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Oortwijn, Y.; van den Berg, H.; Betti, A.

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Ground Truths for the Humanities *

Yvette Oortwijn[†] [‡], Hein van den Berg [†], Arianna Betti [†]

October 25, 2020

Abstract

Ensuring a faithful interaction with data and its representation for humanities *can* and *should* depend on expert-constructed ground truths.

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1. Provocation statement & argument

An important measure for the faithfulness of representations of data is the comparison to a ground truth.

According to some, ground truths are unattainable in humanities research (Kirschenbaum (2007, 1); Nguyen et al. (2020, 8-9)). But the fact that humanities research is concerned with "interpretation, ambiguity and argumentation" (Kirschenbaum, 2007, 1) does not imply, we submit, that ground truths for humanities data are impossible or inessential.

Expert knowledge-based evaluation of computational representations is necessary because generic benchmarks fail to guarantee reliable results for downstream tasks on specialised data (Gladkova and Drozd (2016); Bakarov (2018)). And we say that wherever expert knowledge is available, ground truths can be constructed (van den Berg et al., 2018), in any field of knowledge.

We have developed a method for constructing ground truths in any concept-focused textual domain (Betti et al., 2020). The method relies on our "model approach" for fixing the interpretation of a concept, where concepts are represented by complex, networked relations between terms (Betti and van den Berg, 2014). Our models can be easily turned into schemes for annotating textual fragments. Annotations can be used to test whether the output of computational analysis matches the best-supported interpretation of fragments, increasing the objectivity and replicability of humanities research. Domains in humanities which do not focus on concepts should develop similar methods for constructing ground truths.

2. Counter-perspective

We read Nguyen et al. (2020) as suggesting that measures of reliability alternative to ground truths are necessary because multiple valid definitions of concepts exist in the humanities (Nguyen et al., 2020, 8-9; 17-18). It is naive, though, to assume the sciences to be different: definitions of concepts are always interpretations ((Laplane et al., 2019); (van den Berg et al., 2018)). Interpretations in the humanities are bound by criteria of objectivity: they must be textually adequate, and preferable to other interpretations, e.g. when they explain a text better than other ones. Computational textual representations can be evaluated on the basis of the best models available: a procedure common to many sciences.

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[†] University of Amsterdam, Institute for Logic, Language and Computation [‡] Eindhoven University of Technology, Algorithms, Geometry & Applications

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