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Articoli e Saggi

Automated Vehicles in the latest UK Regulation: The Joint Report of the Law Commissions and the new "duty of candour". The UK as the "Marco Polo" of Automated Vehicles!?*

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Abstract
Automated Vehicles in the latest UK Regulation: The Joint Report of the Law Commissions and the new "duty of candour". The UK as the "Marco Polo" of Automated Vehicles!?

The law and regulation are making their debut in the matter of automated vehicles. Quite surprisingly, the news is from London and Edinburgh, rather than Brussels. While in the EU automated vehicles are still shrouded in mystery, the Joint Commissions of Scotland and England/Wales have, very recently, come up with a brand-new report which, once enshrined in legislation, seemingly in a very imminent future, should highlight and clarify the major issues of the liability of self-driving cars. Against this backdrop, the paper attempts to discuss both the Report, with its novel definitions (user in charge, and duty of candour, among the most intriguing ones) and the prospective legislative framework that may be envisaged. Particularly, 'candour', a traditional concept in medical law, finds itself catapulted into a different area, insurance law, in connection with self-driving cars. Additionally, and intriguingly, the further aim of the discussion is to ascertain the philosophical and moral implications unleashed by the liability of automated vehicles: ultimately, it is not simply the algorithm that matters, rather a complex nexus of legal, philosophical, and economic dilemmas.

Key words: automated vehicles; duty of Candour; user in charge; liability of automated vehicles; Joint Report Law Commissions.

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[*] Sottoposto a referaggio.

1. Introduction

As a result of Brexit, the UK was jinxed as the country without any role in the European Union – and such a viewpoint was quite obvious, as it was leaving the 'club' across the Channel, as well as changing its rôle on the international political stage. As to the latter, word had it that the UK would need to start from the 'backdoor'.[1] In this catastrophic scenario, sketched in perhaps too nonchalantly half a decade ago, it comes as a surprise that the Kingdom is proving itself the first jurisdiction in the Old Continent that, thanks to its unfettered resilience, is going to establish the first regulation on the most advanced technology in modern transport: automated vehicles or self-driving cars.

In such a *crescendo* of events and developments, a brief chronology is necessary.

First and foremost, in 2018, the UK passed a piece of legislation, the Automated and Electric Vehicles Act[2] 2018.[3] This statute relates to Connected and Autonomous Vehicles (CAVs): these are vehicles that move either automatically or semi-automatically in ordinary road traffic. The EAVA 2018 sets forth legal principles in force of which the legal liability lies on both the insurer and the owner of the vehicle.

The former (the insurer) is liable for damages "*where a) an accident is caused by an automated vehicle when driving itself on a road or other public plane in Great Britain*". The liability, more in details, is triggered by the fact that "*the vehicle is insured at the time of the accident*" (letter b) and, "*an insured person or any other person suffers damage as a result of the accident*" (letter c).[4]

The latter (the owner) is liable, on the other hand, if: "*a) an accident is caused by an automated vehicle when driving itself on a road or other public place in Great Britain" (letter a) and "the vehicle is not insured at the time of the accident*" (letter b).[5]

In the UK, the evolution of Automated Vehicles[6] kick-started from the first 'report' of the Law Commissions on 8th November 2018.[7] The last report, or better the Joint Report about Automated Vehicles is on 26 January 2022.[8] The last one introduces innovative issues and new concepts: the duty of candour in the insurance policy of automated vehicles; the concept of user in charge; and, finally, a new approach in the interaction between human and AVs.

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[1] P. DE GIOIA CARABELLESE, *Unmanned vehicles e Rischi Legali ed Assicurativi. Una Visuale dal Regno Unito della Disciplina della Responsabilità dei Veicoli senza Guidatore*, in *Diritto e politica dei trasporti,* No. 1, 2021, p. 1 ff.

[2] Henceforth also referred to as "AEVA 2018".

[3] Among scholars, see J. MARSON, K. FERRIS, J. DICKINSON, *The Automated and Electric Vehicles Act – Part I and Beyond: A Critical Review*, 2020, p. 395 ff.; M. CHANNON, *Automated and Elecrtic, Vehicles Act 2018: An Evaluation in light of Proactive Law and Regulatory Disconnect*, in *European Journal of Law and Technology*, 2019, online.

[4] Paragraph 1(1).

[5] Pursuant to paragraph 1(2), a negative condition should occur: it is the negative conditions that "c) section 143 of the Road Traffic Act 1988 (users of motor vehicles to be insured or secured against third-party risks) does not apply to the vehicle at that time— (i)because of section 144(2) of that Act (exemption for public bodies etc), or (ii)because the vehicle is in the public service of the Crown; and d) a person suffers damage as a result of the accident".

[6] Henceforth, also referred to as AVs.

[7] More precisely: Law Commission, Consultation Paper No. 240, Scottish Law Commission, Discussion Paper No. 166, Automated Vehicles. A joint preliminary consultation paper, 08 November 2018.

[8] Law Commission, Consultation Paper No. 404, Scottish Law Commission, Discussion Paper No. 258, Automated Vehicles: Joint Report, 26 January 2022.

The underpinning idea of this paper that not only does a Regulation on the insurance of these *sui generis* vehicles belong to the public law realm,[9] but also it is an interdisciplinary and, to a certain extent, multidisciplinary matter. In light of this too, the last paragraph of this contribution concerns a quasi-moral-philosophical aspect, *i.e.*, the tragic choices, and, more precisely, the theme of the 'trolley problem', stemming from the existence of automated vehicles.

2. The 'duty of candour' in the area of AV

As anticipated in the previous Chapter, one of the most important 'novelties' of the EAVA 2018, is the introduction of the concept of 'duty of candour'.

While this duty is mentioned in Chapter 1 of the Report,[10] its debut dates back to a long time ago, in the UK. In fact, it is a legal concept not without an interesting and fascinating evolution. Thus, the 'candour' may carry a different meaning, depending on whether either the lens of law or those of ethics are applied.

From an ethical point of view, candour has to refer to openness, honesty and transparency.[11] In other words, candour is not synonymous with the word 'trust', nor 'honesty', rather, it has a different and distinct meaning, that is to say completeness, openness and frankness. By contrast, from a legal perspective, particularly medical law, candour is, ultimately a public duty 'hanging' on the health service. This last one (the iconic British 'NHS') must offer services and treatments that are characterised by respect, transparency and openness.

Another legal perspective, that of administrative law, enjoins one to come up with a further interpretation of the concept of candour. In this area, the duty of candour is more similar to the principles of justice permeating administrative procedures: the duty to provide an explanation for any decision stemming from an administrative body. From this different perspective, the goal of the duty of candour is to explain the potential causal link between the damages suffered by the applicant and the decision of the public body.

Still from a public law perspective, the duty of candour may even stretch to a public law obligation, because it is instrumental in achieving a public interest, via two different ways. On the one hand, it helps identify mistakes made by a public body and, therefore prevent future failures; on the other hand, it is a public enhancement in healthcare, since it requires compliance with openness and honesty.[12]

Ultimately, the duty of candour does have its 'roots' in medical law,[13] although more recently, thanks to the Joint Reports of Law Commission, it also has 'branches' in the field of insurance law. Moreover, while the duty of candour was only a central

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[9] From the web site of Law Commissions, it is inferable that the classification is 'public law', see Automated Vehicles - Law Commission.

[10] Paragraph 1.30.

[11] A CAMPBELL, G. GILLET, G. JONES, *Medical Ethics*, OUP, 2001.

[12] From a judicial perspective, reference shall be placed on *Naylor v Preston* [1987] 1 WLR 958, 967. In this Court decision, the Court held that "*in professional negligence cases, and in particular in medical negligence cases, there is a duty of candour resting on the professional man*".

[13] Regulation 20 of The Health and Social Care Act 2008 (Regulated Activities). More precisely, Regulations 2014 provides a definition of such a duty. To elaborate, the duty of candour in medical law ensures that "*patients harmed by a health care service are informed of the fact and that an appropriate remedy is offered, whether or not a complaint has been made or a question asked about it*". R. FRANCIS, *The Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry*, London, 2013.

recommendation of key public inquiries and policy reviews in the past,[14] in recent years this duty has changed its nature, insomuch as to include a legal façade too.[15]
Nevertheless, the crucial issue is the correct meaning that 'duty of candour' has in the AV Regulation. Potentially, medical law provides a few suggestions and insights. First, the main aim, also in the AVs Regulation, could be the setting up of a culture of safety.[16] Second, the duty of candour also refers to specific requirements of reporting which should ensue, in the future, from a material safety incident. In this way, the duty is concerned with an honest report about the facts involved with the incident and helpful advice on the further appropriate and following enquiries.
Based on the foregoing, it is possible that, in relation to the matter of Avs, the duty of candour[17] maybe considered a crucial one, in the two crucial 'phases' of a vehicle accident: before the risk has materialised; after such a risk has become obvious.
Based on the Joint Report, the duty of candour is part of a broader framework where "*a no-blame safety culture*" is promoted and a different one, based on "*to learn from mistakes*", is recommended. This result could better be achieved also in reliance on a perspective system of administrative sanctions for automated vehicles, in stark contract with criminal sanction currently applicable to 'conventional' cars. It is an ambitious goal that "*relies on the honesty and transparency of the ASDE and NUIC operator in sharing information with regulators*".[18]
In case of a breach of the duty of candour, the 'Crown', therefore, the prosecutor in a non-UK legal terminology, could prosecute both the "*company*" (to use the language of the UK Report) and the "*nominated person*". Thus, the Report highlights that the explicit purpose of the 'Crown' is to ascertain if the company and nominated person have taken "*all reasonable precautions and exercised all due diligence to prevent wrongdoing*"[19].
Another 'person' against which/whom the 'Crown' may carry out its investigation is the "*senior manager*". This second scenario may engender some different consequences, if compared with the first one. In essence, a senior manager is the individual who "*had consented to or connived at the misrepresentation or non-disclosure*". In this case, the 'Crown' is in need "*to prove the necessary mental element: either that the senior manager was aware of the wrongdoing or that they had deliberately closed their eyes to it*".[20]

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[14] I. KENNEDY (Chair), *The Report of the Public Inquiry into Children's Heart Surgery at the Bristol Royal Infirmary 1984–1995: Learning from Bristol* (Cmnd 5207 (I) 2001); DH, Making Amends: A Consultation Paper Setting out Proposals for Reforming the Approach to Clinical Negligence in the NHS (DH 2003).
[15] O. QUICK, *Duties of Candour in Healthcare: the Truth, the whole Truth, and nothing but the Truth?* in *Medical Law Review*, vol. 30, No. 2, 2022, p. 324 ff.
[16] "A culture of candour is a culture of safety, and viceversa". D. DALTON, N. Williams, *Building a Culture of Candour: A Review of the Threshold of the Duty of Candour and of the Incentives for Care Organisalions lo be Candid*, in *Royal College of Surgeons*, 2014, p. 12.
[17] Some Scholars emphasise that "[t]he requirement that a director favor the corporation's interests over her own whenever those interests conflict. As with the duty of care, there is a duty of candor aspect to the duty of loyalty. Thus, whenever a director confronts a situation that involves a conflict between her personal interests and those of the corporation, courts will carefully scrutinize not only whether she has unfairly favored her personal interest in that transaction, but also whether she has been completely candid with the corporation and its shareholders". See R.T. O'KELLEY, R. B. THOMPSON, *Corporations and Other Business Associations: Cases And Materials*, Aspen, 5th ed. 2006.
[18] ASDE stands for "Authorised Self-Driving Entity", see paragraph 2.41. Joint Report; NUIC means No User-In-Charge, see paragraph 2.47 Joint Report.
[19] By contrast, the prosecution office "would not need to prove that either the company or the nominated person had acted with knowledge", Joint Report paragraph 11.52.
[20] Join Report paragraph 11.53.

3. The concept of "*user in charge*" in the prospective UK regulation

The Joint Report sparks off further reflection on other principles encompassed with the prospective legislation in this area of law, AVs, and, more generally, for fully automated vehicles. More specifically, the recommendations of the Law Commissions suggest that the person in the driving seat, since she/he is no longer a driver, may be regarded as a "*user-in-charge*". The definition of the "*users-in-charge*" is given by the same Report. They are humans sitting in the driving seat, while a vehicle is driving itself.

The underpinning philosophy of the Joint Commissions is that every vehicle driving itself should have a user-in charge: as a result, the user-in-charge would be regarded : "(*1) an individual, that is, a human or "natural person", rather than an organisation; (2) who is in the vehicle: not standing nearby or in a remote operations centre; (3) in position to operate the driving controls: for current vehicle design, in the driving seat; (4) while an ADS feature requiring a user-in-charge is engaged. [..]*".[21]

As a result of this definition of "*user-in-charge*", she/he will no longer be prosecuted for offences which arise directly from the driving task. It is obvious that, in this case, the liability will lie on the producer of the automated vehicle. Thus, the "*user-in-charge*" would have immunity from a most offences, such as dangerous driving, violation of speed limits or to run a red light. However, the user-in-charge will still retain some duties, such as "*carrying insurance, checking loads or ensuring that children wear seat belts*".

The user-in-charge, like any current driver of a traditional or conventional vehicle, shall have a driving licence (although the Joint Report refers to an unclear "qualification"), as well as being fit to drive, "*as they may be called on to take over driving if the ADS issues a transition demand*". As a traditional driver, the user-in-charge "*must not be under the influence of drink or drugs*".

To ensure that this system cannot be circumvented, the Joint Report makes it a criminal offence "*to act as a user-in-charge while unfit or unqualified, or to cause or permit another person to do so*". More generally, in connection with the new concept of user-in-charge, the Joint Report draws a robust demarcation line between dynamic and non-dynamic driving, and, therefore, between dynamic and non-dynamic offences. More in general, when the ADS feature is engaged, the user-in-charge will not be responsible "*for the dynamic driving task*", since they do not control the vehicle "*through steering, accelerating or braking, and do not need to monitor the driving environment*". Similarly, while the user-in-charge is immune for all offences which arise from dynamic driving, she/he will face a criminal liability "*where the user-in-charge took steps to override or alter the 18 system so as to engage the ADS when it was not designed to function, or deliberately interfered with the functioning of the ADS*". Finally, a user-in-charge will retain other 'non-dynamic' driver responsibilities. For the remaining responsibilities, which appear to be also the most serious ones, it will be the producer that will retain most of them, including first and foremost the criminal ones.

4. The legal assessment of the liability of automated vehicles

A burning question stems from the analysis of the concept of "*user in charge*": who the 'real' driver in the fully automated vehicle is. The definition suggested by the Joint Report corroborates the idea that pure unmanned vehicles, in essence, are those not relying at all

[21] ADS stands for Automated Driving System.

on a human being as a driver of cars or trucks,[22] since the real driver is seen as being an algorithm, or an Artificial Intelligence (AI) system.[23] Thus, the crucial point is the responsibility of this new unhuman driver in the case of the so called tragic choices. Additionally, an ensuing question is concerned about 'trolley problems', therefore the underlying issue of tragic choices, whether they will be referred to public law or insurance law, or to an interdisciplinary field of law.

With the expression 'trolley problem' reference shall be made to a philosophical matter, which may be summarised as follows: "*a trolley is hurtling down a track towards five people. You are on a bridge under which it will pass, and you can stop it by putting something very heavy in front of it. As it happens, there is a very fat man next to you - your only way to stop the trolley is to push him over the bridge and onto the track, killing him to save five. Should you proceed? The two options each demonstrate one of the philosophical positions; should one choose to sacrifice the fat man, they have taken the Utilitarian position by saving the five people on the track, netting four lives by their actions, while allowing the trolley to continue on its course without interference is the Deontological position, in which one respects the duty they owe to the fat man as a fellow human being and do not sacrifice his life in order to save the lives of the other people on the track*".[24]

In other words, AI system, such as an unmanned driver, must comply with the mandatory rule of road traffic legislation.[25] The difference between an AI driver[26] and a human driver is that of self-preservation: only the second one is endowed with this need. By contrast, the former does not have this 'impulse', because it is not in a position to make an assessment of the costs, regarding the physical safety, of other persons. These individuals are the passengers of vehicles, as well as other 'subjects' and/or further individuals, *i.e.*, society. It is possible that the artificial driver may prefer to protect, in event of a road accident, the property or life of another person and not the physical integrity of its own passengers.

Not only does the choice of two opposing values, or rights, have a philosophical impact, but also it becomes at last, an economic choice too. While a customer of an AV may usually prefer it to prioritise the safety of their 'close ones', it cannot be ruled out, paradoxically, that a subset of costumers or, rather, buyers of an AV may opt, for their

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[22] In force of Automated and Electric Vehicles Act 2018, s 8(1)(a), self-driving refers to "*operating in a mode in which it is not being controlled, and does not need to be monitored, by an individual*". Moreover, the Joint Report emphasises that "*once a vehicle has been authorised as having a 'self-driving' ADS feature, and the feature is engaged, the human in the driving seat is no longer responsible for the dynamic driving task. It will be an offence to describe a feature as 'self-driving' if it has not been authorised*", paragraph 1.17.

[23] Perhaps it is not correct to qualified AV such as autonomous vehicles because they are driver by an unmanned driver, an artificial or synthetic driver.

[24] N. BELAY, *Robot Ethics and Self-Driving Cars: How Ethical Determinations in Software Will Require A New Legal Framework*, in *Journal of the Legal Profession*, No. 40, 2015, p. 121; S. WU, *Autonomous vehicles, trolley problems, and the law* in *Ethics and Information Technology* No. 22, 2022, p. 1 ff.

[25] A. TANIGUCHI, M. ENOCH, A. THEOFILATOS, P. IEROMONACHOU, *Understanding acceptance of autonomous vehicles in Japan, UK, and Germany*, in *Urban, Planning and Transport Research*, No. 1, 2022. About the so-called green logistic, see A. MCKINNON, S. CULLINANE, M. BROWNE, A. WHITEING, *Green Logistics. Improving the environmental sustainability of logistics*, London-Philadelphia-Daryaganiy, 2010; A. MCKINNON, *Freight transport and logistics*, in J. STANLEY, D.A. HENSGER (eds.) *A research Agenda for Transport Policy*, London, 2019.

[26] It is the non-human driver, although, even in referring to the hybrid system, it is common to use this adjective (non-human).

automated vehicles to consider the life of people in general. In this second case, apparently, the value to protect could be identified in the multifarious interests of people, such as their life, their private property, their heritable assets or, even, the lives of animals. It is highlighted that these multiple values could become more and more numerous and, may also be permeated by a subjective 'flavour'. To elaborate, a person may prefer to buy an AV whose goal is to preserve the cultural, or environmental heritage, to the detriment of the safety of (human) passengers or other people; another one could prefer an AV which preserves the life of passenger, regardless of the cost to private property. The potential samples could be even more diverse.

Ultimately, this decision does not originate from an algorithmic driver, rather it is a 'resolution' of both the manufacturer and the IT department: the latter being the party responsible for the software. In light of this, the liability should be on the shoulders of these subjects, and not be a responsibility of the AI driver[27]. In conclusion, the main problem is concerned with the balance between contrasting values, but also between different assessments about costs and benefits between the two rights, or values, at stake. From our perspective and given the dearth of contributions and legislation, it appears that the 'judge' of this decisional process is, first and foremost, the AI programmer, whereas only in the second instance does the unmanned driver step up to the plate. Nevertheless, sooner or later, in the so-called 'tragic choices', a decision shall have to be made.

More broadly, the actual approach could be not only philosophical, but also of an economic nature, because two potential rights, or aspects of human life, will have to be weighed in the balance. The decisional process, on the one hand, looks at the life of the passenger of the AV, on the other hand, at the collective/overall interest. In other words, the choice is between one or two lives, and, potentially, three, four and so on. It is worth noting that, because of this choice, the damages caused by tragic choices could also spark off judicial assessments.

In turning our attention to the trolley problem, the dilemma is whether this issue pertains to public law or, even, to an interdisciplinary 'realm'. The underpinning idea of this paper is that, in talking about the balance test, the pertinent field is public law.[28] In this respect, some scholars[29] highlight that 'trolley problem' is not the correct reference in the development of these new technologies. Rather, the 'Collingridge Dilemma'[30] should be the 'beacon'. Accordingly, there should be no regulation of the impact of the damages arising out of new technologies. Since it is impossible to adhere to decisions which may take on board ethical rights, the risks will still be uncertain.

The crucial, but also sad, aspect is that the decision is concerned with human life and not, merely, an economic aspect of life. A regulation is mandatory, but also necessary, so long as it is in a position to ascertain whether a behaviour would be socially acceptable.[31] From this standpoint, the outcome of this philosophical reasoning is a balanced result, perhaps

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[27] B. CASEYM, *Amoral Machines, or: How Roboticists Can Learn to Stop Worrying and Love the Law*. *Standford Law Journal*, No. 5, 2017, p. 134 ff.

[28] Other Scholars said that trolley problem is a moral philosophy, see H. LILLEHAMMER, *The Trolley Problem*, Cambridge, 2022.

[29] A. WOLKENSTEIN, *What has the Trolley Dilemma ever done for us (and what will it do in the future)? On some recent debates about the ethics of self-driving cars*, in *Ethics and Information Technology*, No. 20, 2018, p. 163 ff.

[30] D. COLLINGRIDGE, *The social control of technology*, London, 1980.

[31] L. T. BERGMANN, L. SCHÒLICHT, C. MEIXNER, P. KÖNIG, G. PIPA. S. BOSHAMMER, A. STEPHAN, *Autonomous Vehicles Require Socio-Political Acceptance—An Empirical and Philosophical Perspective on the Problem of Moral Decision Making*, in *Behav. Neurosci*., No. 28, 2018.

even a compromise, between two opposite values. Moreover, the mechanism of balancing "*is not mechanical but requires the decision-maker to appropriately take into account everything relevant that is not already addressed in the first three prongs of the proportionality test*".[32]
The analysis is even more complex, since constitutional law 'reflections' are important too: these involve the definition of the potential rights to be balanced. Scholars have underlined that fundamental rights cannot be balanced. In this case, the solution is a proportionality test.[33] The rule of constitutional law is clear, because the proportionality test is "*the most successful legal transplant of the twentieth century*".[34]
A further complex aspect is that of discrimination in the trolley problem: that is to say the discrimination in algorithmic decision-making. In fact, AV makes a decision concerning sacrificing the lives of a small group of people in order to benefit a larger group. Moreover, this is very hard to accept when the discrimination is morally wrong.[35]
To see all of this from an Italian constitutional perspective, the existence of a 'war' between constitutional principles becomes obvious. Thus, it is right, because the choice made by a machine, in this case the AV, reflects the way the AI has been programmed.[36] Moreover: in the scenario in which the acronym ESG has become a constitutional principle, the role of constitutional law is under scrutiny. Discrimination in the decision-making process, equality, respect for environment and for future generations now constitute principles embodied in two legal provisions of the Italian Constitution. The controversy, therefore, is between the safety and life of the people, and, on the other hand, brand-new constitutional values, such as the environment, private economic initiatives and human dignity, safety and health.[37]
Furthermore, ESG factors shall be necessarily evoked within the matter of AVs, because the last one should become the sustainability of mobility,[38] roads or infrastructure.[39] With these expressions, reference shall be made to an integration mobility, in which the last goal is a better response to the needs of economic, social and environmental safety. Moreover, the other facet is the minimisation of risk for society in a broadest sense.[40] The

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[32] M. KUMM, A. WALEN, *Human Dignity and proportionality: Deontic pluralism in balancing*, in G. HUSCROFT, B. MILLER, G. WEBBER (eds.), *Proportionality and the Rule of Law: Rights, Justification, Reasoning*, Cambridge, 2014, p. 89. For the difference between proportionality and balancing test, see G. SCIACCA, *Proporzionalità e Bilanciamento tra Diritti nella Giurisprudenza delle Corti Europee*, in *RivistaAIC*, No. 3, 2017.
[33] M. KLATT, M. MEISTER, *The Constitutional Structure of Proportionality*, Oxford, 2012, p. 45 ff.
[34] M. KUMM, *Constitutional Rights as Principles: on the Structure and Domain of Constitutional justice,* in *International Journal of Constitutional Law*, No. 2, 2003, p. 574 ff.
[35] D. LEBEN, *Discrimination in Algorithmic Trolley Problems*, in R. JENKINS, D. CERNY, T. HRIBEK, *Autonomous Vehicle Ethics: The Trolley Problem and Beyond*, Oxford, 2022, p. 130 ff.
[36] A.E. JAQUES, *Why the Moral Machine is a Monster*, in *University of Miami Law School: We Robot Conference*, April. 2019, p. 9.
[37] See article 41 Italian Constitution.
[38] Other Scholars are of the idea that AVs are not sustainable; see E. WILLIAMS, V. DAS, A. FISHER, *Assessing the Sustainability Implications of Autonomous Vehicles: Recommendations for Research Community Practice*, in *Sustainability*, No. 12, 2020, online. See also, A. MCKINNON, *Drones: will last mile logistic take to the air*, in *Future Logistics, a Freight & Logistics supplement by the FTA,* 2016; A. MCKINNON, *Environmentally sustainable city logistics: minimising urban freight emissions*, in E. MARCUCCI et al. (eds.), *Handbook on City Logistics and Urban Freight*, London, 2023, forthcoming.
[39] See European Strategy for Low-Emission Mobility, COM(2016).
[40] T. BONETTI, *Trasporto pubblico locale nel prisma della mobilità sostenibile*, in *Diritto Amministrativo*, No. 3, 2020, p. 563 ff.

first positive aspect in a sustainability view is absolutely the optimisation of traffic flow, a decreased in emissions and a better approach to environmental crises.[41]

5. Reflections on the Joint Report 2022: a 'twilight' of the new UK regulation

Based on the foregoing, it is possible to distinguish two different ways to use vehicles which are authorised to have a 'self-driving' feature (ADS), at least in looking at prospective UK legislation. Whether or not the ADS can be deactivated, two different scenarios can be envisaged.

In the first case, if the ADS feature is engaged, because the user has deactivated the human driving function; the human driver is thus totally exempt from responsibility. By contrast, the second scenario occurs when the human being cannot, and does not want to interfere with the driving.

As to the latter, in force of the Report, there is a complex safety assurance scheme. More precisely, three main players may be defined: 1) the user in charge; 2) the NUIC operator, namely the organisation that oversees vehicles without a user in charge; 3) the Authorised Self-Driving Entity (or ASDE). The last one is the manufacturer or the developer "*that puts the vehicle forward for authorisation and takes responsibility for its actions*".[42]

Irrespective of the demarcation line drawn by the ultimate legal framework, the Law Commissions recommend a cautious approach during this transitional phase from a human driver to a self-driving approach.

In analysing the ADS, it is possible to affirm that this framework encapsulates a recurrent 'mantra', that is an increasing and steady interaction between the human and the technological. As a result of this, it is taken for granted that the world of transportation hinges upon two modes. The user in charge and the NUIC operator may still represent the human world, whereas the vehicles, propelled by their technology, epitomise the synthetic one.

At this stage and in lack of Scholarly contributions, it is possible to affirm that there is a 'human-centered design' approach to automation,[43] in which the human element, or human factor, is still relevant and material. This stance is, perhaps, the lens through which all the concepts discussed in this paper should be analysed. In other words, the duty of candour could have two souls, a core human element, but also a prospective technological one, which is unfolding for the first time with the Joint Report and the legislation that, seemingly, will be passed in the UK.

Finally, for civil law jurisdictions such as the Italian one, the human perspective which is going to be borrowed by this new automated sector, as the UK is doing, should be an encouragement to develop a piece of legislation based on the human and its personality. Yet, Italy and other Continental counterparts do have constitutional principles that should – although this is not necessarily the case – facilitate this phenomenon. Irrespective of the

[41] B.R. HEARD, M. TAIEBAT, M. XU, S.A. MILLER, *Sustainability implications of connected and autonomous vehicles for the food supply chain*, in *Resources, Conservation and Recycling*, No. 128, 2018, p. 22-24.
[42] Joint Report paragraph 1.13(3).
[43] F. BIONDI, I. ALVAREZ, K-A. JEONG, *Human-Vehicle Cooperation in Automated Driving: A Multidisciplinary Review and Appraisal*, in *International Journal of Human-Computer Interaction*, online, p. 4.

'chimeras' of the Continent[44] across the Channel, once again, a new lecture is imparted to the neighbours, and perhaps to the world: a lecture of law, *ergo* a gust of wind of law.[45]

[44] In this respect, 'twilight' is "the soft glowing light from the sky when the sun is below to the horizon". In this chapter, the terms twilight alludes to the light from the sky between full night (*ergo*, the dearth of regulation in this matter) and the sunrise (that is to say, the 'spell' represented by the Joint Report of Law Commissions. However, also from a metaphorical point of view, 'twilight' has the face precede the day before the night, may also mean that the Report at stake will not be translated into legislation by the British Parliament. The darkness on this matter would inevitably ensue from the twilight.

[45] C. DELLA GIUSTINA, *La dialettica tra Governo e Parlamento durante la gestione dell'emergenza sanitaria da Covid-19,* in D. CASANOVA, A. DE NICOLA, M.C. GHIRARDI, P. VILLASCHI, *Le fonti della crisi: prospettive di diritto comparato. Atti del Seminario di diritto comparato*, in *La Rivista del Gruppo di Pisa*, No. 3, 2022, p. 209 ff.

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