

Automated Vehicle Liability and AI

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I INTRODUCTION

Few, if any, developments have had a greater impact on the common law, and in particular tort law, than the advent of the motor vehicle.¹ It is a notorious fact that tort law underwent seismic shifts over the course of the twentieth century in response to cars substantially replacing earlier modes of transportation. The most obvious and perhaps significant example concerns the breach element of the tort of negligence. Under the influence of legislation requiring owners of vehicles to secure third-party insurance,² courts across the common law world, while notionally requiring drivers only to act reasonably, raised the standard of care that drivers must achieve for the purposes of the tort of negligence to a level where, paradoxically, it comes close to imposing liability regardless of fault.

I do not only have in mind in this regard decisions such as *Nettleship v Weston*,³ in which the Court of Appeal of England and Wales held that a learner driver must achieve the standard of the reasonable competent motorist despite the obvious impossibility of their doing so. Rather, I am principally talking about what Patrick Atiyah evocatively described as the process of ‘stretching’ the law.⁴ Atiyah was referring by this term to, in particular, the tendency of judges to demand that motorists exercise far more care than most drivers in practice take. He attributed this proclivity to, among other things, sympathy for injured claimants as well as an awareness that damages awarded in claims brought in respect of motor vehicle accidents are paid by insurers rather than by defendant motorists.⁵

I am grateful to Donal Nolan for discussing the issues in this chapter with me as well as to Phillip Morgan and Jenny Steele for their helpful comments on a draft.

¹ See generally N Engstrom, ‘When Cars Crash: The Automobile’s Tort Law Legacy’ (2018) 53 *Wake Forest Law Review* 293.

² Third-party motor vehicle insurance became compulsory in England with the enactment of the Road Traffic Act 1930.

³ [1971] 2 QB 691 (CA). See also *Lovelace v Fossum* (1972) 24 DLR (3d) 561 (BCSC).

⁴ PS Atiyah, *The Damages Lottery* (Hart Publishing 1997) chs 2–3.

⁵ See also R Lewis, ‘The Relationship between Tort Law and Insurance in England and Wales’ in G Wagner (ed), *Tort Law and Liability Insurance* (Springer 2005).

The New South Wales Law Reform Commission eloquently described the effect of this ‘stretching’, which occurred throughout the common law world, in a report that was published in 1984. The Law Reform Commission observed that the rule that liability in the tort of negligence requires proof of fault had, in the context of motor vehicle accidents:⁶

lost a great deal of [its] original meaning. A breach of duty in a negligence action involves a departure from the standards of the ordinary and reasonable road user. Yet by those standards, if they are to be applied stringently, relatively few defendants would be held liable. The trend to extend compensation to a wider class of claimants has expanded the notion of ‘fault’ as a criterion of liability in transport accident cases.

We are now apparently on the cusp of what promises to be a new motor-vehicle-inspired revolution in the law, including tort law, on account of the imminent introduction *en masse* of self-driving vehicles. Although automated vehicles come with the potential to reduce accident rates,⁷ accidents will always be inevitable. To date, there have been several high-profile accidents involving automated vehicles including the death of a pedestrian in Arizona in 2018 caused by a self-driving Uber vehicle.⁸ There is, accordingly, a very real need to consider the circumstances in which compensation for damage caused by automated vehicles is, and ought to be, available.

This chapter has a modest objective. It considers the civil liability regime in the United Kingdom for damage caused by automated vehicles. The focus is on this country principally because it is the jurisdiction with which I am most familiar. However, developments in the United Kingdom are in any event of particular interest because the Parliament at Westminster has moved especially swiftly in terms of legislating as regards civil liability for accidents occasioned by automated vehicles and because the scheme that it has established is unlike that anywhere else. Further, the whole field has been comprehensively surveyed by the Law Commission of England and Wales and Scottish Law Commission.⁹

⁶ New South Wales Law Reform Commission, *Accident Compensation: A Transport Accidents Scheme for New South Wales, Final Report 1*, vol 1 (1984), para 3.35.

⁷ ‘Human error is a factor in over 90% of collisions. Failing to look properly, misjudging other road users’ movements, being distracted, careless or in too much of a hurry are the most common causes of collisions on our roads. Automated vehicles will not make these mistakes’: Department for Transport, *The Pathway to Driverless Cars: Summary Report and Action Plan* (Department for Transport 2015) para 1.3.

⁸ See National Safety Transportation Board, *Highway Accident Report: Collision between Vehicle Controlled by Developmental Automated Driving System and Pedestrian Tempe, Arizona March 18, 2018* (2019) <www.nts.gov/investigations/AccidentReports/Reports/HAR1903.pdf>.

⁹ Law Commission of England and Wales and Scottish Law Commission, *Automated Vehicles: Joint Report* (2022). See also the valuable report of the Singapore Academy of Law, *Report on the Attribution of Civil Liability for Accidents Involving Autonomous Cars* (2020).

II THE AUTOMATED AND ELECTRIC VEHICLES ACT 2018

A Overview

By far the most significant legal development to date in the United Kingdom regarding civil liability for damage caused by automated vehicles is the enactment of the Automated and Electric Vehicles Act 2018 (the AEV Act). Part I of the AEV Act is concerned with civil liability for damage caused by automated vehicles while Part II focuses on the charging of electric vehicles. Part I, on which this chapter concentrates, entered into force on 21 April 2021¹⁰ and applies in all parts of the United Kingdom except for Northern Ireland.¹¹ Reduced to its core, it establishes a regime whereby insurers of automated vehicles are: (i) held strictly liable for damage that automated vehicles cause while driving themselves and (ii) conferred with a right to bring secondary claims against persons, if any, who were responsible for the accident. This simple summary of Part I conceals, however, significant complexities in the scheme that it establishes. Unsurprisingly, given that it has only commenced very recently, Part I has not yet been the subject of any judicial elucidation although it has excited considerable academic analysis.¹²

It is important to observe at the outset that the AEV Act, in so far as Part I is concerned, is a pre-emptive piece of legislation in that no vehicles are as yet available for sale in the United Kingdom that have the degree of autonomy that is needed to engage it. An influential but arguably seriously deficient classification of different degrees of vehicle automation is that propounded by a body known as SAE International.¹³ Levels 1 and 2 of this taxonomy involve automation that provides a human driver with support. Examples of such automation include cruise control and lane departure warnings. Level 3 involves ‘conditional driving automation’. It entails the vehicle driving itself but a human driver might be required to take control in certain circumstances. Levels 4 and 5 involve ‘high’ and ‘full’ driving automation respectively. Neither requires a human to take control of the vehicle. A Level 4

¹⁰ Automated and Electric Vehicles Act 2018 (Commencement No 1) Regulations 2021/396, r 3(a).

¹¹ The AEV Act, s 22(1).

¹² See, for example, M Channon, ‘Automated and Electric Vehicles Act 2018: An Evaluation in Light of Proactive Law and Regulatory Disconnect’ (2019) 10 *European Journal of Law and Technology* 26; M Channon, K Noussia and L McCormick, *The Law and Autonomous Vehicles* (Informa Law 2019); M Marynowski, ‘Car Insurance in the Age of Self-Driving – Analysis of the Automated and Electric Vehicles Act 2018’ (2019) 4 *Insurance Review* 25; K Oliphant, ‘Liability for Road Accidents Caused by Driverless Cars’ (2019) 13 *Singapore Comparative Law Review* 190; J Marson, K Ferris and J Dickinson, ‘The Automatic and Electric Vehicles Act 2018 Part 1 and Beyond: A Critical Review’ (2020) 41 *Statute Law Review* 395; J Marson and K Ferris, ‘The Lexicon of Self-Driving Vehicles and the Fuliginous Obscurity of Autonomous Vehicles’ (2021) 20 *Statute Law Review* 1.

¹³ SAE International, *Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles: J3016 202104* (2021). For criticism, see D Hopkins and T Schwanen, ‘Talking about Automated Vehicles: What Do Levels of Automation Do?’ (2021) 64 *Technology in Society* 101488.

automated vehicle can ask a human driver to assist but will continue driving itself if the request is unanswered while a Level 5 automated vehicle does not require any human control. The AEV Act is aimed at automation at Levels 4 and 5.¹⁴ Vehicles with automation at Levels 4 or 5 are not yet available, however, for public use in the United Kingdom (or, apparently, anywhere else).

One other general point to observe regarding the AEV Act is that it is remarkably brief (Part I of it runs to just eight sections).¹⁵ As such, it does not deal comprehensively with the phenomenon of automated vehicles. Indeed, it is very far from such a statute. It does not, for instance, prescribe when drivers may permit a vehicle to drive itself or specify particular standards that the technology must achieve. Perhaps most strikingly of all, the AEV Act does not make any arrangements as regards the data that automated vehicles will record and the circumstances in which those data must be preserved and made available to insurers and other stakeholders. There are indications that the government expects such issues to be dealt with by international instruments.¹⁶ The lack of detail in the legislation reflects a ‘wait and see’ philosophy pursuant to which the AEV Act will be kept under review and, if necessary, expanded in order to address problems if and when they arise. This means, however, that there is a danger that it will be out of date by the time that automated vehicles that can drive themselves appear on the roads.

B Background

In 2013, the government wrote in its Autumn Statement that it would ‘support the development of driverless cars through reviewing the regulation and legislation that applies to the testing of driverless cars...’.¹⁷ That review was carried out in 2014.¹⁸ It was followed by the publication in 2015 and 2016 of government reports on the theme of automated vehicles.¹⁹ Legislation on the subject was then formally announced in the 2016 Queen’s Speech. Thus, the Sovereign said that ‘My ministers will ensure the United Kingdom is at the forefront of technology for new forms of transport, including autonomous and electric vehicles’.²⁰ The

¹⁴ The government’s view is that the AEV Act ‘does not apply to level 3 vehicles’: Hansard, House of Lords, Automated and Electric Vehicles Bill, volume 791, column 173, Baroness Sugg (9 May 2018).

¹⁵ The AEV Act is not, however, the shortest statute that has ever been enacted. That prize goes to the Parliament (Qualification of Women) Act 1918, which contains just twenty-seven operative words.

¹⁶ Centre for Connected and Autonomous Vehicles, *Pathway to Driverless Cars: Proposals to Support Advanced Driver Assistance Systems and Automated Vehicle Technologies* (Department for Transport 2016) para 2.24.

¹⁷ HM Treasury, *Autumn Statement 2013* (HMSO 2013) para 2.156.

¹⁸ Department for Transport, *Review of the Legislative and Regulatory Framework for Testing Driverless Cars: Discussion Documents and Call for Evidence* (Department for Transport 2014).

¹⁹ See, for example, Department for Transport (n 7); Department for Transport, *The Pathway to Driverless Cars: A Detailed Review of Regulations for Automated Vehicle Technologies* (Department for Transport 2015); Centre for Connected and Autonomous Vehicles (n 16).

²⁰ *Queen’s Speech 2016* <www.gov.uk/government/speeches/queens-speech-2016>.

background briefing notes to the Queen's Speech identify various goals that the proposed statute would achieve including '[e]nsuring [that] new technology delivers better, safer journeys'.²¹ The promised benefits included ensuring that the United Kingdom was 'at the forefront' when it came to the ownership and use of driverless vehicles.²² It was also said that the legislation would encourage investment in automated vehicles and ensure that 'appropriate insurance' was available in connection with their use.²³

The relevant bill was originally supposed to be entitled the Modern Transport Bill, but it was introduced to Parliament in 2017 as the Vehicle Technology and Aviation Bill. Parliament was dissolved shortly thereafter and the bill fell. However, later in 2017, the Automated and Electric Vehicles Bill was proposed. Its provisions tracked those of the Vehicle Technology and Aviation Bill save that those clauses of the latter that had dealt with aviation no longer featured. The bill's purpose was said to prepare the United Kingdom to be ready for the introduction of automated vehicles that have a high degree of, or full, autonomy. As the Minister of State for Transport explained in the second reading speech: '[Henry] Ford himself said: "Before everything else, getting ready is the secret of success." That is what this Bill is about.'²⁴ The bill's passage through Parliament was unremarkable with Part I being only lightly amended. Much of the debate and written evidence focused on the provisions in Part II concerning electric charging rather than on Part I's clauses regarding automated vehicles. It appears that there was far more stakeholder interest in the former than in the latter.

C *The Mischief*

Before addressing the AEV Act's provisions in detail, it is worth considering why, specifically, the statute was enacted. It is necessary to bear in mind, in this regard, the insurance arrangements that exist in relation to conventional motor vehicles. Claims in respect of damage caused by a conventional vehicle are typically brought against the driver of the vehicle concerned. Those claims, if liability is admitted or established, are paid by the owner's or driver's third-party insurer. Even where the vehicle is uninsured or cannot be traced, compensation will still be paid by an insurer pursuant to agreements between the Secretary of State for Transport and the Motor Insurers' Bureau.²⁵ Obviously, however, this familiar framework cannot

²¹ *Queen's Speech 2016: Background Briefing Notes* (2016) <www.gov.uk/government/publications/queens-speech-2016-background-briefing-notes> 17.

²² *Ibid.*

²³ *Ibid.*

²⁴ HC Deb 23 October 2017, vol 630, col 60.

²⁵ The agreements are available at <www.mib.org.uk/media/166917/2015-uninsured-drivers-agreement-england-scotland-wales.pdf> and <www.mib.org.uk/media/353664/2017-untraced-drivers-agreement-england-scotland-and-wales.pdf>.

be applied to automated vehicles since there may be no human driver (indeed, conceivably, there may not even be a human occupant). The AEV Act's overarching purpose is to plug this gap in insurance cover. It does so by providing victims of accidents caused by automated vehicles with a claim directly against the vehicle's insurer.²⁶ Interestingly, the government considered adopting, as an alternative to the regime established by the AEV Act, a first-party insurance model, applicable to both conventional and automated vehicles alike.²⁷ Under such a system, injured persons would claim against their own insurer. It was thought, however, that this option 'would be too disruptive and costly at this stage'.²⁸

D Key Terms

Section 2 contains the AEV Act's core liability rules. Section 2(1) provides:

Where –

- (a) an accident is caused by an automated vehicle when driving itself on a road or other public place in Great Britain,
- (b) the vehicle is insured at the time of the accident, and
- (c) an insured person or any other person suffers damage as a result of the accident, the insurer is liable for that damage.

Pursuant to section 2(2), if there is no insurer the owner will be liable for the damage. It follows that claims can be brought under the AEV Act only in respect of 'damage' resulting from an accident that is caused by an 'automated vehicle' that was 'driving itself'. It is convenient to examine these three pivotal concepts – 'automated vehicle', 'driving itself' and 'damage' – in turn at this stage, each of which the AEV Act defines. A few remarks will then be offered as regards the word 'accident' and the phrase 'road or other public place', neither of which is defined.

1 'Automated Vehicle'

Section 1(4) provides that 'automated vehicles' are vehicles that are included on a list that the Secretary of State is obliged to maintain pursuant to section 1(1).²⁹ The latter subsection states that the list must include all motor vehicles that '(a) are in the

²⁶ By virtue of amendments that the AEV Act makes to ss 144–145 of the Road Traffic Act 1988, automated vehicles must be insured: see the AEV Act, Sch, cll 18–19.

²⁷ This is a reform for which Atiyah famously argued: see Atiyah (n 4) ch 8.

²⁸ Centre for Connected and Autonomous Vehicles, *Pathway to Driverless Cars: Insurance for Automated Vehicles* (2016) 1. See also at 3 (neither 'necessary [nor] proportionate').

²⁹ The Law Commissions have recommended that this listing procedure be replaced by an authorisation procedure pursuant to which an automated vehicle's manufacturer or developer would need to submit its vehicle to an authorisation authority: Law Commission of England and Wales and the Scottish Law Commission (n 9) ch 5.

Secretary of State's opinion designed or adapted to be capable, in at least some circumstances or situations, of safely driving themselves, and (b) may lawfully be used when driving themselves, in at least some circumstances or situations, on roads or other public places in Great Britain'. As to the first of these conditions, it is striking that it will be met in relation to an automated vehicle even if it is wholly incapable of safely driving itself in most circumstances provided that there are in the Secretary of State's opinion 'at least some circumstances or situations' in which it is 'designed or adapted' to be capable of self-driving safely. This suggests a strong preference to include more rather than fewer automated vehicles on the list. The second condition is that the automated vehicle concerned 'may lawfully be used when driving themselves, in at least some circumstances or situations, on roads or other public places...'. It is unclear precisely which rules the legislature has in mind in connection with this second condition.

It appears that once a vehicle has been listed by the Secretary of State it will be an 'automated vehicle' for the purposes of the AEV Act and that that is so regardless of whether the Secretary of State should have listed it. Conversely, even if a vehicle is clearly an automated vehicle that can safely drive itself it will not qualify as an automated vehicle for the purposes of the AEV Act unless and until it features on the Secretary of State's list. Notably, if an automated vehicle is capable of driving itself safely in one situation (e.g., on a dual carriageway) but not in another (e.g., on a congested city street), and it is used in the latter resulting in the claimant suffering injury, the claimant may still be entitled to compensation under the AEV Act. Significantly, section 1(4) gives no guidance as to when an automated vehicle will be designed or adapted 'safely' to drive itself. Safety is a relative concept. One possible approach would be to enquire whether the vehicle in question causes or is likely to cause accidents at a lower rate than the average incidence of accidents in which conventional vehicles are implicated.³⁰

2 'Driving Itself'

Pursuant to section 8(1), 'a vehicle is "driving itself" if it is operating in a mode in which it is not being controlled, and does not need to be monitored, by an individual'.³¹ Presumably, therefore, if an automated vehicle causes an accident because, for example, it is parked in a dangerous position, no claim will lie under the AEV Act (since the vehicle is not 'operating' at all in this situation). This would appear to be the case even if the vehicle had parked itself. Such cases are relatively clear-cut but others will not be, and the phrase 'driving itself' harbours significant ambiguity. The result is that situations will inevitably arise where it is unclear whether the automated vehicle or the person in charge of it is doing the driving at any particular point in time. Most obviously, these situations may include those where an

³⁰ See further *ibid.* ch 4.

³¹ For criticism, see Marson, Ferris, and Dickinson (n 12).

automated vehicle is transitioning between driving itself and being driven by the person in charge of it (i.e., the so-called 'handover').

Importantly, however, scope for debate as to whether an automated vehicle was driving itself is minimised by section 145(3A) of the Road Traffic Act 1988 (RTA). This subsection stipulates that insurance policies issued in respect of automated vehicles must provide cover not only as regards the liability of the person in charge of the automated vehicle but also 'for the insurer's obligations to an insured person'. Thus, the same insurer will provide cover for both the liability of the person in charge of an automated vehicle and in respect of the automated vehicle itself. It follows that disputes as to whether an automated vehicle was driving itself will break out far less frequently than would be the case where the person in charge of the automated vehicle and the automated vehicle itself have different insurers (since were there different insurers each would be incentivised to contend that the other bears responsibility for paying a particular claim).

Nevertheless, very considerable scope remains for disputes to arise as to whether a vehicle was driving itself or was being driven.³² There are two main situations where this is so. The first is where the insurer considers that the claimant might encounter difficulty in establishing fault on the part of the person in control of the automated vehicle. In such a case, the insurer would be incentivised to argue that the vehicle was being driven by the human concerned since in that case it would not incur liability, unless the claimant can establish fault on the part of the human driver. The second situation is where the claimant is the person in charge of the automated vehicle. Where this is the case, the insurer will have an incentive to demonstrate that the claimant was driving the vehicle since it would also avoid incurring liability in that event.

The AEV Act's definition of 'driving itself', in addition to opening the door to the foregoing debate, also appears to be too restrictive in a potentially important respect. Imagine that a pedestrian is run down by a vehicle that was operating with a certain degree of automation but which still needed to be monitored. Suppose also that the accident occurred because of a defect in the technology and that the human driver, despite monitoring the vehicle, had no sufficient opportunity to prevent the collision. No claim will be available to the pedestrian under the AEV Act since the vehicle was not 'driving itself' for the purposes of section 2(1)(a) on account of its needing to be monitored. However, it is difficult to see the sense in this given that the human driver, despite needing to monitor the vehicle, could not have avoided the accident. Why should the pedestrian be denied a remedy under the AEV Act in circumstances where the accident was caused, and caused only by, a defect in the automation technology? The difficulty is magnified by the fact that the pedestrian will not have any claim against the driver either given that the driver was not at fault.

³² This appears to have been overlooked by the Law Commissions: see Law Commission of England and Wales and Scottish Law Commission (n 9) para 13.6.

3 'Damage'

As regards the concept of 'damage', section 2(3) defines it both by inclusion and exclusion. Damage is specifically stated to include 'death or personal injury' and 'damage to property'. It follows that pure economic loss does not qualify as damage for the purposes of the AEV Act and, as such, cannot properly form the basis of a claim brought under it. In so far as losses that are specifically excluded are concerned, they comprise: (i) damage to 'the automated vehicle',³³ (ii) damage to 'goods carried for hire or reward in or on that vehicle or in or on any trailer (whether or not coupled) drawn by it' and (iii) damage to 'property in the custody or under the control' of the insured person or, if the automated vehicle is not insured, the person who is in charge of it at the time of the accident. Suppose that one automated vehicle causes damage while driving itself to another automated vehicle. It might be suggested that a very literal reading of the foregoing definitions requires that the owner of the latter cannot sue. It seems unlikely, however, that this is what the legislature intended.

4 Undefined Terms

Only damage that is caused by an 'accident' is within the scope of section 2. However, the AEV Act does not specify what qualifies as an 'accident'.³⁴ Difficult issues could well arise in this connection. Suppose, for example, that an automated vehicle is programmed, in the event of a situation in which imperilling the life of either a pedestrian or an automated vehicle's occupants is unavoidable, to prefer the latter's interests and to do so by running down the former. Given that the programmer has, in effect, positively instructed the automated vehicle to collide with the pedestrian in this circumstance, it is debatable whether the injury to the pedestrian is accidental.³⁵ Also undefined is the phrase 'road or other public place'. This language tracks that in, among other provisions, section 143 of the RTA, which prescribes when the use of a motor vehicle must be insured. There is a body of case law regarding the concept of a 'public place' for the purposes of that provision.³⁶ These authorities will presumably be relevant to the construction of that phrase in section 2 of the AEV Act.

³³ This echoes the approach taken in s 5(2) of the Consumer Protection Act 1987 in the context of damage caused by defective products.

³⁴ Although s 8(3) provides that 'a reference to an accident includes a reference to two or more causally related accidents' and that 'a reference to an accident caused by an automated vehicle includes a reference to an accident that is partly caused by an automated vehicle'.

³⁵ Consider *Charlton v Fisher* [2001] EWCA Civ 112, [2002] QB 578. The defendant deliberately reversed his vehicle into that in which the claimant was a passenger. An issue arose, which it was ultimately unnecessary to decide, as to whether the injury had been caused by an 'accident' within the meaning of the policy.

³⁶ See R Merkin and M Hemsworth, *The Law of Motor Insurance* (2nd edn, Sweet & Maxwell 2020) para 5.63; Law Commission of England and Wales and Scottish Law Commission (n 42) appendix 2.

E. A Direct Claim Against the Insurer

Section 2(1) of the AEV Act has been set out above.³⁷ It gives persons injured by automated vehicles a claim directly against the automated vehicle's insurer.³⁸ Various other ways of dealing with the issue had been available to the legislature. Parliament could, for example, have simply left persons injured by accidents caused by automated vehicles to sue the vehicle's producer³⁹ or programmer. However, it is clear why this option was not selected.⁴⁰ Not only could many claimants have encountered profound difficulties in determining which company within a corporate group was responsible for the accident in question,⁴¹ but they could also have faced major problems in terms of enforcement in circumstances where the relevant company may be incorporated overseas. Added to this is the notoriously low success rate of product liability claims in the United Kingdom (especially under the Consumer Protection Act 1987 (CPA)) coupled with their equally well-known high cost. Understandably, the legislature was concerned by the possibility that persons injured by automated vehicles might not, without statutory intervention, be able to recover compensation without 'undue legal wrangling'.⁴² Accordingly, by imposing liability directly on the insurers of automated vehicles, section 2(1) cuts through a host of complications that persons injured by automated vehicles might otherwise face. The trade-off, however, is that subject to the possibility of the insurer being able to bring a secondary claim against third parties responsible for the accident,⁴³ the cost of damage caused by automated vehicles will be borne by the premium paying population in the United Kingdom even if responsibility for it ultimately lies with an company incorporated overseas.

Beyond these preliminary observations, numerous other aspects of section 2 merit attention. Firstly, anyone who suffers damage caused by an automated vehicle driving itself can bring a claim under section 2. It follows that the person who is in charge of the automated vehicle at the time of the accident (if any) is among those who can rely upon section 2 in the event of suffering injury.⁴⁴

³⁷ See section B.iv.

³⁸ See section B.iii.

³⁹ Some jurisdictions in the United States have enacted legislation that places liability for damage caused by autonomous vehicles on manufacturers: see S Quidachay-Swan, 'Autonomous Vehicles and Current State Liability Legislation' [2019] *Michigan Bar Journal* 48. See also New York State Bar Association, *Report of the New York State Bar Association Task Force on Autonomous Vehicles and the Law* (2020) 6–7.

⁴⁰ For further discussion, see Centre for Connected and Autonomous Vehicles (n 16) 8.

⁴¹ For an example of a case from a different context that shows how real this problem can be, see *Four Seasons Holdings Inc v Brownlie* [2017] UKSC 80, [2018] 1 WLR 192.

⁴² Law Commission of England and Wales and Scottish Law Commission, *Automated Vehicles: Consultation Paper 3 – A Regulatory Framework for Automated Vehicles* (2020) para 16.3.

⁴³ See section B.xi.

⁴⁴ There is one exception to this position. Section 3(2) provides that where the accident caused by the automated vehicle 'was wholly due to the ... negligence [of the person in charge of it] in allowing the vehicle to begin driving itself when it was not appropriate to do so' the person in charge cannot benefit from section 2.

This is a further respect in which the AEV Act breaks with the regime applicable to claims in respect of damage caused by conventional vehicles. In the case of accidents involving conventional vehicles, not only does the driver not stand to benefit from the cover that they have purchased but is, indeed, the *only* person who does not stand to benefit.

Secondly, even though section 2 does not say so expressly, the liability that it imposes is strict. Thus, it is irrelevant whether anyone was at fault in, for example, programming or designing the automated vehicle.⁴⁵ Accordingly, section 2 places persons who are injured by automated vehicles into a preferential position compared with persons who are injured by conventional vehicles since the latter must usually establish that they were injured as a result of another person's fault in order to recover damages (albeit the requirement to prove fault, as observed at the outset of this chapter,⁴⁶ is often undemanding). In one sense, this is a surprising step for the legislature to have taken given that, from the perspective of the injured party, the type of vehicle involved in causing them damage is, or at least will almost always be, a matter of luck. Why should the circumstances in which compensation is due to a pedestrian who is run down depend on whether the pedestrian is struck by an automated vehicle or conventional vehicle instead of, for example, on whether the pedestrian's injuries are sufficiently serious that they cannot cope without compensation? Before leaving this second point, it is worth observing that the preferencing suggests a concern on the part of the legislature to reassure the public regarding the introduction of automated vehicles. It is also noteworthy that the significance of the preferencing will diminish as automated vehicles are adopted (because there will be fewer victims of motor vehicle accidents who do not stand to benefit from the strict liability rule).

Thirdly, the legislature has brought within the strict liability net for which section 2 provides only insurers (as well as owners under section 2(2) in the event that an automated vehicle is uninsured). Producers were presumably not included given that they are potentially exposed to strict liability already under the CPA. However, although section 2 does not impose liability on anyone except for insurers (and owners of uninsured automated vehicles), it preserves the liability of any other person.⁴⁷ Accordingly, persons who are injured by an accident involving an automated vehicle remain entitled to claim against the individuals responsible for it, although they would have little incentive to do so given the existence of the strict liability claim against the automated vehicle's insurer under section 2.

Fourthly, section 2 does not provide for any special requirements that need to be satisfied before liability arises in respect of pure mental harm suffered by

⁴⁵ Although see *ibid.*

⁴⁶ See the text accompanying nn 4–6.

⁴⁷ Section 2(7).

secondary victims, that is, persons who were not themselves physically endangered.⁴⁸ Suppose that a vehicle runs out of control and collides with a pedestrian resulting in their being killed or seriously injured. If the vehicle is a conventional one, horrified onlookers who were not in a relationship of love and affection with the pedestrian who suffer mental harm as a consequence of what they saw would not have any claim against the driver.⁴⁹ If, however, the vehicle is an automated one, the bystanders would not seem to face any difficulty in recovering compensation under the AEV Act. This is a further respect in which claimants who sue under the AEV Act are singled out, on the basis of luck, for preferential treatment relative to other claimants.

Finally, and in contrast with the situation that obtains in relation to damage caused by conventional vehicles,⁵⁰ no arrangements are as yet in place to have the Motor Insurers' Bureau ultimately cover losses occasioned by automated vehicles where the automated vehicle concerned is uninsured or untraced. It appears that the government and the Motor Insurers' Bureau are (or were) in discussions aimed at ensuring that persons injured by automated vehicles are not prejudiced by the fact that an automated vehicle is uninsured.⁵¹ One would hope that arrangements would also be made to cater for untraced automated vehicles.

F Contributory Negligence

Ordinarily, where a claimant fails to take reasonable care for their own safety and where that failure is causally related to the injury suffered, any damages recoverable are subject to reduction for contributory negligence pursuant to the Law Reform (Contributory Negligence) Act 1945.⁵² However, the 1945 Act applies only if the defendant is also at fault.⁵³ It cannot, therefore, apply straightforwardly to a claim under the AEV Act since the usual defendant (i.e., an insurer) will never be at fault in connection with the accident that caused the damage. Section 6(3) of the AEV Act deals with this by stipulating that the 'behaviour of the [automated] vehicle' is deemed to be 'fault' on the part of the person held liable thereunder for the purposes of the 1945 Act. It follows that whenever a claimant who seeks relief

⁴⁸ Mental harm constitutes 'damage' for the purposes of the AEV Act given that damage is defined to include 'personal injury': see the text accompanying n 33 above.

⁴⁹ *Alcock v Chief Constable of South Yorkshire Police* [1992] 1 AC 310 (HL).

⁵⁰ See n 25 above and the accompanying text.

⁵¹ Motor Insurers' Bureau, *Annual Report and Accounts 2018*, 10 <www.mib.org.uk/media/461843/annual-report-2018.pdf>.

⁵² In the United Kingdom, contributory negligence is no longer a complete defence to a claim in tort. However, the language of contributory negligence is still used in this country (and in other Commonwealth jurisdictions) to refer to the process by which damages are reduced on account of the claimant's own carelessness.

⁵³ See s 1(1). As regards the apportionment provision generally, see J Goudkamp and D Nolan, *Contributory Negligence: Principles and Practice* (2nd edn, Oxford University Press 2023) ch 4.

under section 2 is guilty of contributory negligence, any damages to which they are entitled will be reduced under the apportionment legislation.

Section 3(1) of the AEV Act explains (or, perhaps more accurately, tries to explain) how the apportionment exercise should be conducted. It provides that if 'the accident, or the damage resulting from it, was to any extent caused by the injured party, the amount of liability is subject to whatever reduction under the [1945 Act] would apply to a claim in respect of the accident brought by the injured party against a person other than the insurer or vehicle owner'. Accordingly, and oddly, it is the insurer's or owner's (deemed) fault together with the claimant's fault that engages the apportionment legislation (pursuant to section 6(3) as discussed above), whereas it is the fault of 'a person other than the insurer or vehicle owner' along with the claimant's fault that will be considered for the purposes of determining the amount by which damages should be discounted (under section 3(1)). In what can only be regarded as a serious defect in the legislative framework, section 3(1) leaves the 'other' person unidentified, and the legislature seems not to have appreciated that there may not even be another person against whom a claim could be brought. Although the position is far from clear, it may be that the 'other' person should be regarded as a hypothetical human motorist driving in a manner equivalent to the way in which the automated vehicle drove itself.

Quite apart from these difficulties, these provisions are in any event nothing short of an embarrassment on account of their complexity. It may have been better had the legislature simply accepted that the comparative exercise that the apportionment regime usually entails cannot properly be conducted in claims under the AEV Act because there will never, in actuality, be any fault on the insurer's part.⁵⁴ This would have left the legislature with at least two options. One would have been simply to exclude the defence of contributory negligence from claims under the AEV Act altogether. Certainly, eliminating the defence would have been consistent with the preferencing visible elsewhere in the statute. The other option would have been to provide for the discount to be determined in view only of the extent of the claimant's departure from the standard of the reasonable person in his or her position. Surprisingly, the Law Commissions have not recommended that the foregoing provisions be amended.⁵⁵ Although they accepted that the statutory machinery is 'complex',⁵⁶ legislative intervention was not regarded 'as a priority at this stage' in view of 'the absence of any experience of how the AEV Act might apply to real life cases'.⁵⁷

⁵⁴ It is no answer to this that contributory negligence is sometimes admitted as a defence in the strict liability context, such as in connection with claims under the CPA. It is not the AEV Act's imposing strict liability that causes difficulty in connection with the contributory negligence doctrine but the fact that, in a claim under the AEV Act, the insurer will never have been at fault in connection with the accident.

⁵⁵ Law Commission of England and Wales and Scottish Law Commission (n 9) para 13.23.

⁵⁶ *Ibid.* para 13.15.

⁵⁷ *Ibid.* para 13.22.

G *Exclusion or Limitation of Liability*

Section 4 provides, in unnecessarily convoluted terms, for a limited right on the part of insurers to exclude or restrict their liability. Section 4(1)(a) states that an insurance policy may exclude or restrict liability arising under section 2(1) where the damage results directly from prohibited changes being made to the vehicle's software by the insured or with his or her knowledge. Section 4(1)(a) is qualified, however, by section 4(2) which stipulates that section 4(1)(a) does not apply unless the insured at the time of the accident knows that the software changes concerned are prohibited under the policy. This limitation on section 4(1)(a) is inapplicable where the insured person is the policy holder. Pursuant to section 4(1)(b), it is also permissible for the insurer to exclude or restrict liability on account of an unreasonable failure by an insured person to install safety-critical software updates.⁵⁸ One can envisage complications arising where an accident would still have occurred despite a failure to install safety-critical software updates but is made worse by that failure.

H *Limitation Period*

The AEV Act makes various amendments to the Limitation Act 1980. As a consequence of these amendments, the limitation period applicable to a claim under section 2 of the AEV Act is three years with time running from the date of the accident. This is so even if the damage is property damage, where a six-year limitation period would normally apply.⁵⁹ If the claim is in respect of personal injuries, the running of time is postponed until the date of knowledge on the part of the claimant, if that date is later than the date of the accident.⁶⁰ The date of knowledge is the date on which the claimant knew: (i) that the injury concerned was significant, (ii) that it was attributable to an accident caused by an automated vehicle driving itself, and (iii) the identity of the insurer of the vehicle (or owner if the vehicle was uninsured).⁶¹ Secondary claims under the AEV Act are subject to a two-year limitation period with time running from the date on which the right of action accrued.⁶² This is consistent with the limitation period that applies to contribution claims.⁶³

I *Remoteness*

The AEV Act does not expressly deal with the issue of remoteness of damage. A question mark thus hovers over whether liability arising under section 2 is restricted

⁵⁸ Pursuant to s 4(6)(b), updates are deemed to be safety-critical if it 'would be unsafe to use the vehicle in question without the updates being installed'.

⁵⁹ Limitation Act 1980, s 2.

⁶⁰ *Ibid.* s 11B.

⁶¹ *Ibid.* s 14(1B).

⁶² *Ibid.* s 10A(1).

⁶³ *Ibid.* s 10(1).

to kinds of damage that are reasonably foreseeable. The same issue arises in relation to the CPA, which is also silent on the subject. Since it is generally thought that a reasonable foreseeability remoteness constraint nevertheless applies to claims under the CPA,⁶⁴ the same approach might be warranted in relation to claims brought under the AEV Act.

J Remedies

The AEV Act does not specify how damages awarded pursuant to section 2 are to be assessed. Presumably, liability arising under section 2 extends to the totality of the harm suffered by the injured person. The only qualification to this is that the AEV Act imposes an upper limit on claims in respect of property damage.⁶⁵ That cap is the limit on compulsory insurance for property damage set forth in section 145(4)(b) of the RTA, which is currently £1.2m. It is unclear whether awards of punitive or aggravated damages are available under the AEV Act.

K Secondary Claims

As discussed above, section 2 of the AEV Act initially places the cost of accidents caused by automated vehicles on the insurers or, if the vehicle is uninsured, their owners. Section 5 of the statute makes arrangements for secondary claims. Section 5(1) stipulates that where an insurer's or owner's liability to a person injured by an automated vehicle is 'settled', 'any other person liable to the injured party in respect of the accident is under the same liability to the insurer or vehicle owner'. Pursuant to section 5(2), the insurer's or owner's liability is regarded as being settled where it has been determined by a judgment, an arbitration award or an enforceable agreement. Under section 5(3), in the event that the insurer or owner makes a recovery under section 5(1) that exceeds the sum paid to the injured person, the insurer or owner must pay the excess to the injured party. Obvious persons against whom secondary claims could potentially be brought include the person in charge of the automated vehicle,⁶⁶ a driver of another vehicle involved in the accident and the automated vehicle's producer. The last-mentioned may be liable at common law or under the CPA or both. One interesting and important issue that arises in this regard is whether software qualifies as a 'product' for the purposes of the 1987 Act.⁶⁷

⁶⁴ See, for example, J Goudkamp and D Nolan, *Winfield & Jolowicz on Tort* (20th edn, Sweet & Maxwell 2020) para 11.051.

⁶⁵ Section 2(4).

⁶⁶ Although the insurer may itself be liable to cover any such claim meaning, it would be either pointless or fail for circuity of action.

⁶⁷ See S Whittaker, 'European Product Liability and Intellectual Products' (1989) 105 *LQR* 125; L Grolman, *Does this Compute? Applying the Consumer Protection Act 1987 to Software that Learns* (Master of Studies thesis, University of Oxford 2019); R Bagshaw, 'Product Liability: Autonomous Ships' in B Soyer and A Tettenborn (eds), *Artificial Intelligence and Autonomous Shipping* (Hart Publishing 2021).

One suspects that secondary claims are most likely to be pursued against drivers of other vehicles since judgment in such claims, if successful, will be enforceable against a British insurer.

III CONCLUSION

The AEV Act is an unusual statute in many ways, particularly on account of its being an attempt by the legislature to pre-empt technological developments. Not knowing the precise form that the relevant technology will take, the legislature has avoided trying to be too prescriptive, but the result is a statute that is remarkably thin on detail and the Secretary of State is given considerable discretion as regards the issue of whether particular vehicles will qualify as an automated vehicle for the purposes of the AEV Act. All of this suggests that the statute will require overhauling sooner rather than later, and that it could very well be out of date perhaps even before the very technology for which it seeks to cater arrives on the market. Indeed, the Law Commissions have recommended that changes be made to it at this juncture.⁶⁸

The AEV Act attempts to deal with losses caused by automated vehicles by providing for a direct claim against insurers. Various other options for dealing with the costs of accidents caused by automated vehicles were available to the legislature. For example, Parliament could, as observed above,⁶⁹ have done nothing and left injured persons to pursue claims at common law or the CPA. Alternatively, it could have required providers of automated vehicles to arrange insurance cover or to self-insure as a precondition to being able to access the British automated vehicle market. Another option would have been to require users of automated vehicles to purchase first-party insurance.⁷⁰ It would also have been possible for the legislature to break away from an insurance model entirely and to establish a government-operated compensation fund. Consideration of the background materials to the AEV Act suggests that inadequate consideration was given to the merits of these and various other possibilities.

The same background materials suggest an absence of serious reflection on the part of the legislature on certain other basic questions of considerable importance. For example, scant consideration was given to the variety of models available for funding the payment of compensation to persons injured by automated vehicles. The legislature, by enacting the AEV, has opted to raise the money required by way of insurance premiums. There were, however, a range of alternatives. For example, the money required could have been raised through taxation of owners of automated vehicles, motorists more generally or the population at large.

⁶⁸ See n 29 above.

⁶⁹ See the text accompanying n 40 above.

⁷⁰ See the text accompanying n 27 above.

Taxes could also have been imposed on the importation or sale of automated vehicles. It does not appear that any or any adequate addition was given to these and other possibilities.

Similarly, the architects of the AEV do not seem to have been appreciated that the AEV Act treats victims of accidents caused by automated vehicles preferentially relative to victims of accidents occasioned by conventional vehicles (who are themselves generally treated far more favourably than persons who suffer injury and illness caused other than by the fault of another person). If they did, they did not stop to ask themselves whether this preferencing makes any sense in circumstances where luck determines whether a given claimant has a claim under AEV Act or must, in order to recover compensation, establish fault on the part of a human driver. The phenomenon of preferencing is just as relevant today, if not more relevant, than it was when Patrick Atiyah forced it into lawyers' consciousnesses in the 1970s.⁷¹

It may be replied that the preferencing phenomenon will diminish in importance as automated vehicles gradually replace conventional vehicles. This will undoubtedly be the case, although on any assessment the phasing out of conventional vehicles will be gradual and likely take many decades. The issue remains, therefore, why any legislative intervention should be restricted to automated vehicles. Not only is the preferencing phenomenon a pressing issue but major drawbacks attend having different compensation systems that deal with different types of accidents. These downsides include adding complexity to the law as well as the fact that differences between the applicable regimes are typically arbitrary. Of course, legislating across the whole field of motor vehicle accidents (or, even more widely, the field accidents generally) is a much more formidable undertaking than establishing compensation systems piecemeal. It is a challenge to which few legislatures have risen. The Parliament at Westminster is not among them.

⁷¹ PS Atiyah, *Accidents, Compensation and the Law* (Weidenfeld and Nicolson 1970).