▶ PERCEVAL PILLON, *Deontic logic as a formalisation puzzle*.

Deontic logic as a formalisation puzzle Deontic logic is a branch of formal logic aiming to give a formal account of a set of notions revolving notably around obligation and normative reasoning. It has been studied by a large range of formal systems of different natures [1] and grew to address more and more philosophical questions. Our aim is to study it from the perspective of a critical theory of formalization given the specificity and the social anchoring of the notions at stake. Philosophical goals for the formalization of the set of notions in play will be identified and questioned and we will study the adequation between them and the formal tool used to give logical systems. By formal tools we mean here the choice of formal solutions chosen in order to formalize the aimed notion. The main point can be summarized by the question "why and how one formalizes such notions ?". Our proposal will rely on two main philosophical tools to carry out the analysis: the Carnapian notion of formal explication and the literature on the theory of formalization (works by C. Dutilh Novaes for example). Given the large scope of the question, we will focus on significant examples of formal propositions : systems of modal deontic logic and in and out logic. Our communication will first briefly explain the historical development of the field of deontic logic in order to contextualize the examples. Then we will present the criteria used to analyze the formal. The last and main part of the talk will analyze the selected systems, by applying the criteria defined earlier to them, having in mind the philosophical or practical goals they are supposed to achieve.

[1] Hilpinen, R., and McNamarra, P. (2013). Deontic Logic a Historical survey and Introduction.