# Behabitive Reports

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#### Abstract

A family of illocutionary verbs, "verbs of judging" or "behabitives", like criticize or praise, show a curious ambivalence regarding the role played by their complement, which can be an **object** or a **content** of judgment. We argue that these verbs assign two different propositional arguments, though for syntactic reasons, only one can be expressed in any sentence, and propose an analysis consisting in a uniform semantic definition where the argument that is not expressed is nonetheless understood to be there, as a definite (in the object case) or an indefinite (in the content case).

## 1 The Problem: Locution or illocution?

"Behabitives" (Austin 1962: 160), or "verbs of judging" (Fillmore 1971b: 273), like *praise* or *criticize*, are illocutionary verbs, reporting certain speech acts. But can they also be locutionary verbs, quotation verbs, reporting speech?

The data give conflicting answers. Judging from (1), they cannot; this sentence does not entail the sentence coming from it by substituting said for criticized and carrying out the other, syntactic, changes made necessary by that substitution, (3i). It entails (3ii), a sentence resulting from substituting said and including a general negative moral judgment predicate, act wrongly. But then, so does (2), a sentence which includes that predicate already; this sentence does entail the result of substituting said for criticized and carrying out the corollary changes. If (2) were to pattern with (1), it should entail (3iii), which it does not. In fact, (1) and (2) seem to mean more or less the same.

- (1) John criticized Herod for marrying Herodias.
- (2) John criticized Herod for acting wrongly in marrying Herodias.
- (3) (i) John said that Herod had married Herodias.
  - (ii) John said that Herod acted wrongly in marrying Herodias.
  - (iii) John said that Herod acted wrongly in acting wrongly in marrying Herodias.

Furthermore, judging from (1) the verb *criticize* is a factive verb, triggering the presupposition corresponding to the proposition expressed by the gerund phrase (its empty subject controlled by the DP complement) – that Herod had married Herodias; but judging from (2) this is not so: this sentence does not presuppose that Herod acted wrongly in marrying Herodias.

This confusing state of affairs is no accident of English. In German, say, the verb *kritisieren*, which typically takes a clausal, *dass* 'that' complement, exhibits the same ambivalence in regard to the role played by the proposition expressed by that clause: it can be what the matrix subject somehow uttered a criticism of, as in (4), or it can be what the matrix subject uttered as a criticism, as in (5).

- (4) Einstein kritisierte, dass Bohr die Kausalität aufgegeben hatte. 'Einstein criticized Bohr for having abandoned causality.'
- (5) Einstein kritisierte, dass Bohr voreilig die Kausalität aufgegeben habe. 'Einstein criticized Bohr for having prematurely abandoned causality.'

In (4), what Einstein uttered is not specified, but whatever it was it was understood as a criticism of the fact that Bohr had abandoned causality, while in (5), what Einstein uttered was that Bohr had prematurely abandoned causality, – and this is understood as a criticism of some familiar fact (in this case probably the fact that Bohr had abandoned causality). Note that in the latter sentence only, the finite verb in the complement clause is in the present subjunctive – a fact we will return to in due course.

Note also that provided (5) does report a criticism of the fact that Bohr had abandoned causality, (4) and (5) seem to have a common entailment like (6):

(6) Einstein said/wrote that Bohr acted wrongly in abandoning causality.

Here we reencounter the kind of general negative moral judgment predicate that we saw in (2) and in (3ii), and we see that the reason that (1) and (2) meant more or less the same is that the moral judgment predicate in (2) was so general; the negatively flavoured adverb *voreilig* 'prematurely' is much more specific (as we will see, the relevant locutions come in a wide array of forms and flavours).

We will be saying that in one case, exemplified by (1) and (4), the complement proposition is the **object** of judgment, and that in the other case, exemplified by (2) and (5), it is the **content** of judgment. Let us refer to the two cases as the **O** case (for "object") and the **C** case (for "content"), respectively.

Evidently, in the O case, to criticize  $\alpha$  for doing P is to say something conveying disapproval of  $P(\alpha)$ , whereas in the C case, it is to say  $P(\alpha)$ , thereby conveying disapproval of something  $\alpha$  has done or is doing. Only in this case is the verb a quotation verb, reporting a locution as well as an illocution.

What we have been loosely referring to as a negative moral judgment predicate we will term the **evaluative element** the presence of which in the complement clause is, as it appears, necessary (maybe even sufficient) for the C case.

We are faced with a seeming ambiguity: a verb  $criticize_1$  which is not a verbum dicendi and another verb  $criticize_2$  which is. However, there are clearly strong semantic ties between the two, and the double-naturedness seems systematic, across verbs and across languages; the challenge, then, lies in reconciling these observations through an analysis that predicts the (il)locutionary alternation in the behabitive attitude verb in a systematic way. To that end, we need a clear understanding of the two cases and the constraints they are subject to.

The rest of the paper is structured as follows. In Sect. 2, we address the various syntactic environments behabitive verbs occur in (including quotation marks), noting the constraints they put on one or the other interpretation and trying to explain those constraints. In Sect. 3, we turn to the semantic requirements posed by one or the other interpretation, exploring, in particular, the evaluative element characteristic of the content case interpretation. In Sect. 4, we develop a formal analysis, relating the two interpretations to a unitary format and motivating their distinctive properties. Sect. 5 brings concluding remarks.

## 2 Object or Content of Judgment: Syntactic Properties

The Object – Content ambivalence in the propositional argument of behabitives cuts across several constructions, but there are also constructions that definitely favour one or the other of the cases. In particular, the (C)ontent case correlates with certain grammatical characteristics of quotations. In this section, we will explore this terrain, mapping the syntactic features and environments that are necessary or sufficient for this case to obtain.

#### 2.1 Janus-faced abstract DP arguments

Note, first, that both in English and in German, a verb like *criticize/kritisieren* can take a single, proposition-type DP argument, usually a definite description built around a deadjectival or deverbal noun, and that even then, the C case is a viable alternative beside the O case, as witnessed by (7a-b) and (8a-b):

- (7) a. The principal addressed the student body and criticized the content of our show.
  - b. The principal addressed the student body and criticized the immoral content of our show.
- (8) a. Der Trainer kritisierte das Deckungsverhalten seiner Truppe. the coach criticized the coveringconduct his<sub>GEN</sub> troop 'The coach criticized his team's defense work.'
  - b. Er kritisierte das zu lasche Deckungsverhalten seiner Truppe. he criticized the too lax coveringconduct his $_{\rm GEN}$  troop 'He criticized his team's too lax defense work.'

From (7a), we can conclude that the principal said something to the effect that our show should have had a different content from what it had, but from (7b) we can conclude that (s)he said that our show had an immoral content – which is one way of saying that it should have had another content. In other words, the valency frame where the verb selects for a DP with a propositional content fails to discriminate between an object and a content role for that content.

#### 2.2 Embedded V2 Clauses in German: C only

In German, there are two ways to construct a declarative complement clause: as a subordinate, verb-final clause introduced by the subjunction dass 'that',

or as a verb-second clause without a complementizer. The C role is compatible with both realizations, as illustrated in (9a-b):<sup>1</sup>

- (9) a. Platon kritisierte, dass die Rhetorik unmoralisch ist.
  Plato criticized that the rhetoric immoral is
  'Plato criticized rhetoric as immoral.'
  - b. Platon kritisierte, die Rhetorik ist unmoralisch. Plato criticized the rhetoric is immoral 'Plato criticized rhetoric as immoral.'

But the O role is only compatible with the subordinate clause realization:

- (10) a. Platon kritisierte, dass die Sophisten Rhetorik lehrten.
  Plato criticized that the Sophists rhetoric taught
  'Plato criticized the Sophists for teaching rhetoric.'
  - b. ??Platon kritisierte, die Sophisten lehrten Rhetorik. Plato criticized the Sophists taught rhetoric

It is possible to make sense of (10b), but only if teaching rhetoric can safely be taken to imply something negative; the object of criticism is then left implicit.

What is the reason that only the C role is compatible with the V2 realization? Truckenbrodt (2006), building on Reis (1997) and Gärtner (2002), develops a theory of V2 clauses predicting a range of semantic restrictions on embedding predicates, inter alia, that they cannot be factive. If case O kritisieren is factive, its incompatibility with embedded V2 clauses is thus immediately accounted for.

#### 2.3 Subjunctive in German Complement Clauses: C only

In German, indirect quotation is normally marked by a subjunctive verb form (the *Referatkonjunktiv*).<sup>2</sup> Thus the C case examples in (9) could equally well, or would probably, be formulated as in (11):

- (11) a. Platon kritisierte, dass die Rhetorik unmoralisch sei / wäre.
  Plato criticized that the rhetoric immoral is<sub>subj-pres/past</sub>
  'Plato criticized rhetoric as immoral.'
  - b. Platon kritisierte, die Rhetorik sei / wäre unmoralisch. Plato criticized the rhetoric is<sub>subj-pres/past</sub> immoral 'Plato criticized rhetoric as immoral.'

A close look at (9) reveals that the tense is a relative present even though the mood is indicative – again, this is typical of reported speech. In (10), however, we find an absolute past (or a past subjunctive substitution for a nondistinct relative present subjunctive); so the two cases correlate with distinct forms of the finite verb in the indicative as well. The subjunctive enhances the contrast: irrespectively of verb-last or verb-second, the O case is incompatible with it.

<sup>&</sup>lt;sup>1</sup>Note that a subjunctive finite verb form is a default in these cases; we turn to that in 2.3.

<sup>&</sup>lt;sup>2</sup>A present or present perfect tense Referatkonjunktiv is mandatory in writing; in speech, past or past perfect subjunctive forms predominate in the same function.

a. ??Platon kritisierte, dass die Sophisten Rhetorik lehren würden.
 Plato criticized that the Sophists rhetoric teach would
 b. ??Platon kritisierte, die Sophisten würden Rhetorik lehren.
 Plato criticized the Sophists would rhetoric teach

Note that there is a slightly different reason for this than for the V2 constraint: while the latter rests on the resistance of V2 to factivity, the former is grounded on the presupposition that the content of the clause be uttered, a presupposition the C case can comply with but not the O case (for a discussion of the relevant features of the *Referatkonjunktiv* see Fabricius-Hansen and Sæbø 2004).

#### 2.4 German Correlative Complement Clauses: O only

Conversely, only the O case is compatible with a pronominal (es 'it') expletive, or Korrelat 'correlate', for the complement clause.

- (13) a. Platon hat es kritisiert, dass die Sophisten Rhetorik lehrten.
  Plato has it criticized that the Sophists rhetoric taught
  'Plato criticized the Sophists for teaching rhetoric.'
  - b. ??Platon hat es kritisiert, dass die Rhetorik unmoralisch ist. Plato has it criticized that the rhetoric immoral is

Though there is considerable literature on the syntactic status of the correlate (e.g. Büring and Hartmann 1995, Müller 1995, Vikner 1995, or Sudhoff 2004), the semantic picture is much less developed. One of the two "crucial questions ... not ... touched on" by Sudhoff (2004) is

whether the classification of matrix verbs ... corresponds to certain semantic properties of the verbs, i.e. whether it is possible to predict the (in)compatibility with correlate-es from their meaning.

This question, however, "cannot be answered in a straightforward way. Several proposals have been made ..., none of which seem to be entirely conclusive" (Sudhoff 2004: 23). Our intuition is that es signals that the complement clause it correlates with is not quite discourse-new. It agrees with factives like bedauern 'regret' (the strings hat es bedauert, dass and hat bedauert, dass are equally frequent) but it disagrees with verbs of saying like behaupten 'claim' (except in contexts such as niemand hat es behauptet, dass 'noone has claimed that'); between these two extremes there are many verbs, including verbs of saying, where es seems to imply that the proposition expressed by the correlative clause is already under consideration in the discourse.

If this is more or less correct, it suggests that case C judgment verbs resist the correlate because the content of judgment is in essential part discourse-new.

#### 2.5 Complement Clause or DP + Predicative Phrase

What we have (in Section 1) called the "evaluative element" which has to be present in a C case behabitive complement clause – for instance, act wrongly –

can have a separate mode of expression in a small clause predicate introduced by a particle such as English *as* or German *als*. Consider (14):

(14) Die Ärzte kritisieren (es) als unethisch, dass das Medikament jetzt the doctors criticize it as unethical that the drug now auf den Markt gebracht wird.

on the market brought becomes

One would think that once the evaluative element – here, unethical – has been safely put away, so to speak, in another phrase, the propositional complement is always the pure object of criticism, an objective fact, as in (14) indeed it is. However, this does not seem to be the case; we do encounter cases like (15):<sup>3</sup>

(15) Die Ärzte kritisieren (es) als unethisch, dass das Medikament the doctors criticize it as unethical that the drug zu einem Zeitpunkt auf den Markt gebracht werde, wo to a timepoint on the market brought becomes<sub>subj-pres</sub> where die Nebenwirkungen noch nicht genügend bekannt seien. the sideeffects yet not sufficiently known are<sub>subj-pres</sub> 'Doctors criticize the decision to put the drug on the market at a time when side effects are not yet sufficiently known as unethical.'

It is perhaps not so clear from the English paraphrase, but the subjunctives in the complement clause show that we are dealing with a C case (the extra evaluative element, over and above *unethisch* 'unethical', residing in the adverb (nicht) genügend '(not) sufficiently'). We can imagine the doctors issuing the statement (16) and being reported to have done so with (15):

(16) The side effects of this drug are not yet sufficiently known. Putting it on the market now is therefore unethical.

In English, the "subject" of a small clause with a predicate introduced by as is mostly a DP, and often a DP that appears to denote a type e entity, as in (17):

(17) Opponents criticize the building as too high.

We wrote in Sect. 1 that to criticize  $\alpha$  for doing P is in the C case to say  $P(\alpha)$  and thereby convey one's disapproval of some action of  $\alpha$ . More generally, we can say that to criticize  $\alpha$  for – or as – P is (in the C case) to say  $P(\alpha)$  and thereby convey one's disapproval of some fact about  $\alpha$ . But even if we do, what is the relevant fact in a case like (17), about, here, the building?

It seems clear to us that criticism of a person or thing is not the conveyance of disapproval of that person or thing *per se*. The disapproval one ascribes to a person when one describes that person as criticizing something is generally a counterfactual desire, so if that something is a type e entity, an individual,

 $<sup>^3</sup>$ One may ask why, apparently contradicting the claim made in Sect. 2.4, the correlate es is possible here; the answer seems to be that – independently of the behabitive verb – a predicate like unethisch requires a subject correlate when the subject clause is extraposed.

what the person disapproves of, wishing it were otherwise, is the fact that the entity has a certain property or set of properties.

More specifically, the relevant fact about the building in cases like (17) or (18) is, in our view, that it has the relevant properties it actually has, and here the relevant properties seem to be properties pertaining to height, the relevant fact being simply that the building is as high as it (actually) is. In (18), the relevant properties are those pertaining to aesthetic appearance.

(18) Opponents criticize the building as an eyesore.

We will return to this issue when we develop our formal analysis in Sect. 4.

To sum up, the constructions involving a small clause predicate introduced by a(l)s are consistently C case insofar as that predicate is an evaluative element, characteristic of the C case. This does not, however, exclude that a propositional participant appearing in the role of small clause subject is also a C case actant. To criticize someone/something  $\alpha$  as P is to say that  $\alpha$  is P and thereby convey one's opinion that  $\alpha$  should not have all the properties s(h)e or it actually has, – and particularly not the ones that pertain to P.

## 2.6 Quotation Mixed and Pure

Across languages, "mixed quotations", where a proper part of a clause is marked as direct quotation (cf. e.g. Cappelen and Lepore 2005, Geurts and Maier 2005) show a very clear preference for the C case.

- (19) The State Department has criticized Iraqi President Saddam Hussein for using "very brutal means" to suppress civil unrest.
- (20) Seehofer lobte, dass Merkel "Großartiges" erreicht habe. Seehofer praised that Merkel "grand" achieved have<sub>subj-pres</sub> 'Seehofer praised Merkel for achieving "great results".'

Is this clear preference an absolute correlation? Although in theory, there may be other reasons for inserting a piece of direct quotation in a judgment report than to represent some evaluative element, we find that in practice, it is difficult not to interpret such an insertion as something that helps constitute a criticism.

(21) a. My boss has criticized me for not publishing anything for "a decade".

(21a) hardly has a reading entailing that my boss uttered something extraneous conveying dismay at my not publishing anything for what she called a decade; maybe she uttered the whole of (21b), but the first half of this two-sentence text suffices to convey dismay at my not publishing anything for ten years.

(21) b. You have not published anything for a decade. That is unfortunate.

To test properly whether the O case is at all compatible with a piece of quotation in the propositional argument, we could insert one in a German "O case only" construction (cf. Sect. 2.4):

(22) Sie kritisierte es, dass das Ministerium ein Kopftuchverbot für she criticized it that the ministry a hijab ban for Schülerinnen für "nicht mit der Landesverfassung vereinbar" hält. schoolgirls for "not with the stateconstitution compatible" holds 'She criticized the Ministry for ruling that a hijab ban for schoolgirls is "incompatible with the State Constitution".'

It is fully possible to make sense of this sentence, but the natural way to do so is to ultimately attribute the quote not to the criticizer but to the criticizee, – while also, it would seem, inferring that the criticizer is quoting the criticizee. In conclusion, it seems as if a behabitive report containing a piece of quotation attributable to the agent of the report alone can only be interpreted as reporting her locution, the content of, here, criticism.

Be this as it may, when the judgment report is directly quotational *in toto*, as in the German sentence (23), there can be no doubt that a content of judgment is being reported:

- (23) "Das war taktisch völlig falsch", kritisierte der Coach. "that was tactically totally wrong" criticized the coach
- (24) "Ist das kinderfreundlich?" kritisierte er. "is that childrenfriendly?" criticized he

The object of criticism is in both (23) and (24) a proposition referred to by the anaphoric pronoun das 'that' (in the context of (23), it is the fact that the team played long balls in the second half of the match, in the context of (24), it is the fact that the TV sets were mounted high on the walls of the hotel rooms). Disapproval of these facts is reported to have been conveyed by, primarily, the adjective phrase völlig falsch 'totally wrong" and the adjective kinderfreundlich 'child-friendly', respectively – but note that in (24), this positive predicate is, essentially, literally called into question by the interrogative.

## 3 Object or Content of Judgment: Semantic Properties

The Object—Content alternation in the propositional argument of behabitives has some semantic correlates, in the lexical material making up the argument; first and foremost, the presence of a negative (for verbs like *criticize*) or positive (for verbs like *praise*) evaluative element is a condition for the C case to obtain. In this section, we explore the various forms this element can take, and we ask whether a given argument can evince a C case / O case ambiguity, depending on how a certain element is interpreted. We also investigate the ways in which the object of judgment can be expressed in or inferred from a C case argument, distinguishing between a "big" and a "small" C case; in examples of the latter type, the propositional argument practically consists in the evaluative element (from here on also: the EE) (to this we turn in Sect. 3.3).

#### 3.1 Evaluative Elements (EEs): Clear and less clear cases

The EEs encountered so far – more exactly, from Section 1 through Section 2.5 – are relatively easy to identify:  $act\ wrongly$ , voreilig 'prematurely', immoral, the degree modifier zu 'too', unethisch 'unethical',  $nicht\ gen\"{u}gend$  'not sufficiently', the degree modifier too,  $an\ eyesore$ . In the cases of mixed quotation considered in Section 2.6, quotation marks help identify the EEs as  $very\ brutal$ ,  $a\ decade$ , and  $Gro\betaartiges$  'something great', and in the examples of direct quotation, the EEs are  $v\ddot{o}lliq\ falsch$  'totally wrong' and kinderfreundlich 'child friendly'.

The degree modifier too is a particularly clear case, in more than one regard.<sup>4</sup> It is clearly evaluative, as it is (or necessarily interacts with) a (possibly covert) modal dependent on a normative ordering source, and it has a nonevaluative, "objective" counterpart in the locution  $as \ldots as \ldots (actually) \ldots$ , so that the corresponding O case is closely comparable to the C case:

- (25) a. Dostoevsky criticized the book for having too many psychological details.
  - Dostoevsky criticized the book for having as many psychological details as it did.

As noted in Section 1 in connection with (1) and (2), the C case example and the O case example, sharing much of their lexical material and their syntax, have roughly the same meaning here. As we will see in Section 3.2, however, it is far from always so easy to detach the EE from the propositional argument, reconstructing the O case proposition from the rest.

Nor is it always easy to decide whether a given element is evaluative, or evaluative in the sense of inducing a C case reading of the propositional complement. Consider the predicate being a Socialist – as (26) suggests, it can be evaluative and induce a C case reading, but as (27) suggests, it can also be nonevaluative and form part of an O case complement – and only the broader context, plus world knowledge and cultural knowledge, can give a definitive answer.

- (26) Obama has been criticized for being a Socialist.
- (27) Luxemburg was not only criticized for being a Socialist she was assassinated for being one.

As is obvious to anyone familiar with U.S. politics from 2008 onwards, (26) is not intended to presuppose that Obama is a Socialist, but just as obviously, at least to anyone faintly familiar with early 20th century European history, (27) is intended to presuppose that Luxemburg was a Socialist.

Many EEs can be classified as so-called Predicates of personal taste (cf. Lasersohn 2005 and Stephenson 2007), like *eyesore* in (18) or *hässlich* 'ugly' in (28).

(28) "Ich finde Noldes "Nadja" hässlich", kritisiert Lea. "I find Nolde's "Nadja" ugly", criticizes Lea.

<sup>&</sup>lt;sup>4</sup>See Meier (2003) for a thorough treatment of this modifier and its dual enough.

Such predicates are said to depend, for their intension or extension, on a judge, where some think of the judge as a semantic index while others regard it as a contextual parameter. On the basis of "subjective" attitude verbs like *finden* 'find' in (28), Sæbø (2009) argues that the judge index or parameter is relevant not only for Predicates of personal taste but also for, in particular, expressions like the modal modifier *too*, a prominent EE in C case reports of criticism.

The emerging picture is that EEs inducing C case readings span a wide range, from relatively 'hard-wired' (second-order) negative judgment predicates like wrongly and immoral through modal expressions like too and insufficient and personal taste predicates like ugly and eyesore to 'labile' elements like Socialist where evaluativity is context- and culture-dependent, as well as expressions like a decade, where so-called Expressive meaning (cf. Potts 2007) may play a role, insofar as an attitude is conveyed by a particular lexeme signalling something over and above its contribution to the content at issue or to truth conditions. Note that on the one hand, intersubjectivity does not appear to be necessary – the speaker of (26) may herself not associate anything negative with Socialist – but on the other hand, it seems necessary, if nothing else (such as German V2 or subjunctive, a predicative phrase, quotation mixed or pure) excludes the O case, for speaker and hearer to be aware that the subject of the report is likely to associate something negative with the element at issue.

## 3.2 "De Re" Readings of O case VPs

Sometimes, the speaker chooses to represent the object of criticism in a guise that the subject would not subscribe to. The proposition the subject is reported to convey her / his disapproval of is not the proposition resulting from a regular, de dicto reading of the embedded (gerund) clause, but one resulting from what seems to be a de re reading of that clause. (29) is a case in point. By contrast, the clause in (30) is probably to be interpreted in the customary, de dicto way.

- (29) The Senator is criticizing Obama for keeping his top domestic promise.
- (30) The reporters are being criticized for keeping their promise to protect their source.

Regarding (29), however, the proposition the Senator is reported to be conveying her disapproval of is not the proposition that Obama is keeping his top domestic promise (she might not be aware that he is) but – for example – the proposition that he is reforming the health care system. In the actual world, these two VPs – reforming the health care system and keeping his top domestic promise – are coextensional, they are two descriptions of one action.

There would seem to be two main ways to model this intuition.

• In analogy with the treatment of de re readings of nominals offered, e.g., by von Fintel and Heim (2009), index the VP keeping...promise (VP<sub>1</sub>) with a variable  $w_0$  for the actual world so that this proposition ensues:  $\{w: \text{Obama is in } w \text{ the agent of the event that VP}_1 \text{ describes in } w_0\}.$ 

• In analogy with the treatment of de re readings offered by Maier (2006), substitute the context-determined, coextensional VP reforming...system (VP<sub>2</sub>) and read that de dicto so that this proposition ensues:

 $\{w : \text{Obama is in } w \text{ the agent of the event that } \mathsf{VP}_2 \text{ describes in } w \}.$ 

As far as nominals (mostly, definite and indefinite descriptions) are concerned, the first option is standard in natural language semantics, while the second, 'relational' type of analysis (VP<sub>2</sub> would be the 'acquaintance relation' that the subject has to the event) is more at home in philosophy of language.

This second option appears to us decidedly more adequate for the case at hand. But this approach has been criticized as being noncompositional (von Stechow and Zimmermann 2004), at least in regard to the belief contexts to which it is commonly applied. However, it might just be possible to emulate a relational theory of de re here in a compositional way, exploiting the fact that VPs like keep his top domestic promise or do exactly the same thing she has just now done as occurring in (31) are in a sense second-order predicates, 'criterion predicates' according to Kearns (2003), 'abstract predicates' according to Sæbø (2008).

(31) She criticized her husband for doing exactly the same thing she has just now done.

Sæbø (2008) provides an analysis of abstract predicates as having an argument slot for a "concrete", first-order predicate, e.g., reform the health care system. In line with that analysis, we can assume that a predicate like keep...promise (=  $\kappa$ ) may presuppose a predicate P such that P is his top domestic promise:

$$[\![\kappa]\!]_v = \lambda e : \langle P | \mathcal{K}_v(P) \rangle. P_v(e)$$
  
(notation:  $\lambda e : \langle \text{presupposition} \rangle. \text{ content}; v \text{ for the 'actual' world})$ 

The de re interpretation of the overt, abstract predicate  $\kappa$  thus reduces to this:  $\mathcal{K}$  exhausts its role in restricting the presupposed covert, concrete predicate P, extensionally; once P is embedded in a context like criticize...for, it is read  $de\ dicto.\ P$  mimics the 'acquaintance relation' in a relational analysis of  $de\ re$ , and the point made by Maier (2006) that this relation is anaphoric is mirrored in that P is presupposed. – In the context of the present paper, however, this suggestion must remain on a speculative note.

## 3.3 "Big" and "small" C case Propositions

Sometimes, the object proposition can easily be reconstructed from the content proposition since it is expressed by a part of what expresses that proposition. Notably, this is the case when, as in (2), repeated here, a specificational in or by gerund phrase modifies an E(valuative) E(lement) predicate.

(2) John criticized Herod for acting wrongly in marrying Herodias.

The object proposition is obviously the fact that Herod has married Herodias. Another case in point is the *too* locution, discussed in Sect. 3.1 and exemplified here by (32).

(32) My mother criticizes me for becoming pregnant again too soon.

The object proposition is the fact that I have become pregnant again as early as I have.

However, the O case is not always predictable from the C case; as often as not, the object proposition is not explicitly, only implicitly present in the C report. In fact, this correlates with the measure of generality in the EE predicate: if it is very general, as in (2), it is difficult to leave the object proposition out:

(33) ?John criticized Herod for acting wrongly.

But if it is more specific, as in (34a), the specificational phrase can be left out:

- (34) a. Bush condemned the media for harming national security by revealing details of the program.
  - b. Bush condemned the media for harming national security.

It cannot be left out in just any context, of course, only in a context providing a specification of the object proposition; we need to have been informed by what salient action the media were condemned for harming national security.

Recall from Sect. 3.2 that predicates like *keep a promise* or *break a promise* have been described as 'criterion predicates' (Kearns 2003) or 'abstract predicates' (Sæbø 2008), as predicates of other predicates rather than predicates of events. Now *act wrongly* is a typical criterion predicate, and conversely, *keep* or *break a promise* would be a good EE in a C case behabitive report. Sæbø (2008) uses 'abstract predicate' as a cover term for criterion predicates on the one hand and 'manner-neutral causatives' – such as *harm national security* – on the other.

In fact, the following generalization seems to be justified: when the object fact is left implicit, the EE is an abstract, second-order predicate; and conversely, whenever the EE is an abstract predicate, the object fact can be added in the form of a by or in gerund phrase modifier. According to Sæbø (2008), the task of such a modifier is to specify the more concrete predicate that the abstract predicate alludes to and predicates over. In the present context, its task is to supply the objective fact when in a C case the main predicate is an abstract – criterion or manner-neutral causative – negative evaluative predicate.

But it is often left to the context to supply the objective fact. (34b) was a case in point, (35) is another.

(35) Southern women were criticized for jeopardizing their reputations.

The object of criticism – what Southern women did such that according to some, in so doing they were jeopardizing their reputations – is missing and must be retrieved from the context of utterance.<sup>5</sup> In other words, it acts as an anaphoric presupposition, and it is natural to connect this behavior to the presupposition of factivity that the behabitive triggers concerning the O case.

 $<sup>^5{\</sup>rm In}$  the actual context, they served as nurses in the Civil War.

In our opinion, these observations hold a key to understanding the oscillatory behavior of behabitives and to a precise analysis. Both the object, O case fact and the content, C case proposition can be left unexpressed in the construction – one is if the other is not. Now if the O(bject) case fact is left out, it gets a definite interpretation, while if the C(ontent) case proposition is not expressed, it receives an indefinite interpretation, – and this correlates with the factivity of the behabitive verb with respect to the O case and the O case only.

## 4 Analysis: One slot, two roles

Behabitives consistently assign two different propositional *actants*, O and C, although for syntactic reasons, only one can be expressed in any given sentence: there cannot at the same time be, in English, two *for* gerund phrase arguments, or, in German, two *dass* clause arguments. Thus in regard to proposition-type arguments, these verbs are **semantically binary** while **syntactically unary**. As we have seen, various formats and environments constrain the alternation, discouraging or even excluding one of the two from appearing in a construction. Some of these constraints should come out as consequences of a formal analysis. But first of all, the analysis must make a connection between the two roles so that (1) there is no reason to assume a systematic ambiguity in behabitives, and (2) the distinct semantic properties of the two roles are sufficiently motivated.

Such a connection will have to consist in a precise conception of what we have loosely described as "saying something, thereby conveying one's (dis)approval of something else", where the "something" is of course the content proposition (for convenience:  $\psi$ ) and the "something else" is the object fact ( $\phi$ ).

Our first move is to model disapproval of a fact  $\phi$  in terms of a modal notion, defining that if you disapprove of  $\phi$ , then in view of your ideals,  $\phi$  should not have been the case ( $\mathcal{N}$  for necessity, f for the modal base and g for the ordering source in the theory of Kratzer (1981); ignoring the world index here):

(36)  $\mathcal{N}^{f,g} \neg \phi$  where f yields the relevant facts and g yields your ideals (you disapprove of  $\phi$ : in view of your ideals, non- $\phi$  is a necessity)

Approval, relevant to positive behabitives like *praise*, we may model as  $\mathcal{N}^{f,g}\phi$ . Our next step is to define your conveyance of this by claiming a proposition  $\psi$ . Here, we may be simplifying somewhat, but this is at any rate our proposal:

(37)  $\Delta(\psi^{f,g})(y) \wedge \psi^{f,g} \Rightarrow \mathcal{N}^{f,g} \neg \phi$  (you convey your disapproval of  $\phi$  by claiming  $\psi$ : you claim  $\psi$  and  $\psi$  entails that in view of your ideals, non- $\phi$  is a necessity)

 $\Delta$  (for dicendi) stands for a verb like claim, y is you,  $\Rightarrow$  is for strict implication (though that may be too strict), and the conversational background parameters f and g are superscripted to  $\psi$  to take care of the many (maybe all) cases where this proposition is (itself) modalized. As before, g yields your ideals.

The next step is to build a behabitive from this. For simplicity, we first consider the German *kritisieren* as embedding a *dass* 'that' clause, – and the O case:

(38) 
$$kritisieren^* = \lambda \phi \lambda y \lambda e : \langle \phi \rangle . \exists \psi \, \Delta(\psi^{f,g})(y) \wedge \psi^{f,g} \Rightarrow \mathcal{N}^{f,g} \neg \phi$$

Relevant examples are (4) and (10a). The pattern can be transferred to English criticize ( $\alpha$  for P) by adding  $\lambda \alpha$  and substituting  $\lambda P$  for  $\lambda \phi$  and  $P(\alpha)$  for  $\phi$ .

- (4) Einstein kritisierte, dass Bohr die Kausalität aufgegeben hatte. 'Einstein criticized Bohr for having abandoned causality.'
- (38) is of course only adequate for the O case; the content proposition  $\psi$  is introduced by existential quantification. It would seem that we need a distinct C case definition, one that might look like (39):

(39) 
$$kritisieren^* = \lambda \psi \lambda y \lambda e : \langle \exists \phi \mid \phi \rangle . \Delta(\psi^{f,g})(y) \wedge \psi^{f,g} \Rightarrow \mathcal{N}^{f,g} \neg \phi$$

As in (38), the object proposition  $\phi$  is a factive presupposition (recall from 3.2 the notation: < presupposition > . content ); here, however, since it is not an explicit but an implicit argument, it is, in line with the general analysis of zero arguments developed by Sæbø (1996), introduced in the presupposition and so acquires an interpretation as a zero anaphoric pronoun.<sup>6</sup>

How about joining the two definitions, (38) and (39), into one? From a semantic viewpoint, the verb has two propositional arguments, while from a syntactic viewpoint, it has one and only one obligatory argument beside the subject, in the sense that there must be one and only one clausal complement present, – and both arguments are optional as it is unspecified which is expressed.

This much must be stipulated: exactly one clausal complement is mandatory. For the rest of the story, general principles about unexpressed arguments apply: Arguments can be zero; a zero argument can have an indefinite or a definite interpretation; if it occurs in a presupposition triggered by the verb, it tends to have a definite interpretation, if not, it tends not to, as shown by Sæbø (1996). With these considerations in mind, let us amalgamate the two cases, the O case and the C case, into one:

(40) 
$$kritisieren^* = \lambda \phi \lambda \psi \lambda y \lambda e :< \phi > \Delta(\psi^{f,g})(y) \wedge \psi^{f,g} \Rightarrow \mathcal{N}^{f,g} \neg \phi$$

If the  $\phi$  argument is saturated, the  $\psi$  argument is prevented from being so; it is then, in accordance with the general principle just cited, introduced at the level of assertion and interpreted as an indefinite propositional referent; if, conversely, the  $\phi$  argument stays unsaturated, this argument is, again in accordance with the general principle, introduced at the level of presupposition and interpreted as a definite propositional referent; then the  $\psi$  argument has to be saturated.

What remains unconventional – and slightly problematic – in connection with (40) is the assumption that the first argument can remain unsaturated although a proposition, say p, is sister to the verb. General principles cannot tell us how

 $<sup>^6</sup>$ For perspicuity, we employ a mixture of DRT and, say, Update Logic notation here; the quantifier  $\exists$  may be interpreted as introducing a discourse referent.

– whether (1)  $\lambda \phi$  is closed off prior to the merge (maybe an empty node is sister to the verb instead of p), regardless of p's aptitude for the  $\phi$  or  $\psi$  role (in this case two readings are composed, one more, one less reasonable), or whether (2) it is only closed off in the merge, upon inferring that p is not apt for the  $\phi$  role; p is then passed on to serve as argument for the  $\lambda \psi$  function.

We see (dis)advantages with both strategies, but we would opt for the former. This means that the semantic composition of the verb and the propositional argument that comes to the surface proceeds in two stages: First, the verb merges with a node which can be empty,  $\emptyset$ , so that no proposition is sister to the verb, or nonempty; second, this merge merges with a node which is empty if and only if the first node was nonempty.

The pattern in (40) can be transferred to the English valency frame *criticize*  $\alpha$  for . . . (or the corresponding German valency frame) by adding  $\lambda \alpha$ , substituting  $\lambda P$  for  $\lambda \phi$  and  $\lambda Q$  for  $\lambda \psi$ , and replacing  $\phi$  by  $P(\alpha)$  and  $\psi$  by  $Q(\alpha)$ .

As for the minimal valency frame illustrated in (41), with a type e complement and nothing more, we note that when both the P and the Q argument remain unsaturated, the interpretation that ensues is, or tends to be, indefinite on both counts, so to speak: even the object fact is not interpreted anaphorically. The context may specify what Anne criticizes Bill for, but that is hardly required.

#### (41) Anne criticizes Bill.

This, inter alia, sets *criticize* apart from *blame*, where a missing *for* complement does have an anaphoric interpretation. While we have no ready explanation for this, the way we would analyze the case is, as suggested in Section 2.5, to regard as the object fact the proposition that Bill has the properties he actually has:

(42) 
$$\exists \psi \, \Delta_v(\psi^{f,g})(a) \wedge \psi^{f,g} \Rightarrow \mathcal{N}^{f,g} \neg \lambda w(\{P|P_w(b)\} = \{P|P_v(b)\})$$
 (Anne says something entailing that in view of her ideals, Bill should not have had all the properties he in fact has)

The entailment that Bill should not have had all the properties he has is very weak, of course, the proposition that he has all the properties he has being so very strong; this reflects the highly underspecified nature of the criticism if all that is known about the object fact is a type e participant.

The unitary definition (40) seems to us to fulfill the criteria for a satisfactory analysis set up at the beginning of this section: it makes a connection between the two roles so that (1) there is no reason to assume a systematic ambiguity in behabitives, and (2) the distinct semantic properties of the two roles – one an objective fact, the other an evaluative claim – are sufficiently motivated.

In addition, the definition goes a long way toward explaining the constraints on this or the other argument role imposed by certain formats and environments, as described in Section 2. In particular, the fact that a V2 complement clause is incompatible with the O case can be traced to the factive presupposition that concerns this case, and the fact that a reportive subjunctive clause entails the C case can be tied to the fact that this case satisfies, through the  $\Delta$  predication,

the presupposition associated with the Referatkonjunktiv.

## 5 Concluding Remarks

We leave several issues unresolved. Most importantly, our suggestions fall far short of doing justice to the full range of relevant facts, in three dimensions:

- the spectrum of constructions, some of which e.g., those discussed in Section 2.5 by their very nature exclude one of the two argument roles encoded in (40)
- the spectrum of verbs of judging, which, as shown by Fillmore (1971a), display a variance in various ways and most of which would require an augmentation of (40)
- the spectrum of languages: we have considered two, closely related ones; it is anybody's guess to what extent the languages of the world exhibit a lexical item definable by (40)

Moreover, there are some subtler aspects of the semantics of a verb like *criticize* which we have glossed over, foremost the aspect of agentivity – or responsibility. There is an implication that somebody is responsible for the fact, and if you criticize  $\alpha$  for something, you place that responsibility on  $\alpha$  or, if  $\alpha$  is inanimate but an artefact, as in (17) or (18), on the one responsible for it. Our definition (40), however, predicts (mutatis mutandis) that (44) can be inferred from (43):

- (43) Camilla says that ManU should have won.
- (44) Camilla criticizes ManU for not winning.
- (43) entails that Camilla says something that in view of her ideals entails that  $\mathcal{N}^{f,g} \neg \phi$  where g yields her ideals and  $\phi$  is that ManU did not win. But (44) means something more, which our analysis is not fine-tuned enough to capture.<sup>7</sup> If it were amplified to say something about agency, this would offer a way to treat the German valency frame seen in (45), where there are both a DP and a finite clause complement, providing a role for the otherwise redundant DP:
- (45) Niemand kritisiert Sie, dass Sie erst jetzt darüber schreiben. nobody criticizes you that you only now itabout write 'Noone criticizes you for not writing about it earlier.'

That all said, it needs to be emphasized that to the best of our knowledge, the ambivalent, Janus-faced nature of verbs of judging, behabitives, has not been brought to light in earlier work, and that this object/content oscillation has interesting implications in at least two directions. First, for a theory of subjective or expressive meaning, or of so-called personal taste, the 'evaluative elements' that are constitutive of the 'content case' form a class that can inform

<sup>&</sup>lt;sup>7</sup>A German sentence Camilla kritisiert, dass ManU nicht gewonnen hat does not necessarily ascribe to Camilla the attribution of responsibility to ManU but maybe to the referee.

the theory from an independent angle. Second, a theory of quotation must be equipped to deal with cases where the quotational status of a proposition is in no way explicitly marked but must be inferred from a variety of sources.

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