De: Review of Philosophy and Psychology em@editorialmanager.com **Objet:** Your Submission ROPP-D-23-00083 - [EMID:615a2d403a1435b5]

Date: 24 octobre 2023 à 18:15

À: Anouch BOURMAYAN anouch@bourmayan.fr

CC: verheyen@essb.eur.nl

Dear Dr. BOURMAYAN,

I have received the reports from our advisors on your manuscript ROPP-D-23-00083 "Valence first. An experimental investigation of the affective dimension of verb meaning."

With regret, I must inform you that, based on the advice received, I have decided that your manuscript cannot be accepted for publication in Review of Philosophy and Psychology. Both reviewers indicate that important psychological work on the matter has been overlooked in the introduction, which is important for the positioning of your contribution. The first reviewer also points to shortcomings of the experiments. While some these shortcomings are recognized in the discussion, they nevertheless shed doubt on the observation that valence truly comes first. Finally, the second reviewer questions the way you position your work relative to Frege's program. Having worked on a similar topic myself, I am very sympathetic to your goal of bringing valence more central in the study of meaning, but because the issues raised would require a thorough rewrite and additional experiments, I prefer to issue a reject decision, rather than to engage in a lengthy editorial process that might not end up convincing the reviewers. Below, please find the reviewers' comments for your perusal.

I had prepared several more detailed comments myself while reading your paper, which I will share here in case you might them useful when pursuing this line of work:

- I share Reviewer 1's opinion that it would be worthwhile to look into the work of <u>Kousta</u>. You might also want to look at the work of <u>Osgood</u> who is generally referenced on matters of valence in the psychological literature. Finally, you might find Experiment 3 from <u>De Deyne et al. (2014)</u> interesting, since it is very similar to your Experiment 2 although it pertains to adjectives. I believe these references are more central to your case than the literature on affective tone and mood.

De Deyne, S., Voorspoels, W., Verheyen, S., Navarro, D., & Storms, G. (2014). Accounting for graded structure in adjective categories with valence-based opposition relationships. Language and Cognitive Processes, 29, 568-583.

- I also share Reviewer 1's observation that the concrete/abstract dimension might make for a more natural comparison, although I appreciate it is related to the physical/psychological distinction.
- You refer to Rosch's basic level words. I took this to mean that you were referencing basic level words' usage, rather than their organisation in a hierarchy, since it is not clear that that holds for verbs. Perhaps that could be clarified.
- I recommend reporting the reliability of the norm data you obtained and making these data available for future use.
- Both experiments: A sample size justification would be appreciated, as well as information on the duration of the experiment and remuneration of participants.
- Experiment 1: Do the results hold when responses on which the maximally allotted time (2 secs) is reached are excluded?
- Experiment 2: It would be nice to have the lists included in the appendix. Did you consider including list as a factor in your mixed-effects analysis? A word about the overall low level of similarity would be appreciated.

I would like to thank you very much for forwarding your manuscript to us for consideration and hope the comments received will be useful for the pursuit of your research.

With kind regards, Steven Verheyen Executive Editor Erasmus University Rotterdam

Comments for the Author:

Reviewer #1: The role of valence and affective meaning, more generally as a factor central to word meaning, is regaining attention in psychology. This work contributes to this literature by showing that valence also affects verb meaning. The study is well-motivated, and overall, the study has merit. However, there are also limitations which limit its potential impact. The introduction adds to the existing literature by comparing more philosophic traditions with psychological theories of affective meaning. The latter is covered somewhat selectively and could benefit from including work that highlights the role of valence in grounding meaning (e.g. the affective embodiment theory, for instance, Kousta, S. T., Vigliocco, G., Vinson, D. P., Andrews, M., & Del Campo, E. (2011). The representation of abstract words: why emotion matters. Journal of Experimental Psychology: General or Winter, B. (2023). Abstract concepts and emotion: cross-linguistic evidence and arguments against affective embodiment. Philosophical Transactions of the Royal Society B, for an alternative view.). There is also recent electrophysiological evidence suggesting that emotional valence becomes available before other aspects of meaning (Ponz, A., Montant, M., Liegeois-Chauvel, C., Silva, C., Braun, M., Jacobs, A. M., & Ziegler, J. C. (2014). Emotion processing in words: a test of the neural re-use hypothesis using surface and intracranial EEG. Social Cognitive and Affective Neuroscience). While the introduction offers, understandably, only a snapshot, studies of this kind speak directly to the topic and methods proposed in this work and might be included in a revision.

The current work's more substantial limitation is what counts as evidence for the "valence first" hypothesis Experiment 1. Evidence for valence first is taken by evaluating the speed at which participants judge valence (positive vs. negative) and semantic domains (verbs being psychological vs. physical). The issue with this comparison is that the rationale for assuming that this kind of semantic domain sets a reasonable baseline is a tall order.

I suspect the authors are aware of this, as they argue why this distinction might be psychologically real at length in the introduction. However, even if this is a distinction with some psychological base, it does not demonstrate that other aspects of meaning (and basically any aspect of meaning should do) might not be easier to access. In this particular case, judging something to be positive or negative is a natural task in daily life, iudging whether verbs are psychological or physical is not. This



could be a matter of wording (perhaps it is easier to judge words' concreteness, which, apart from valence, is one of the major semantic dimensions), but without additional evidence it is hard to say.

A second potential issue is that verbs are much more complex than other parts of speech in terms of semantics, which might make valence a relatively more accessible semantic dimension.

Finally, in experiment 1, there might be other reasons why valence judgments are faster than domain judgments. One reason that stood out is the presence of morphological markers indicative of valence among 50% of the negative and psychological verbs (despair, displease, dishonor, discourage, dismay). The discussion recognises this indirectly but mostly focuses on the pragmatic side.

Given these limitations, there are several ways forward. The first one is to expand the experiment to systematically consider a wider variety of words and cover a broader set of semantic judgments pertaining to verbs and see where valence sits. Ideally, this experiment should also control for potential confounds, including, but not limited to, morphology. If new experiments are not feasible, then there should be an explicit acknowledgement of this as a limitation in the discussion. This would include noting that the current results cannot generalise to words other than verbs (applies to both experiments 1 and 2), and the results leave the possibility open that another semantic judgment might shed a different light on the findings (experiment 1). I know the introduction has some hedging around what can be learned from this work. That is fair, but clearly highlighting the limitations is essential to avoid situations where these findings could be taken out of context, which would result in misrepresentation of the evidence.

There are some specific points about the presentation of findings and the need for detail on methods and procedures that need to be considered in future versions of this work. This includes:

- Providing descriptives of the verb ratings with reliability scores (see page 7)
- The use of tables for some of the descriptives on page 8 that also includes absolute values on both dimensions, next to the actual verb stimuli listed on page 7.
- Motivation why only correct responses are considered in Experiment 1 (page 10)
- The list of materials selected in Experiment 2
- The use of a table to describe the experimental design in terms of materials (see page 11)

Reviewer #2: Dear editor and author,

The article presents evidence that valence is important or even prior to "referential meaning". I assess the paper based on the question of whether it significantly contributes to the psycholinguistics literature or to the philosophical community. Ideally it does both. I am afraid it accomplishes neither.

I think at most, it can do the former, but then the paper the paper is not speaking to the right audience and I recommend a psychology journal. I don't think that psychologists are very interested in a response to Frege. Moreover, I think the experiments are not advanced enough to really contribute to the debate in psycholinguistics. The emotional aspects of word meaning has been worked on a lot in the last three decades. The review of this literate in this paper is very short.

As to the philosophers, I think nobody will be convinced by this. I think there's a confusion here what Frege meant. It is not that he denied the importance of valence but he just didn't want it to be part of logical reasoning or his ideal language for the reason the author mentions. The idea that valence comes before referential meaning is therefore not at all surprising or interesting.

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