Ethical Guidance for Socially Disruptive Technologies

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The impact of new and emerging technologies like artificial intelligence, genome editing, and climate engineering, is so profound, that it can be considered to be disruptive. These technologies do not only have radical consequences for society - as is expressed by the concept of 'the Fourth Revolution' and 'Society 5.0' that is emerging from that - but also for critical and ethical reflection. Technologies have become ethically disruptive, in the sense that they challenge and affect the very concepts with which we can do ethics in the first place. What do' agency', 'responsibility' and 'empathy' mean when artificial agents are entering society? What does 'democratic representation' mean when climate engineering might urge us to also include future generations, and the rights of ecosystems? What can the notion of 'the humane' still mean when genome editing enables us to develop human-animal hybrids? This keynote will explore the ethically disruptive character of emerging technologies in detail, by investigating the various ways in which technologies can be ethically significant themselves. Breaking the human monopoly on ethics and expanding it towards technology will make it possible to connect ethics more directly to practices of design. The resulting 'Guidance Ethics Approach' enables bottom-up ethical reflection that can foster the responsible design, implementation and use of new and emerging technologies.