## LETTER TO THE EDITOR

## DEALING WITH SOCIALLY CONSTRUCTED CONCEPTS IN AN ONTOLOGY

DAVID KOEPSELL Delft University of Technology

BARRY SMITH State University of New York at Buffalo and National Center for Biomedical Ontology

We are glad to see our paper ("Creating a Controlled Vocabulary for the Ethics of Human Research: Towards a Biomedical Ethics Ontology," JERHRE, 4(1), 43-58) has already provoked some discussion, and that Dr. DuBois is sympathetic at least with the aims of our work (James M. DuBois, "The Biomedical Ethics Ontology Proposal: Excellent Aims, Questionable Methods," JERHRE, 4(1), 59-62).

DuBois ultimately questions whether the Biomedical Ethics Ontology (BMEO) will be able to solve problems such as: Does justice require excluding vulnerable people from a study or rather ensuring access to research that could benefit them or their respective communities? When does a mere inequity amount to an injustice? In our article, we point out that the BMEO will be no panacea. We explicitly state that, even while it will permit some automation (such as drop-down menu consent form and protocol authoring) and enable useful searching of data concerning past cases, there will always be ethical questions that require reflection by committee members, application of ethical principles to new cases, and the drawing of conclusions only after much debate. However, in order to achieve many valuable ends through development and use of the BMEO, we need only find some commonalities among ethical principles across relevant jurisdictions and fields.

Thus even if, as DuBois holds, ethical principles are socially constructed, developing an ontology by which we can uncover the relations of those principles to specific instances or cases will be useful. The ontology will link cases in which entities of certain types are instantiated and it will serve its purposes even if those types are subject to change over time. Ethics committee members and others will be able to use the ontology to search for and compare current cases with other cases involving features of the same or similar types, and such an ability will be useful

even if, at some later time or in some different culture, different typologies would need to be applied.

"Justice in recruitment" is advanced by DuBois as an example of a non-universal and variant type that cannot be represented in an ontology. But this is in fact an excellent example to illustrate the potential usefulness of our proposed ontology. Comparing and contrasting differing views of justice in recruitment by linking cases through an ontology whose coverage domain includes a type labeled justice in recruitment will make for some interesting and useful studies, and possibly help to alleviate injustices due to local bias or prejudice. The assumption is that there is some commonality among multiple uses of the term "justice," even if there are differences among local customs, traditions, and interpretations of specific cases.

Even if DuBois is correct in his views about ethics, therefore, we believe that the BMEO will maintain its utility. In fact, however, we disagree with the two assumptions that underlie these views, namely: (1) that ethical principles are never founded in objective reality, and (2) that legal or regulatory principles are not subject to ongoing interpretation. Let's start with the first.

DuBois makes the broad claim that "ethical concepts within pluralistic societies are social constructs." This leads him to the conclusion that within the realm of ethical "concepts," there are no natural kinds, and thus ontological analysis is useless. This claim is troubling. It implies among other things that, for instance, prior to the Nuremburg Code, the use of human subjects without informed consent was not unethical or immoral. We, in contrast, hold to the view that what is morally wrong today was morally wrong 100 years ago. Certainly, in building the BMEO, we must work hard to understand the many different sorts of entities that comprise what we would call "social reality" in order to determine what basic structures are salient to the domain of biomedical ethics, and thereby to develop an ontology that shows how these structures are reflected in codes, laws, rules, and processes. The latter are all in a sense "socially constructed." This does not, however, imply that everything about them is socially constructed (any more than the socially constructed nature of supermarket checkout procedures implies that the rules of arithmetic used in adding up the bill are themselves socially constructed). The authors of the BMEO acknowledge fundamental principles of ethics—for instance, the principle of not using human subjects simply as a means to an end—though they recognize the role of social reality in shaping the application and enforcement of these principles over time.

As to the second assumption, DuBois holds that legal and regulatory principles are not subject to ongoing interpretation. We believe that this assumption is incorrect from a legal standpoint. Regulatory principles may or may not come pre-packaged with definitions. But even where definitions are supplied, the latter are still always subject to reinterpretation. Take, for example, the constitutional principle of "due process," for which the framers of the U.S. Constitution offered no particularly useful definition, but which remains the law of the land in the U.S.A. Even after 230 years of jurisprudence, the legal interpretation of "due process" still remains subject

to debate. Yet the single principle that certain process is necessarily due in criminal matters has remained in force throughout this time. The approach we propose is not meant to *define* such principles from scratch, but rather to express them in useful ways that stay as close as possible to the current, working definitions of the relevant terms in regulatory contexts. So, legal ontologists keeping track of the term "due process," for instance, will have a concise definition of the term that will allow them to keep track of how the principle is being applied in any given period.

We are thankful for this early and fervent discussion, and encourage future dialogue and critique while we continue to work on developing the BMEO.

Address correspondence concerning this comment to: David Koepsell, Department of Philosophy, Delft University of Technology, The Netherlands. E-MAIL: drkoepsell@yahoo.com.