What is a digital object?

Yuk Hui

We are at the moment witnessing the emergence of digital objects, which initiates both a new philosophical investigation departs from its metaphysical tradition, and a paradigm shift of engineering understanding and practice. Digital objects, in this context, refer to the intensive dataification of physical entities (e.g. a sheep in the farm) and the objectification of data according to computational ontologies (e.g. the semantic web movement). The double movement from object (physical +cultural) to data and data to object (digital) constitutes a new milieu, which grounds the activity of our everyday life. This paper proposes an introduction to digital objects by highlighting several departures one has to take from philosophical tradition, also contribute to the evolving philosophy of technology. 1) a technical object never consisted a philosophical discourse in the tradition until Gilbert Simondon’s On the Mode of Existence of Technical Objects, philosophy since Aristotle down to Husserl, considers all technical objects as natural objects, i.e. a iphone is nothing different from an apple on the table, by privileging the form/matter understanding of objects. 2) such a bias nevertheless constitutes today what we call ontologies, originates from Aristotle’s concept of substance-accidentals. The individualization and industrialization of digital objects always struggle in form imposition, which we can see from the GML to HTML, XML and finally ontologies (especially in the grammar of RDF). Yet such an understanding of object to Bertrand Russell is an “unconscious philosophical error”. Here it also exhibits the peculiarity of technics itself, which is always open to chances and accidents. The obsolete yet most popular term at the moment, ontologies, depart from its substance-accidentals origin from the beginning, and become relational calculus after Russell’s critique, and concretized in Edgar Codd’s relational database. To understand ontologies in a computational sense, or Ontology in a Heideggerian sense must find a new direction in a theory of relations; 3) relational nature of objects in the form of ontologies is the source of networks, or more precisely networks of data. This also departs from the vision of Ted Nelson’s hypertext to what Tim Berners-Lee a decade after his creation of the WWW in CERN called a “global mind”. The objects constitutes not only a world we are always already in, but also the thinking process which conditions the I and the We. Through these three aspects (though limited): object, network, mind, this paper proposes to open up a (new) philosophical investigation.