

Review of: "Creating ontological definitions for use in science"

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The authors have started addressing an important aspect that is not getting enough attention, and that is most welcomed. I also note that because Qeios does not make clear what type of article it is, I am left with an awkward feeling that I do not know what I am reviewing. To follow the authors, I miss a definition of an "Qeios article". I think the current article should get published, but I also note a number of missed opportunities that would make the work more reusable.

First, I miss some historic and scholarly background to the role of definitions in dictionaries and ontologies. Surely, there must be some prior art to this and some further reading (added as citations) would be very much appreciated. Prior work like the "Ontology Lookup Service" should be properly cited.

Second, the addition of unique functionality of Qeios with respect to definitions was unexpected. It felt like advertisement and it generally lacks citations of any type. On top of this, I am puzzled why the authors did not use this functionality efficiently in this article, and include definitions for (at least) the key topics of this paper.

A third aspect comment is the link to identifiers. I find the suggestion that the identifier (IRI) is primarily for the definition rather than the label. For many users of ontologies in the life sciences this may come as unexpected. I also like to link this to my second point, and like to invite the authors to make the bridge to the concepts of "compact identifiers", their use in written text, and, third, the "definition" functionality of Qeios.

A final major point is that I would encourage to authors to make the bridge for "FAIR"-ness, and in particularly the 15 guidelines effectively being "FAIR maturity indicators" that define domain-specific needs for ontologies (see FAIR principle R1.3). I see the research output of this article primarily being this list of 15 indicators.

Other comments:

- ontology identifiers are inconsistently represented
- the visual representation of 15 guidelines does not make them easy to go through
- I am not sure how to interpret guideline #11, particularly the "...that can be taken as read." part
- in guideline #14, I guess "(The Comment field is provided to allow ontology developers to provide explanations and elaborations to help users understand how to use the classes.)" sneaked in as part of the definition, but was not meant



to, right? See also my second small "other comment".