PHILOSOPHICAL KNOWLEDGE
THE HARD PROBLEM OF KNOWLEDGE REPRESENTATION?

The SW technology is best suited for representing definite knowledge. Imagine having a collection of some objects that have easily discernable features and can be

grouped in a clear hierarchy of classes. The knowledge about that collection can be represented without any problem; it would be a kind of catalogue. A good example of such a catalogue is the current state of the Wittgenstein ontology project: so far, the WAB team has produced over five hundred thousand RDF triples that involve over sixty-five thousand individual entities, including over fifty thousand entities for each separate remark by Wittgenstein. The remaining several thousand entities stand for persons, dates and periods of time, volumes or books, and others. They are linked together by twenty-six object properties, including "refersTo," "hasDate," or "hasPart," as well as several data properties.[14]

Unfortunately, representing a theory, in particular, a philosophical conception is a different story. There are numerous reasons why such a task is highly problematic. The first and most important reason is the inherent multi-perspective nature of the humanities.[15] The same phenomenon prompts different thinkers to present their own accounts; moreover, those accounts, in turn, prompt other scholars to present their own readings of these different accounts, bringing about new layers of divergence. Although debates are generally possible, they usually result in the formulation of yet more theories and interpretations. There is nothing wrong in this process; this is how knowledge in the humanities progresses. However, there is no clear solution to the problem of how to represent such knowledge. What are to be the entities and properties in a situation when various perspectives can offer completely different categorisations of a given phenomenon?

The second problem is the contextuality and indefiniteness of conceptions in the humanities. There is nothing strange or unnatural in the existence of their various interpretations: they are structurally open to complementing with new content and for employing in various situations that change their meanings. Therefore, knowledge in the humanities (philosophy) can never reach its definite shape and ultimate interpretation.

There is also a problem of inconsistency: some standpoints in the humanities are plainly inconsistent; that is, they contain two or more inconsistent claims. Meanwhile, others are inconsistent because it is possible to reach inconsistency through inference. Moreover, they can be inconsistent in various ways. For example, the notorious *Tractatus* 6.54 says that to understand its author is to recognise the Tractarian theses as nonsensical, as something one should throw away like a ladder. How to represent this? Is there a possibility to create a coherent computational ontology for Wittgenstein's *Tractatus* or Hegel's *Phenomenology of Spirit*?

Finally, the humanities are often meta-theoretical: various stances include specific categorisations of the domains about which they theorise. It is tempting to try to represent such categorisations as computational ontologies of OWL classes, but such attempts are doomed to fail because philosophical conceptual structures do not meet the formal

[14] See Alois P i c h l e r and Øyvind Liland G j e s d a l, W*ittgenstein Ontology* (Bergen: University of Bergen, 2007), http://ubbdev.gitlab.io/wab-ontology/index-en.html.

[15] It should be noted that both this and other features of knowledge in the humanities (philosophy) mentioned in the main text can also be attributed, perhaps to a lesser extent, to scientific theories.

strictness requirements of first order calculus. Moreover, categorisations in the humanities are partly grounded in implicit relations between basic concepts that are informal, semantic in nature. Thus, if primitive concepts of ontologies in the humanities cannot be mapped directly onto OWL classes, what type of entities should they be? In other words, how can one build a computational ontology for a philosophical ontology?

The WAB team has long been aware of those difficulties, and they have made attempts to address them both in their theoretical papers and in the actual shape of the Wittgenstein ontology. They tested and subsequently rejected the idea of mapping philosophical categorisation onto the hierarchy of OWL classes. They also admitted both the possibility that various philosophical claims of the same philosopher may contradict each other, as well as the possibility that the same philosophical content may be interpreted as various conceptual structures. Furthermore, they have described philosophical content as dynamic, open-ended, vague, and context-dependent.