

# Using Enkapsis Theory for Unravelling Societal Complexities: the case of Uber

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## INTRODUCTION

Societal challenges may be evoked by novel digital technologies that connect different stakeholders in society. An example of a societal challenge is the arrival of smartphone applications that create peer-to-peer businesses, such as the transportation networking application Uber or accommodation network application Airbnb. In particular Uber has caused unrest in the traditional taxi sector, it has evoked legal debates and numerous newspaper articles have been devoted to this so-called ‘disruptive technology’ (see for example Weisse and Guynn 2014; Suster 2014; Adhikari 2015). Uber directly or indirectly connects drivers to passengers, credit card companies to developers of geographical maps, mobile network providers to car manufacturers, legal authorities to international investors, etcetera.

A way of understanding the complex relationships between the entities and stakeholders in digitally enabled constellations such as Uber, is in terms of enkaptic interlacements. The theory of enkapsis is a philosophical tool, based on a specific view of reality, which may guide a novel understanding of the relationship between artefacts and entities and between social structures that exist in reality. We contribute to interdisciplinary research by using insights from philosophy to understand societal complexities caused by digital technologies. It falls in the Digital Humanities project, since it connects both the academic and public and private sectors in interdisciplinary research and innovation to tackle societal challenges.

## ENKAPSIS THEORY

The theory of enkapsis is unique to Dooyeweerd, a Dutch philosopher, who introduced his theory in his book “A New Critique of Theoretical Thought” (1953). It is part of a larger philosophical framework of individuality structures and modal structures which we will not address in detail. In short, the theory of individuality structures (and modal structures) is a project to understand the nature of specific things and events in reality as well as grasp the identity of entities in a non-reductionist manner. It takes as a basis that reality presents itself according to a number of irreducible yet closely interrelated aspects (Dooyeweerd distinguished 15 aspects in total, such as numerical, spatial, psychological, ethical, juridical, etc). The theory of enkapsis is only a small part of this project.

Furthermore, Dooyeweerd distinguishes between enkaptic interlacements and part-whole relationships in order to explain how individuality structures cohere amidst their differences (Chaplin, 2011). We have added a third relationship, namely juxtapositional relationships.

An *enkaptic interlacement* pre-supposes that the structures of things and events, or those of societal relationships functioning in it, have an independent internal leading function and an internal structural principle of their own. (Dooyeweerd, 1953, Vol. III, 637).

A *part-whole* relationship can be defined as follows: “In all those things whose structure is not that of a homogeneous aggregate, a *part* is essentially qualified by the structure of the whole. In this case the structure of a whole can never be construed by means of its parts, because the parts, as such, are entirely dependent on the whole. The question what is a part of a non-homogeneous whole cannot be decided by a functional mathematical-physical analysis, but only by an inquiry into the internal individuality-structure of this whole. This fact has always been lost sight of on the functionalist standpoint.” (Dooyeweerd 1953, Vol III p. 638-639).

We call a constellation a juxtapositional relationship when two wholes function independent of each other and cooperate on a temporary, non-necessary basis. Two wholes can be taken apart without disrupting or intervening their respective qualifying functions.

## ANALYSIS

If we apply this rather abstract theory to the complex case of Uber, our initial findings are that firstly Uber has a part-whole relationship with the information technology infrastructure: without digital technologies, Uber loses its meaning and will not function according to its leading function, namely to connect drivers to passengers. Secondly, Uber has an enkaptic interlacement with the credit card company system that takes care of the automatic payments, since Uber can exist independent of the credit card company system (it can handle payments in different ways, even in cash, as it does in some countries where credit cards are a rarity) and the credit card payment system does not depend on Uber for its existence. Thirdly, Uber has a juxtapositional relationship with regular taxi companies and legal authorities (although there are cases where legal authorities have entered in an enkaptic interlacement with Uber, such as in the Philippines). In this paper we will further explore how the theory of enkapsis can explain a multiplicity of complex relationships and furthermore, how these relationships relate to different responses to Uber in different countries, cultural settings and legal systems.

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