striking about (1) is its complex interpretation in the face of a seemingly simple syntax. The (overt) syntax shows some typological variation. However, the description of its superficial form (in the attested languages) is quite uncontroversial – cf. the collection of languages by de Groot (2000:695f.).

Due to the complex interpretation associated with a – superficially at least – quite impoverished syntax, a compositional analysis of the *absentive* has not been seriously entertained up to now (with the exception of Abraham 2007, Broekhuis 2013 and Haslinger 2007).

In general, authors seem to judge a compositional approach to the analysis as not worth pursuing. König (2009) and Vogel (2007), for instance, explicitly reject the possibility of such an explanation.

Non-compositional analyses of the construction decisively depend on the requirement that there is a set of interpretive features that are inseparable from its form. There is actually a broad consensus that such a set of characteristic features exists and that it can be identified in the data. Certainly, there is some divergence with respect to the precise delimitation of their content, but a core of interpretive features seems to be beyond any doubt (cf. section 2). And even those authors who are sceptical about postulating a constructional meaning do not seriously challenge the facets of meaning which are commonly ascribed to this construction (with the exception of Haslinger 2007 on Dutch).

It is one goal of our investigation to demonstrate that many of the factual assumptions about the interpretation of the copula plus infinitive construction are not valid, at least in the case of German. Hence, it is the claim of *universality* of the defining features attributed to the *absentive* that is challenged. It will be shown that, as a consequence, the *structural* conditions that determine its interpretation have to be revised.

Mostly, the status of the information conveyed by the *absentive* is not precisely determined with respect to truth conditional meaning provided by the semantics in contrast to pragmatic inferences. Admittedly, pragmatic factors are frequently assumed to play a role in its interpretation. However, these factors are scarcely elaborated in any detail. It is, therefore, a second goal to identify those parts of interpretation which can be ascribed to the semantics of the construction and its constitutive parts, and to separate them from pragmatic inferences, namely, certain implicatures. We would like to emphasise that this requirement is basically independent of the choice of specific theoretical approaches to the syntax.

Our investigation will proceed as follows: The next three sections deal with current analyses of the pertinent construction, considering aspects of its form and interpretation. We act on the assumption that current analyses of a linguistic phenomenon – like the *absentive* – have to be scrutinised before an alternative analysis is proposed. For this reason, we expatiate on specific properties of the construction vis à vis specific explanatory assumptions made in the literature. In the subsequent fourth section, the proposed analysis will be elaborated. We will draw heavily upon strict parallels in distribution of the *absentive* in German with a minimally different construction employing an overt expression of location like *Theo ist in der Küche Tee kochen* (*Theo is (off) in the kitchen brewing tea*). Both variants are subject to identical constraints on the choice of the subject, the copula and the infinitival verbs, and they share certain aspects of interpretation with respect to the infinitive. In the case of these evident parallels it is our goal to demonstrate that a

compositional analysis of the phenomenon illustrated in (1) which resorts to well established principles and conditions on syntactic structure building and interpretation is not only possible but well justified. We want to show that (1) instantiates a locative predication structure, formed with an empty locative element, to which an infinitival VP is adjoined.

The interpretation of absence is attributed to an inference from this meaning by means of an implicature. As a terminological precaution in order to avoid any possibly misleading suggestive connotations, we will use the term *copula plus infinitive* instead of the term *absentive* when specific aspects of the German variant are discussed. *Copula plus infinitive* is neutral in this respect but points to unquestionable properties of the construction.²

1. Form

In German, the so called *absentive* construction is formally characterised by the occurrence of a (finite) form of *sein*, which is combined with an infinitival main verb. This complex is then associated with a nominal subject. Typologically different languages like Hungarian as well as Dutch follow the very same pattern. Other languages like Italian employ a prepositional element positioned immediately before the infinitive. A third type represented by the Nordic languages differ more substantially as the *absentive* is formed by coordination of a copula with a finite main verb (for an overview cf. de Groot 2000:693).

Provided that the interpretation ascribed to the construction is homogeneous across the languages under consideration, the formal characteristics amount to the presence of 1. *sein* (*be*) or its equivalents and 2. the occurrence of a main verb irrespective of its finite or non-finite form. The claim by Vogel (2007) that the main verb must have a non-finite form, seems to be at odds, for instance, with the data in Norwegian – provided that (*non*-)*finiteness* is conceived as a morpho-syntactic feature. Her assumption (Vogel 2007:255) that these languages employ some supplementary device which substitutes a finite form for an otherwise canonical non-finite one (*Infinitiversatzstrukturen*) is not warranted by the data. This assumption may furthermore obscure the fact that the lexical content of the respective verbs – and not their infinitival form in a number of languages – is crucial for the interpretation of the construction.

² A note on the data is indicated at this point. The *copula plus infinitive* is primarily a phenomenon of oral informal speech. Corpora of written language, therefore, provide a limited source of evidence. In general, corpus based inquiries into the *absentive* are a desideratum. Examples given here have been checked informally.

Regarding German, an array of facts about distribution and lexical choice has to be recognised in order to achieve a substantial analysis. These are examined in the following subsections.

1.1. *sein* (*be*)

Depending on the analysis that is put forth, the verbal element *sein* (like its equivalents in other languages) is categorized either as an auxiliary (cf. Abraham 2007) or as a copula (cf. de Groot 2000). It is noteworthy that *sein* is not the only verb the construction can be formed with. The element *bleiben* (*remain/stay*) – certainly a copula verb – may also occur in the relevant context, though not as frequently as *sein*.

- (3) a. Er bleibt/blieb noch arbeiten bis spät in die Nacht.
 he stays/stayed PRT work until late in the night³
 ‘He stays/stayed away working until deep in the night.’
 b. Wärest du nur mal länger angeln geblieben.
 were you only PRT longer fishing remained
 ‘If you only had stayed away fishing somewhat longer.’
 <http://www.blinker.de/forum/viewtopic.php?t=34345> (08.11.2012)

It is utterly impossible to substitute *bleiben* for the auxiliary *sein* in the perfect tenses in German.

- (4) Theo ist/*bleibt gekommen/gegangen.
 Theo has/*remains come/gone
 ‘Theo has come/gone.’

Apart from any consideration about the underlying structure, the examples in (3) and (4) corroborate a copular analysis of *sein*.

Facts like those in (4) render approaches untenable such as e.g. the original approach by Abraham (2007), who assumes that the copula plus infinitive is derived from a present perfect form of the verb *gehen* by deletion of the latter.⁴ Adding an infinitive, which is possible with *sein*, is impossible with *bleiben*.

- (5) Theo ist/*bleibt arbeiten gegangen.
 Theo is/*remains work gone
 ‘Theo went to work.’

Hence, (5) cannot be the source of the respective *absentive* construction putatively formed by deleting the perfect participle. In addition, if it were derived by ellipsis from some regular form with the verb *gehen*, why the

³ Abbreviations are used as follows: PRT = particle, MP = modal particle, PREF = prefix, PRP = preposition.

⁴ In Abraham (2015) *sein* is no longer categorized as an auxiliary but as a copula which is complemented by the infinitive.

absentive cannot be formed with *werden* remains unexplained (cf. (7)) since (6) is perfect.

- (6) Theo wird arbeiten gehen.
 Theo will work go
 'Theo will go to work.'

It is a remarkable fact of the construction that it cannot be formed with the copula *werden*. Examples like (7) only provide a future tense interpretation with *werden* functioning as an auxiliary verb. A transition into a state of absence cannot be expressed by (7).

- (7) Theo wird arbeiten.
 Theo *becomes/will work_{INF}
 'Theo will work.'

For the sake of completeness, we note that the copula *sein* may occur in any tensed form.

- (8) a. Theo war Holz hacken (gewesen).
 Theo was wood chop (been)
 'Theo was/had been off chopping wood.'
 b. Theo ist Holz hacken gewesen.
 Theo is wood chop been
 'Theo has been off chopping wood.'
 c. Theo wird Holz hacken (gewesen) sein (wenn Du kommst).
 Theo will wood chop (been) be (when you come)
 'Theo will be/have been off chopping wood.'

1.2. *Embedding*

The copula plus infinitive may form the complement of raising as well as subject control verbs (9a/b). Object control, however, is impossible in cases like (9c) and many others. This restriction is a reflex of a general condition on the interpretation of the infinitive.

- (9) a. Theo scheint arbeiten zu sein/ gewesen zu sein.
 Theo seems work to be/ been to be
 'Theo seems to be/have been off working.'
 b. Theo behauptet arbeiten (gewesen) zu sein.
 Theo claims work (been) to be
 'Theo claims to be/have been off working.'
 c. *Man zwingt Theo arbeiten (gewesen) zu sein.
 one forced Theo work (been) to be

The *accusativus cum infinitivo* regularly disallows embedding a copula plus infinitive.

- (10) *Man sieht/lässt Theo arbeiten sein.⁵
 one sees/lets Theo work be

The copula plus infinitive may furthermore be a complement to modal verbs.

- (11) a. Theo soll/sollte arbeiten sein.
 Theo shall/should work be
 ‘Theo should//is/was supposed to be off working.’
 b. Theo muss/müsste arbeiten sein.
 Theo must/must-subj work be
 ‘Theo must/should be off working.’
 c. Theo * darf/dürfte arbeiten sein.
 Theo may/may-subj work be
 ‘Theo is allowed/should be off working.’
 d. Theo kann/könnte arbeiten sein.
 Theo can/could work be
 ‘Theo might/could be off working.’

In this case, there may be a preference for an epistemic as opposed to a deontic reading (cf. in particular (11c)).⁶ This preference prevails in the indicative as well as in the subjunctive (Konditional II).

2. Interpretation

The expression of absence is generally assumed to be the basic property of the *absentive* construction. However, following the received opinion in the literature, its interpretation is not restricted to this core but supplemented with a set of quite divergent interpretive properties. Although these additional characteristics of interpretation are in a sense peripheral, they are nevertheless considered to be invariable (cf. Abraham 2007, de Groot 2000, König 2009, Vogel 2009). Hence, these

⁵ (10) may count as partial indirect support for the copula analysis of *sein*. In general, the copula is excluded from the complement of an *aci*-verb (with the remarkable exception of *lassen* (*let*)).

(i) *Man sieht den Braten im Ofen/knusprig sein.
 one sees the roast in-the oven/crispy be

Concerning the alternative formed with *lassen* a metalinguistic reading of (10) may be considered.

⁶ There are nevertheless cases with a coerced deontic reading (contrary to Krause 2002) as in:

(i) Theo muss arbeiten sein, wenn Karl-Eugen kommt, sonst gibt's Ärger.
 Theo must work be, if Karl-Eugen comes otherwise gives-it trouble
 ‘Theo has to be off working when K.E. arrives otherwise he'll get into trouble.’

additional invariable properties assume the status of defining properties. In the next sections we will argue that neither these peripheral nor the core aspects of interpretation are truth conditional. Though the copula plus infinitive exhibits these interpretive properties in certain contexts, it may lack them in others.

2.1. *Peripheral Aspects of Interpretation*

In German, at least some of these alleged properties are far from necessary components of the interpretation of copula plus infinitive constructions. It is, therefore, convenient to first examine these cases before dwelling on their core properties.

Abraham (2007:4), de Groot (2000:693) and Vogel (2007:253) claim that the eventual return of the subject to the location from which it is absent is part of the *absentive* semantics. As a consequence, negating any return should be impossible – contrary to the facts shown in (12).

- (12) a. Theo ist Hornhechte angeln und wird leider nie
 Theo is garfish fish and will unfortunately never
 wieder zurückkehren.
 again return
 ‘Theo is off fishing garfish and regrettably will never come
 back again.’
 b. Theo war Hornhechte angeln und ist leider nie
 Theo was garfish fish and is unfortunately never
 wieder zurückgekehrt.
 again returned
 ‘Theo was off fishing garfish and regrettably has never come
 back again.’

Coordination of a copula plus infinitive with an expression that denies the return of the subject as in (12) is undoubtedly grammatical (cf. Broekhuis 2013 on Dutch for a corresponding observation). Statements like these are far from contradictory. In this respect, (12) is entirely different from examples like (13). In (13) the verb *zurückgegangen* (*went back*) denotes a movement back to the starting point of the movement to the door. Because of a contradiction, it is obviously impossible to continue the utterance by explicitly denying this backward movement.

- (13) #Theo ist von hier zur Tür gegangen und wieder
 Theo has from here to-the door went and again
 zurückgegangen aber er ist nicht zuRÜCKgekommen.
 back-gone but he has not back-come

If the subject’s return would indeed be implied by the *absentive* meaning due to its semantics, (12) should be as deviant as (13) is – contrary to the facts. Hence, we have to admit that *return to the location of absence* is not

part of the *absentive*'s semantics. If in certain cases the construction gives rise to such an interpretation, this is best conceived as a pragmatic inference by means of a conversational implicature.

Secondly, it is assumed that the *absentive* construction involves a prognostic statement about the duration of the subject's absence (cf. de Groot 2000:700, Vogel 2007:253). De Groot states that this prediction is based on pragmatic knowledge (de Groot 2000:693). Taken literally, this prediction has to be conceived as the result of a pragmatic inference, which, under certain circumstances, may be cancelled. De Groot, however, considers both the speaker's and hearer's assumption about the duration of absence to be an invariable property of the construction. Hence, it should not be possible to dismiss it. However, as in the case of a putative return, it is possible to explicitly deny any expectation of the duration of absence.

- (14) Theo ist Holz hacken, aber ich weiß überhaupt nicht wie
 Theo is wood chop but I know at all not how
 lange.
 long
 'Theo is off chopping wood but I do not know at all for how long.'

Again, a statement is ill-formed if an overt expression of the duration of absence is denied, as in (15).

- (15) #Theo ist eine Stunde Holz hacken, aber ich weiß
 Theo is one hour wood chop but I know
 überhaupt nicht wie lange.
 at all not how long

If, as suggested, the *absentive* construction would imply any substantial temporal information about the duration of absence, (14) should be just as contradictory as (15). However, (14) is perfect. Hence, any condition on the expression of the duration of absence has to be abandoned.⁷

De Groot (2000:693) and Vogel (2007:253) also claim that the subject of the copula plus infinitive construction is involved in an activity which is denoted by the infinitival verb. This condition is strengthened, for

⁷ It is, without a doubt, often possible to estimate the duration of absence. But this is not a peculiar property of this construction. The same holds true for arbitrary statements as well, which may also be uttered in the context of a question like *wie lange ist Theo weg?* (*how long will Theo be gone?*)

- (i) a. Theo hackt gerade Holz.
 Theo chops just wood
 'Theo is chopping wood.'
 b. Theo pinkelt gerade.
 Theo pees just
 'Theo is peeing.'

instance, by König (2009:48) and implicitly by de Groot (2000:705) to the effect that the subject denotes the agent of the activity.

Involvement of the subject in the verbal event is certainly expressed by the construction. However, the subject is not obligatorily assigned an agent role nor does it necessarily bear the subject role of the non-finite main verb.

- (16) a. Theo ist (sich) die/seine Haare (vom Friseur) schneiden
 Theo is REFL the/his hair (by-the barber) cut
 lassen.
 let
 'Theo is off getting his hair cut (by the barber).'
- b. Er ist seinen Star (von einem Kurpfuscher) stechen
 he is his eye cataract (by a quack doctor) prick
 lassen.
 let
 'He is off getting his cataract removed (by a quack doctor).'
- c. Er ist seinen Rücken massieren lassen.
 he is his back massage let
 'He is off getting his back massaged.'

In (16), the non-finite agentive main verb (*schneiden*, *stechen*, *massieren*) itself does not assign a theta role to the subject of the construction at all. With respect to this verb the referent of the subject rather functions like a free dative. However, the subject of (16) is assigned an agent (or causer) role by the *aci*-verb *lassen*. Hence, there is actually a certain attribution of responsibility to the subject's referent, so that in this broader sense the restriction to agentivity is observed in (16), too.

Abraham (2007:4) and Vogel (2009:253), furthermore, assume that the activity denoted by the infinitival verb is pursued habitually. This is by no means a necessary condition as shown in (17), a possible exclamation about a domestic affair.

- (17) Stellt euch vor, etwas Außergewöhnliches ist
 imagine yourself PRT something extraordinary has
 passiert: Theo ist einkaufen/ den Müll entsorgen!
 happened: Theo is shop / the waste dispose
 'Imagine, something extraordinary has happened: Theo is off
 shopping/disposing the waste.'

Remoteness is also an alleged defining property of the *absentive* construction (cf. Abraham 2007:4, de Groot 2000:4 Vogel 2009:253). However, this criterion remains vague if no measure is determined. Even so, a statement like (18b) in the context of a question like (18a) uttered in *the living room of Theo's flat* is quite natural.

- (18) a. A: Wo ist denn Theo?
 where is PRT Theo
 ‘Where is Theo?’
 b. B: Ach, der ist gerade die Küche aufräumen.
 oh he is just the kitchen clean up
 ‘Oh, he is in the kitchen cleaning up.’

Uttering (18b), the speaker need not imply that Theo went outdoors, nor does the hearer have to draw such an inference (the same observation in Dutch is reported by Broekhuis 2013). The specification proposed by Vogel (2009) that the event denoted by the non-finite verb has to occur out of sight also does not offer a reliable criterion. On the occasion of looking out of the window into the garden, an utterance like (19) is impeccable.

- (19) Sieh mal: unser Hund ist pinkeln.
 look PRT our dog is pee
 ‘Look: our dog is outdoors peeing (in the garden).’

We have to conclude from this overview that none of the listed supplementary interpretive characteristics can be assigned the status of a necessary defining property of the copula plus infinitive construction. As far as specific instantiations exhibit one or more of these characteristics, the interpretation has to be based on pragmatic inferences but not on conceptual truth conditional meaning.

2.2. Core Aspects of Interpretation

We now turn to the core interpretation of the copula plus infinitive construction, i.e. the interpretation of absence. Following the definition by de Groot (2000) this interpretation is encoded by the meaning of the grammatical form. At first, it is helpful to precisely reconsider the content of this interpretation in terms of basic predicates. *Absence* is to be defined as the negation of a locative predicate. Localisation can be characterised as a two-place predicate designated by the shorthand: $\text{at}(x,y)$. Absence amounts to negation of this predicate: $\neg\text{at}(x,y)$. The arguments of the semantic predicate are linked to the syntax by means of λ -terms associated to constituents in the syntactic structure or they are existentially bound under certain conditions. If *absence* is conceived as the constructional truth conditional meaning of the copula plus infinitive construction, (20) gives us this part of meaning (which is composed with the lexical meaning of the infinitival verb).

- (20) [[*sein* + ____[-Fin]]] : $\lambda y \lambda x \neg\text{at}(x,y)$

Provided that the *locatum* argument λy is linked to the subject of the construction, the *location* argument λx has to be determined. According to the common conception, this is the place where the locatum, i.e. the referent of the subject, is not located. This place, however, is not expressed by some

co-occurring phrase at least in cases like (1). Hence, the variable of the place argument λx has to be bound by means of some other device.

According to de Groot (2000:697), the place of absence is defined as the *deictic centre*. In the tradition going back to Bühler (1934), *deictic* expressions receive their interpretation by reference to the spatio-temporal circumstances of the utterance of this expression. The natural interpretation of (1) with respect to the location of the subject's referent amounts to (21), in particular, if this statement is made as a response to a question like *wo ist Theo?*

- (1) Theo ist arbeiten.
 Theo is work
 'Theo is off working.'

(21) Theo is not at the place of the utterance of (1).

We may generalise this fact about the interpretation as in (22).

- (22) Given a suitable context of discourse, any statement formed with a copula plus infinitive construction is capable of asserting that the referent of the subject is not present at the place of utterance.

Referring to the place of utterance, the interpretation of absence may be conceived as established by deixis. In this sense, (22) is clearly a sufficient condition for a given interpretation of the construction. However, it is easy to show that (22) cannot provide a necessary condition.

- (23) a. A: Wo war Theo denn eigentlich gestern?
 where was Theo MP in fact yesterday
 'Where was Theo yesterday?'
 b. B: Nun, Theo/ der war arbeiten!
 well Theo/ he was work
 'Well Theo/he was off working.'

Uttering (23b), some speaker may refer to a shared belief pertaining to a place different from the place of utterance where Theo should have been yesterday but was not.

It is even possible that the place of utterance is actually the place where the subject's referent of the *absentive* construction is located. This is the most natural interpretation of, for instance, (24b).

- (24) a. A: Wieso ist denn der Teufel hier im Dom?
 why is MP the devil here in-the cathedral
 'Why is the devil here in the cathedral?'
 b. B: Der ist nur schnell beichten und verschwindet gleich
 he is only swiftly confess and disappears just
 wieder!
 again
 'He is (off hell) swiftly confessing and he will leave in a jiffy.'

It is obvious that the location with respect to which the relation of absence is defined in the cases of (23) and (24) is not determined deictically in the sense outlined above.⁸

Referring to the Dutch counterpart of (25) De Groot (2000:698) actually admits that 'the deictic centre is not restricted to the place of the speaker'.

- (25) Als Peter ins Zimmer kam, war Marie essen.
 when Peter into-the room came was Marie eat
 'When Peter entered the room Mary was off eating.'

The statement in (25) is most naturally understood as expressing that *Marie* was absent from a contextually known room (possibly different from the place of utterance). It is the semantic content of the NP *das Zimmer* (*the room*) and not the origo of the speech act which defines this place. De Groot's additional statement that the deictic centre 'may be anywhere' makes clear that it is not the place of absence which is defined deictically. Even if the place of absence is termed a *deictic centre* it is not necessarily determined by means of deixis.

In (25) the place of absence is introduced by a locative expression within a temporal adverbial clause. The place of absence may also be calculated by reference to the meaning of the subject. Some thirty years ago statements like those in (26) could plausibly be made expressing that the head of the Roman Catholic Church was not in the Vatican Palace.

- (26) a. Der Papst ist gegenwärtig/gelegentlich bergsteigen.
 the pope is at present/occasionally mountain.climb
 'At present/occasionally the pope is out of Vatican palace mountaineering.'
 b. Der Papst war 1981 bergsteigen.
 the pope was 1981 mountain.climb
 'In 1981 the pope was out of Vatican palace mountaineering.'

⁸ In the unmarked case of oral communication the utterance of the speaker and its perception by the hearer coincide in time. Likewise, both the speaker and the hearer are located at the same place. However, modes of communication may vary depending on technical means. In written communication the time of utterances and the time of perception usually differ. On the other hand, long distance oral communication mediated by telecommunication devices separates the place of utterance from the place of perception. These circumstances may affect the interpretation especially of present tense clauses with 1.pers. subjects like:

- (i) ich bin essen.
 I am eat
 'I'm off eating.'

(i) works quite different as a note posted at an office door or as a statement in a telephone call. These considerations extend to reports of utterances like (i) as in:

- (ii) Theo behauptet essen zu sein.
 Theo claims eat to be
 'Theo claims to be off eating.'

The place of absence is certainly inferred from the denotation of the noun *Papst*. The same holds true of (24), where *hell* is inferred as the devil's place of absence.

Deixis may play its role in the interpretation of an *absentive* construction, namely, in contexts of a question-answer sequence. But it cannot be considered a defining property with respect to the interpretation of the construction itself.

Next, the source of the interpretation expressed by (20) has to be clarified. As is well known, utterance meaning is possibly derived from different sources: the truth conditional meaning on the one hand and pragmatic inferences, i.e. implicatures, on the other. It is fruitful to examine the copula plus infinitive construction with respect to these two sources of interpretation. Pragmatic factors are occasionally referred to (Abraham 2007:8, de Groot 2000:693) but mostly without any detailed explication.

Let us first examine whether (20) is truth conditional. If so, consequences with respect to negation are to be expected. It is a truism that a predication is false if its negation is true. Hence, if we negate a proposition like (27a) as in (27b), we can draw the conclusion in (27c).

- (27) a. Theo ist nicht hier.
 Theo is not here
 'Theo is not here.'
 b. Theo ist nicht nicht hier.
 Theo is not not here
 'Theo is not not here.'
 c. $\Rightarrow$ Theo ist hier.
 Theo is here
 'Theo is here.'

If (20) expresses truth conditional meaning that is grammatically encoded, it is to be expected that negating an *absentive* construction entails the presence of the subject at, for instance, the place of utterance, as it does in (27c). Such an interpretation should at least be possible. However, a truthful negation, as in (28b), of a copula plus infinitive like (28a) does not mean that the subject's referent is present at that location. The assumption (motivated by the question) that the subject's referent is not present cannot be cancelled by negation, (28b') is no valid conclusion from (28b).

- (28) (Wo ist / was macht Theo eigentlich?)
 where is what does Theo in fact
 'Where is Theo?'
 a. Theo ist arbeiten.
 Theo is work
 'Theo is off working.'

- a'. $\Rightarrow$ Theo ist nicht am Ort des Sprechakts.
 Theo is not at-the place of the speech act
 'Theo is not at the place of the speech act.'
- b. Theo ist nicht arbeiten.
 Theo is not work
 'Theo is not off working.'
- b'. $*\Rightarrow$ Theo ist am Ort des Sprechakts.
 Theo is at-the place of the speech act
 'Theo is at the place of the speech act.'

(28b) may express that *Theo* is absent from the place where he is assumed to be working. This reading, however, is somewhat awkward in the context of a *wo/where-question* for different reasons. In any case, it does not – logically – follow from (28b) that he is not absent from the place of utterance.⁹

Since the place of absence is not necessarily identical with the place of utterance, it may be determined by some expectation on the part of the speaker. In this sense (29a) may be understood as a statement to the effect that *Theo* is not located at a place where he is expected to stay. This interpretation is made explicit by (29b).

- (29) a. Theo ist/war Hornhechte angeln.
 Theo is/was garfish fish
 'Theo is/was off fishing garfish.'
- b. $\Rightarrow$ Theo ist/war nicht, wo man ihn erwartet/wo er
 Theo is/was not where one him expects/where he
 sein sollte.
 be should
 'Theo is/was not where he is/was expected to be.'

If the content of (29b) were part of the semantics of the copula plus infinitive construction certain restrictions on the overt expression of (29b) would be expected. As demonstrated by (30), it is infelicitous to coordinate two clauses with identical predicates.

- (30) #Der Köter jault aber/und er jault.
 the pooch yowls but/and he yowls

(30) is awkward with *und* because of redundancy. *Aber* indicates a contradiction between the conjoined propositions that does not hold true.¹⁰

Now, it is completely inconspicuous to amend (29a) by coordinating a clause expressing the expectation (29b), as in (31). Both conjunctions *und* as well as *aber* are suitable to connect the conjuncts.

⁹ One might suppose that the construction involves a presupposition of absence instead of an implicature. Cancelability in other contexts, however, points to the latter (see below).

¹⁰ The two conjuncts do not meet the condition on minimal semantic distinctness in the sense of Lang (1991).

- (31) a. Theo ist immer Hornhechte angeln aber nie wo er
 Theo is always garfish fish but never where he
 sein sollte.
 be should
 'Theo is always off fishing garfish but he is never where he
 should be.'
- b. Theo ist immer Hornhechte angeln aber/und nie wo
 Theo is always garfish fish but/and never where
 man ihn erwartet.
 one him expects
 'Theo is always off fishing garfish but/and never where he is
 expected to be.'

As (31a/b) show, the clause connected by *aber* expresses a statement that is in conflict with the statement made by the preceding clause. Contrary to (30b), no redundancy with *und* in (31b) arises. This fact suggests that the interpretive content of (29b) is not part of the semantics of the copula plus infinitive construction.

If, on the other hand, the expectation expressed in (29b) is explicitly appended to the copula plus infinitive in the first conjunct of (31), the very same effects as in (30) arise.

- (32) a. #Theo ist immer Hornhechte angeln, also nicht da,
 Theo is always garfish fish hence not there
 wo er sein sollte, aber nie wo er sein sollte.
 where he be should but never where he be should
- b. #Theo ist immer Hornhechte angeln, also nicht da,
 Theo ist immer Hornhechte angeln, also nicht da,
 Theo is always garfish fish hence no there
 wo man ihn erwartet, aber/und nie wo man
 where one him expects but/and never where one
 ihn erwartet.
 him expects

In all examples in (32), the continuation by *also...* expresses the expectation of (29b) which can be attributed to the *absentive* construction. Hence, this expectation is part of the meaning conditioned by the semantic representation of the whole clause. As in (30) the complex statements in (32) become unacceptable if a clause expressing that very expectation is appended by coordination.

(31) exhibits a property that is typical for pragmatic inferences. Implicatures can, *inter alia*, be strengthened. The second conjunct in (31) just functions as a confirmation of the (implicit) expression of absence in the first one. The explicit, thus truth conditionally relevant, expression of absence, however, is incompatible with a pragmatic enforcement, hence, the dubious status of (32).

In section 1.2 it has been noted that the copula plus infinitive may form the complement of a raising verb like *scheinen*.

- (9) a. Theo scheint arbeiten zu sein.
 Theo seems work to be
 'Theo seems to be off working.'

This case is revealing because of its interpretation with respect to the scope of the raising verb. The meaning of *scheinen* implies that its complement cannot be claimed to express a true proposition. If absence were encoded as part of the constructional meaning of the copula plus infinitive *scheinen* should have scope over this aspect of meaning. Hence, (9a) should at least have the potential to express the fact that *Theo* is not absent but working at the place of utterance. Such an interpretation, however, is impossible. Instead, (9a) is understood as expressing the fact that *Theo* seems to be at some arbitrary place and that he seems to be working there.

Finally, it even seems possible to cancel the interpretation of absence altogether in certain borderline cases.

- (33) a. Schwalben sind unentwegt Mücken fangen.
 swallows are incessantly midges catch
 'Swallows are incessantly catching midges.'
 b. Ein Vagabund ist ständig ein Dach überm Kopf
 a vagabond is constantly a roof above-the head
 suchen
 search
 'A vagabond is constantly looking for a roof over his head.'

Uttering (33), the speaker does not necessarily convey that the subject is dislocated from any specific location where it may be reasonably assumed to be.

The interpretation of absence is not part of the truth conditional meaning of the copula plus infinitive construction but it is the result of an implicature. Now, two questions arise: firstly, what actually is the meaning of the construction and how is it encoded and, secondly, how does the implicature of absence arise?¹¹

¹¹ As to the second question, it should be noted that *the absentive meaning* can also be conveyed without the copula plus infinitive construction even if no lexical expression of (dis-)location is present in the clause. (ia) and (ib) are equivalent in this respect.

- (i) (Wo ist Theo eigentlich?)
 where is Theo in fact
 'Where is Theo?'
 a. Der ist arbeiten!
 he is work
 'He is off working!'
 b. Der arbeitet!
 he works
 'He is working!'

3. Towards an Explanation

It is often emphasised that the *absentive* construction is stative in nature (de Groot 2000:701). However, it must be noted that locative questions are not the only type of question that can be properly answered by a copula plus infinitive construction. (24) already shows a case in which it answers a purposive or causal question. What is even more striking is the potential of the copula plus infinitive construction to answer (non-stative) activity-questions.

- (34) a. Was macht Theo (eigentlich)?
 what makes Theo (in fact)
 ‘What is Theo doing?’
 a’. Der ist arbeiten/Bier holen/die Haare schneiden lassen.
 he is work/beer fetch/his hair cut let
 ‘He is off working/fetching beer/getting his hair cut.’
 b. Was zum Teufel macht der Teufel hier im Dom?
 what to-the devil makes the devil here in-the cathedral
 ‘What the hell is the devil doing here in the cathedral?’
 b’. Der ist nur schnell beichten und verschwindet gleich
 he is only swiftly confess and disappears just
 wieder!
 again
 ‘He is swiftly confessing and will leave in a jiffy.’

The considerable variability with respect to the question’s context should prevent us from coming to possibly premature conclusions in regard to the semantic type of the predicate of the copula plus infinitive construction. Since it is capable of expressing a location as well as a (purposive) activity, it is reasonable to look for the structural and lexical foundations of this potential.

3.1. *Locative predication*

We argue that the copula plus infinitive actually involves a locative predication and that this predication is syntactically encoded. There is, of course, no overt locative expression that could directly provide the content of this predication. It is, however, a common phenomenon that, for instance, implicit arguments of a predicate are not represented by lexical material in the syntax. Hence, there is no principled objection against the assumption that a phonetically empty element representing the locative is present in the syntax of the copula plus infinitive as well. Of course, empty categories are subject to specific conditions on licencing which have to be considered.

A first appropriate step is to investigate the possibility of an overt expression of location in the copula plus infinitive. There is, in fact, an immediate analogue with an overt locative like in (35).¹²

- (35) a. Theo ist im Hof Holz hacken (gewesen).
 Theo is in-the yard wood chop (been)
 'Theo is/has been in the yard chopping wood.'
 b. Adelbert ist irgendwo Primeln pflanzen.
 Adelbert is somewhere primroses plant
 'Adelbert is somewhere planting primroses.'

The examples in (35) have the potential to express absence either from the location of the speech act or from a contextually accommodated place. (35a) expresses a definite location. The indefinite location (35b) accords with the interpretation of the type of copula plus infinitive discussed so far.

In addition, the locative phrase confines the place of the event expressed by the infinitive. While the event is locally restricted by the adverb/PP, the location, in turn, is characterised by the event as a place where the action denoted by the verb is (prototypically) performed.

It is obvious that any copula plus infinitive without an overt locative predicate can be converted into a construction with an overt locative predicate. And, vice versa, any construction with an overt locative expression allows deletion of the locative without any loss in grammaticality. These parallels give rise to a parallel structural analysis of both types of the copula plus infinitive.

There is, furthermore, a phonological aspect of the construction that needs to be examined. In a case like (35a), there are three prosodic variants. There may be one raising tone or two as indicated by the slashes in (36) in combination with one or two intonation phrases indicated by |.¹³

- (36) a. |theo ist im /HOF holz\ hacken|
 b. |theo ist im /HOF\ holz hacken|
 c. |theo ist im /HOF\ | /HOLZ\ hacken|
 Theo is in-the yard wood chop
 'Theo is in the yard chopping wood.'

Both variants slightly differ in interpretation. (36c) is most naturally understood as an explicit statement about the fact that *Theo* is *in the yard*, which is amended with an expression of the activity performed there. (36a/b) give rise to an interpretation according to which *Theo* is

¹² De Groot (2000:694) explicitly refrains from inquiry into constructions containing overt locative expressions. Referring to Hungarian, he notes that a construction with a locative may have a purposive meaning but does not denote absence (de Groot 2000:697). However, there is no fear of loss of interpretation in the cases of German discussed next.

¹³ Comma intonation is possible but not necessary and, therefore, ignored.

engaged in an activity which takes place *in the yard*, from which it follows that he is actually in the yard, too – the yard may be located anywhere. This dissociation, which is more implicit in (35)/(36), may also occur overtly as in (37).

- (37) |eddi war in /lemWERder\ auf der/ WERFT\ arbeiten|
 Eddi was in Lemwerder on the shipyard work
 ‘Eddi was in Lemwerder working on the shipyard.’

(37) allows a syntactic structure according to which the PP *in Lemwerder* functions as a locative predicate together with the copula *war*, and the second PP *auf der Werft* forms a locative adverbial that is adjoined to the infinitive.¹⁴

The different readings available for (36) can now be based on different syntactic structures, one of which involves an empty adverbial category – for convenience expressed by e_{LOC} . The interpretation of (36c) with *im Hof* functioning as an overt locative predicate is represented by (38a). (38b) represents the reading with *im Hof* functioning as an adverbial modifier of the VP corresponding to (36a/b). (38c), finally, is the structure underlying the unadorned copula plus infinitive construction.¹⁵

- (38) a. Theo ist *im Hof* [_{VP} Holz hacken].
 b. Theo ist e_{LOC} [_{VP} *im Hof* Holz hacken].
 c. Theo ist e_{LOC} [_{VP} Holz hacken].

The second, perhaps even more striking parallel, concerns the exclusion of the copula *werden* from both the copula plus infinitive with and without a lexical expression of location. Locative predicates formed with a copula, in general, cannot be formed with *werden* but are restricted to *sein* and *bleiben*.

- (39) a. *Theo wird_{cop} im Keller Kohlen holen.
 Theo becomes in-the cellar coal fetch
 b. *Theo wird_{cop} im Keller
 Theo becomes in-the cellar
 c. *Theo wird_{cop} Kohlen holen.
 Theo becomes coal fetch

(39b) is, in any case, ungrammatical. In particular, (39a) cannot express a movement to the place denoted by the PP *im Keller*. Likewise, (39c) does not convey a movement to a place where the action expressed by the infinitive is performed. It also cannot be interpreted as a transition to an action performed at the place denoted by the PP. In this respect, the copula plus infinitive in (39c) is completely parallel to (39a)/(39b). The only interpretation available for (39a)/(39c) is restricted to the future

¹⁴ The structure underlying (37) is expressed in (i):

(i) Eddy war [_{PP} in Lemwerder] [_{VP} [_{PP} auf der Werft] arbeiten]

¹⁵ The licencing of this empty category will be the topic of section 3.7.

tense of the verb *holen*. Hence, the exclusion of *werden* from the copula plus infinitive receives an immediate explanation if the latter is, as proposed, analysed as a locative predicate.

In the face of absence of any overt lexical index, it might be argued that the assumption of a locative predicate is a mere mystification. Instead, the whole construction might be considered no more than a specific form of a verbal predicate. In this case, however, interference with a locative predicate, given a structure in which such interference would otherwise exist, should not emerge. Coordination of two locative predicates may give rise to such a conflict as in (40).

- (40) a. #Der Bauer ist gerade auf dem Acker und in der Stadt.
 the farmer is just in the field and in the city
 b. #Anton ist gerade in der Stadt und irgendwo.
 Anton is just in the city and somewhere

Simultaneous localisation of a physical object at two different places is impossible. Hence, the examples in (40) are deviant.

Coordination of a (finite) locative predicate with a verbal predicate does not yield a comparable incompatibility.

- (41) a. Der Bauer ist gerade auf dem Acker und erntet
 the farmer is at the moment in the field and harvests
 Rüben.
 beets
 ‘The farmer is in the field at the moment and harvests beets.’
 b. Anton ist irgendwo und vertrinkt sein Geld.
 Anton is somewhere and PREF-drinks his money
 ‘Anton is somewhere spending his money on drinks.’

An inconsistency as in (40) immediately recurs, if a locative modification is adjoined to the second conjunct.

- (42) a. #Der Bauer ist gerade im Stall und erntet auf dem
 the farmer is just in-the stable and harvests in the
 Acker Rüben.
 field beets
 b. Anton ist irgendwo und vertrinkt # hier sein
 Anton is somewhere and spends here his
 Geld.¹⁶
 money on drinks

Now, if the copula plus infinitive did not include any locative predication a conflict as in (40) and (42) should not emerge. The status of such cases, however, is at best dubious if not unacceptable.

¹⁶ The judgement bears on the deictic reading of *hier* (not equivalent to a *dort/da*-reading) related to the speech act performed by the speaker.

- (43) #Anton ist irgendwo und sein Geld vertrinken.
 Anton is somewhere and his money spend on drinks
- (44) #Anton ist irgendwo gewesen und sein Geld
 Anton has nowhere been and his money
 vertrinken gewesen.
 spend on drinks been
- (45) #Anton ist irgendwo und ist sein Geld vertrinken.
 Anton is somewhere and is his money spend on drinks

Example (44) is only acceptable if the eventualities denoted by the two conjuncts do not temporally overlap. The example in (45), which comes closest to coordination of a finite locative and a finite verbal predicate (41), is likewise deviant.

The copula plus infinitive obviously does not pattern like regular verbal predicates if coordinated with a locative predicate. This fact is incompatible with an analysis of the copula plus infinitive as a genuine verbal predicate. Since verbal and locative predicates may be freely coordinated otherwise, there must be some component of the interpretation of the copula plus infinitive which gives rise to the conflict in (43)–(45). Furthermore, the first conjunct expressing the locative predicate does not implicitly refer to any action which is mutually exclusive with the action denoted by the infinitival verb of the second conjunct. Finally, incompatibility of localisation can only emerge if the copula plus infinitive encodes a locative predicate as well.¹⁷

The semantic content of this locative is determined as the place where the action denoted by the infinitive is performed. As mentioned earlier, the impression of absence which is evoked by the construction, then, is the result of a pragmatic inference.

3.2. *The infinitive*

Since the empty locative forms the primary predicate of the construction, the infinitive is excluded from that function for conceptual reasons, in addition

¹⁷ In Romance languages, Italian comes closest to the copula plus infinitive in German while French is different. In Italian, a copula construction with *essere* and an infinitival VP introduced by the prepositional element *a* occurs. The preposition *per* despite its (partially) overlapping semantics is excluded. It is only compatible with overt locative predicates. This construction can express absense of the subject and it may likewise be formed with an overt locative predicate.

(i) Gianniè (in cortile) a tagliare la legna.
 John is in-the yard PRP chop the wood
 'John is in the yard chopping wood.'

Further parallels are pointed out below. French, instead, only allows for overt locative predication modified by an infinitival adjunct introduced by a subjunctive element (cf. Wöllstein 2015a).

to the empirical objections outlined in section 1. There is also no evidence in favour of syntactic predicate coordination.¹⁸ Without any ad hoc stipulations, the copula cannot be recognized as a three place predicate, subcategorized for an infinitive. Hence, the infinitival VP can only be an adjunct. Bare VP-adjuncts are attested in other contexts, too, for instance, with depictive predicates formed by present participles (cf. Fortmann 2015).

Adjuncts have to be interpreted. The interpretation of adverbial clauses is regularly provided by the subordinating conjunction. The copula plus infinitive does not enclose any subordinator. Hence, its interpretation can only emerge from the content provided by the lexical inventory and its morpho-syntactic specifications. In this respect the copula plus infinitive is similar to temporal accusative NPs in German.

Furthermore, there is a set of restrictions on the choice of the infinitival verb and of the subject of the construction, which hold independently of the overt or non-overt expression of location. These restrictions allow us to infer a suitable adverbial interpretation if they are observed.

(46) *Restriction on the verb*

- a. ??Hans ist (im Wald) sich vor Geistern fürchten.
Hans is (in-the forest) himself of ghosts fear
- b. *Theo ist (in der Dusche) wach werden.
Theo is (in the shower) wake up

(47) *Restriction on the subject*

- a. Theo ist (im Park) Tauben vergiften.
Theo is (in-the park) pigeons poison
'Theo is in the park poisoning pigeons.'
- b. *Die/eine Chlorgaswolke ist (im Park) Tauben vergiften.
the/a chlorine cloud is (in-the park) pigeons poison
- c. Frieda ist die Primeln wässern.
Frieda is the primroses water
'Frieda is off watering the primroses.'
- d. *Der Regen ist die Primeln wässern.
the rain is the primroses water
- e. Frieda ist die Primeln beschatten.
Frieda is the primroses shade
'Frieda is off shading the primroses.'
- f. *Eine Wolke ist die Primeln beschatten.
a cloud is the primroses shade

¹⁸ Moreover, multiple predication is not allowed at all:

- (i) a. *Theo ist ein Idiot unverschämt.
Theo is a fool impudent
- b. *Der Tisch ist aus Buchenholz schön.
the table is made of beech beautiful

Verbs that express events or states not induced by intention are excluded from the copula plus infinitive (cf. (46)). Verbs which enter into this construction are only compatible with intentional subjects (cf. (47)). These restrictions are widely acknowledged in the literature. They do not, however, naturally follow from any constructional or grammatical-category approach.¹⁹ If, for instance, a presumed grammatical category *absentive* were to have the property of expressing absence, due to its form, the restrictions in (46) and (47) would be hard to motivate: The categorial features of this alleged category are constituted by the verb *sein* and non-finiteness. The lexical content of the verb evidently cannot enter into the categorial determination of the construction. There are also no apparent principled reasons with respect to the meaning of the excluded subjects or verbs that could be referred to as an explanation of these restrictions.

It is frequently observed that the infinitive is interpreted as a reason for the absence of the subject (König 2009, Vogel 2007). This is correct with respect to German and can be made more precise in that the infinitive expresses the purpose for the subject's being at a location, but not, for instance, the cause of its localisation. Because of this characteristic interpretation, it is promising to inquire into properties of the copula plus infinitive construction from which it is obtained.²⁰

3.3. *Purposive Modification*

In this section we want to expose certain parallels between the infinitival VP of the copula plus infinitive and bona fide infinitival purposive adjuncts. These parallels pertain to the interpretation of indefinite objects of the verb and to parallels in interpretation to purposive adjuncts.

Transitive verbs like *angeln* that form the predicate of a main clause restrict the interpretation of indefinite object-NPs to an extensional reading. In this respect, they differ from verbs like *suchen* which also allow for an intensional reading.

- (48) a. Theo angelt/angelte einen Salzhering.
 Theo fishes/fished a salted herring
 'Theo is/was fishing a salted herring.'
 b. Theo sucht/suchte einen Salzhering.
 Theo looks/looked for a salted herring
 'Theo is/was looking for a salted herring.'

In (48a) the existence of *ein Salzhering* is presupposed. Hence, an explicit denial of the effect of the *angeln* activity (for instance by adding *vergeblich*)

¹⁹ A restriction of the infinitive to agentive verbs is, for instance, attested by de Groot (2000:705). Investigations into the *absentive* note this restriction but do not elaborate on an explanation.

²⁰ The copula plus infinitive in Italian imposes the same restriction on its subject. If there is no overt locative predicate, an intentional subject is obligatory; the infinitive assumes a purposive interpretation (cf. Wöllstein 2015a:181f.).

is inappropriate due to a presupposition conflict (cf. (49a)). With the non-presuppositional verb *suchen*, such a conflict does not arise (cf. (49b)).

- (49) a. #Theo angelt/angelte vergeblich/erfolglos einen
 Theo fishes/fished in vain/unsuccessfully a
 Salzhering.
 salted herring
- b. Theo sucht/suchte vergeblich/erfolglos einen
 Theo looks/looked for in vain/unsuccessfully a
 Salzhering.
 salted herring
 'Theo looked for a salted herring without success.'

Remarkably, the verb *angeln* loses this restriction on its object if it forms the infinitive of a copula plus infinitive construction. Insertion of a negative adverb like *vergeblich/erfolglos* as in (50) gives rise to the interpretation that not the event as a whole but only its expected result (i.e. the having of the garfish) is denied.

- (50) Theo ist/war vergeblich/erfolglos einen Hornhecht angeln.
 Theo is/was in vain/unsuccessfully a garfish fish
 'Theo is/was off trying to fish a garfish without success.'

Since *angeln* requires an extensional object if it forms the predicate of a main clause, the cancellation of this requirement in (50) indicates that the infinitive does not enter into the predicate formation of the copula plus infinitive.²¹

However, adjunct clauses do not in general allow cancellation.

- (51) a. #Theo ist empört während er vergeblich/erfolglos einen
 Theo is outraged while he in vain a
 Hornhecht angelt.
 garfish fishes
- b. #Theo war empört weil er vergeblich/erfolglos einen
 Theo was outraged because he in vain a
 Hornhecht angelte.
 garfish fished

With purposive adverbial clauses, especially with those that are infinitival and contain the complementizer *um*, the intensional reading of the indefinite is possible.

²¹ The past tense version of (50) may be judged more natural than the present tense. This difference may follow from the interaction of the event structure of telic verbs like *angeln* and the temporal encoding of the event by the specification of tense. In the past tense the whole event, including the terminal state is understood as being completed, hence – the incompatibility of *erfolglos*. In the present tense the event may be understood as still going on. This effect may even be strengthened by the availability of a future tense reading of the present tense in German.

- (52) Theo sitzt/saß am Strand um einen Hornhecht zu angeln.
 Theo sits/sat on-the beach for a garfish to fish
 aber er fängt/fing keinen einzigen.
 but he catches/caught none
 'Theo is/was sitting on the beach in order to fish a garfish but he
 does/did not catch any.'

The parallel in interpretation of indefinite objects between the copula plus infinitive and *um*-purposive clauses is evident.

Purposive non-finite adverbials occur in three variants. The clausal type is introduced by the complementizer *um* with the infinitive preceded by the infinitive-marker *zu* – (53a). With the second variant no complementizer is present while the infinitives are morphologically similar (cf. (53a)). The third option is represented by a bare infinitive without any lexical complementizer – actually, no such element is possible at all in combination with the bare infinitive (53b).

- (53) a. Theo ist im Hof [(um) Holz zu hacken]
 Theo is in-the yard for wood to chop
 'Theo is in the yard to chop wood.'
 b. Theo ist im Hof [(um) Holz hacken]
 Theo is in-the yard for wood chop
 'Theo is in the yard to chop wood.'

Let us turn to the specifics of these three types. While modification by an *um-zu*-infinitive is compatible with any predicate formed with a copula and a predicative phrase, the two other instances are restricted to locatives as in (53).²²

- (54) Theo ist Vereinskassier [(um) die Kasse *(zu)
 Theo is club-treasurer for the exchequer to
 kontrollieren]
 control
 'Theo is club treasurer to control the funds.'
- (55) Balduin ist zuvorkommend [(um) die Gäste zum Bleiben
 Balduin is courteous for the guests to-the remain
 *(zu) nötigen]
 to coerce
 'Balduin is courteous to force the guests to stay.'
- (56) Der Draht ist aus Kupfer [(um) Strom *(zu) leiten]
 the wire is of copper for current to conduct
 'The wire is made of copper to conduct electricity.'

²² Purposive modification of clauses with a main verb predicate is ignored in the present context.

Bare infinitives and *zu*-infinitives form a class of possible adjuncts as opposed to *um-zu*-infinitives with respect to the choice of the matrix predicate, which is restricted to locatives. Bare infinitives and *zu*-infinitives, in turn, differ with respect to the capacity of modifying a non-overt locative predicate.

- (57) Theo ist [(**um*) Holz (**zu*) hacken]
 Theo is for wood to chop

Only bare infinitives can modify a clause with an empty locative.

The partition exemplified in (54)–(56) depends on the (non-) occurrence of the connective *um*. This element functions as a lexical exponent of the purposive relation encoded by the infinitival phrase. The availability of the purposive interpretation in (53b) gives rise to the assumption that the lexical content of the connective *um* can be at least partly substituted by means of grammatical form (cf. Wöllstein 2013).

The partition shown in (57), in contrast, depends on the lexical choice of the non-finite verb form. Only a bare infinitive is capable of licencing an empty locative predicate as opposed to the *zu*-infinitive.

3.4. *Directional Interpretation*

At this point it is appropriate to dwell on a rather similar construction that might suggest a slightly different explanation of the copula plus infinitive. It is formed with an overt directional expression as opposed to a locative.

- (58) Frieda ist in den Wald Pilze sammeln.
 Frieda is into the forest mushrooms collect
 ‘Frieda has gone into the forest (in order) to collect mushrooms.’

A copula with a directional PP or adverb may be predicated over a subject expressing that the subject’s referent is on its way to a goal expressed by the directional phrase. What is striking about (58) is the fact that the infinitive also gets a purposive interpretation, expressing an action which the subject intends to execute at the goal of its movement.

Now, in certain cases a copula plus infinitive may also assume a directional reading as, for instance, in (59).

- (59) Anton ist jemanden besuchen.
 Anton is someone visit
 ‘Anton has gone (somewhere) to visit someone.’

The directional interpretation may further be enforced in the context of a directional question as in (60b).

- (60) a. Anton ist jemanden besuchen aber ich weiß nicht genau
 Anton is someone visit but I know not exactly
 wohin.
 whereto
 ‘Anton has gone to visit someone but I do not exactly know
 where(to).’
 b. Anton ist jemanden besuchen. Weißt du wohin?
 Anton is someone visit. Know you whereto
 ‘Anton has gone to visit someone. Do you know where
 (he has gone)?’

Finally, directional predicates may only be coordinated with directional questions, and not with locative questions, as shown in (61).

- (61) a. Frieda ist in den Wald aber ich weiß nicht genau
 Frieda is into the forest but I know not exactly
 wohin.
 whereto
 ‘Frieda has gone into the forest but I do not know where exactly.’
 b. ??Frieda ist in den Wald aber ich weiß nicht genau
 Frieda is into the forest but I know not exactly
 wo.²³
 where

In view of these facts, an analysis of the copula plus infinitive based on a directional predication can be proposed. The evident locative interpretation of certain variants of the construction, then, might be considered derivative. Though appealing, such an account is dubious for several reasons. Firstly, the copula *bleiben* is excluded from directional copula plus infinitive constructions – substitution of *ist* by *bleibt* is impossible in (60)/(61). A second objection emerges from the discrepancy with respect to directional vs. locative questions, as in (61). If the copula plus infinitive is analysed as a directional predicate, it should pattern like (61) with respect to *wo*- and *wohin*-questions. However, directional questions are only licit in the context of certain instantiations, but not in general. Locative questions, instead, are always possible.

- (62) a. Theo ist Hornhechte angeln aber ich weiß nicht
 Theo is garfish fish but I know not
 wo/wohin.
 where/whereto
 ‘Theo is off fishing garfish but I don’t know where.’

²³ (61b) is adequate only if there are different forests the location of which is questioned.

- b. Theo ist sein Glück suchen aber ich weiß nicht
 Theo is his luck search but I know not
 wo/*wohin.
 where/whereto
 'Theo is off seeking his fortune.'
- c. Theo ist seine Haare schneiden lassen aber ich weiß nicht
 Theo is his hair cut let but I know not
 wo/*wohin.
 where/whereto
 'Theo is off getting is hair cut but I don't know where.'
- d. Theo ist seinen Motorschaden reparieren aber ich weiß
 Theo is his engine failure repair but I know
 nicht wo/*wohin.
 not where/whereto
 'Theo is of repairing his engine but I don't know where.'

Judgements on the examples in (62) may vary from case to case, unsurprisingly because the interpretation considerably depends on world knowledge and pragmatical plausibility. There is, however, an evident discrepancy between the locative and the directional readings depending on the choice of the infinitival verb. These facts strongly suggest that an analysis of the copula plus infinitive cannot be properly derived from an underlying directional predicate.

3.5. *Conditions on purposive modification by bare infinitives*

After having determined the grammatical function of the bare infinitive, its categorial properties have to be clarified. Due to the verbal character of its head it is reasonable to conceive the whole phrase as a VP. There is no compelling evidence in favour of categorizing the bare infinitive as a functional projection CP (cf. Rapp & Wöllstein 2009). In particular, the particle *zu*, which might give rise to such an analysis, is not present.^{24,25} VP-adjunction to a clause is also not restricted to the case at hand. Other

²⁴ We do not want to enter into a discussion on this issue. In contrast to languages like English, the distributional properties of the particle *zu* in German do not suggest its analysis as a functional category heading an IP (cf. Haider 1993 for discussion).

²⁵ For this reason, the copula plus infinitive does not allow the occurrence of a lexical complementizer cf. (53b): **Theo ist im Hof um Holz hacken*.

non-finite verb forms, namely participles, may head VP-adjuncts in German, too (cf. Fortmann 2015).²⁶

Next we have to figure out how the specific purposive interpretation of the VP-adjunct is established. As pointed out by Reis (2003) and Rapp & Wöllstein (2009) VPs that are not part of an extended functional projection CP are constrained to a modal interpretation.²⁷ Their predicates rule out factual readings. Non-factuality, furthermore, is essential in order to account for the interpretation of the copula plus infinitive construction in (63) as discussed before in section 3.3.

- (63) Theo ist/war vergeblich/erfolglos einen Hornhecht angeln.
 Theo is/was in vain a garfish fish
 'Theo is/was off fishing garfish in vain.'

(63) illustrates the cancellation of the constraint on the indefinite object of the verb *angeln*. If the verb obtains a non-factual reading it no longer expresses the aspect of catching an existing object, hence the acceptability of (63). As shown before, non-factuality is a general interpretive property of purpose clauses.

²⁶ The analysis of the infinitival VP of the copula plus infinitive as a modifier raises further questions about its syntax. Adverbial modification is usually encoded by syntactic adjunction. Adjuncts, on the other hand, form islands for extraction. However, movement of a VP-internal constituent to a VP-external position is possible, in particular with contrastive focus:

- (i) Holz_i ist Anton [_i hacken] und nicht Pilze sammeln.
 wood is Anton chop and not mushrooms collect
 'Anton is chopping wood. He is not collecting mushrooms.'

Extraction from the infinitival VP, however, also occurs with an overt locative as in:

- (ii) Holz_i ist Anton im Wald [_i hacken] und nicht Pilze sammeln.
 wood is Anton in-the forest chop and not mushrooms collect
 'Anton is chopping wood in the forest. He is not collecting mushrooms.'

Barrierhood, on the other hand, does not emerge from a single inherent categorial feature. It depends on interacting factors, anyway. Hence, whatever the conditions are that make extraction out of VP possible in (i) these conditions are also active in (ii). It should be noted that the very same phenomenon can be observed with other kinds of adverbials. For instance, DPs like *den ganzen Tag* (*the whole day long*) may form temporal adverbials as in (iii). Extraction of a *von*-PP, which is possible with DP in general, is acceptable. At least (iii) is not as deviant as extraction from adverbial clauses or adverbial PPs.

- (iii) a. Er hat den ganzen letzten Tag vom vergangenen Monat gearbeitet.
 he has the whole last day of-the last month worked
 'On the last day of last month he worked all day long.'
 b. [Von welchem Monat]_i hat er [den ganzen letzten Tag _i] gearbeitet?
 of which month has he the whole last day worked
 'On which month's last day did he work all day long?'

²⁷ Specifications of modal force etc. depend a.i. on structural conditions (root vs. embedded occurrences), lexical choice. Modal force may vary from (weak) readings (bare root infinitives) to strong readings in the case of *warum*-infinitives (Reis 2003, Fortmann forthcoming).

Despite this distinguished property that the infinitival VP shares with other instances of purposive modification, it differs from canonical *um-zu*-infinitives with respect to the conditions that determine the purpose expressed.

Purposes are different from, for instance, causes and times in that they are not (immediately) connected to facts about the natural world. Instead, they emerge from intentional attitudes that are attributed to some entity that is capable of bearing such attitudes, i.e. normally human, or at least animate, beings. As a consequence, any purposive modification involves some individual who intends to realise the purpose. This, once again, is a general fact about this type of adverbials. It is independent of its specific form.

The presupposition of a bearer of an intentional attitude may interact with the interpretation of the clause modified by a purposive adjunct in different ways, irrespective of the (non-)finiteness of the adverbial. In the first case, the referent of some argument NP in the matrix clause is identified with the subject of intention.

- (64) a. Theo arbeitet damit er Geld verdient.
 Theo works in order he money earns
 'Theo is working in order to earn money.'
 b. Theo arbeitet um Geld zu verdienen.
 Theo works for money to earn
 'Theo is working in order to earn money.'

In both examples in (64), it is the subject referent of the matrix clause to which the intention of executing the action expressed by the purposive clause is attributed. Because of the occurrence of the pronominal *er* in (64a) and the controlled PRO-subject in (64b), respectively, the subject of intention – in its natural interpretation – is identified with the actor of the intended action. This, however, is not necessarily the case. (65) demonstrates the dissociation of subjects. Here, the subject of the purpose clause is naturally identified with *Paul* the referent of the dative object of the matrix clause.

- (65) a. Theo gibt Paul einen Dietrich damit er die Tür
 Theo gives Paul a pick lock in order he the door
 öffnet.
 opens
 'Theo gives a pick lock to Paul in order that he opens the door.'
 b. Theo gibt Paul einen Dietrich um die Tür zu öffnen.
 Theo gives Paul a pick lock for the door to open
 'Theo gives a pick lock to Paul in order to open the door.'

In all cases in (64)/(65) the objective expressed by the purpose clauses is attributed to the referent of a matrix clause constituent. In this sense it is feasible to regard this kind of purpose clause as an *internal attribution* of aims.

In the second case of purposive modification, the subject of intention is not identified with any argument of the matrix clause. This variant is also independent of the finiteness of the purpose clause. (66) provides an example.

- (66) a. Der Wein liegt im Keller damit er reift.
 the wine lies in-the cellar in order it ages
 ‘The wine is in the cellar in order that it ages.’
 b. Der Wein liegt im Keller um zu reifen.
 the wine lies in-the cellar for to age
 ‘The wine is in the cellar in order to age.’

As in (64), the subject of the matrix clause is identified with the subject of the adjunct clause by pronominal binding and control, respectively. However, the subject *der Wein* cannot be understood as bearing an intention. The bearer of intention is suitably presupposed and accommodated. This type of purpose clause represents an *external attribution* of aims.

After this short digression we return to the copula plus infinitive construction focussing on a further distributional peculiarity. Predicative structures with an overt expression of location allow for any choice of the matrix subject and can also be modified by purposive *um-zu*-infinitives as in (67).

- (67) a. Der Wein ist/bleibt im Keller um (stets) einen
 the wine is/remains in-the cellar for always a
 Vorrat zu haben.
 supply to have
 ‘The wine is/remains in the cellar in order to always have a
 supply.’
 b. Der Wein ist im Fass um zu reifen.
 the wine is in-the barrel for to age
 ‘The wine is in the barrel in order to age.’

Both examples differ with respect to control. (67a) exhibits arbitrary control of the infinitive’s PRO-subject, while PRO is controlled by the matrix subject in (67b). Due to the fact that the NP *der Wein* in neither case denotes a possible subject of intention, the attribution of purpose is a matter of external attribution of aims in both examples.

As pointed out in the beginning of section 3.2, the copula plus infinitive is significantly restricted with respect to the choice of the matrix subject of the infinitival verb. Constructions as exemplified in (68) are ungrammatical.

- (68) a. *Der Wein ist/bleibt im Keller einen Vorrat haben.
 the wine is/remains in-the cellar a supply have
 b. *Der Wein ist im Fass reifen.
 the wine is in-the barrel age

These deviant examples show that an external attribution of aims is not possible with the copula plus infinitive.²⁸ In the licit cases, i.e. those with an animate subject NP, internal attribution of the aim is possible, and is actually a necessary condition for the interpretation of constructions such as (1).

- (1) Theo ist arbeiten.
 Theo is work_{INF}
 'Theo is off working.'

In addition to the localisation of *Theo*, (1) expresses his intention to execute the action denoted by the verb *arbeiten*.

The second constraint concerning the choice of the infinitival verb is shown in (46) repeated here:

- (46) a. ??Hans ist (im Wald) sich vor Geistern fürchten.
 Hans is (in-the forest) himself for ghosts fear
 b. *Theo ist (in der Dusche) wach werden.
 Theo is (in the shower) wake up

This cannot be immediately accounted for by constraining the purposive clause to an internal attribution of aims. Converting (46) into clauses with an *um-zu*-infinitive may be a bit odd with (46a) which is formed with a psych-verb but (46b) provides a perfect result.

- (69) a. ?Hans ist im Wald um sich vor Geistern zu
 Hans is in-the forest for himself for ghosts to
 fürchten.
 fear
 b. Theo ist in der Dusche um wach zu werden.
 Theo is in the shower for to wake up
 'Theo is taking a shower in order to wake up.'

The copula plus infinitive requires a verb which is selectionally restricted to animate subjects. This fact can be conceived as a reflex of a restriction to intentional subject imposed on the verb. Selection of an intentional subject by the infinitival verb, then, turns out as a necessary condition on the copula plus infinitive construction. However, this constraint does not follow from the conditions related to internal attribution of aims per se.

²⁸ The distinction between external and internal attribution of aims may also shed some light on the exclusion of embedding the copula plus infinitive under object control verbs like *zwingen* shown above (cf. (9c)). In this case, the localisation of the matrix object/PRO-subject is determined by external purposes (attributed to the matrix subject). Hence, there arises a conflict between the external attribution of aims to the matrix subject and the internal attribution to the object/PRO-subject. Again, the very same holds of forms with an overt expression of the locative:

- (i) *Man zwang Theo im Wald arbeiten (gewesen) zu sein.
 one forced Theo in-the wood work (been) to be

If, as in (69), a lexical complementizer occurs in the clause, it does not hold true. Hence, the selectional restriction on the verb has to be considered an effect of the overall licencing conditions on the copula plus infinitive construction. Obviously, it is the semantic contribution of the connective *um* that is substituted in this case. As already mentioned above, the interpretive content of a purposive adverbial relation encompasses an intentional attitude towards the event expressed by the predicate of the purpose clause. If the subject argument of an agentive verb, which appears as a licit predicate of the copula plus infinitive construction, is selectionally restricted to an animate being, the requirement of an intentional instigation of the event expressed by the purpose clause is fulfilled.

Thus, the purposive interpretation of the infinitive can be regarded as an interactive effect of the modal, hence non-factual, interpretation of the infinitive on the one hand and of the intentional attitude towards the event of the external argument of the infinitive on the other.²⁹

While a purposive interpretation of the VP can be inferred as demonstrated, the question as to why no other possible adverbial interpretation arises may be asked. First of all, the range of possible adverbials is restricted due to the content of the matrix predicate. Manner clauses, for instance, are excluded from modifying locative predicates formed by copula constructions. In principle, temporal as well as conditional or causal clauses do modify locative predicates. However, as noted above, bare VPs are restricted to a modal interpretation excluding any factual interpretation. Hence, any type of adverbial clauses that are factual cannot be substituted by a bare VP. This prevents the VP from functioning as a temporal, causal or concessive adverbial modifier. Conditional clauses, which can otherwise be formed by verb-first clauses in German without the conditional subordinator *wenn* or *falls*, are obligatorily formed by a CP structure (cf. Reis & Wöllstein 2010:128ff for a detailed explanation). Bare VPs do not project CP structures and therefore cannot meet the structural requirements of conditional clauses – at least in German. Hence, the interpretation of the infinitive is confined to purposive modification.

3.6. *Certain peculiarities of purposive modification by bare infinitives*

At this point it is worth discussing two further aspects of the interpretation of the copula plus infinitive.

²⁹ The considerations in this section focus on a synchronic account for the pertinent construction. As pointed out to us by Bernd Wiese, there is also some diachronic motivation of the proposed analysis. Curme (1922:270), for instance, mentions forms like *er ist fischen* as instances of an old infinitive of purpose, and Blatz (1896:569) states: “Ziemlich veraltet ist der finale Infinitiv nach sein,... *er ist jagen*”. For a discussion on the very same phenomenon in the history of Indo-European languages cf. Disterheft (1981).

The intention that is attributed to the subject of the construction is not restricted to the action denoted by the infinitive but encompasses the implicitly predicated location, too. Thus, statements like (1) or (29a), repeated in (70), convey the information that the subject referent is located at the place of action due to its own intention and not, for instance, by force of some extrinsic power.³⁰

- (70) a. Theo ist arbeiten.
 Theo is work
 'Theo is off working.'
 b. Theo ist Hornhechte angeln.
 Theo is garfish fish
 'Theo is off fishing garfish.'

This property, however, is shared by constructions with an overt expression of location.

- (71) a. Theo ist in der Fabrik arbeiten.
 Theo is in the factory work
 'Theo is in the factory working.'
 b. Theo ist am Strand Hornhechte angeln.
 Theo is on-the beach garfish fish
 'Theo is on the beach fishing garfish.'

This effect emerges from the internal attribution of aims to which the purposive bare infinitive is restricted: The intention to execute a certain action implies the intentional localisation of the actor at the location of that action.³¹ The case is different with external attribution of aims – as, for instance, with *um-zu*-infinitives like in (67) above.

The second peculiarity concerns an, admittedly, rather subtle trait of the interpretation of the copula plus infinitive. Non-factuality, as pointed out, is a general condition of the interpretation of purposive adverbials,

³⁰ It should be noted that *intentionality* is severely restricted in certain respects. It does not imply any (positive or negative) evaluation of the intended action or location. The intention does also not comprise any effect that may come about as a result of the intended eventuality. The intention furthermore may be provoked by some external compelling force on its bearer. With respect to the localisation encoded by the copula plus infinitive a minimal amount of intentional control on the part of the subject is both necessary and sufficient. Therefore, (i) is a macabre joke:

(i) der Verstorbene ist mit den engsten Angehörigen die Totenmesse zelebrieren.
 the deceased is with the nearest relatives the requiem celebrate
 'The deceased is off celebrating the requiem together with his nearest relatives.'

whilst (ii) involves a minimum of intended collaboration of the culprit:

(ii) Adelbert ist (im Knast) seine Strafe absitzen.
 Adelbert is in-the clink his sentence serve
 'Adelbert is off/in the clink serving his sentence.'

³¹ This fact also accounts for the capacity of copula plus infinitives to answer activity questions (cf. (34)).

irrespective of their specific syntactic form. As a consequence, the intended effect expressed by a purpose clause may be denied without contradiction.

- (72) a. Der Wein ist im Fass um zu reifen aber er verderbt
 the wine is in-the barrel for to age but it spoils
 leider.
 unfortunately
 'The wine is in the barrel in order to age but unfortunately it is spoiling.'
- b. Theo ist in der Dusche um wach zu werden aber er
 Theo is in the shower for to wake up but he
 wird nicht munter.
 becomes not awake
 'Theo is taking a shower in order to wake up but he does not get awake.'

Non-factuality of a purpose clause, however, does not imply that the event denoted by the adverbial clause's predicate does not happen at all. Purpose clauses are not counterfactual. This would mean that purposes would never be achieved.

However, while (72) represents felicitous statements, when coupled with the copula plus infinitive construction an explicit denial seems quite awkward in cases like (73a/b).

- (73) a. #Theo ist arbeiten aber er tut/macht es nicht.
 Theo is work but he does/makes it not
- b. #Theo ist einen Hornhecht angeln aber er tut/macht es
 Theo is a garfish fish but he does/makes it
 nicht.³²
 not
- c. Theo ist einen Hornhecht angeln aber er fängt keinen.
 Theo is a garfish fish but he catches none
 'Theo is off fishing a garfish but he does not catch any.'

In order to account for the difference between (73a/b) and (73c) – repeated from (63) – it is necessary to bear in mind that verbs like *angeln* represent a complex event structure (formed by a causal and a caused event resulting in a resultant state) while verbs like *arbeiten* are simplex event verbs. Verbs like *tun* or *machen* refer to activities irrespective of the structure of the event referred to. So, while in (73c) negation only takes the embedded event (the achievement) into its scope in (73a/b), scope of

³² The #-marking is related to a reading by which the speaker's commitment comprises the whole utterance. Only with a quotation reading of the first conjunct (possibly adequate in certain contexts) these examples may be acceptable.

negation is extended, including the (causing) activity, giving rise to a contradiction.

It is worth noting that the very same effect occurs if the location is made explicit as in (74).

- (74) a. #Theo ist in der Fabrik arbeiten aber er tut/macht es
 Theo is in the factory work but he does/makes it
 nicht.
 not
- b. #Theo ist am Strand Hornhechte angeln aber
 Theo is on-the beach garfish fish but
 er tut/macht es nicht.
 he does/makes it not

(73) and (74) are deviant under the intended internal-attribution-of-aims reading, which is the only one available with purposive clauses without a lexical complementizer. If the connective *um* occurs, the clauses improve drastically. But only the external-attribution-of-aims reading is possible in this case; in this respect (75) is on a par with (73) and (74).

- (75) a. Theo ist in der Fabrik um zu arbeiten aber er
 Theo is in the factory for to work but he
 tut/macht es nicht.
 does/makes it not
 ‘Theo is in the factory in order to work but he does not do so.’
- b. Theo ist am Strand um Hornhechte zu angeln aber er
 Theo is on-the beach for garfish to fish but he
 tut/macht es nicht.
 does/makes it not
 ‘Theo is on the beach in order to fish garfish but he does not do so.’

As a matter of fact, copula plus infinitive constructions determine a partially factual interpretation of the infinitive (irrespective of the overt/non-overt locative). Non-factuality is constrained to the accomplishment of the action denoted by the verb and does not extend to the event as a whole, especially not to its instigation. The question, then, arises as to how this constraint might be reconciled with the purpose clause’s general property of being non-factual.

Firstly, it has to be kept in mind that non-factuality of the purposive adjunct clause is compatible with a state of affairs which renders its proposition true. Furthermore, the partial factuality requirement cannot be regarded as an overall property of the encoding of purpose – purposes may fail. As already mentioned, purpose clauses are not counterfactual. The partial factual reading of the adverbial in the copula plus infinitive construction can be analysed as a consequence of a requirement on coherent interpretation in the following way.

The adverbial infinitive expresses an event that is intended by the referent of the matrix subject. A logical condition of the realisation of the event is its spacial localisation. Hence, the location of the intended event is part and parcel of an intention towards its realisation.

The (silent) main predicate of the copula plus infinitive expresses an intentional localisation of the subject's referent. Its location is identical with the location of the event which is likewise intended by the subject. Under this condition, it would be logically inconsistent if the location predicated over the subject were distinct from the location of that event.

On the other hand, the localisation of the subject's referent at the location of the intended activity may count as a partial fulfilment of the conditions on its realisation. Since both the actual localisation and the prospective event, are intended by the subject, it would be inconsistent to assert the former and, at the same time, to deny any activity in order to bring about the intended event. Such a denial, however, is expressed by continuations like *tut es nicht / macht es nicht* as in (73), (74) and also in (75) under an internal attribution of aims reading.³³

The results of the preceding considerations can be summarised as follows: Any copula plus infinitive construction can be freely amended by inserting a locative PP or adverb and any locative predicate with an infinitive can be reduced by deletion of the locative *salva grammaticalitate*. Both variants of the copula plus infinitive construction with and without an overt locative are subject to the very same restrictions on the choice of the verb. Both variants require a subject whose referent can be ascribed an intention to perform the action denoted by the infinitive. Both variants share the partially factual interpretation of the infinitive. These parallels are too evident to be ignored by a serious account of the copula plus infinitive. They strongly suggest a structural analysis from which these parallels can be deduced in a natural way.

³³ It should be noted that the very same phenomenon can be observed with the complement of the verb *versuchen*. If this verb is complemented by an infinitive with an agentive verb, negation of the whole event is unacceptable.

- (i) Theo versucht einen Hornhecht zu angeln # aber er macht es nicht.
 Theo tries a garfish to fish but he does it not
 'Theo is trying to fish a garfish...'

In the case of (i) *versuchen* is complemented with *angeln*, which is a complex event predicate. In this case, a denial of the resultant state is possible without reservation.

- (ii) Theo versucht einen Hornhecht zu angeln aber leider fängt er
 Theo tries a garfish to fish but unfortunately catches he
 keinen einzigen.
 none

'Theo tries to fish a garfish but unfortunately he does not catch any.'

3.7. *The structure of the copula plus infinitive*

The distributional and interpretive facts about the copula plus infinitive construction discussed so far suggest an analysis based on an empty locative predicate. A more principled explanation requires an account in terms of general grammatical principles and conditions which licence phonologically empty categories (*ec*). Over the years, the specific technical formulation of the pertinent conditions on licensing *ec* has changed, as have the theoretical equipments of syntactic theorizing. However, the general considerations in Rizzi's (1986) investigation of null objects in Italian may serve as a point of convergence. Empty categories are subject to formal licensing and to licensing of their interpretive content. Formal licensing amounts to a specific syntactic relation of the *ec* to another lexical element. Licensing of content emerges from identification by some other element co-occurring together with the *ec* in the syntactic structure containing the latter.

The head-complement relation provides a structural configuration in which an empty category may be formally licensed – in terms of principles-and-parameter theory the complement is governed by the head. German, although not a *pro*-drop language with respect to subjects, allows objects of certain transitive verbs to be optionally left out. This is possible if the selectional restrictions on the respective argument are to an extent specified by the selecting verb that allows a prototypical interpretation of the referent of the argument. Some illustrative examples are gathered in (76).

- (76) a. Die Kuh frisst (Silofutter).
 The cow eats (silage)
 'The cow is eating (silage).'
 b. Manche Leute helfen (einem) gerne aus Prinzip.
 some people help (someone) willingly on principle
 'Some people are cooperative on principle.'

This means that a verbal head has the capacity to formally licence an *ec* in its complement position. It should be noted that, in German, certain adverbials may be inserted between (the base position of) the licensing head and its complement phrase cf. (76b). In German, as a verb-final language, complementation does not depend on a sisterhood relation between the verb and its complement.

Predicative structures are formed by copula verbs like *sein*, *bleiben* etc. which are combined with a phrase expressing the content of the predication. The latter phrase may be realised by an NP, AP or PP. A predicative phrase fills the complement position of the copula verb. (77) illustrates the case of a locative predicate with a locative PP and a locative adverb respectively.

- (77) a. ... dass der Wein [_{VP} [_{PP} im Fass] ist]
 that the wine in-the Barrel is
 ‘... that the wine is in the Barrel.’
 b. ... dass der Wein nicht [_{VP} [_{PP} dort] ist]
 that the wine not there is
 ‘... that the wine is not there.’

The parallel in head-complement structure of VPs headed by either transitive or copula verbs, and the general capacity of verbal heads to licence an empty category warrant the assumption that the predicative complement of a copula verb may be left unpronounced. This possibility is severely restricted. There are, to our knowledge, no predicative constructions with empty NP or AP in German. This restriction, however, has to be conceived of a result of the second part of conditions on licencing an *ec*, namely the conditions on licencing its interpretive content to which we will now turn.

Traces of movement aside, the predominant topic of the investigation of empty categories are unpronounced pronominal elements which are nominal in nature, hence forming noun-phrases. The interpretive content of a nominal *ec* is primarily provided by morphosyntactic features – ϕ -features in terms of principles-and-parameter theory and its successors. Theta-role-assignment is a further mode of identification proposed by Rizzi (1986) in view of empty objects.

Locations are prototypically expressed by adverbs or PPs which are different from noun-(phrases) in that they do not instantiate nominal ϕ -features. Hence, if the account of locative predication in the case of copula plus infinitive constructions that we propose here is correct, the licencing of interpretive content of the empty locative has to be achieved by different means.

To begin with, any mode of licencing an *ec* involves its identification with (the features of) some other constituent. In the case of an empty locative we have to look for some overt expression which makes a location available which, then, may be identified with the locative predicate of the main clause.

In the previous sections, it was emphasised that the location predicated over the subject of the copula plus infinitive construction is identified with the location of the event expressed by the infinitival verb. It was also shown that the identification of the locative main predicate with the location of that event is independent of the overt or non-overt expression of the location in the main clause. In this sense it can be taken for granted, and as an empirical fact that an identification relation, necessary in order to licence the empty locative, is established in the copula plus infinitive construction.

Next, the structural conditions on which that identification relation is based have to be elaborated. The empty locative element in the main clause obviously cannot be identified with an overt expression formed by

a locative adverb or PP, since neither occurs (obligatorily) with the infinitive. However, a substitute mode to install an appropriate identification relation exists.

Based on Davidson (1967), it is assumed that the argument structure of verbal predicates provides an event argument in addition to the arguments that are assigned a thematic role. This event argument crucially enters into adverbial modification. An adverbial modifier adjoined to a VP is analysed as a predicate over the event argument of the verb. A locative adverbial, then, is interpreted as predicating a location over the event denoted by the verb. Due to the fact that events are located in space in general, it may be assumed that the location argument of the locative predication is existentially bound if no overt expression of location is present. Furthermore, the more specific characterisation of an event by the place where it is localised has an interpretive counterpart in a corresponding characterisation of the location by the very same event.

The location of the event denoted by the infinitival VP of the copula plus infinitive, which is provided by the event argument of the verb, can be identified with the location which is predicated over the subject by the locative *ec* in the matrix predicate. The characterisation of the former is thus transferred to the location predicated over the subject of the main clause.

The crucial prerequisite for licencing the content of the locative empty category proposed here is that the modifying infinitival VP provides for an event argument (via its verbal head). From this premise, certain empirical consequences can be drawn. Namely, it can be concluded that an empty locative can only be licenced in a syntactic environment that makes a suitable event argument available.

As pointed out with reference to the examples in (57), which are repeated in (78), empty locative predication is not possible with *um-zu* and *zu*-infinitives but only with bare infinitives.

- (78) a. *Theo ist [um Holz zu hacken]
 Theo is for wood to chop
 b. *Theo ist [Holz zu hacken]
 Theo is wood to chop

The ungrammaticality of (78) cannot be accounted for by failure of formal licencing of a putative empty category because the copula verb heading the matrix VP actually has the potential to formally licence an empty category. The examples in (78) can only fail because the interpretive content of the empty element cannot be licenced.

The adjunct phrases in (78) are formed by CPs (cf. Rapp & Wöllstein 2009). CPs represent propositions different to VPs, which represent events. While VPs provide an event argument that may mediate the necessary licencing of content of the empty locative in the matrix predicate, CPs do not. Hence, CPs do not instantiate the correct type to

fulfil the requirements on licencing.³⁴ Since licencing of empty categories that are not introduced by movement in the course of derivation is a local relation, a VP within CP is not accessible. For the same reason a copula plus infinitive construction can never obtain the interpretation of a nominal or adjectival predication over the matrix clause subject.

3.8. *What about absence?*

In section 2.2 it was already suggested that the interpretation of absence regularly imposed on the copula plus infinitive construction results from a – generalised – implicature in the sense of Grice (1975). Without elaborating a technically detailed analysis, we want to very briefly sketch an explanation of some characteristic examples.

In the context of a locative question in the present tense, an utterance formed with a copula plus infinitive construction is most naturally interpreted as expressing the subject's absence from the location of the speech act. It is important to note that the very same effect arises with a response in form of a simple declarative (79c).

- (79) a. Wo ist Theo?
 where is Theo
 'Where is Theo?'
 b. Der ist arbeiten!
 he is work
 'He is off working!'
 c. Der arbeitet!
 he works
 'He is working!'

According to the general co-operative principle, a question like (79) is only justified if *Theo's* whereabouts is not evident, namely, if he is not present at the place of the utterance. Under this condition, information about an activity performed by *Theo* gives rise to the inference that the location of this activity is distant from the place of utterance (wrt. to possible intervening factors cf. the considerations in section 2.2).

While an *absentive* reading of (79b) is strongly induced in the context of a question like (79a) it does not depend on that exact context, as (80) shows.

- (80) Als man ihn suchte, war Theo Hornhechte angeln.
 when one him searched was Theo garfish fish
 'When he was searched for Theo was off fishing garfish.'

The temporal adverbial clause *als man ihn suchte* in (80), due to the meaning of the verb *suchen*, conveys the information that the location of the event

³⁴ For further discussion on syntactic properties cf. Wöllstein (2015b).

indicated by that verb is different from the location of the object being looked for – *Theo* in (80) – which is expressed by the copula plus infinitive.

The interpretation of absence may also emerge without an immediate lexical trigger.

- (81) Als der Postbote kam, war Theo Hornhechte angeln.
 when the postman came was Theo garfish fish
 ‘When the postman came Theo was off fishing garfish.’

Both, the main clause in (81) and the temporal adverbial clause, express a location of their respective subjects. The location of *Theo* is determined, as explained above by the location of the *angeln*-event. The location of *der Postbote* is determined as the goal of his arrival. In the absence of any lexical expression, the respective locations are arbitrary. In principle, they may be identical or differing. Since the respective predicates are independent of each other, they denote independent events which have differing locations in the default case. Hence, identity of both locations is more specific than the default case.

The different locations of *Theo* and *der Postbote* in (81) – the *absentive* reading – can now be calculated by means of the Gricean maxims of conversation. As previously mentioned, the identity of the locations of *Theo* and *der Postbote* is the more specific case. Hence, an unambiguous expression of identical locations would be more informative than an expression of only arbitrary locations – which might nevertheless be identical. According to the *maxim of quantity* a more specific expression has to be chosen if the more specific case is to be expressed and if such an expression is available. There is a means to express identical locations, namely, the anaphoric element *da* as in (82).

- (82) Als der Postbote kam, war Theo da.
 when the postman came was Theo there
 ‘When the postman came Theo was at home.’

(82) is expected if Theo is present at the goal of the postman’s arrival. The fact that (81) is uttered instead of the more informative (82) gives rise to the inference that (82) cannot be stated truthfully. A statement about the location of *Theo* like (81) induces the implicature that this location is different from the location of *der Postbote*, which amounts to the *absentive* interpretation.

There is a notable parallel in interpretation between the case of (81) and a copula plus infinitive with an overt indefinite locative adverb *irgendwo* (*somewhere*).

- (83) Als der Postbote kam, war Theo irgendwo Hornhechte
 when the postman came was Theo somewhere garfish
 angeln.
 fish
 ‘When the postman came Theo was somewhere fishing garfish.’

Due to the indefinite interpretation of the adverb, it is, in principle, possible to refer to an arbitrary location. Hence, there is no logical reason which might prohibit the identification of the location of the fishing with the location of the postman's arrival. Nevertheless, it is hard to achieve such a reading in a natural way. This means that the very same implicature that is operative in (81) also applies in (83). The disjoint location interpretation in (81) and (83) may be further strengthened by the fact that the places where fishing takes place are rarely the same places where mail is delivered.

Finally, the possibility of cancelling the implicature in (81) has to be taken into account.

- (84) Zufällig war der Gasmann gerade den Zähler ablesen,
 accidentally was the gasman just the meter read
 als der Postbote kam.
 when the postman came
 'Coincidentally the gasman was just reading the meter when the
 postman arrived.'

It does not seem unreasonable to refer to two events coinciding in the same apartment by uttering (84).

It is not our goal to elaborate the interpretation of a broad scale of possible examples. The previous examples, however, may suffice to demonstrate that the analysis works and how it works.

4. Conclusion

With respect to the interpretation of the copula plus infinitive in German, its utterance meaning is dissociated into its semantic and pragmatic components. As a result, we find that crucial properties attributed to the construction are based on pragmatic inference. In particular, as far as absence is expressed, this interpretation cannot be determined by truth conditional meaning; the locus of absence may vary substantially, and, in certain cases, absence from a specific location may not even be expressed at all. As far as location is expressed, its truth conditional meaning amounts to location of the subject at the place of the event expressed by the infinitive. *Absence*, then, is inferred in relation to this location based on contextual knowledge or the semantics of other constituents, in particular of the subject. The analysis of the construction as a locative predicate is corroborated by strict parallels to overt locative predication. Parallels pertain to the exclusion of the copula verb *werden* to restrictions on the choice of the non-finite verb and to the subject of predication. These findings have to be explained independent of any specific theoretical approach. Grammatical-category-analyses of the *absentive*, as widely proposed in the literature, do not do justice to the properties mentioned. Hence, the copula plus infinitive construction in German

cannot be considered a particular instantiation of some universal *absentive* category. According to the analysis proposed here, the copula is complemented by a phonologically empty locative predicate whereas the infinitive forms an adjunct. This compositional analysis provides an account of the syntactic as well as the interpretive properties which emerge from the interaction of structural conditions and pragmatics. We concentrated our investigation on facts about German and we refrain from judgements about other languages. However, we assume that comparable constructions in other languages are no less accessible to a compositional analysis.

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