



Open Library of Humanities



Part of the Ubiquity
Partner Network



Open Library of Humanities

The Language of Perspective

How to Cite: Klages, J, Holler, A, Kaiser, E and Weskott, T 2020 Commonalities and Differences in the Interpretation of Predicates of Personal Taste vs. Relational Locative Expressions: Some Theoretical Considerations and Experimental Evidence. *Open Library of Humanities*, 6(2): 10, pp. 1–30. DOI: <https://doi.org/10.16995/olh.513>

Published: 09 September 2020

Peer Review:

This article has been peer reviewed through the double-blind process of *Open Library of Humanities*, which is a journal published by the Open Library of Humanities.

Copyright:

© 2020 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See <http://creativecommons.org/licenses/by/4.0/>.

Open Access:

Open Library of Humanities is a peer-reviewed open access journal.

Digital Preservation:

The Open Library of Humanities and all its journals are digitally preserved in the CLOCKSS scholarly archive service.

THE LANGUAGE OF PERSPECTIVE

Commonalities and Differences in the Interpretation of Predicates of Personal Taste vs. Relational Locative Expressions: Some Theoretical Considerations and Experimental Evidence

Johanna Klages¹, Anke Holler¹, Elsi Kaiser² and Thomas Weskott¹

¹ University of Goettingen, DE

² University of Southern California, US

Corresponding author: Thomas Weskott (thomas.weskott@phil.uni-goettingen.de)

We compare two types of expressions that have been claimed to exhibit perspective-sensitivity in their semantics, predicates of personal taste like, e.g., *fun*, or *tasty*, with relational locative expressions as, e.g., *to the left of*, with respect to their semantic properties. While, at first blush, there are some properties shared by the two classes of expressions, the differences in semantic behaviour between them outweigh the commonalities. Having established these theoretical differences, we compare the two types of expressions in a two-alternative forced choice experiment. Our results indicate that there are considerable differences in the way the two kinds of expressions are comprehended. We discuss these differences in light of the view that perspective-sensitivity has a uniform semantic core.

Introduction

Perspective sensitivity is a ubiquitous linguistic phenomenon. We use perspective sensitive items like *to the left of*, *in front of* and *tasty* or *fun* on a daily basis, and addressees interpret these expressions apparently without major problems. Yet, the analysis of the semantics of these expressions, and the interpretation of perspective sensitive items as a class, has proven to be a rather difficult matter. Among the problems opposing a straightforward semantics for perspective sensitive expressions ('PSE's henceforth) is the question of whether it is feasible to strive for a uniform semantics for all members of the class. Prima facie, the members of the class, their diversity with respect to syntactic category notwithstanding, seem to share a common semantic core; see Partee (1989), for a first attempt to unify different types of PSEs; and Bylinina McCready, and Sudo (2015) for a more recent overview over the semantics of PSEs). Accordingly, there are theoretical arguments in favor of such an attempt at uniformity, and we will discuss them in what follows. However, we will not only present theoretical arguments arguing against a uniform treatment, but also experimental evidence that highlights the differences between two types of PSEs: relational locative expressions like the ones mentioned above on the one hand, to be abbreviated as 'RLE' throughout; and predicates of personal taste ('PPT's) on the other. The ultimate goal of this contribution is to argue for an approach to the semantics of perspective-sensitive items that is firmly based on experimental evidence, and which does justice to the theoretical and empirical differences within this class of expressions.

Since the main aim of this contribution is to present the experimental evidence, our theoretical discussion cannot make any claim to an exhaustive representation of the vast and complex linguistic and philosophical issues surrounding PPTs; for an overview and in-depth discussion of both the semantic and the philosophical matters involved, we refer the reader to Peter Lasersohn's recent book (Lasersohn (2017)). Also, we will have to limit our attention here to the two classes of expressions mentioned, and will say almost nothing about other types of PSEs, like epistemic modals (like, e.g. *must*, *might*; see Stephenson (2007)), discourse particles, expressions of social

proximity (e.g., *foreigner*), and various other expressions that have been identified as exhibiting perspective sensitivity in the recent literature; again, we point the interested reader to Bylinina et al. (2015) for a recent overview.

Theoretical Background: Commonalities and Differences Between PPTs and RLEs

The two types of expressions to be investigated in this contribution are exemplified by the English examples below.

- (1) CRAIG: Haggis is tasty.
- (2) MICHAEL: Carla is sitting to my left.

In (1), the underlined expression is a predicate of personal taste. It expresses the judgment of the speaker, Craig, about his attitude towards a type of food, haggis: he considers it tasty. That this is a 'personal' judgment is quite obvious, since other persons will have other attitudes towards haggis, and will express them accordingly, perhaps using other types of PPTs like *dainty*, or *yummy*, or *unsavoury*, or perhaps even *disgusting*. Other PPTs pertaining to non-edible objects are *fun*, *interesting*, *boring*, etc., and may also include moral and aesthetic judgments.

In (2), a location—where Carla is sitting—is described in relation to another location, the location of Michael. The relation expressed in (2) is $\lambda y \lambda x . \mathbf{left-of}(x,y)$, and the *relatum* object y of the relation (the one with respect to which the relation is expressed and has to be interpreted) is Michael: Carla is sitting somewhere on the left-lateral side of Michael's frontal plane.

From this first approximation, it may seem that the two types of expressions are quite different in their usage, and in the semantics that underlies this usage. However, they exhibit a fair amount of commonalities, that we will go into, before returning to their—more or less—obvious differences.

Commonalities

The first and most obvious commonality between the two types of predication to be investigated here is that both predicates of personal taste, as well as relational locative expressions, exemplified in (3) and (4) below, are *dependent on context* for their interpretation.

(3) Carla is sitting to my left.

(4) I find haggis to be quite tasty.

To assess the truth of (3), we have to check whether the person uttering (3) is located such that Carla is sitting to her left. And to assess the truth of (4), we make sure that the person who uttered it does indeed consider haggis tasty. The context dependence here is obviously tied to the indexicals *my* and *I*, respectively. The second commonality to be noted thus is that the dependence upon context that both expressions exhibit is a type of *indexicality* (as opposed to, say, a type of anaphoric or presuppositional dependence). But, as the German examples (5) and (6) show, the context dependence remains even if the overt reference to the speaker is removed.¹

(5) Carla sitzt links.

Carla sits left.

'Carla is sitting [to the speaker's, or someone else's] left.'

(6) Haggis ist lecker.

Haggis is tasty.

'Haggis is tasty.'

What these examples show is that both types of PSEs contain what may pre-theoretically be called "slots" for the expression of relational information, and that these slots can be filled by indexicals (as in (3) and (4) above), or can be left implicit (as in (5) and (6)). In both cases, one would probably want both types of expressions to contain *variables* for this relational information, and that the values of these variables have to be supplied by contextual parameters. As a reviewer noted, there are numerous accounts to be found in the literature on how this assignment of a value to the variable is to be spelled out at the syntax-semantics interface: by assigning a contextual parameter, by variable binding, by control, etc. Since the division between PPTs and RLEs that we want to argue for here is orthogonal to these details, we decided to (more or less randomly) pick one account (i.e., Lasersohn

¹ We decided to choose German here because the RLE examples without overt mention of the origo have a somewhat dubious grammaticality status in English (some native speakers accepting them, but some others not), while being quite OK in German. As the gloss for example (5) shows, the origo of the RLE does not have to be interpreted as necessarily to be that of the speaker.

(2009)) and stick to that throughout our argument. Note that we chose this formal account not out of any theoretical predilection, but simply because it allows us to make explicit the interplay between PSEs and their surrounding context.

The property to provide a variable is the third commonality that the two types of expression exhibit. As one would expect in connection with the third property, there are restrictions on the types of values that the variable might take on. Lasersohn (2009) differentiates between *autocentric*, *acentric*, and *exocentric* assignments. In order to represent the differences between these assignments, and how they affect interpretation, we will adopt Lasersohn's 'toy language' (his term; see Lasersohn (2009), p.361), an extension of the formal system developed and described in Kaplan (1989). In Lasersohn's (2009) system, denotations are assigned to simple expressions relative to a context c , a world of evaluation w , and an individual i (see Lasersohn (2009), p.361ff. for what follows).² Thus, the denotation of an expression α is represented as $\llbracket \alpha \rrbracket^{c,w,i}$. Lasersohn further assumes that each context c must specify a speaker or agent (notated $A(c)$), a world $W(c)$, and what he calls a "judge", $J(c)$. This allows him to deal both with context dependent expressions such as, for example, I , which gets the denotation $\llbracket I \rrbracket^{c,w,i} = A(c)$ for all c,w,i , as well as context independent ones, for which $\llbracket \alpha \rrbracket^{c,w,i} = \llbracket \alpha \rrbracket^{c',w,i}$, for all c,c' . In addition, Lasersohn provides for the possibility that the judge relative to which a predicate is to be interpreted is expressed overtly, as in *tasty for John*. He assumes that $\llbracket \alpha \text{ for } \beta \rrbracket^{c,w,i} = \llbracket \alpha \rrbracket^{c,w,b}$, where $b = \llbracket \beta \rrbracket^{c,w,i}$. Thus, the denotation of *tasty for Mary*, $\llbracket \text{tasty for Mary} \rrbracket^{c,w,i}$, would be $\llbracket \text{tasty} \rrbracket^{c,w,Mary}$. Lasersohn further assumes that the content of an expression α is a function from worlds w and individuals i into the denotation of α relative to c,w , and i : $\llbracket \alpha \rrbracket^c(w,i) = \llbracket \alpha \rrbracket^{c,w,i}$. Finally, truth is defined as follows: "We say that a sentence ϕ is *true in context* c iff its content in c maps the world and judge of c onto 1, that is iff $\llbracket \phi \rrbracket^c(W(c), J(c)) = 1$." (Lasersohn (2009), p.362).

² Part of the formal apparatus Lasersohn employs in the 2009 paper is superseded by the more elaborate, pragmatic theory in his 2017 book. But we take it that the semantic issues we are interested in here are not affected by the differences between these two formalizations, and that both the commonalities and the differences between the types of expressions come out the same in the 2017 version.

While we will not provide a compositional analysis for the interpretation of the two types of expressions, we can use this formal system to illustrate the assignment of different values to the variables contained in PPTs and RLEs. Assuming the usual semantics for predication (see Lasersohn (2009), for the details), the context-independent denotation of an utterance like

(7) CRAIG: Haggis is tasty.

comes out, preliminary, as

(8) $\llbracket \mathbf{7} \rrbracket^{c,wi} = 1$ iff $\llbracket \mathbf{tasty}(\mathbf{haggis}) \rrbracket^{c,wi} = \llbracket \mathbf{haggis} \rrbracket^{c,wi} \in \llbracket \mathbf{tasty} \rrbracket^{c,wi}$.

Since the denotation $\llbracket \mathbf{haggis} \rrbracket^{c,wi}$ is context-insensitive, we only have to take care that the parameter for the judge gets assigned the right value. If the utterance (7) by Craig is to be interpreted *autocentrically*, we get $i = A(c) = J(c) = \text{Craig}$, which gives us $\llbracket \mathbf{7} \rrbracket^{c,wi} = 1$ iff $\llbracket \mathbf{haggis} \rrbracket^{c,wi} \in \llbracket \mathbf{tasty} \rrbracket^{c,wi,Craig}$. Accordingly, the *exocentric* assignment of the judge parameter in

(9) MICHAEL: Haggis is tasty for Craig.

has the contextual parameters $A(c) = \text{Michael}$, while $J(c) = \text{Craig}$; thus, while its form is quite different from that of (7), the two utterances end up as having the same denotation, because in the case of (9), the overt expression of the judge blocks the assignment of the “agent” of (9), Michael, to the judge parameter. An *acentric* assignment to the judge parameter would be one that does not assign any value at all to the judge parameter, thus expressing an “objective” judgment about the taste of haggis. Such an acentric use must be kept apart from an occurrence of a PPT like *tasty* in which the variable contained in it is quantified over, as in the following example:

(10) Everyone likes haggis.

Rather than assigning no value to the judge parameter, the judges covary with the individuals that the assignment function passes to the interpretation of the quantifier; see Mitchell (1986), and Partee (1989).

Although Lasersohn (2009) does not deal with spatial expressions, we can extend Lasersohn’s toy language to also cover expressions for relational locations like *left of*, thereby adding one more commonality between PPTs and RLEs to our list. It seems quite reasonable to assign the *autocentric* use of *left of* in (5), uttered by Michael,

- (11) MICHAEL: Carla sitzt links.
 Carla sits left.
 ‘Carla is sitting (to the speaker’s, or someone else’s) left.’

the denotation $\llbracket \text{left of} \rrbracket^{c,wi}$, where $i = A(c) = \text{Michael}$, which seems to give us the intuitively correct semantics: $\llbracket \text{left of} \rrbracket^{c,w,\text{Michael}}$. The truth conditions for (11) also seem to turn out correct:

- (12) $\llbracket \mathbf{11} \rrbracket^{c,w,\text{Michael}} = 1$ iff $\llbracket \text{sitting_left of(Carla)} \rrbracket^{c,w,\text{Michael}} = \llbracket \text{Carla} \rrbracket^c$
 $\in \llbracket \text{sitting_left of} \rrbracket^{c,w,\text{Michael}}$.

Thus, the sentence comes out as true if Michael utters it in a situation where Carla is sitting to his (intrinsic) left, and false otherwise. The interpretation seems to be fully parallel to the one in (8).

Given the commonalities between the two expressions, and the successful application of the same interpretation rule to the *autocentric* uses, we might try to add one further commonality between the two types of expressions by treating exocentric uses of relational locatives like *exocentric* uses of taste predicates. As in the case of *tasty*, we could account for an exocentric use of *left-of*, and, also in parallel to PPTs, RLEs can only be used exocentrically if the relational argument is overtly expressed; we thus would assume that the denotation $\llbracket \text{left of } x \rrbracket^{c,wi}$ is $\llbracket \text{left of} \rrbracket^{c,w,x}$. Let us look at the truth conditions for the following utterance:

- (13) CRAIG: Carla sitzt links von Michael.
 Carla sits left of Michael.
 ‘Carla is sitting to the left of Michael.’

At first glance, it seems that the evaluation index i will take care of the correct assignment:

- (14) $\llbracket \mathbf{13} \rrbracket^{c,wi} = 1$ iff $\llbracket \text{sitting_left of Michael(Carla)} \rrbracket^{c,wi} = \llbracket \text{sitting_left of (Carla)} \rrbracket^{c,w,\text{Michael}} = \llbracket \text{Carla} \rrbracket^c \in \llbracket \text{sitting_left} \rrbracket^{c,w,\text{Michael}}$.

Apparently, just as in the case of PPTs with an overt judge, the overt expression of the spatial relatum blocks the assignment of the agent of (13) to the “judge” parameter, which in this case should probably more aptly be called “perspective parameter”. But are the truth conditions in (14) really correct? Let us consider a

few scenarios that should make (13) true if (14) is the correct rendering of the truth conditions. In Scenario 1, Carla is sitting to the left of Michael, and Craig is standing behind them, aligned with Michael (Carla's orientation is of course irrelevant). This is a scenario in which (13) comes out as true, as readers may verify for themselves.

There is, obviously, a different scenario, Scenario 2, in which the speaker, Craig, is not aligned with the relatum, Michael, but rather is standing opposite of him, facing him.

In Scenario 2, there is a reading under which (13) comes out as true, and one where it comes out as false: for the first reading, we assume that the perspective parameter gets filled by Michael; the interpretation then proceeds as in (14), and the

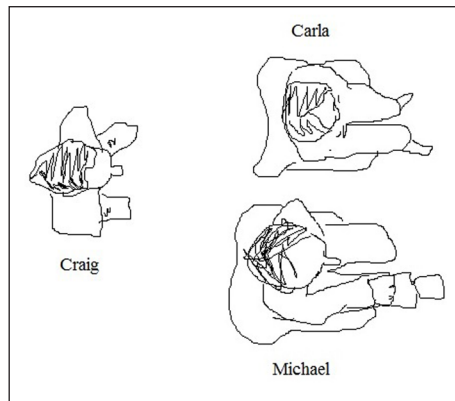


Figure 1: First scenario: Michael and Craig are aligned.

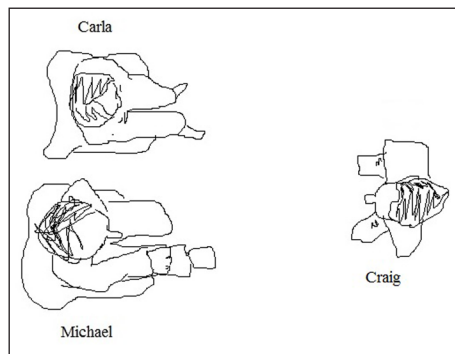


Figure 2: Second scenario: Michael and Craig are facing each other.

sentence comes out as true. For this first reading, we have to suppose that Craig is taking on Michael's perspective in uttering (13). However, the second reading is one where the perspective parameter is filled by the speaker, Craig; and this gives us a denotation for (13) that is not true in Scenario 2:

$$(15) \quad \llbracket 13 \rrbracket^{c,wi} = 1 \text{ iff } \llbracket \text{**sitting_left of Michael(Carla)}** \rrbracket^{c,wi} = \llbracket \text{**sitting_left of_Michael(Carla)}** \rrbracket^{c,w,Craig} = \llbracket \text{**Carla}** \rrbracket \in \llbracket \text{**sitting_left of_Michael}** \rrbracket^{c,w,Craig}.$$

This deictic reading for *left of* seems to be one where the commonalities between RLEs and PPTs break down—there is no equivalent to Scenario 2 for PPTs. Furthermore, it seems that while an overt expression of the judge of an PPT can block the assignment of the speaker to the judge parameter, an overt expression of the relatum of an RLE cannot in all cases block the assignment of the speaker to the perspective parameter; rather, it can do so only in case the speaker and the relatum are aligned. No such restriction seems to exist for PPTs.

Hence, we have to rethink our strategy of parallelising the truth conditions we assign to PPTs and RLEs, despite the commonalities enumerated above: as we have surmised right from the start, one can expect there to be differences between the two types of expressions. Let us look at these in more detail.

Differences

The first, and most perspicuous, difference between the two types of expressions is that in many languages, including English, the encoding of the judge parameter of PPTs is optional, while that of the perspective parameter of RLEs seems to be mandatory. Although underlyingly both expressions seem to be relational and sensitive to context, and especially to the role that the speaker plays in filling the parameter, there are syntactic differences. This has been pointed out by Barbara Partee already (see Partee (1989), p.268), and is elaborated on by Bylinina et al. (2015), p.72f.

The second difference has to do with the possibility to block the assignment of the speaker to the judge/perspective parameter, or shift it away to a different referent, which we have discussed above with respect to example (13), and which we illustrate below in a somewhat different setting: embedding under attitude verbs.

- (16) a. MICHAEL: Craig glaubt, dass Haggis lecker ist.
 Craig believes, that haggis tasty is.
 ‘Craig believes that haggis is tasty.’
- b. MICHAEL: Craig glaubt, dass Carla links sitzt.
 Craig believes, that Carla left sits.
 ‘Craig believes that Carla is sitting to the left.’

In (16-a), the only possible assignment to the judge parameter of *tasty* seems to be the denotation of the subject of the attitude verb, Craig. Contrast this with (16-b), where the perspective parameter—from whose perspective Carla is sitting to his of her left—can be filled both by the expressed attitude holder, Craig, as well as the speaker/agent, Michael; probably with a slight preference for the former. Thus, it seems that RLEs are somewhat more flexible in their assignment of the perspective parameter than PPTs in their assignment of the judge parameter: they are, as it were, more *shiftable*. We urge the reader to keep this difference between PPTs and RLEs in embedding contexts in mind, since we will return to it in our experiment.³

A third difference, and one that has been the subject of much discussion is the proneness to so-called *faultless disagreement*,⁴ which PPTs exhibit, while RLEs do not. Although this property has been a topic of research and lively debate in the philosophy of language for at least 15 years now, we will not enter into the discussion

³ Probably closely related to the difference in embedding under attitudes is the difference in the behavior in counterfactuals; cf.:

- (i) a. If I were Craig, Carla would sit to my left.
 b. #If I were Craig, haggis would be tasty.

This seems to add to the evidence that the perspective parameter of RLEs is readily shiftable, while the judge parameter of PPTs is less so; see Klages, Holler, Kaiser and Weskott (2019) for some discussion and experimental evidence.

⁴ One reason for being a bit sceptical about the term “faultless disagreement” is that the faultlessness of disagreement does not seem to be limited to predicates of taste, or, more generally, statements of “an opinion”. Kracht and Klein (2014) argue quite convincingly that disagreement and, more generally, mutual misunderstanding are ubiquitous and, if we read them correctly, even desirable properties of natural languages.

Also, one might wonder whether the term ‘disagreement’ is well chosen: the currently championed relativist treatments of cases of faultless disagreement seem to us to imply that there cannot be agreement about matters of taste, and it seems somewhat dubious whether there can be disagreement, faultless or not, about matters where there can be no agreement. Luckily, these critical considerations are completely orthogonal to the aims of the current paper.

of faultless disagreement here, but rather only point out that there is a palpable difference between the exchanges in (17) and (18):

- (17) CRAIG: This vegetarian haggis is tasty.
MICHAEL: No, it isn't.
- (18) CRAIG: This vegetarian haggis contains cauliflower.
MICHAEL: No, it doesn't.

Evidently, the disagreement between Craig and Michael in (17) is of a different kind than that in (18). To witness: the disagreement in (18) can be settled by checking—by some appropriate analytic procedure—whether the vegetarian haggis in question contains cauliflower or not. If it does, Craig is right, and Michael is wrong, and if it does not, the other way round. For (17), there does not seem to exist an equivalent procedure of assessing who is right, and who is wrong. Actually, there does not even seem to be something to be right or wrong *about*. Peter Lasersohn has made this point repeatedly: while the assessment of the truth of a judge-independent predication (like λx . **contains-cauliflower**(x)) simply depends on *matters of fact*, the assessment of the truth of a sentence containing a PPT does not; it is, as Lasersohn puts it, dependent on *matters of taste* (see Lasersohn (2017) for extensive discussion).

A fourth point where the two types of predicates diverge is the possibility to use RLE in a derived fashion, where the *perspectival center* is not a sentient being, but an artifact onto which a front-back asymmetry is projected. Typical cases are cupboards, cars, etc. Consider a case where there is a person, Michael, and a ball lying on the ground; between the two, there is a car. If the front of the car is facing the ball, Michael can truthfully utter (19-a), but when the car is facing towards Michael, (19-a) is infelicitous (though perhaps not false), while (19-b) is felicitous.

- (19) a. The ball is in front of the car.
b. The ball is behind the car.

Such cases of a *derived origo* (“Origoverschiebung” in Bühler’s (1934) original parlance), which have received different treatments in linguistic semantics (see Bierwisch (1988), Wunderlich and Herweg (1991), Aurnague and Vieu (1993), and Kracht (2002)), seem not to have any obvious equivalent in the semantics of PPTs: it is quite hard to imagine what such an equivalent, a “derived judge parameter”, might be.

A further difference between the two expression types lies in their event semantic properties: while PPTs can be used to express habitual judgments as in *I find haggis tasty*, which are rather temporally stable, i.e. their truth is asserted to hold for a long interval including the utterance time, but possibly also stretching into the future, the meaning of RLEs lacks such longevity; which is not very surprising, given that the relative locations of objects, even if they are non-movable, are highly dependent on the location of the *origo* (see Skopeteas, Hörnig, and Weskott (2008) for discussion).⁵ In other words: although the meaning of both types of expressions has to be time-sensitive, they seem to differ with respect to the intervals they describe, simply because—and we are fully aware that this is truistic—in most cases, people's localisations relative to objects change faster than their tastes do.

Finally, the root of the differences enumerated so far, probably lies in the ontological differences between “judges” and “perspectives”, that is, the values that get assigned to the parameters of PPTs and RLEs, respectively. A judge has to be a sentient being, perhaps even a sentient being capable of expressing a judgment (though that is not entirely clear), and the perceptions of this sentient being have to be (mentally) represented on a scale: in order to be able to find something tasty, one has to have a comparison class, i.e. a set of objects with a (partial) ordering relation defined over that set. In comparison, a perspective is an object of an ontologically quite different kind: in the simplest case, it can be defined by two locations and a vector (e.g., in a Euclidian space); or a geometric point, and a projection (see Abusch and Rooth (2017)). Objects such as these, which figure in the semantics of RLEs, are clearly ontologically less complex than the scales involved in the semantics of PPTs. Note also that the origin of the vector or the projection of the perspective encoded in an RLE does not have to be a sentient being, nor one being capable of forming judgments; a camera, or, as we have seen, even a cupboard, is sufficient for inducing a perspective, although both artifacts have “inherited” their perspective from a human projecting it

⁵ A reviewer noted that statements containing RLEs can also describe habitual judgments, as e.g. in *Whenever I go to the movies, I prefer to sit in the front*. While we agree that the RLE here clearly figures in a habitual statement, we want to leave open the question whether what the overall statement expresses is a matter of relative location, or a matter of taste, or preference.

onto them. It should be noted, however, that spatial expressions can also be used to denote scalar arrangements—think, for example, of relational expressions like *further behind*, etc.; but these usages are derivative of the basic use of spatial prepositions and adverbs. Furthermore, as was pointed out to us by Sarah Zobel (p.c.), comparatives and superlatives of RLEs seem to be quite odd, at least in predicative use:

- (20) a. *Peter sitzt linker als Paul.
Peter sits left-COMP as Paul.
'Peter is sitting further to the left than Paul.'
- b. *Peter sitzt am linkesten.
Peter sits at-the lefttest.
'Peter is sitting leftmost.'

This contrasts with the perfectly acceptable comparative and superlative usages of PPTs:

- (21) a. Pudding ist leckerer als Presssack.
Pudding is tastier as Presssack.
'Pudding is tastier than Presssack (=collared pork).'
- b. Pudding ist am leckersten.
Pudding is at-the tastiest.
'Pudding is the tastiest.'

To sum up: despite the initial prospects of providing a uniform semantic treatment for the two types of expressions, and despite some apparent semantic similarities, we have found them to differ in quite crucial respects. This raises the question whether the class of perspective-sensitive expressions is as uniform as one would consider it to be at first glance. In addition, we want to raise the question whether the two types of expressions can be shown to be interpreted differently in actual comprehension; if they can, this would be evidence against their uniformity.

Our Experiment

In order to answer this question and to establish whether the apparent semantic and pragmatic differences discussed above can be made visible by quantitative data from actual linguistic behavior, we designed an experiment in which participants had to decide which of two boxes is the one that a protagonist in a given scenario would choose. The scenarios were described linguistically, and additionally by means

of a schematic picture representing the scenario from a bird's eye view. We chose to address the research question in this somewhat indirect manner, since previous studies used a rather blunt approach to assess the perspectivized interpretation of participants by asking them directly from whose perspective a certain expression was to be evaluated (e.g., see Harris and Potts (2009), Kaiser (2015), Kaiser and Lee (2017); but also see Kaiser and Cohen (2012) for a more indirect approach). In order to make the goal of our experiment less perspicuous, and thereby prevent participants from behaving strategically, we embedded the items aiming at the interpretation of PPTs and RLEs into a set of fillers that were concerned with the scalar implicatures of expressions like *some* and *most*; see below for details.

By directly comparing two quite different types of PSEs in the same experimental setting, we hoped to accrue some evidence pertaining to the question as to whether the commonalities, or the differences between the two expression classes play a more important role. Since from all the differences described above in the section on the differences, the difference in embedding (see (16)) is the one that seemed to us the easiest to operationalise in an experiment, we chose to cross the factor PERSPECTIVE SENSITIVE EXPRESSION (i.e., PPTs vs. RLEs), with the factor EMBEDDING (embedded vs. non-embedded occurrence of the PSE) in a fully crossed design. Given the differences in embedding behavior evident in (16), as well as the rather long list of differences in general, we predicted there to be main effects for both factors; see below for the more specific hypotheses.

Participants

We tested 40 speakers of American English over 18 years of age, 19 of which identified as female, 20 as male, and one which did not identify as female or male.

Materials

One item consisted of a linguistic description of the scenario, a pictorial representation of the decision situation, and a decision prompt; this structure was common to both experimental items and fillers. Also common was the depicted and described situation: two protagonists are involved in a box-picking game at a table. On the picture belonging to each picture, the participants saw the two protagonists

seated opposite each other, with a table between them, on which the boxes are either placed on the line between the two, or perpendicularly. In the exact middle between the two boxes there is a flower, serving the role of a non-oriented relatum object (the depiction of the flower was centrosymmetric). Both protagonists are depicted schematically and symmetric to the horizontal axis of the picture, and they are named.

The RLE items had a relatively simple structure: there was a context sentence (above the scenario picture in **Figure 3**), the critical sentence, and the decision prompt (both below the picture).

The RLEs employed in our materials were *to the left of*, *to the right of*, *in front of*, and *behind*. In order to render the presentation of the stimuli in the PPT condition as similar as possible to that in the RLE condition, the PPT items were headed by a more elaborate context, in which the taste preferences, or general attitudes toward the boxes were established; the target sentences and decision prompts were the same as in the RLE condition. **Figure 4** illustrates the presentation of the PPT items:

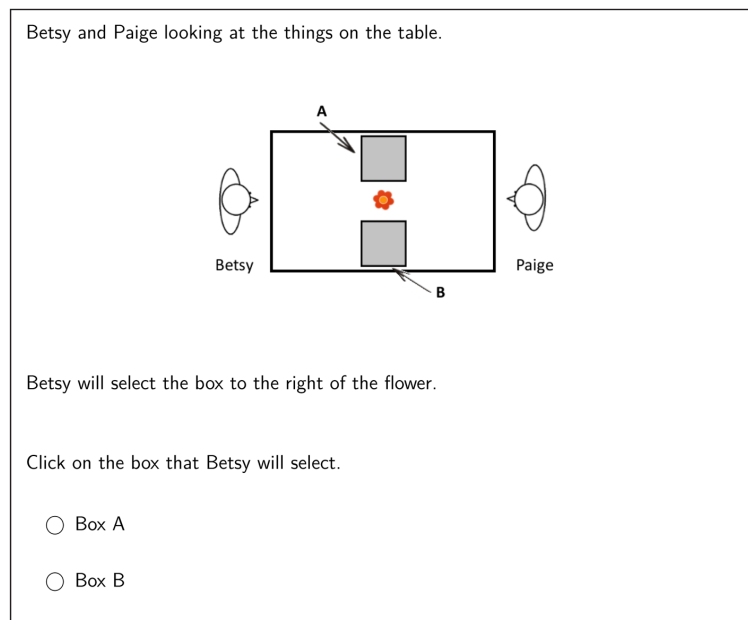
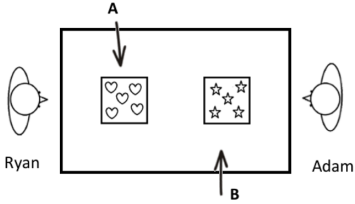


Figure 3: Sample stimulus in the RLE/-embedded condition.

Adam finds boxes with hearts annoying, but he considers boxes with stars astonishing.

Ryan considers boxes with hearts astonishing, but he finds boxes with stars annoying.



Ryan thinks that Adam will select the annoying box.

Click on the box that Ryan thinks Adam will select.

Box A

Box B

Figure 4: Sample stimulus in the PPT/+embedded condition.

The 12 items thus consisted of 12 pairs of PPTs, each pair consisting of a predicate with a positive valence (e.g., *inspiring*, *fascinating*, *astonishing*) and a predicate with a negative valence (such as *boring*, *annoying*, *disturbing*). The PPTs were chosen following the criteria in McNally and Stojanovic (2014), and were additionally matched against the stimulus-bias scores in Bott and Solstad (2014) and Ferstl, Garnham, and Manouilidou (2011).

Thus, depending on the condition of the item, either the position (RLE), or the surface of the boxes would vary. There were 24 items overall: 12 PPTs, and 12 RLEs. Within these, there were six +embedded, and six –embedded items, respectively. In addition, we varied, and counterbalanced, as far as that was possible, a number of further variables: (i) the box-taking verb (rotating through the verbs *choose*, *pick*, *select* and *take*); (ii) the position of the target box (the box that would correspond to a shifted reading of the PPT, or the RLE) was counterbalanced (whether it was to the left/front/right, or behind the flower); (iii) the position of the active protagonist (the “box-taker”); (iv) the pattern on the target box (rotating through the patterns);

(v) the pairs of patterns for the box pairs; and (vi) the gender of the protagonists. The embedding verb in the +emb condition was held (*to think*).

In addition to the 24 experimental items, there were 24 filler items, four of which served as benchmarking items. The fillers had linguistic descriptions like *'Luke and Maya are playing a game. Luke will pick the box with some/most of the stars. Click on the box that Luke will pick.'*, along with a picture that fitted the description semantically, or only by drawing an implicature. For four of these fillers, the descriptions did not even fit semantically; these served the purpose of detecting tired or unattentive participants. Four lists were created according to a latin-square design; the resulting lists were splitted into two blocks, and these blocks were randomized. Each block started with a filler.

Procedure

The experiment was administered via Amazon Mechanical Turk. First, participants were informed about their rights, and the setup of the experiment was explained, and a few sociographic variables were collected. Participants were then given two sample items to familiarise themselves with the task. Then the experiment with the 48 trials would start.

Design and Predictions

By nesting the factor EMBEDDING (+embedded vs. –embedded) under the between-items factor PERSPECTIVE-SENSITIVE EXPRESSION (PPT vs. RLE; henceforth PSE for short), we obtained four conditions, which we illustrate below:

- (PPT) [Context:]
Hazel finds boxes with stars confusing, but she considers boxes with dots fascinating. Lexie considers boxes with stars fascinating, but she finds boxes with dots confusing
- [Picture:]
Lexie and Hazel at the table, on which a box with dots (Box A) and a box with stars (Box B) are placed.
- [Target:]
- (PPT/–emb) Hazel will select the fascinating box.
- (PPT/+emb) Lexie thinks that Hazel will select the fascinating box.
- [Decision Prompt:]
Click on the box that (Lexie thinks that) Hazel will select.

- (RLE)** [Context:]
Heather and Shannon are looking at the things on the table.
- [Picture:]
Heather and Shannon at the table, on which a grey box (Box A), a flower, and second grey box (Box B) are placed between the protagonists.
- [Target:]
- (PPT/-emb)** Heather will select the box in front of the flower.
- (PPT/+emb)** Shannon thinks that Hazel will select the box in front of the flower.
- [Decision Prompt:]
Click on the box that (Shannon thinks that) Heather will select.

The factor PSE was tested *within-participants* and *between-items*; the factor EMBEDDING was tested *within-within*.

Firstly, we predicted a main effect of the factor EMBEDDING, meaning that the box that corresponds to the intrinsic, i.e. shifted interpretation of the PPT/RLE of the box-taker (Hazel, or Heather, respectively, in the examples above; the “box-taker box”) will be picked more often in the (–emb) conditions, because there is no competitor for the assignment of the perspective/judge parameter to the variable of the PSE, while in the (+emb), the other box (corresponding to the intrinsic interpretation of the other protagonist) should be picked more often.

Based on our theoretical considerations, we further predicted an interaction of the factors EMBEDDING and TYPE OF PSE: RLEs show a greater flexibility in the assignment of the perspective/judge variable than PPTs (recall the section on the differences between the two types of PSEs, and in particular the discussion below example (16)). Thus, RLEs should be more easy to shift towards the subject denoting the attitude holder in the (+emb) conditions than PPTs, while we would not expect any difference in the (–emb) conditions. Thus, the difference in proportions of decisions for the box-taker box (RLE-PPT) should be negative in the two (+emb) conditions, and close to zero in the two (–emb) conditions.

Results

As our dependent variable, we defined the proportion of decisions for the box-taker box, that is, the box that corresponds to the intrinsic/perspectivised reading of the RLE/PPT from the viewpoint of the protagonist who gets to pick the box in the

scenario. For example, in the scenario depicted in (3), this would be Box A, because it is to the right of the flower from Paige's viewpoint. **Figure 5** plots the proportion of box-taker box decisions dependent on the TYPE OF PSE (PPT vs. RLE), and the factor EMBEDDING (- vs. + embedding).

As is evident from **Figure 5**, the probability of picking the box-taker box, i.e. the box corresponding to the shifted interpretation of the PSE, was considerably higher in the non-embedded conditions than in the embedded ones (means: .85 vs. .41). Furthermore, the proportion of box-taker box decisions was somewhat higher in the PPT condition than in the RLE condition (.68 vs. .58). And the difference between these two conditions is a bit more articulate in the +emb conditions than in the -emb conditions (.15 vs. .05), hinting at an interaction of the two factors.

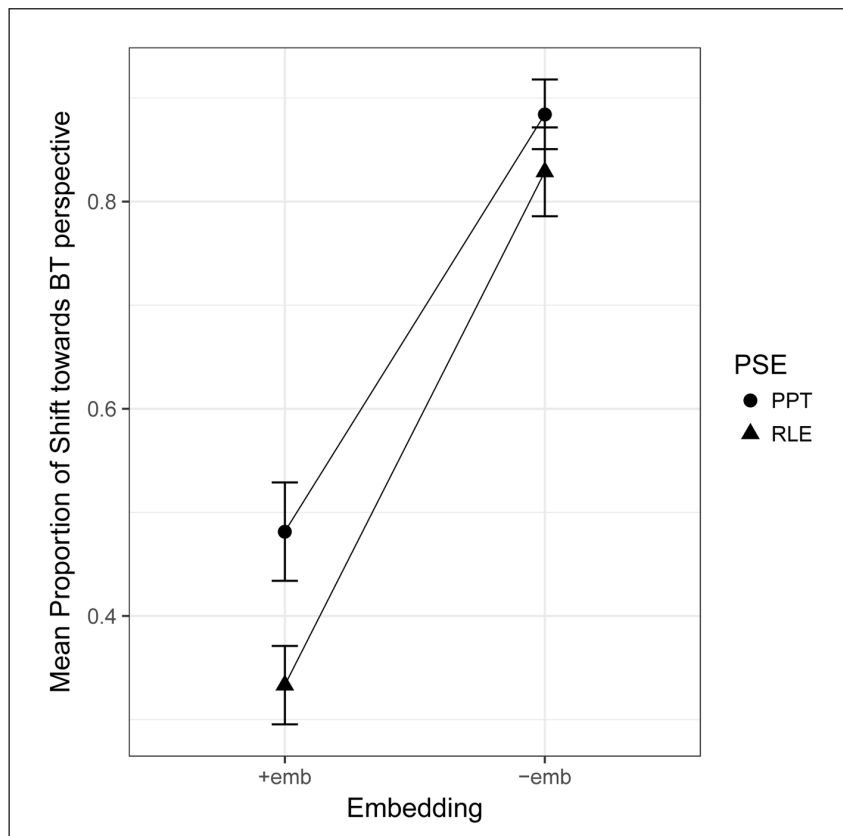


Figure 5: Mean Proportion of Shift Towards the Box-Taker Perspective, dependent on EMBEDDING and TYPE of PSE.

In order to assess the reliability of these effects, we performed a linear mixed-effects logistic regression on the decisions, with EMBEDDING and TYPE OF PSE as fixed factors, and participants and items as random factors. The model with the maximal random effects structure (see Barr, Levy, Scheepers, and Tily (2013)) did not converge, so we fitted the most complex model that would converge, with the syntax `glmer(persp ~ (PSE*EMB) + (1+PSE-subject) + (1-item), ...)`. Significance was assessed by forward-selection model comparison likelihood-ratio χ^2 -tests. We are aware that the fact that we were not able to test the maximal model might jeopardize the generalizability of our results because of inflation of type I error, and we will hedge our conclusions accordingly. The output of the maximal model is given below:

Our prediction that there should be a main effect of embedding is clearly borne out by the data, and the model comparison for that factor yielded a significant effect for EMBEDDING, $\text{LR-}\chi^2_{df=1} = 39.90$, $p < .001$. The main effect of TYPE OF PSE proved to be significant in the model comparison, as well: $\text{LR-}\chi^2_{df=1} = 6.97$, $p < .01$, although we are less sure whether this is really a resilient result, given the problems with model convergence. In any event, the interaction we predicted was not significant in the analysis given in **Table 1**; nor was it in the model comparison, where adding the interaction did not improve model fit, $\text{LR-}\chi^2_{df=1} = 0.32$, $p > .05$. Apparently, the variance in the data set was too big for the interaction to show a reliable effect. In our search for the source of this variance, we carried out further *post-hoc* tests, and hit upon two interactions buried in the data. In the first of these interactions, our factor EMBEDDING interacted with the emotional valency of the PPTs; in the second one, it was the orientation of the RLEs. Recall that half of the target boxes were ones with a negative emotional valency (i.e., *boring*, *annoying*, etc.), while the other half were positively valued (*amazing*, *interesting*, etc.).

Table 1: Output of the maximal (converging) model.

Fixed effects	Estimate	Std.Error	z value	Pr(> z)
(Intercept)	-0.03149	0.32049	-0.098	0.9217
PSERLE	-0.77262	0.33422	-2.312	0.0208*
EMB-emb	3.00036	0.42416	7.074	1.51e-12***
PSERLE:EMB-emb	-0.30710	0.53947	-0.569	0.5692

As **Figure 6** shows, the shifted interpretation was most frequently (in almost 100% of the cases) available to participants when the target box corresponding to this shifted interpretation was positively valued, and there was no embedding. The biggest effect of embedding occurred for these positively valued PPTs: if Ryan thinks that Adam will take the amazing box, it apparently matters less whether Ryan or Adam finds the box amazing (in the latter case, Ryan just adopts Adam's stance towards the box).

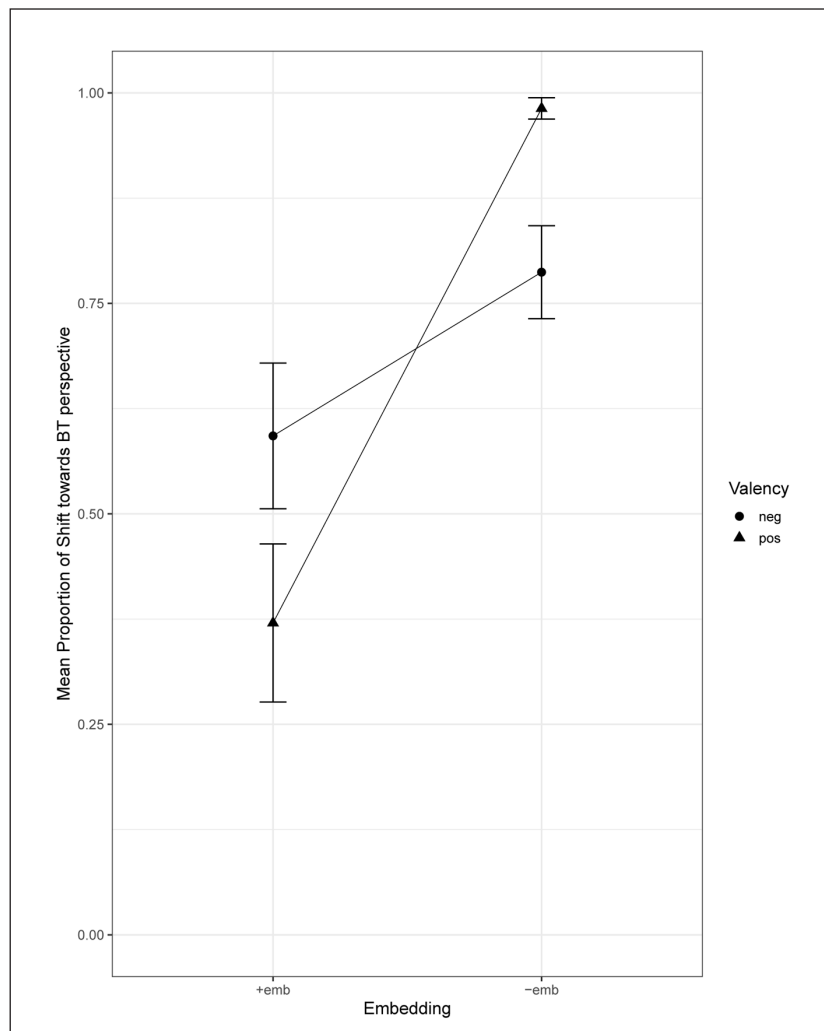


Figure 6: Mean Proportion of Shift Towards the Box-Taker Perspective for the PPTs only, dependent on EMBEDDING and VALENCY of the PPT.

Discussion

The results we obtained were not particularly clear with respect to the hypotheses we started out with: whether or not there is a clear difference between predicates of personal taste and relational locatives seems to depend on details of the statistical analysis—not a very desirable state of affairs. Still, we think that, taken together with the theoretical considerations pursued in the section on commonalities and differences, it is possible to argue that the emerging picture is not so unclear after all. In order to integrate the experimental results into our theoretical background, we will shortly review the commonalities and differences that we found the two types of PSEs, PPTs and RLEs, to exhibit.

The *commonalities* had mainly to do with the way in which context interacts with the implicit content in the semantics of the two types of expressions: both RLEs and PPTs were shown (i) to be context-dependent, and—in a sense to be discussed in more detail below—indexical; (ii) to contain parameters which can be left implicit, or made explicit by overt lexical material encoding the judge or the perspectival center, respectively; and (iii), to exhibit, up to a certain point, striking commonalities in how the parameters are assigned their respective values.

The *differences* between the two expression types began when we looked closer at the way the content of utterances containing a PPT or an RLE gets fixed relative to certain contexts; that is, ultimately, how the judge/perspective parameter gets fixed, and how properties of the context (as, for example, speaker orientation) affect this fixation of the parameter value. To remind the reader, we enumerate the differences here again. PPTs and RLEs differ with respect to (i) optionality of expressing the relational argument (depending on language); (ii) availability of non-speaker judge/perspective parameter assignments; (iii) proneness to faultless disagreement; (iv) derived assignments; (v) event semantic properties (longevity); and, (vi), and probably most importantly, ontology of the type of entities assigned as parameter values (judges vs. perspectives). Even from this somewhat arbitrary list it appears that the differences outnumber the commonalities, and we tend to think, on theoretical grounds alone, that the differences indeed outweigh the commonalities. Empirically, we can back this claim up by the data (caveats to follow below), since the

effect of our factor PSE TYPE was significant in the analysis that we presented. But we hasten to remind the reader that the non-maximal random effect structure of the logistic regression mixed model, and the resulting possibility of an inflated type I error, forbid any strong generalisations. Which is just statistical jargon for: the data did not tell us reliably whether the two types of PSEs really do differ.

Also, the striking similarities in the two interactions between EMBEDDING and VALENCY and EMBEDDING and ORIENTATION are apt to cast some doubt on any strong statement about the differences: given these two interactions we found in the data, should we not reconsider some of the theoretical differences as perhaps less significant (in the non-statistical sense)? Currently, we do not think so. Although our reasoning here is completely post-hoc, and certainly quite speculative, we want to put it forward nevertheless to allow readers to make their own judgement.

First of all, the similarity between the two types of expressions is partly due to the choice of our experimental design. Although in everyday situations, people sometimes face each other, and then person X 's right is person Y 's left, etc., this is not a property of RLEs in general, but restricted to these everyday face-to-face situations, which we also chose to employ in our design. A similarly unnatural "inverse symmetry" held for the PPTs in our experiment: whenever protagonist X valued Box A positively and Box B negatively, the reverse would hold for the other protagonist, although the taste preferences of two individuals in everyday situations, luckily, seldom exhibit this kind of dependence. Thus, for both types of PSEs, the relation R (more or less explicitly) expressed by the PSEs with respect to two objects a and b and with respect to two protagonists X and Y had the property $aR_x b$ iff $bR_y a$, or $aR_x b$ iff $aR_y^{-1} b$. Thus, a fair amount of the similarities we found in the data may very well be due to the similar restrictions that we imposed on the experimental scenarios for RLEs and PPTs. Of course, this was very much intended: without these restrictions, we would not have been able to experimentally compare the two types of PSEs in the first place.

Still, one may wonder whether these design restrictions alone explain the similar patterns, or whether there is some deeper reason why the valency of PPTs and the orientation of RLEs behaved so similarly in our experiment. Our take on

the somewhat surprising similarity in the interaction patterns is that both taste predications with positive valency, and *left of/right of* localisations have rather clear preferences with respect to the assignment of their respective parameters: in case there is no embedding under an attitude verb, both subtypes of PSEs clearly prefer the speaker as the parameter value (judge/perspectival center). In case the clause containing the PSE is embedded under an attitude verb, the subject of that verb is the clearly preferred. For the taste predication with a negative valency, and for *in front of/behind* localisations, these preferences are less pronounced. For PPTs, we can make perfect sense of this weaker preference: it simply mirrors the reluctance of our participants to attribute to a protagonist—be it the box-picker, or the other protagonist—a choice where the chosen box is negatively valued by that protagonist. What is less clear to us is why the front-behind dimension should exhibit a similarly weakening effect on the preferences. We have to leave the explanation for this effect to further research.

Thus, with the exception of this one data point, we think we are able to explain how the observed similarities came about. We furthermore think that the differences—both empirical, and theoretical—persist in the face of the similarities: it should be quite hard, for example, to explain away the ontological differences of the parameter values we have pointed out. And even on a more basic level, the denotations of the two types of expressions, the differences are quite apparent: while an RLE denotes a relation between two sets of points in space, relative to an origo/perspectival center and a time of evaluation, a PPT denotes a mental object of at least ordinal scalar type, possibly with a standard, i.e. a threshold value, relative to an origo/judge and a time of evaluation. While the denotation of RLEs thus can be given extensionally, this does not hold for PPTs. We think that this very basic difference alone militates against a uniform treatment of the two types of PSEs, and calls for a semantic treatment of the class of perspective sensitive expressions that, while taking into account their commonalities, does justice to their differences.

Given the very preliminary nature of our results, it seems redundant to point to the need for more empirical work on the issues dealt with. We will only point to some directions for further research here.

We are currently working on a replication of the experiment described here in German, where RLEs can express the origo parameter as an adjunct, which is not possible in English (see Hörnig, Weskott, Kliegl, and Fanselow (2006) for some discussion):

- (22) CRAIG: Carla sitzt von Michael aus links.
Carla sits from Michael off left.
'Carla is sitting to the left, as seen from Michael.'

Note that (22) is, thanks to its explicit expression of the origo parameter, true both in Scenario 1 (cf. **Figure 1**, where the speaker, Craig, is aligned with the relatum, Michael), and in Scenario 2 (cf. **Figure 2**, where this is not the case). We think that a typological approach to the phrases expressing judges and perspectival centers is called for, since the variability seen even within the Germanic languages makes for interesting semantic differences. Moreover, given Barbara Partee's (1989) criterium of argumenthood for origo phrases, it seems a worthwhile task to look for languages where these origo phrases might be obligatory, making a pronominal treatment of origos—and possibly judges, too—seem more promising than in Partee's original assessment of the data.

Further experimental work needs to be done with respect to the preferences that the assignment of judge and origo parameters exhibits in online comprehension. We have started to look into this in counterfactual contexts (see Footnote 3), but this is only a first step, and there are intensional contexts—imagination, dreams, etc.—where the interpretation of perspectival parameters behaves in fascinating and unexpected ways.

To conclude on a more general note: we have argued here that the differences found between two members of the class of perspective sensitive items, predicates of personal taste, and relational locative expressions, may outweigh the similarities they exhibit at a first glance. Given the differences, one may very well ask why the two types of expressions came to be treated as members of the same class in the first place. We think that this is an instance of a more general cognitive pattern. Spatial relational expressions tend to get mixed up with other types of relational and/or indexical expressions for two reasons: firstly, they are context dependent, which may

be the reason why they get thrown into the same bag as other relational context dependent expressions. The second reason, however, is probably more important. We humans tend to think about many abstract relations in spatial terms; linguists studying metaphor have long recognized and described this. The application of the notion of perspective to mental representations seems a particularly prolific case: though this notion is firmly grounded in an extensional denotation in Euclidean space, it is, with increasing degree of metaphoricity, extended to conceptualise relational notions concerning temporal, epistemic, and intentional relations more generally. A case of particular significance is the notional environment of egocentricity, i.e. the *self/de se*, in the philosophy of language and the philosophy of mind. To give but one example: in his explanation of the obligatory egocentricity of certain beliefs—their being attitudes *de se*, as Lewis (1979) termed them—John Perry called them “self-locating beliefs”, or “self-locating knowledge” (Perry (1979), p.492f.). Over and above the wording, which borrows from the spatial domain, the conceptual background is that, just as we self-locate ourselves in physical space (e.g., by means of a fixed map with a red dot saying “You are here.”), we can self-locate in logical space.⁶ Given the way notions of spatial and epistemic perspective are mixed in philosophical discourse, as well as in ordinary talk (think of lexemes like *stance*, *viewpoint*, etc.), it is not too surprising that the two types of expressions we have looked at here have been classified with their commonalities, rather than their differences in mind. But we contend that broadening the empirical basis in the study of perspective sensitive expressions in general will lead to a more accurate picture of the semantic variation within the class of perspective sensitive items, as well as of its potential common core, and, consequently, the prospects for a uniform semantic analysis.

⁶ The property of borrowing from the spatial domain is shared by many other of the thought experiments that Perry, Lewis, and others in their wake have brought up to argue for (or against) the particular properties of egocentric beliefs and utterances; see Cappelen and Dever (2013) for a critical discussion. Although we do not want to enter into the history of this idea of “self-location”, we think that the first and clearest commitment to the parallel of (self-)location in physical and logical space is in Lewis (1979):

“What happens when [Adam] believes a proposition, say the proposition that cyanoacrylate glue dissolves in acetone? Answer: he locates himself in a region of logical space.” (p.518, our emphasis)

Acknowledgements

This publication is based on Chapter 5 of the first author's dissertation, Klages (2020), who gratefully acknowledges the funding of the Graduate School "Theorie und Methodologie der Textwissenschaften und ihre Geschichte". The work reported here was partly carried out in the project ProProCon of XPRAG.de priority program funded by the DFG. The authors wish to thank audiences at the universities of Bielefeld, Tübingen, Los Angeles and Nijmegen for fruitful discussion, as well as the two anonymous reviewers from OLH and Rose Harris-Birtill for their comments.

Competing Interests

The authors have no competing interests to declare.

References

- Abusch, D., & Rooth, M.** (2017). *The formal semantics of free perception in pictorial narratives*. Retrieved from <http://events.illc.uva.nl/AC/AC2017/Proceedings/> (Last accessed on September 4, 2019)
- Aurnague, M., & Vieu, L.** (1993). A Three-Level Approach to the Semantics of Space. In C. Zelinsky-Wibbelt (Ed.), *The Semantics of Prepositions: From Mental Processing to Natural Language Processing* (pp. 395–439). Berlin, New York: DeGruyter.
- Barr, D. J., Levy, R., Scheepers, C., & Tily, H. J.** (2013). Random effects for confirmatory hypothesis testing: Keep it maximal. *Journal of Memory and Language*, 68. DOI: <https://doi.org/10.1016/j.jml.2012.11.001>
- Bierwisch, M.** (1988). On the grammar of local prepositions. In M. Bierwisch, W. Motsch & I. Zimmermann (Eds.), *Syntax, Semantik und Lexikon. Studia Grammatica XXIX* (pp. 1–65). Berlin: Akademie Verlag.
- Bott, O., & Solstad, T.** (2014). From Verbs to Discourse: A Novel Account of Implicit Causality. In B. Hemforth, B. Mertins & C. Fabricius-Hansen (Eds.), *Psycholinguistic Approaches to Meaning and Understanding across Languages* (pp. 213–251). Cham: Springer. DOI: https://doi.org/10.1007/978-3-319-05675-3_9
- Bühler, K.** (1934). *Sprachtheorie. Die Darstellungsfunktion der Sprache*. Jena: G. Fischer.
- Bylinina, L., McCreedy, E., & Sudo, Y.** (2015). Notes on perspective-sensitivity. In P. Arkadiev, I. Kapitonov, Y. Lander, E. Rakhilina & S. Tatevosov (Eds.), *Donum*

Semanticum. Opera Linguistica et Logica in Honorem Barbara Partee a discipulis amicisque rossicis oblata (pp. 67–79). Moscow: Languages of Slavic Culture.

- Cappelen, H., & Dever, J.** (2013). *The Inessential Indexical. On the Philosophical Insignificance of Perspective and the First Person*. Oxford: OUP. DOI: <https://doi.org/10.1093/acprof:oso/9780199686742.001.0001>
- Ferstl, E. C., Garnham, A., & Manouilidou, C.** (2011). Implicit causality bias in english: a corpus of 300 verbs. *Behavior Research Methods*, 43(1), 124–135. DOI: <https://doi.org/10.3758/s13428-010-0023-2>
- Harris, J. A., & Potts, C.** (2009). Perspective shifting with appositives and expressives. *Linguistics and Philosophy*, 32, 523–552. DOI: <https://doi.org/10.1007/s10988-010-9070-5>
- Hörnig, R., Weskott, T., Kliegl, R., & Fanselow, G.** (2006). Word order variation in spatial descriptions with adverbs. *Memory & Cognition*, 34, 1183–1192. DOI: <https://doi.org/10.3758/BF03193264>
- Kaiser, E.** (2015). *Perspective-shifting and free indirect discourse*. Retrieved from <https://journals.linguisticsociety.org/proceedings/index.php/SALT/article/download/25.346/3346> (Last accessed on September 4, 2019). DOI: <https://doi.org/10.3765/salt.v25i0.3436>
- Kaiser, E., & Cohen, A.** (2012). Free Indirect Discourse and Perspective Taking. *Poster presented at AMLaP 2012*, Riva del Garda, Italy.
- Kaiser, E., & Lee, J. H.** (2017). *Experience matters: A psycholinguistic investigation of predicates of personal taste*. Retrieved from <https://journals.linguisticsociety.org/proceedings/index.php/SALT/article/view/27.323/3848> (Last accessed on September 4, 2019). DOI: <https://doi.org/10.3765/salt.v27i0.4151>
- Kaplan, D.** (1989). Demonstratives: An essay on the semantics, logic, metaphysics and epistemology of demonstratives and other indexicals. In J. Almog, J. Perry & H. Wettstein (Eds.), *Themes From Kaplan* (pp. 481–563). Oxford: OUP.
- Klages, J.** (2020). *Perspektivierung im Text: Interpretation und Verarbeitung*. Georg-August-Universität Göttingen: PhD dissertation.
- Klages, J., Holler, A., Kaiser, E., & Weskott, T.** (2019). Discourse Expectations Induced by Perspectivization: The Case of Counteridenticals. *Talk held at DETEC 2019, Leibniz-ZAS*, Berlin.

- Kracht, M.** (2002). On the semantics of locatives. *Linguistics and Philosophy*, 25(2), 157–232. DOI: <https://doi.org/10.1023/A:1014646826099>
- Kracht, M., & Klein, U.** (2014). Notes on disagreement. In D. Gutzmann, J. Kopping & C. Meier (Eds.), *Evaluations – Denotations – Entities. Studies in Context, Contents and the Foundation of Semantics* (pp. 276–305). Leiden: Brill. DOI: https://doi.org/10.1163/9789004279377_013
- Lasersohn, P.** (2009). Relative truth, speaker commitment, and control of implicit arguments. *Synthese*, 166(2), 359–374. DOI: <https://doi.org/10.1007/s11229-007-9280-8>
- Lasersohn, P.** (2017). *Subjectivity and Perspective in Truth-Theoretic Semantics*. Oxford: OUP. DOI: <https://doi.org/10.1093/acprof:oso/9780199573677.001.0001>
- Lewis, D.** (1979). Attitudes De Dicto and Attitudes De Se. *The Philosophical Review*, 88(4), 513–543. DOI: <https://doi.org/10.2307/2184843>
- McNally, L., & Stojanovic, I.** (2014). Aesthetic adjectives. In J. Young (Ed.), *The semantics of aesthetic judgment* (pp. 17–37). Oxford: OUP. DOI: <https://doi.org/10.1093/acprof:oso/9780198714590.003.0002>
- Mitchell, J.** (1986). *The Formal Semantics of Point of View*. University of Massachusetts at Amherst: PhD dissertation.
- Partee, B.** (1989). Binding implicit variables in quantified contexts. In C. Wiltshire, R. Graczyk, & B. Music (Eds.), *Papers from the 25th Annual Meeting of the Chicago Linguistic Society* (pp. 342–365). Chicago: Chicago Linguistic Society.
- Perry, J.** (1979). The Problem of the Essential Indexical. *Nous*, 13(1), 3–21. DOI: <https://doi.org/10.2307/2214792>
- Skopeteas, S., Hörnig, R., & Weskott, T.** (2008). Contextual versus inherent properties of entities in space. *Linguistische Berichte*, 216, 431–456.
- Stephenson, T.** (2007). Judge dependence, epistemic modals, and predicates of personal taste. *Linguistics and Philosophy*, 30(4), 487–525. DOI: <https://doi.org/10.1007/s10988-008-9023-4>
- Wunderlich, D., & Herweg, M.** (1991). Lokale und direktionale. In D. Wunderlich & A. von Stechow (Eds.), *Semantik. Ein internationales Handbuch der zeitgenössischen Forschung* (=HSK Vol. 6) (pp. 758–785). Berlin/New York: DeGruyter.

How to cite this article: Klages, J, Holler, A, Kaiser, E and Weskott, T 2020 Commonalities and Differences in the Interpretation of Predicates of Personal Taste vs. Relational Locative Expressions: Some Theoretical Considerations and Experimental Evidence. *Open Library of Humanities*, 6(2): 10, pp.1–30. DOI: <https://doi.org/10.16995/olh.513>

Published: 09 September 2020

Copyright: © 2020 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See <http://creativecommons.org/licenses/by/4.0/>.



Open Library of Humanities is a peer-reviewed open access journal published by Open Library of Humanities.

OPEN ACCESS The Open Access logo, consisting of the words 'OPEN ACCESS' followed by a circular icon containing a stylized padlock with an open keyhole.