## What's the Matter with Vehicle Automation Ethics? ...or: What Really Matters in Vehicle Automation Ethics

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## **Abstract**

One of the big obstacles impeding progress towards full vehicular automation lies with machine decision making and the potential ethical consequences thereof - in particular in relation to dilemma situations. The discussions surrounding the "Trolley Problem" paint a picture from which a satisfactory way out is difficult to see: No matter which outcome is chosen in such a dilemma, human individuals come to harm, thereby rendering the decision leading to the outcome ethically problematic and undesirable. As a consequence, any decision algorithm that would propose to execute such an action would be equally unacceptable, which leads us to an impasse on how to design vehicles with ethically sound decision making ... or so it might seem. In this talk, we will untangle the complex problem space of moral dilemmas and vehicle automation together. We first take a thorough look at dilemmas and their purpose in Philosophy, so that we can then explore various dilemma variations and finally discover why the problem posed by dilemmas is actually not part of the design space that is appropriate to deal with them as far as the decision-making process is concerned. We will then move the dial towards the future and put the lens on the true scope of ethically relevant aspects in relation to vehicle automation, in order to specify what we (should) mean whenever we talk about "ethical automated vehicles".



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