# A phrasal construction for an ex quolibet falsum inference

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#### 1 Introduction

I will look at a German construction that expresses the rejection of an immediately preceding proposition, (1a), or the rejection of the truth of the antecedent in a conditional, (1b). In either case, the rejection is encoded as stating that the speaker is *der Kaiser von China* 'the emperor of China'.

(1) a. A: "Wir verwenden die besten und teuersten Materialien für unsere T-Shirts ..."

'We use the best and most expensive materials for our t-shirts ...'

B: Und ich bin der Kaiser von China!

and I am the emperor of China

'This is nonsense!' (lit.: 'And I am the emperor of China.')

(deTenTen23)

b. Also, wenn das stimmt, bin ich der Kaiser von China.

thus if this is correct am I the emperor of China

'This cannot be correct.' (lit.: 'If this is correct, I am the emperor of China.') (deTenTen23)

The relevant statement in (1) requires that the communication participants are aware that the speaker is not really the emperor of China. Transparently, then, the utterance is to be as understood in the following way: The preceding claim is so wrong that if you accept it, anything follows from it, even that the speaker is the emperor of China. This means that the construction relies on an *ex falso quodlibet* reasoning, i.e., the fact that anything follows from a false assumption. However, it is by making an "anything" (*quodlibet*) statement that the speaker indicates that they consider the previous statement false. For this implicit underlying motivation of the construction, I will refer to it as *ex quōlibet falsum*-continuations – or, short, *quodlibet*-continuations. I will refer to the initial statement, (1a), and the *if* part in (1b) as the *antecedent*. As the two realizations of the *quodlibet*-continuation in (1a) and (1b) have different properties, I will refer to them as *and-quodlibet* and *then-quodlibet* respectively.

I will discuss properties of the *quodlibet*-continuation in Section 2, and sketch an HPSG analysis that captures its properties in Section 3. Only a sign-based architecture of grammar, such as HPSG, with an explicit semantics-pragmatics interface can successfully account for the interaction of syntax, semantics, and pragmatics attested in this construction.

#### 2 Data

The empirical basis of the paper are examples from the German internet corpus deTenTen23, retrieved via sketchengine (Kilgarriff et al., 2014). I also use examples form other corpora, and introspection.

## 2.1 Basic properties of the *quodlibet*-continuation

A corpus query for the sequence of lemmas "sein der Kaiser von China" in deTenTen23 resulted in 50 hits, out of which 20 were relevant, the rest being literal uses or metaphoric uses of the expression der Kaiser von China sein 'be the emperor of China' to refer to a rich or important person (or someone who thinks they are), or to something absurd and exagerated. I also queried for the sequence "sein \* der Kaiser von China", which led to 20 relevant hits (out of 40). Testing for verb-final occurrences, i.e. for the sequence of lemmas "der Kaiser von China sein" yielded 48 hits, but none of them was relevant. These three queries targeted the following structures: Subject-Verb verb-second clauses, Verb-Subject verb-second clauses, and verb-final clauses. The corpus data revealed the following properties:

(i), the subject in all relevant examples was *ich* 'I'. (ii) All relevant Subject-Verb verb-second examples contain the conjunction particle *und* 'and', as in (1a), all relevant Verb-Subject verb-second examples are conditionals, as in (1b). This shows that the *and-quodlibet* and the *then-quodlibet* variants exhaust what I could find in the data. (iii) Both verb-second variants were independent clauses or direct speech reports. The verb-final query, which would have brought up embedded instances, did not result in any relevant hits. This indicates that the

*quodlibet*-continuation cannot be embedded. **(iv)** The antecedent is usually a clause, but it can be a fragment that relates to the preceding context, see (2).

(2) [Context: Something about independent critical journalism]
Ja, ja ... unabhängig, und ich bin der Kaiser von China.
yes yes independent and I am the emperor of China
'Right, independent – I don't believe a word of it.'

One example reports a cartoon in which a police officer sees an ambulance parking in a spot reserved for disabled persons. Issuing a parking ticket the police officer utters the *and-quodlibet-continuation Und ich bin der Kaiser von China*. This suggests that non-linguistic antecedents are possible as well.

(v) 11 out of the 20 relevant *and-quodlibet* hits (Subject-Verb verb-second) contained a clearly identifiable switch in the speaker, as in (1a). In seven examples, the speaker was the same, though they clearly reported someone else's utterance. Three cases were unclear as to whether they contain a switch.

To summarize the five properties: There is a conventionalized form (und ich bin | dann bin ich) der Kaiser von China, which must occur as an independent utterance. Its antecedent can best be characterized as a salient proposition, though the proposition can be inferred from the context.

#### 2.2 The semantics and pragmatics of the *quodlibet*-continuation

The antecedent of the *quodlibet*-continuation must be salient and there must be some salient individual (often the addressee) that believes it to be true.

The *quodlibet*-continuation seems to lack any at-issue content: This is particularly clear for the *and-quodlibet* variant. In (3), speaker A objects to the claim that Alex is highly gifted. Speaker A cannot add a question tag to their statement, see (3a). Neither can a speaker B react to A's utterance with *yes* or *no*, (3b). An option that is available to B is to put the original proposition back into the discourse and to propose it again for integration into the common ground, as done in (3c).

- (3) A: Alex ist hochbegabt und ich bin der Kaiser von China! Alex is highly gifted and I am the emperor of China
  - a. # ...nicht wahr? 'isn't it?!'
  - b. B: #Ja, das stimmt. 'Yes, this is true'/ #Nein, das stimmt nicht. 'No, this is not true.'
  - c. B: Doch, Alex ist wirklich hochbegabt. 'Alex really is highly gifted'

For the *then-quodlibet* variant – *Wenn Alex hochbegabt ist, bin ich der Kaiser von China* 'if Alex is highly gifted, I am the emperor of China' – the confirmation tag in (3a) is possible, and so is the agreement (i.e., *ja* 'yes') version (3b). However, replying as in (3c) is odd.

## 2.3 quodlibet-continuations vs. other rejection-expressing constructions

There are constructions with similar meaning and properties in German: The German version of the incredulity response construction (Akmajian 1984; Lambrecht 1990; *Was? Ich und mir Sorgen machen?!* 'What? Me worry?!'), and the continuation *dass ich nicht lache* 'don't make me laugh' (lit.: that I not laugh). There are some differences between the *quodlibet*-continuation and these two constructions, though.

First, the incredulity response construction licenses negative polarity items, such as *jemals* 'ever' in its second part, the predicative part. Neither *dass ich nicht lache* nor the *and-quodlibet*-continuation can do this, see (4).<sup>1</sup>

(4) a. Ich und jemals einen Garten haben, einen eigenen Garten!
I and ever a garden have, an own garden
'Me – ever have a garden, a garden of my own?!'

(www)

- b. Du haast \*jemals/ [irgendwann mal] einen Garten dass ich nicht lache! you have ever/ at some point a garden that I not laugh 'You will have a garden at some point don't make me laugh!'
- c. Du hast \*jemals/ [irgendwann mal] einen Garten und ich bin der Kaiser von China!

<sup>&</sup>lt;sup>1</sup>The examples in (4b) and (4c) use a different subject than the attested example in (4a) because a first person subject sounded less smoothly even without there being an NPIs in the clause.

However, even though I did not find corpus examples of this, NPIs seem to be possible in the antecedent in the *then-quodlibet* variant, (5). This might not be surprising as *if* clauses are a known NPI licensing environment.

(5) Wenn du das jemals schaffst, dann bin ich der Kaiser von China.
if you this ever get done then am I the emperor of China
'I don't think you will ever manage to do this.' lit.: 'If you ever manage to do this, then I am the emperor of China.'

This shows that the antecedent clause is more independent in the *dass ich nicht lache* construction and the *and-quodlibet* than in the Incredulity Response Construction and the *then-quodlibet* variant.

Dass ich nicht lache is syntactically more flexible than the *quodlibet*-continuation: it can be parenthetically

*Dass ich nicht lache* is syntactically more flexible than the *quodlibet*-continuation: it can be parenthetically inserted inside a noun phrase, see (6). The *quodlibet*-continuation does not allow for such parenthetical uses.

- (6) a. ... dass es um etwas anderes geht, als ein ... Denkmal von hoher (dass ich nicht that it about something else goes than a monument of high that I not lache) Fachwerk-Qualität"?

  laugh half-timbering quality
  - "...that it is about something else than a ...monument of high (don't make me laugh) quality of half-timbering." (deTenTen23)
  - b. \*...von hoher (und ich bin der Kaiser von China) Fachwerk-Qualität?

We can conclude from this that the difference in the NPI-licensing potentials are due to general properties of the construction, independent of whether they express that the speaker is the emperor of China.

### 2.4 Literal or non-literal meaning?

We saw above that the *quodlibet*-continuation does not introduce a negation that would license an NPI in its antecedent. In general, it is not a morpho-syntactically or semantically negative clause. Instead, it seems to behave just as its literal meaning.

To make this point, consider the following two German temporal *quodlibet*-expressions: (am/bis zum) Sankt Nimmerlein(s)tag '(on/untill) Saint Never Day' and wenn Ostern und Weihnachten auf den selben Tag fallen 'when Easter and Christmas fall on the same day'. Both refer to a never-occurring point in time. Consequently, they can be used to express that something is never going to happen or that it will last forever, see (7).

(7) Das heißt, er [your wish] wird sich nie erfüllen, er wird erst am Sank Nimmerleinstag Realität. 'This means that it will never come true, it will only become reality on Saint Never Day' (deTenTen23)

Just like the *and-quodlibet* continuation, they do not license NPIs nor do sentences containing them pass any tests for negated sentences in German (such as the *oder doch* confirmation tag). Instead, the negative meaning arises from the fact that these temporal expressions refer to times that never occur in the real world. This shows that there is a number of different means to use unsatisfiable literal meaning and still arrive at a sensible interpretation through some pragmatic inference.

The importance of the literal meaning becomes even more evident in the light of lexical variation attested for the *quodlibet*-continuation. In (8), the speaker first utters the *quodlibet*-continuation in its canonical form. This is followed by a variation of the subject and the predicative noun, where both are chosen in a way to be at least as extreme and improbable as the speaker being the emperor of China.

- (8) ... und ich bin der Kaiser von China. Und der Schwiegersohn des Tankwarts meines Kollegen ist der Zauberer von Oz.
  - "... and I am the emperor of China. And the sun-in-law of the gas station attendant of my colleague is the Wizard of Oz."

Again, this kind of variation seems to require that the idiom be interpreted literally, even though it cannot be true in the actual world.

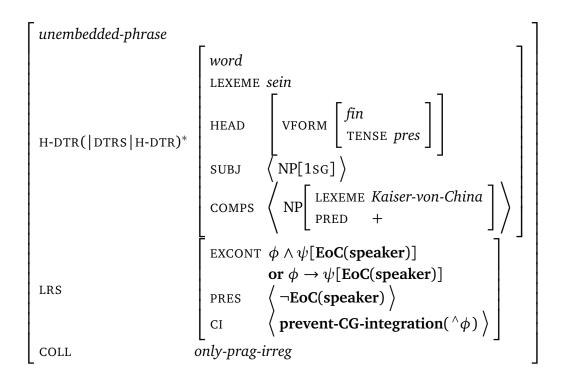


Figure 1: Sketch of the phrasal lexical entry of the German emperor-of-China-construction

# 3 Analysis

The *quodlibet*-continuation is a phrasal construction. I sketch its analysis in Fig. 1. It is clausal, and, in fact, has the status of an independent utterance (type: *unembedded-phrase*). Its syntactic shape is regular and its literal meaning is composed in the ordinary way. We can use the architecture of phraseological clauses from Richter & Sailer (2009) or Kay et al. (2015) to express this. In Sailer (2010) I propose an extension of the typology of idiosyncrasy from Fillmore et al. (1988) and its HPSG adaptation in Richter & Sailer (2009) to include also pragmatic idiosyncrasy. This is necessary here, as the only idiosyncrasy in this phrase is at the level of pragmatics, as elaborated on below. Given this extension, the phrase is marked as *only-prag(matically)-irr(egular)* in its COLL value, which is were idiosyncrasy is dealt with in Richter & Sailer's proposal.

The specification of the phrasal lexical entry needs to be such that it is compatible with both the *and-quodlibet* and the *then-quodlibet* variant. This can be achieved by leaving most of the syntax unspecified and requiring that it has a regular syntactic structure. What needs to be specified, though, is the following: (i) The phrase is an independent utterance. Specifying the sign as an *unembedded-phrase* restricts the possibility of a verb-final realization. (ii) The lexical head is a form of the verb *sein* 'be' and in present tense. These requirements are directly expressed in the specification of the lexical head in the phrase. (iii) The speaker must be the subject and there is a predicative NP *der Kaiser von China* 'the emperor of China'. These properties can be enforced through constraints on the elements of the SUBJ and COMPS lists of the lexical head respectively. The subject is required to be first person singular. The complement must be a predicative noun phrase whose LEXEME (or LID) value is *Kaiser-von-China*. It is reasonable to assume that the expression *Kaiser von China* 'Emperor of China' is lexicalized in German, but a further decomposed treatment would be possible as well – and has just been ignored here for reasons of space.

The two different syntactic realizations and the blocking of additional syntactic material should follow from the very precise semantics given in the EX(TERNAL-)CONT(ENT) value.<sup>2</sup> The EXCONT value corresponds to the overall semantic representation of the phrase in the system of *Lexical Resource Semantics* (LRS, Richter & Sailer 2004), which I assume here. Other approaches to the syntax-semantics interface are equally possible, of course. My choice is determined by a reviewer's demand to be as precise as possible and by the fact that LRS has been used in the past to model phenomena a the semantics-pragmatics interface in HPSG, such as Hasegawa & Koenig (2011) and Sailer (2024), to mention just two.

To address the meaning, I assume the semantic-pragmatics interface from Levinson (2000) in the form pre-

<sup>&</sup>lt;sup>2</sup>The constant **EoC** is short for **Emperor-of-China**.

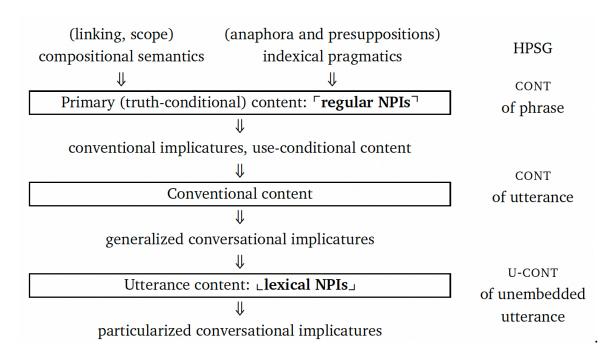


Figure 2: The semantics-pragmatics interface from Sailer (2024, 161)

sented in Sailer (2021) and integrated into HPSG in Sailer (2024), see Fig. 2.<sup>3</sup> My analysis will make use of most of the pragmatic ingredients of this model: presuppositions, use conditional content/conventional implicatures, and generalized conversational implicatures (GCI). As indicated in the figure, presuppositions are part of the primary truth-conditional content (though typically not at issue). Together with conventional implicatures/use conditional content, this forms the *conventional content*.

This model treats GCIs as part of the linguistic representation of an utterance as they have an influence on the (overall) truth conditions (Levinson, 2000) and on the licensing of NPIs (Sailer, 2021). They are part of the *utterance content*. GCIs are treated as monotone enrichment of the semantic representation of the conventional content. This means that material can be added (for example for strengthening an inclusive *or* to an exclusive *or*, or to add implicit arguments). Sailer (2021) encodes GCIs as rewriting rules on semantic representations and draws a parallel to the effect of post-lexical rules in phonology as treated in Höhle (2019). Particularized conversational implicatures (PCIs) are, however, left outside of the linguistic sign in this model. According to Sailer (2021) they do not trigger any grammatically relevant effects.

Given this architecture, we can now look at the semantics and pragmatics of the *quodlibet*-continuation. The construction comes with two conventional non-at-issue meaning components: First, the presupposition that the speaker is not the emperor of China. This is expressed with the formula ¬EoC(speaker) in the PRES(UPPOSITION) list in Fig. 1. Second, the use-conditional meaning that the speaker wants to prevent the antecedent to be integrated into the common ground. The encoding in Fig. 1 follows the treatment of verum focus in Sailer (2022).

With a global accommodation of the presupposition, a sentence of the *then-quodlibet* variant has a semantic representation of the form  $(\phi \to \psi) \land \neg \psi$ , where  $\phi$  is the semantic representation of the antecedent and  $\psi$  that of *ich bin der Kaiser von China* 'I am the emperor of China'.

Matters are a bit more challenging for the *and-quodlibet* variant. After global accommodation of the presupposition, the semantic representation is of the form  $(\phi \land \psi) \land \neg \psi$ . This formula is always false. A look at the GCIs triggered by coordination allows us to assimilate the meaning of *and-quodlibet* to that of *then-quodlibet*. Horn (2004) provides a convincing argument in favor of deriving enriched readings of coordination by GCIs. He illustrates this with the temporal reading of *and* (*They got a baby and married.* vs. *They married and got a baby.*). The same argument applies to the causal or inferential uses of *and* – as in *The earth rotates and we experience day and night.*), which is interpreted with an implicit "*and, therefore.*" To model this, I assume a CGI that can map an expression  $(\phi \land \psi)$  in the conventional content to an expression of the form  $(\phi \rightarrow (\phi \land \psi))$  in the utterance content.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup>Please ignore the terms *regular NPIs* and *lexical NPIs*. These do not play a role here, but were included in the original figure.

<sup>&</sup>lt;sup>4</sup>I need to modify the formalization of GCIs from Sailer (2021) slightly. Sailer's GCIs are rewriting rules at the mapping between

With this GCI, the original semantics of the *and-quodlibet*,  $(\phi \land \psi) \land \neg \psi$ , can be rewritten as  $(\phi \rightarrow (\phi \land \psi)) \land \neg \psi$ . This formula is logically equivalent to the semantic representation of the *then-quodlibet* variant,  $(\phi \rightarrow \psi) \land \neg \psi$ . As such, it is no longer contradictory but is true if and only if both  $\phi$  (the antecedent) and  $\psi$  (that the speaker is the emperor of China) are false.

Let us now consider the use-conditional content. It is identical to what Gutzmann et al. (2020) propose for VERUM focus, and also used in Sailer (2021). There, it is expressed as a conventional implicature of the form **prevent-downdate**( $^{\wedge}\phi$ ). This has the effect of preventing the proposition  $^{\wedge}\phi$  to be considered part of the common ground.

I treat the common ground management as a use-condition. Following the model in Fig. 2, it is integrated into the conventional content of an utterance at the highest level. Consequently, there is no difference in the effect between the two variants of the *quodlibet* construction with respect to it.

Taken together the two non-at-issue semantic contributions of the *quodlibet* construction guarantee: that (i) the sentence is only true if the antecedent is false, and (ii) speaker signals that the antecedent should not be integrated into the common ground. This takes care of the semantics and pragmatics of the construction.

We should briefly address a final point: Why does the *and-quodlibet* variant seem to make no truth-conditional contribution (see (3))? The reason seems to lie in the fact that the two conjuncts – the antecedent and the *quodlibet*-continuation – do not have the same truth value. The response pattern of a sentence like *Es regnet und es regnet nicht* 'It is raining and it is not raining' would be just the same as in (3).

### 4 Conclusion

I have discussed empirical properties of the *quodlibet*-continuation in German. These established that this is a specialized, idiosyncratic construction, which, nonetheless, has a regular syntactic structure, and is interpreted in a standard way with its literal meaning. I proposed a fairly underspecified phrasal lexical entry to capture the syntactic regularity and flexibilty. As its construction-specific meaning, I propose that it introduces the presupposition that the speaker is not the emperor of China and a use-conditional meaning that the antecedent of the construction should not be integrated into the common ground. The presupposition is sufficient to get the correct reading for the conditional variant of the construction. For the coordination variant, we arrive at a meaning that is identical to that of the conditional variant via a generalize conversational implicature.

HPSG makes it possible to formulate the complex syntactic, semantic, and pragmatic properties of the *quodlibet*-continuation: A **constructional framework** is required to express the syntactic idiosyncrasy. However, it must also allow for the appropriate degree of underspecification to capture that (i) the construction is overall built according to the general rules of the language, and (ii) it comes in two syntactically different variants. A concrete proposal of the **semantics-pragmatics interface** is necessary to allocate the different meaning components of the construction and to indicate which aspects are idiosyncratic and, thus, need to be expressed in the lexical description of the construction, and which ones follow from general semantic combinatorics or from general mechanisms of meaning enrichment.

The proposal extends naturally to the other cases mentioned in passim, such as the temporal expressions of the type <code>Sankt Nimmerlein(s)tag</code> 'Saint Never Day' and the phraseological clause <code>dass ich nicht lache</code> 'don't make me laugh'. Similar expressions can be found in other languages, such as English <code>and I</code> am the <code>Queen of Sheba/England</code>. We also find spontaneous instantiations of such <code>quodlibet</code> reasoning. For such, nonconventionalized cases, I would assume that they are dealt with in the same way as the <code>quodlibet</code>-continuation construction here, but they most likely derive purely from ad-hoc application of Gricean reasoning instead of lexically prespecified presuppositions and conventional implicatures.

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the conventional content and the utterance content. They take the form  $\alpha \mapsto_{GCI} \beta$  and are interpreted as follows: When the formula  $\alpha$  occurs in the conventional content, it can be replaced with the formula  $(\alpha \land \beta)$  in the utterance content. This way, GCIs always enrich the semantic representations and do not remove material. However, Sailer's formulation is too restrictive. I will, therefore, adopt the following, weaker definition of GCIs: For any formula  $\alpha$  and  $\beta$ , such that  $\alpha$  is a subformula of  $\beta$ :  $\alpha \mapsto_{GCI} \beta$  is interpreted as follows: When the formula  $\alpha$  occurs in the conventional content, it can be replaced with  $\beta$  in the utterance content. This new definition maintains the idea of enrichment of the formula but is more flexible.

<sup>&</sup>lt;sup>5</sup>Gutzmann et al. (2020) use "downdate" to express the idea that a question under discussion is settled with a proposition p.

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