A NEW SYSTEM OF LIABILITY FOR ROAD TRAFFIC ACCIDENTS INVOLVING SELF-DRIVING VEHICLES

DR MOHD HWAIDI

Associate Professor of Law at Birmingham Law School ¦ Director of LLM Programmes (Dubai)
E-mail: m.hwaidi@bham.ac.uk

Abstract - This presentation argues that the future introduction of fully Automated Vehicles (AVs) into roads as part of ordinary daily life may create a serious legal and social problem that has not been sufficiently addressed within current legal reforms. As humans become increasingly dependent upon technology in performing ordinary activities, there is often a gradual reduction in human attentiveness and care. Most individuals today excessively rely upon smartphones, GPS systems and automated technologies in ordinary decision-making. The concern explored in this presentation is that once fully Automated Vehicles become commonly used on roads, human drivers, pedestrians and cyclists may similarly become less cautious when interacting with AVs. Human road users may increasingly rely upon the superior safety systems of AVs to avoid accidents regardless of human negligence. The presentation argues that such conduct represents a form of moral hazard capable of undermining one of the principal benefits expected from AV technology itself, namely the significant reduction of road traffic accidents. A study based on algorithmic analysis in Game Theory supports the argument that the introduction of AVs will most likely encourage more negligent behaviour by human road users when encountering AVs. The problem has also been acknowledged within recent reports commissioned by the Law Commission of England and Wales.

The presentation introduces a conceptual model of liability intended to create incentives for both AV manufacturers or operating fleets, and human road users, to continue exercising precautions on roads. The proposed model seeks to prevent the emergence of moral hazard between AVs and human road users whilst simultaneously upholding the rule of law by sustaining responsible behaviour within society. The model is grounded in the utilitarian object recognised within law and economics scholarship: the attainment of the maximum social benefit from AV technology, namely the substantial reduction of road accidents, whilst bearing the minimum cost of safety necessary to achieve that objective.

The presentation particularly focuses upon the behavioural rationale behind treating AVs in law as equivalent to human drivers within negligence claims involving human victims. The argument advanced is that if AVs continue to be treated in law as human drivers, human road users may continue interacting with AVs cautiously in reality as they presently do with ordinary drivers. This seeks to preserve the current level of care exercised by human drivers, pedestrians and cyclists and to prevent the deterioration of driving culture in the future. Alongside this private law dimension, the presentation briefly considers the role of strict liability mechanisms directed towards improving future AV safety standards and infrastructure.

The presentation further argues that current approaches under the Automated and Electric Vehicles Act 2018, together with recent recommendations concerning AV regulation, primarily focus upon anticipatory governance, institutional preparedness and technological regulation without sufficiently evaluating the impact that AV technology may have upon human behaviour and driving culture. The presentation therefore proposes a preventative approach that considers law not merely as a mechanism for allocating liability after accidents occur, but also as an instrument capable of sustaining positive human behaviour into the future in response to emerging technologies.

Methodologically, the presentation adopts a cross-disciplinary approach combining doctrinal legal analysis with law and economics, behavioural studies and aspects of neuroscience. It seeks to promote further interdisciplinary discussion concerning the relationship between emerging technologies, human behaviour and the future design of liability rules.