

# Gradient At-issueness vs. Uncertainty about Binary At-issueness

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## 1 Introduction

In a thought-provoking paper entitled “The information status of iconic enrichments: Modelling gradient at-issueness”, Barnes and Ebert argue against a binary opposition between at-issue vs. non-at-issue content, which has been standardly assumed in semantics and pragmatics. Instead of binarity, the authors defend the idea that at-issueness is a gradient notion that comes in degrees. The empirical focus of their paper is two kinds of iconic enrichments to regular spoken language: iconic co-speech gestures, like BIG, and ideophones, like *splish-splash*. Two examples of sentences with such enrichments are cited in (1)–(2).

- (1) Cornelia brought [a bottle]\_BIG.
- (2) The frog goes splish-splash up the stairs.

After evaluating various approaches to these phenomena (Henderson 2016; Schlenker 2018a; Esipova 2019; Kawahara 2020), the paper settles for a uniform account along the lines of Ebert et al. (2020). According to it, iconic co-speech gestures and ideophones make a default non-at-issue contribution similar to that of supplements (Potts 2005; Koev 2022)—although the account also allows for a shift to at-issue status in certain environments. For example, (1) is claimed to convey the non-at-issue information that the bottle referred to in the verbal part of the utterance is similar to the big bottle referred to by the gesture.<sup>1</sup> In turn, (2) is claimed to convey two non-at-issue implications: a manner adverbial modification characterizing the described event as a splashing event and a depictive contribution through demonstration that enacts the described event by uttering the words *splish-splash*.

Against this backdrop, the authors argue for at-issue variability based on the following two experimental findings (Ebert et al. 2020; Barnes et al. 2022).

- (i) While generally not at-issue, the semantic contribution of iconic co-speech gestures becomes more at-issue in the presence of an associated demonstrative pronoun, like German *so*.
- (ii) While generally not at-issue, iconic co-speech gestures and ideophones differ in the degree to which their content is at-issue. By default, gestural content is less at-issue than ideophonic content.

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<sup>1</sup>In (1), the gesture BIG is intended to be temporally aligned with the indefinite *a bottle* and to be performed with both hands standing far apart, with the upper hand palm facing downwards and the lower hand palm facing upwards.

A third argument can be derived from the literature on projection. That is, in view of the hypothesis that semantic content projects to the extent that it is not at-issue (Simons et al. 2010; Tonhauser et al. 2018), the empirical finding that semantic content may project to various degrees additionally argues for at-issueness being a gradient notion. However, this last piece of evidence does not play a central role in Barnes and Ebert’s argumentation, so I will ignore it here and focus on (i)–(ii).

Zooming out, the authors highlight several factors that may affect the at-issue status of iconic enrichments. The most significant of these factors is the modality of the communication channel, where enrichments presented in the verbal modality are generally more at-issue than those presented in the visual modality. For example, ideophones, which are closely associated with the verbal modality, turn out to be more at-issue than co-speech gestures (Ebert et al. 2020; Barnes et al. 2022). Additional factors include: the degree of linguistic integration, where predicative modifiers are typically more at-issue than adverbial modifiers (cf. Schlenker 2018b); linear position, where enrichments occurring at sentence boundaries are typically more at-issue than sentence-medial enrichments (cf. Syrett and Koev 2015); and the mode of reference, where enrichments introduced by a demonstration or quotation are typically more at-issue than plain contributions (Ebert et al. 2020). The combined impact of these (and potentially other) factors is assumed to result in a rich scale that rates for at-issueness different kinds of iconic contributions or semantic content more generally.

Barnes and Ebert’s argument for at-issue variability visits several important junctures. My main goal in this contribution is to examine these junctures and briefly explore the different analytical choices. Notable junctures include the specific construal of at-issueness adopted, the way gradient at-issueness is formally spelled out, the systematic link between at-issueness and truth, and the justification for introducing degrees of at-issueness based on the specific choices. The key takeaway will be a plea to differentiate between two distinct ways of interpreting the scaled experimental results: one positing at-issueness as a gradient property, and an alternative suggesting that at-issueness is binary while gradience arises from the listener’s uncertainty regarding the speaker’s intention of making certain semantic content at-issue.

## 2 At-issueness and truth

The main empirical support for at-issue variability comes from two experimental studies, presented in Ebert et al. (2020) and Barnes et al. (2022). Both studies constitute sentence verification tasks which compare the truth value contribution of an iconic enrichment (co-speech gesture or ideophone) to that of a regular modifier (adjective or adverbial). Crucially, these studies regard truth value contribution as a measure of at-issueness. The key idea is that what matters for truth is not just matching reality but also at-issue status, where content that is more at-issue matters more for truth than content that is less at-issue.<sup>2</sup> Barnes and Ebert describe the link between at-issueness and truth as follows:

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<sup>2</sup>There is a potential problem with the experimental design utilized in Ebert et al. (2020) and Barnes et al. (2022). In these studies, the category ‘match’ is used both as one of the predictors (the other predictor being ‘mode of reference’: iconic vs. verbal) and simultaneously as labeling the points on the dependent response scale. To avoid confusion, I will take ‘match’ to be a purely semantic category functioning as a predictor and assume that the experiments are verification tasks assessing ‘joint’ truth, a generalized notion of truth (see section 2.2).

Assuming that speakers' judgements on the appropriateness of utterances given a certain background (via contexts or pictures) reflect how much they actually agree with the information given by the parts of the utterance, we propose that these parts of the utterance contribute to the judgement to differing degrees, depending on how at-issue they are. For example, highly at-issue content will contribute more to a speaker's judgement than content which is not at-issue at all. (p.31)

I dub this positive association between at-issueness and truth Proportionality and formulate it more precisely as in (3).

(3) *Proportionality*

At-issueness and truth are (directly) proportional. That is, semantic content that is more at-issue makes a stronger contribution to the overall truth value of the utterance than semantic content that is less at-issue.

Indeed, the experiments in [Ebert et al. \(2020\)](#) and [Barnes et al. \(2022\)](#) establish that the contribution of iconic enrichments, which is non-at-issue by default, may partially be ignored when judging the truth of the entire sentence. However, this finding holds significance only if (3) is a viable hypothesis. More specifically, this hypothesis says two things: (i) at-issueness and truth come in degrees, and (ii) at-issueness and truth stand in a (direct) proportionality relationship to each other. These two statements make strong ontological commitments whose implications require further investigation in future work. In section 3, I will suggest that (i) can be resisted even if a version of (ii) is maintained. However, before delving into that discussion, the remaining part of the current section 2 will focus on reconstructing Barnes and Ebert's own story, occasionally filling the gaps.

## 2.1 Gradient at-issueness

Before fleshing out formally the idea that at-issueness comes in degrees, it is important to acknowledge that there are different construals of what at-issueness amounts to in theoretical terms. Barnes and Ebert adopt the view that at-issueness is a matter of discourse relevance: semantic content is at-issue just when it is relevant to the Question Under Discussion and is conventionally marked as such ([Simons et al. 2010](#)). While this question-based construal is very popular, it is not the only one on the market ([Koev 2022](#) for an overview). Other construals identify at-issue content with what has been proposed to be added to the Common Ground ([Farkas and Bruce 2010](#); [Koev 2013](#); [AnderBois et al. 2015](#)) or what sits at the right frontier of the Discourse Tree ([Hunter and Asher 2016](#)). The important point is that these different construals lead to distinct formal mechanisms for capturing the gradient nature of at-issueness. Let us now turn to gradient at-issueness as understood on the question-based construal.

Barnes and Ebert float (without elaborating) two ways of implementing at-issue variability, both grounded in the general notion of 'informativeness' but yielding different results. The first implementation follows [Groenendijk and Stokhof's \(1984\)](#) way of comparing informative answers. According to it, an answer to a question is more informative than another answer if and only if the question possibilities eliminated by the first answer are a (proper) superset of the question possibilities eliminated by the second answer eliminates.<sup>3</sup> For example, given the question *Where*

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<sup>3</sup>In other words, when restricted to the space of possibilities delineated by the question, an answer is more informative than another answer if and only if the former (asymmetrically) entails the latter.

*did Judith go?*, an answer like *Judith went to Palo Alto* will be strictly more informative than an answer like *Judith went to California*. While this implementation does produce a gradient effect, it leads to a partial ordering rather than a proper scale, and so it does not guarantee that any two answers can be compared in this way. For example, in the above context the answers *Judith went to California* and *Judith went to Oregon* cannot be ordered by informativeness since the eliminated possibilities do not stand in a subset–superset relation with respect to each other. As a result, neither of the answers will be judged as more relevant to the question than the other answer. This is then hardly an appropriate way of spelling out at-issue variability, particularly considering the fact that regular and iconic content may not be connected by an entailment relationship.

The second suggested implementation of variable at-issuedness is based on van Rooy (2003) and can be regarded as a quantitative counterpart to Groenendijk and Stokhof’s method. Here the informativeness of a proposition reflects the degree to which that proposition is relevant to the question, measured by the number of question issues the proposition resolves. This notion may be defined as in (4), for a proposition  $p$  and a question  $Q$  (cf. van Rooy 2003).<sup>4</sup>

$$(4) \quad r(p, Q) = -\log_2 P_Q(p)$$

For example, consider a question  $Q$  which raises two issues,  $p$  and  $q$ , thus containing four complete answers ( $a = p \cap q$ ,  $b = \neg p \cap q$ ,  $c = p \cap \neg q$ , and  $d = \neg p \cap \neg q$ ) which happen to be equally likely (i.e., each answer being  $\frac{1}{4}$  likely). Then,  $r(a \cup b \cup c \cup d, Q) = -\log_2 1 = 0$ , because  $a \cup b \cup c \cup d$  encompasses the entire question space and resolves no issue;  $r(a \cup c, Q) = -\log_2 \frac{1}{2} = 1$ , because  $a \cup c$  resolves one issue, i.e.  $p$ ;  $r(a, Q) = -\log_2 \frac{1}{4} = 2$ , because  $a$  resolves two issues, i.e.  $p$  and  $q$ ; etc. The key observation about (4) is that informativeness boils down to likelihood, where less/more likely propositions are more/less informative (respectively). To illustrate, take two propositions  $p$  and  $q$  and a question  $Q$ , such that  $P_Q(p) = 0.3$  and  $P_Q(q) = 0.4$ . It follows that  $r(p, Q) = -\log_2 0.3 = 1.74$  and  $r(q, Q) = -\log_2 0.4 = 1.32$ . That is, relative to  $Q$ ,  $p$  is less likely and more informative whereas  $q$  is more likely and less informative. Overall, we get a numeric measure of informativeness that runs from 0 to infinity and can rank any set of propositions.

Adopting here van Rooy’s measure of informativeness as relevance of a proposition to a question, Barnes and Ebert introduce a quantile-style measure of relevance which is sensitive not just to questions but also to contextual alternatives, i.e., other propositions that the speaker could have conveyed in the given context. This alternative-sensitive measure is computed by dividing the number of less or equally relevant (in van Rooy’s sense) alternatives by the total number of alternatives, as stated in (5).

$$(5) \quad r(p, Q, Alt) = \frac{\#\{a' \in Alt \mid r(a', Q) \leq r(p, Q)\}}{\#Alt}$$

This context-sensitive measure behaves as expected. That is, if there is a single alternative, that alternative’s relevance comes in at 1. If there are two alternatives, the more relevant one gets assigned a value of 1 and the less relevant one gets assigned a value of 0.5. For three alternatives, the resulting values are 1, 0.67, and 0.33 (ordered from more relevant to less relevant). Overall,

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<sup>4</sup>While I leave the term  $P_Q(p)$  undefined here, its intuitive meaning should be clear. That is, this term stands for the probability of  $p$  relative to the space of possibilities provided by  $Q$ . One simple idea is that this is just the probability of  $p$  conditionalized on the sum of answers in  $Q$ , i.e.,  $P_Q(p) = P(p \mid \cup Q)$ . Another, more elaborate idea would be that this term sums up the probabilities of those (complete) answers in  $Q$  that are compatible with  $p$ , i.e.,  $P_Q(p) = P(\cup_{q' \in Q, q' \cap p \neq \emptyset} q')$ .

the most relevant alternative always gets assigned a value of 1, and the remaining alternatives are symmetrically distributed between 1 and 0.

Barnes and Ebert introduce the measure in (5) with the apparent goal of ‘normalizing’ van Rooy’s measure in (4), so that the scores can be compared to relevance thresholds within the unit interval  $[0, 1]$ . More specifically, the authors assume that each expression which conveys propositional content (root clause, appositive, gesture, ideophone, etc.) comes with a minimal requirement on its degree of relevance. That is, in order for an utterance as a whole to be appropriate, each contained propositional expression must meet its minimal relevance threshold. This is stated in (6).

(6) *Appropriateness*

An utterance with propositional expressions  $e_1, \dots, e_n$  is appropriate in a context with a Question Under Discussion  $Q$  only if each proposition expressed by  $e_1, \dots, e_n$  meets the respective minimal threshold for relevance.

This appropriateness condition explains why root clause content must be at least as relevant as any other entailments conveyed by the utterance, say appositive entailments. For example, (7) would be considered appropriate with the Question Under Discussion in (8a) but not with the one in (8b). The reason for this contrast is not that appositive content cannot be at-issue. It is just that the relevance threshold for root clauses is much stricter compared to that for appositives.

(7) Maria, the best musician in town, came for dinner last night.

(8) a. Who came for dinner last night?

b. Who do you think is the best musician in town?

There is one potential problem with imposing appropriateness thresholds as posited in (6), stemming from the kind of measure defined in (5). This measure generates a ranking which reflects van Rooy’s ordering but may diminish its informational value, as the resulting scores are relative to the number of contextual alternatives. For example, let us assume with Barnes and Ebert that the relevance threshold for root clauses is very high (say, 0.9) and that the relevance threshold for appositives is very low (say, 0.1). Now, if in the context of (7) the root clause proposition and the appositive proposition are the only contextual alternatives and the former happens to be more relevant (in van Rooy’s sense) than the latter, according to (5) their respective scores will be 1 and 0.5, thereby satisfying the assumed minimal thresholds. The problem is that (7) is predicted to be appropriate even if, intuitively, the root clause proposition is only minimally relevant to the Question Under Discussion and the appositive proposition is quite irrelevant: all that is required is that the former be more relevant (in van Rooy’s sense) than the latter. What seems to lie at the heart of this problem is the concept of contextual alternatives. Perhaps if it assumed that the set of such alternatives is always very rich, van Rooy’s informativeness-based values can more or less be preserved.

## 2.2 Gradient (joint) truth

Supplemental expressions have been widely assumed to be logically and compositionally independent, leading to the expectation that they may be ignored when determining the overall truth value of a sentence (Bach 1999; Potts 2005). However, Syrett and Koev (2015) present experimental

evidence that challenges this expectation. They demonstrate that the truth-conditional contribution of appositives closely resembles that of regular conjuncts: a false appositive renders the entire sentence false. Given that appositive content is non-at-issue by default, one might draw the conclusion that at-issue status has no effect on truth conditions. Nevertheless, [Kroll and Rysling \(2019\)](#) argue that this apparent lack of effect is due to assuming a very general Question Under Discussion which renders all entailments of the sentence at-issue. When appositive content is made non-at-issue via a specific such question, this content only partially contributes to truth conditions. Interestingly, Kroll and Rysling also a similar effect with regular but non-at-issue conjuncts, indicating that truth judgments are primarily sensitive to at-issue status rather than construction type.

The experimental studies in [Ebert et al. \(2020\)](#) and [Barnes et al. \(2022\)](#) additionally demonstrate that iconic enrichments may contribute to truth conditions to various degrees. More generally, at-issueness and truth seem to track together, in the sense that content that is more at-issue matters more for truth than content that is less at-issue. In order to do justice to this kind of proportionality relationship (see (3)), Barnes and Ebert propose that ‘joint’ truth—i.e., the truth value of the entire utterance, including its less relevant entailments—is a gradient notion. This generalized notion of truth is defined in (9), where the (plain) truth value of each individual entailment (first term of the summation) is weighted by its relevance (second term of the summation).<sup>5</sup>

$$(9) \quad T(u, Q, w) = \sum_{p' \in \llbracket u \rrbracket} p'(w) \cdot r(p', Q, Alt)$$

However, as it stands, Barnes and Ebert’s quantile-style measure employed in (9) is inappropriate because it does not guarantee that the relevance values of all entailments of  $u$  sum up to 1. For example, consider the sentence with an appositive in (7) and assume that the root clause proposition and the appositive proposition are the only contextual alternatives. As discussed in subsection 2.1, their respective relevance scores must be 1 and 0.5. Assuming that both propositions are true, the joint truth value of the entire sentence will then amount to  $1 \cdot 1 + 1 \cdot 0.5 = 1.5$ , which is meaningless.

One way to rectify the problem would be to assume that the set of alternatives is just the set of entailments conveyed by the utterance, i.e.,  $Alt$  is just  $\llbracket u \rrbracket$ . If this is plausible, we can normalize van Rooy’s relevance measure in (4) and plug it in (9) as a substitute for Barnes and Ebert’s measure in (5). The formal definitions are provided in (10)–(11).

$$(10) \quad \tilde{r}(p, Q, Alt) = \frac{r(p, Q)}{\sum_{p' \in Alt} r(p', Q)}$$

$$(11) \quad \tilde{T}(u, Q, w) = \sum_{p' \in \llbracket u \rrbracket} p'(w) \cdot \tilde{r}(p', Q, \llbracket u \rrbracket)$$

A revision along these lines would, at the very least, ensure that we obtain reasonable values for joint truth. The larger point is that the implementation of relevance, as featured in the definition of joint truth, needs to be carefully tailored to the task at hand.

The key question raised by (9) is the conceptual understanding of joint truth. This notion introduces degrees of truth, and similar models have been explored, for example in fuzzy logic ([Zadeh 1965](#); [Goguen 1969](#)). However, while such models view gradient truth as a primitive notion, the gradience of joint truth is derived by scaling for relevance the classical (binary) notion of truth. Doing things this way implies that content which is very low on the relevance scale will barely have any truth-conditional impact. Barnes and Ebert are aware of this implication of their proposal and state it (in a dynamic semantic setting) roughly as in (12).

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<sup>5</sup>I am assuming that an utterance  $u$  denotes the set of its entailments.

(12) *Low Relevance*

Content with low relevance may be ignored and need not enter the Common Ground. (If objected to, such content will become highly at-issue and may enter the Common Ground in the usual way.)

There is a potential theoretical concern here, as (12) appears to conflict with the appropriateness condition outlined in (6). That is, according to the latter, each content should meet the (minimal) relevance threshold associated with its triggering expression. The puzzle then is why this should be so, if content with low relevance can be disregarded for truth. Furthermore, from a broader perspective, what role would such content play in discourse if it is immaterial for both truth and at-issueness?

### 3 An alternative: Uncertainty about binary at-issueness

My main gripe with Barnes and Ebert’s account is their assumption that, in order to do justice to the observation that at-issueness and truth track together, we need to assume that both of these categories are gradient. In this section, I will sketch an alternative account, based on the idea that at-issueness is a binary notion and its gradient effect in truth value judgment tasks is due to the listener’s uncertainty as to whether a given meaning is intended by the speaker to be at-issue. For the record, I will adopt the Rational Speech Act framework (Frank and Goodman 2012; Goodman and Frank 2016), but the overall direction of the argument is more important than the specific details, and other formalisms could serve a similar purpose.

The key idea behind the Rational Speech Act framework is that the listener uses Bayesian inference to arrive at the speaker’s intended meaning given the produced utterance. This is accomplished through a recursive reasoning process which involves three major steps. The basic step is the ‘literal listener’  $L_0$ , which assesses the probability of a meaning  $m$  being the intended interpretation of the utterance  $u$  as compared to other meaning alternatives. This rule is defined in (13).<sup>6</sup>

$$(13) \quad L_0(m|u) \propto \llbracket u \rrbracket(m)$$

Assuming that the literal meaning of  $u$  is the set of its entailments (whether triggered in the standard way or by iconic enrichments),  $\llbracket u \rrbracket(m)$  will return 1 if  $m$  follows from this set and 0 if it does not.

The second step is the ‘pragmatic speaker’  $S_1$ , a probability distribution over possible utterances given a certain communicative intention. The idea is that the speaker produces an utterance that maximizes utility via a tradeoff between the utterance’s informativeness (calculated from the literal listener  $L_0(m|u)$ ) and the utterance’s cost  $C(u) \leq 0$ . The extent to which the speaker maximizes utility is modulated by a rationality parameter  $\alpha \geq 1$ , where greater  $\alpha$  values result in higher utility. The full rule is stated in (14).

$$(14) \quad S_1(u|m) \propto \exp(\alpha \cdot (\ln L_0(m|u) + C(u)))$$

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<sup>6</sup>In order to arrive at the full equation, we divide the right-hand side by the sum of truth values across all salient meaning alternatives:  $L_0(m|u) = \frac{\llbracket u \rrbracket(m)}{\sum_{m'} \llbracket u \rrbracket(m')}$ . Since the normalizing term  $\sum_{m'} \llbracket u \rrbracket(m')$  remains constant across the choice of a specific alternative, it can be omitted. Similar remarks apply to the rules in (14) and (15).

If  $\alpha = 1$  and  $C(u) = -n$ , the above rule boils down to  $S_1(u|m) \propto \frac{L_0(m|u)}{\exp(n)}$ . What this means is that e.g. if the speaker produces an utterance with an iconic enrichment as compared to an equally informative utterance with a regular modifier, the former and more marked variant will incur a greater cost and will reduce the overall speaker probability.

The third and final step is the ‘pragmatic listener’. It measures the probability that the produced utterance conveys a given meaning, based on the pragmatic speaker (indicating how much the choice of utterance reduces the listener’s uncertainty about the meaning) and the listener’s prior expectation regarding that meaning. This is essentially the Bayes rule and is stated in (15).

$$(15) \quad L_1(m|u) \propto S_1(u|m) \cdot L_1(m)$$

Let us assume that the prior expectation assesses the contextual relevance of the given meaning, among possibly other things.<sup>7</sup> So, if a meaning partially follows from utterance entailments that are contextually not relevant, its prior expectation will decrease, thus reducing the overall literal listener probability. Notice that this construal is compatible with relevance being a binary notion.<sup>8</sup> That is, what is being measured is the probability of a given meaning being relevant, not the degree to which said meaning is relevant.

Barnes and Ebert’s experimental findings may now be captured by the linking hypothesis stated in (16), where  $T(u, m)$  is a (potentially multiple-degree) response variable in truth value judgment tasks with utterance  $u$  and a state of affairs compatible with  $m$ .

$$(16) \quad T(u, m) \propto L_1(m|u)$$

According to this hypothesis, participants’ behavior in truth value judgment tasks is proportional to the pragmatic listener measure of interpretation. That is, the more likely a meaning given the observed utterance, the higher the ratings on the response measure. Specifically, lower participants’ ratings could result from low utility (i.e., logical falsity or highly marked utterance) or—crucially—from low certainty about contextual relevance. In turn, higher participant’s ratings will result from high utility (logical truth and non-marked status) and high certainty about contextual relevance.

Of course, the above hypothesis has not been tested and may necessitate modifications. For example, literally true but underinformative utterances in sentence verification tasks have been argued to track pragmatic speaker models rather than pragmatic listener models (Degen and Goodman 2014; Jasbi et al. 2019; Waldon and Degen 2020). That is, participants may reinterpret a verification task as a production task, trying to determine whether the speaker could have produced the utterance with the intention of communicating a particular meaning. If this mechanism holds general validity, the response variable in (16) will have to be linked to the pragmatic speaker and not to the pragmatic listener. Either way, the important point is that any reasonable model in this ballpark will be capable of capturing the data presented by Barnes and Ebert without necessitating the assumption that truth and at-issueness are gradient notions.

<sup>7</sup>Alternatively, Questions Under Discussion may be explicitly introduced into the probabilistic model (e.g., Degen 2023).

<sup>8</sup>For example, a proposition could be considered relevant to a question if it either selects, removes, or at least suggests an answer. Otherwise, it would be considered irrelevant to that question.



## 4 Conclusion

Barnes and Ebert’s target article puts forward the intriguing idea that at-issue status is not a categorical property but rather exists on a spectrum. This proposal is compatible with the experimental data summarized in the paper, which demonstrates that gestural and ideophonic content may contribute to truth conditions only partially and so such content can plausibly be assumed to be contextually relevant to various degrees. At the same time, this proposal comes with strong ontological commitments concerning linguistic meaning, implying that both truth and relevance vary along a scale. My contention is that such a radical departure from traditional linguistic assumptions may not be fully justified. That is, a more conservative perspective would posit that both truth and relevance are binary notions. According to this viewpoint, the gradient effect observed in truth value judgment tasks arises from the pragmatic listener’s uncertainty as to whether a given meaning is intended to address the Question Under Discussion. It seems to me that, given the current stage of research, it would be premature to definitively adjudicate between these two views.

## Funding

This research was supported by DFG grant KO 5704/1-1.

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