

## **THE METHOD OF THOUGHT EXPERIMENTS AND THE EPISTEMOLOGY OF ESSENCE**

The thought experiment is one of the most popular methods in philosophy in which appealing to imaginary situations takes a part in arguing in favor or against particular philosophical claims or in order to explain them. Famous examples of the use of this method are asking for what is a morally good decision in dilemmas such as the “trolley dilemma” or considering whether it is possible for God to create a stone that is too heavy for them to lift. Except for philosophy, this method is used extensively in other sciences (e.g. Schrödinger’s cat) and even in everyday reasoning (imagining our own future in order to decide which job offer better suits us).

In the light of appealing to imaginary and counterfactual situations, the use of this method is explained with help of epistemology of modality, which is a theory that concerns the problem of how it is possible to acquire knowledge about what is possible, what is necessary and what is impossible.

Among several approaches to the epistemology of modality, there is one which has never been applied to explain the use of the method of thought experiments. Such an account is essentialism, according to which modal knowledge is gained with the help of knowledge of the essences of things, that is in properties that make those things to be these things. At the same time, essentialism is a highly influential approach, firstly because of its long tradition (it stems from the Aristotelian notion of *essence*), and because of its wide application in contemporary problems within the epistemology of modality and philosophy of science.

The project aims to integrate these two discussions, to provide a detailed account of thought experiments within a framework of essentialist modal epistemology, and to determine whether adopting that approach can help in dealing with methodological problems concerning thought experiments.

The project starts with establishing the set of possible kinds and uses of thought experiments on the ground of existing taxonomies and the analysis of the actual use of thought experiments.

With respect to the epistemological problems of essentialism, the project aims to determine which established theory on epistemology of essence might give the most satisfying answers to two other important epistemological problems. The first problem calls for an explanation of how exactly applying a particular mental capacity works to yield modal or essentialist knowledge. The second one concerns the problem of what restricts a given capacity or method that is to yield modal or essentialist knowledge in order to exclude impossible things or states of affairs from the set of results that comes from using a given capacity or method.

After addressing these issues, the established essentialist account will be applied to the determined set of thought experiments, and it will be investigated whether such an approach can provide an answer to two methodological problems concerning thought experiments within a framework of essentialism:

**Content Problem:** What is the logical structure of thought experiments?

**Reliability Problem:** How we can use thought experiments reliably, given the possible disagreements regarding verdicts about particular thought experiments?

In effect, the project aims to provide a detailed account on the methodology of thought experiments within a framework of one of the most important approaches on the epistemology of modality, i.e. essentialism. The results would have an impact on our understanding of the structure, value, and limits of thought experiments. Moreover, the results would also provide a solution to several epistemological problems concerning the essentialist epistemology of modality, and thereby have a great impact on this influential metaphysical and epistemological approach. Last but not least, the project aims to determine new ways to deal with methodological problems concerning thought experiments, such as the possibility of possible disagreements on their conclusion and their logical structure.