

ARTICLES ON SEMANTIC PUBLISHING

Dear Colleague,

I would like to bring to your attention three articles that I and my research group have published in April 2009 on the subject of semantic publishing.

1. David Shotton, Katie Portwin, Graham Klyne and Alistair Miles (2009) Adventures in semantic publishing: exemplar semantic enhancements of a research article. *PLoS Computational Biology* **5** (4): e1000361. <http://www.ploscompbiol.org/doi/pcbi.1000361>.

This article describes exemplar semantic enhancements we made to an original epidemiological research article. We wished to create an example of what we hope will become mainstream in publishing of on-line scientific research articles. So we took an original article:

Reis et al. (2008) Impact of Environment and Social Gradient on *Leptospira* Infection in Urban Slums *PLoS Neglected Tropical Diseases* **2**: e228, doi:10.1371/journal.pntd.0000228,

and published a semantically enhanced version of this article on the Web at <http://dx.doi.org/10.1371/journal.pntd.0000228.x001>.

This enhanced article includes interactive figures, mashups with Google Maps and with data from related publications, live links to full-text references, downloadable datasets in Excel files relating to figures in the paper, downloadable RDF metadata files describing the publication and the references it cites, and a separate Document Summary, all with their own DOIs. A diagram showing the ecosystem of documents resulting from our enhancement of the paper by Reis *et al.* (2008) is attached (Figure 1).

2. David Shotton (2009) Semantic Publishing: the coming revolution in scientific journal publishing. *Learned Publishing* Volume **22** (2), 85–94. <http://dx.doi.org/10.1087/2009202>.

Preprint at http://imageweb.zoo.ox.ac.uk/pub/2008/publications/Shotton_Semantic_publishing_evaluation.pdf

This article is a general review of the field of semantic publishing, written for a journal read by publishers.

3. David Shotton (2009) CiTO, the Citation Typing Ontology, and its use for annotation of reference lists and visualization of citation networks. Paper accepted for the BioOntologies SIG at ISMB2009, Stockholm, 29 June 2009. Postprint at http://imageweb.zoo.ox.ac.uk/pub/2008/publications/Shotton_ISMB_BioOntology_CiTO_final_postprint.pdf

CiTO, the Citation Typing Ontology, is an ontology for describing the nature of reference citations in scientific re-search articles and other scholarly works, and for publishing these descriptions on the Semantic Web. Citation are described in terms of the factual and rhetorical relationships between citing publication and cited publication, the in-text and global citation frequencies of each cited work, and the nature of the cited work itself, including its peer review status. This paper describes CiTO and illustrates its usefulness, both for the annotation of bibliographic reference lists and for the visualization of citation networks.

I hope you find these interesting and helpful.

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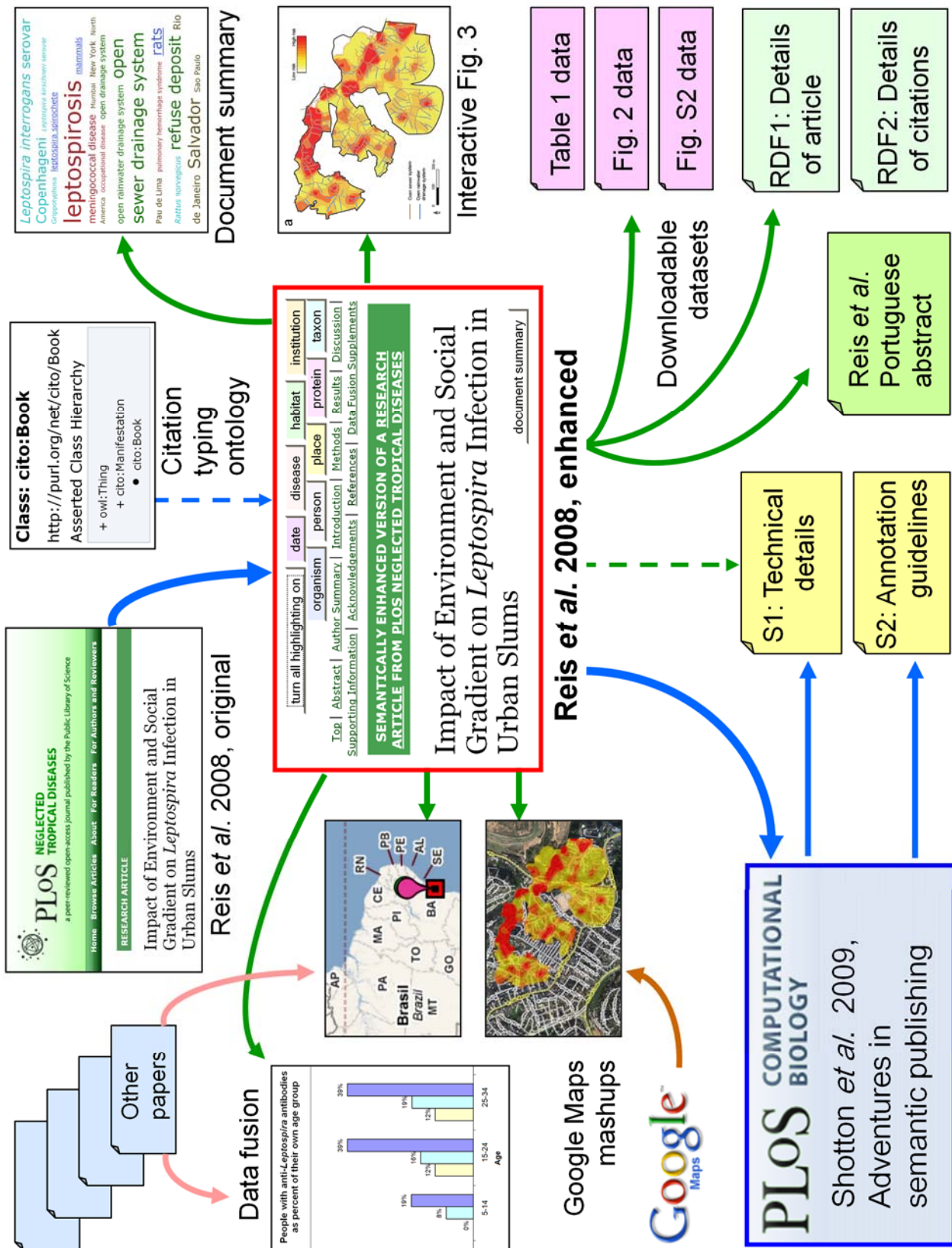


Figure 1. The ecosystem of published articles, documents, spreadsheets, data fusions and machine-readable RDF data files resulting from our decision to apply semantic enhancements to the article by Reis et al. (2008) Impact of Environment and Social Gradient on *Leptospira* Infection in Urban Slums *PLoS Neglected Tropical Diseases* 2: e228. <http://dx.doi.org/10.1371/journal.pntd.0000228.x001>