Circles of Care for Safety: A Care Ethics Approach to Safe-by-Design

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ABSTRACT ORIGINAL

Safe-by-Design is an approach to engineering that aims to integrate the value of safety in the design and development of new technologies. It does so by integrating knowledge of potential dangers in the design process and developing methods to design undesirable effects out of the innovation. Recent discussions have highlighted several challenges in conceptualizing safety and integrating the value into the design process. Therefore, some have argued to design for the responsibility for safety, instead of for safety itself. However, this idea has not been developed further. In this article, we develop an approach to Safe-by-Design, grounded in care ethics, which builds on the idea of designing for responsibility and can deal with the complexity that is inherent to the conceptualization of safety. We describe five ways in which care ethics contributes to the conceptualization of Safe-by-Design: (1) It suggests the development of ‘circles of care’ in which stakeholders share the responsibility for safety; (2) it recognizes the importance of considering safety as something that is situated in the surroundings of a technology, instead of as a property of the technology itself; (3) it acknowledges that achieving safety is labour that requires an ongoing commitment; (4) it emphasizes that the way in which we relate to technology impacts its safety; and (5) it recognizes the role of emotions in assessing safety. All these elements combined lead to a broader understanding of safety and a philosophically more substantial and practically more appealing conceptualization of Safe-by-Design.